National Home Week Display Houses Indicate Design Trend
Now! Shadow-Line Beauty... Faster, Easier!

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Look how effectively the new Insulite SHINGLE-BACKER achieves rich, new beauty for shingled exteriors! See how easily it solves the problem of uniform exterior shingle application! The long 48-inch panels cover a lot of space—fast—and provide a firm, smooth undercourse that makes it easy to match the outside processed shingles with uniform deep-line shadow beauty.

Only a few seconds time and just 4 nails give you a strong, wind-resistant, uniform undercourse that ordinarily requires many miscellaneous shingles, many nails and much longer time to apply. It saves man-hours, eliminates waste...and in many cases the total applied cost is surprisingly less than the cost of standard double-coursing procedure. Insulite SHINGLE-BACKER is made of genuine waterproofed Graylite—asphalt-impregnated throughout. It is equally effective for shingling on wood sheathing or Bildrite Sheathing. Ask your Insulite representative to give you all the facts.

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MINNESOTA AND ONTARIO PAPER COMPANY
MINNEAPOLIS 2, MINNESOTA

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RESISTS WINDS BEYOND 250 M. P. H.

Complete instructions show how to use the new Insulite application system for applying shingles over Bildrite Sheathing with the new SHINGLE-BACKER. Test panels, using this system with "Stronghold" grooved nails, have resisted air blasts of more than double hurricane velocity in laboratory wind tunnels—without the loss of a single shingle. Holding strength with plenty to spare—plus extra insulation, plus assurance of uniform, attractive, exterior beauty.

See Sweet's Line, for Builders—2nd Fl.
YOU CAN INSTALL THIS NEW WINDOW UNIT IN 2 Simple Steps...

1 Nail to sheathing

2 Anchor to studding

See how easily she reaches over the sink and twirls her Fenestra Window open. How easily she swings it wide to catch the breeze. It's one of the things that sold her on this house.

... it comes completely trimmed outside and inside

Added to the modern, sales-appealing Fenestra* features like twist-of-the-wrist opening...controlled ventilation...screening and cleaning from inside, is a feature designed for your convenience: Easy, two-step installation.

Each Fenestra Casement now comes completely steel trimmed. All you have to do is nail it to the sheathing around your rough opening...then anchor it to the studding on the inside. It's that easy. Your carpenter makes all opennings alike for frame or brick veneer. Runs sheathing right over stud and cripple and saws it off flush. Plaster, tile or dry wall butts against metal trim inside. Shingles, siding, stucco or brick butts against it outside. You don't have any finishing to do inside or out.

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DETROIT STEEL PRODUCTS COMPANY

Please send me complete information on the complete, new Fenestra Unit—Steel Casement with Combination Inside/Outside Metal Trim.

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Company .............................................

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BECAUSE:

Upson Kuver-Krak Panels have a long record of satisfaction in re-covering cracked ceilings!
No other material makes such beautifully modern home-style ceilings!
No material produces such trouble-free, long-lasting ceilings!
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☐ Have your Representative call to give me more information on the cracked ceiling market.

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NAME OF FIRM _____________________________________________________
STREET ADDRESS ___________________________________________________
CITY __________________________ STATE ________________________________

AMERICAN BUILDER
IN YOUR MARCH ISSUE

Highlights of the NAHB Convention and Exposition, together with the roster of new officers for 1951.

The all electric house of the 50’s. Here are ideas galore for the builder who is seeking the unusual; even the windows of this house operate electrically. A story profusely illustrated with plans and photographs.

Thinking of remodeling jobs? See how one builder converted a 100 year old structure into modern rental units.

Framing Farm Buildings, the fourth and last article on Construction Lumber, contains pertinent information for builders and dealers alike.

American Builder’s Blueprint Plan, drawn to 1/2 inch scale and fully detailed, will give you a practical house for the average middle class buyer. This is a “big small house” the basic appeal of which has been thoroughly sales-tested.

Other features include timely editorials, how-to-do-it items, Better Detail Plates and news from all segments of the industry.

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TRUSCON... a name you can build on

beautiful doors...

durable doors...

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For the first time the builder may procure from a single source a steel door frame, flush swing door and choice of four types of high quality hardware. These new Truscon Residential Steel Doors are smart... strong... modern. Precision engineered and carefully manufactured. Smooth, quiet, trouble-free in operation.

Outstanding economy of labor and material for installation is a major feature. Steel construction protects against warping, shrinking or sagging during the life of the structure. Efficiency of space and operating convenience are special advantages of the sliding closet doors.

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In a ground-to-roof remodeling program begun in 1946, the Webster Hall has modernized all of its guest bathrooms as well as the public lounges. This view of the women’s rest room shows smartly styled, shell pink Crane Marcia Lavatories in a counter of black tile. Of vitreous china, the Marcia comes in white and eight Crane colors. Features: roomy, semi-oval basin, exclusive Securo waste. Dial-ese controls on convenient beveled panel. Size: 24” x 21”. Consult your Crane Branch or Crane Wholesaler.

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WARMING SUNSHINE ENTERS: freezing winds stay outside. It's an easy trick for these expansive WINDOWALLS, which serve simultaneously both as windows and as wall for most of this fine home's southern exposure.

Much of the beauty, much of the famed efficiency of these Andersen Casement and Picture Window Units comes from their careful wood construction. Wood blends with the shingle exterior, and wood's insulating values improve the windows' performance.

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

Andersen Corporation
BAYPORT - MINNESOTA
Perhaps the most important part of President Truman’s address on December 15, immediately preceding his declaration of a national emergency, was what he said about the necessity of increasing production. For the weapon that makes the United States the most powerful nation in the world is not the atom bomb, but its capacity for production; and, unfortunately, in spite of what the President said, it is by no means certain that policies of his administration will conducive to full utilization of our great productive capacity.

Economic conditions in the United States are widely different from what they were when we began mobilizing for World War II in 1941. The nation then had a large surplus—or at least a large unutilized—capacity, as shown by the great amount of unemployment and the low level of goods produced and transported in 1940. Without this previously unutilized capacity it would have been impossible to so enormously increase production and transportation during the war.

As means of production and transportation have been, and are now being, utilized, there has not been since the war, and is not now, any large surplus capacity. Unless they are to be more effectively utilized, it will not be possible to add so much production for military purposes to production for civilian purposes as was done during the last year. And if total production is not to be greatly increased it will be necessary to reduce production for civilian purposes much more in order adequately to increase it for military purposes. This would impose greater hardships on the civilian population and tend to break down the economy, the strength of which must be maintained and increased to the utmost extent possible in order to bear the war load.

However, the problem may not be as difficult, or even insoluble, as it seems. The economy is based on both machines—i.e., plant—and manpower. The productive and transportation plants have been largely expanded by increased investment of private capital since the last war, and can and will be further expanded by the same means if private investment is not prevented or discouraged by such policies as taking by taxation income that otherwise would be invested, and huge government expenditures, Federal, state and local, that are not essential for either military or civilian purposes. And the effectiveness of available manpower can be increased by such means as (1) reversing the policy of reducing hours of work which has prevailed since the war, and (2) employing more women in industry.

Many illustrations could be given of how the nation’s production is being restricted by reductions of working hours. One of the most important of these illustrations is the effect of the establishment of the 40-hour week on the railways. It has reduced the number of hours each week in which freight cars are loaded and unloaded by the railroads and industry, and thus reduces the effective utilization of cars and other railway facilities. This has been the principal cause of the freight car shortage which the railways have been trying to remedy by ordering more new freight cars since the war began in Korea than ever before in the same length of time.

Increase of total production—production for both essential military and civilian purposes has swiftly become the most vitally important problem with which the American people are confronted. It will not be enough merely to substitute military for civilian production. The power of the nation to defend itself is dependent on the maintenance of a powerful civilian economy. And this can be accomplished only by policies that will make available adequate capital, materials and manpower for the civilian economy, including especially the housing industry.

There is still a housing shortage, and the only effects of denying the private housing industry adequate capital and materials would be (1) to protract and intensify the housing shortage, (2) to cause unemployment, because the ages of a great majority of building craftsmen are such that they could not be taken into military service, and (3) by these means to weaken the civilian economy.
More Power  
More Style  
More Economy

Sweller, fresh air in the kitchen.  .  .  .  and all day! That's what new home owners want. Help get rid of "Kitchen Smells." Install a NuTone Ventilating Fan. Sell your homes easier .  .  .  faster.

Never before has there been a ventilating fan like NuTone. NuTone's most powerful air delivery — proved by wind tunnel test. Modern design — in chrome and white, with NuTone's EXCLUSIVE patented center grille; removable by one simple thumbscrew for ready cleaning! Greater economy to you, because NuTone is lower cost installed .  .  .  a screwdriver is the only tool needed.
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FOR STANDARD INSTALL- LATION IN HOMES WITH OR WITHOUT BASEMENTS

RANCHIEF WARM AIR Furnaces

NINE MODELS — Counterflows, Hi-Boys, Lo-Boys. Pressure oil, vaporizing oil, or gas-fired, using any common oil or gas. Rated at 64,000 BTU and up at bonnet.

BEAUTIFUL — Gleaming white enamel finish, smart styling.

COMPACT — 22" x 22", U.L. Listed for reduced clearances. Top flue outlet for added compactness, neatness.

APPROVED — U.L. Listed for oil or gas, A.G.A. approved for gas. Convertible at any time from oil to gas with no loss in capacity.

PACKAGED — Fully assembled and fire-tested at factory. Fully wired including controls. All wiring and operating parts fully enclosed.

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Materials Handling Division — Cranes, Hoists
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Counter lighting with Insulux Glass Block adds glamour to normally dull spaces. Used here they bring plenty of soft light right down on active working surfaces.

**WORKING SURFACES OFFER YOU**

**SALES OPPORTUNITIES FOR Daylight Engineering**

Maintenance, remodeling and modernization are likely to be bigger and bigger factors in the building industry for a long time to come.

Daylight Engineering with Insulux Glass Block in existing homes offers you an excellent opportunity to keep your volume up, even in the face of curtailed new home construction.

Because the housewife does much of her work at her kitchen counters, suggest counter lighting to brighten these working surfaces. Her wall of Daylight won't rust, rot, or lose brightness no matter how often washed or splashed.

But don't stop there! Show the housewife the many other ways Insulux Glass Block can make her home more livable. Wherever she wants to block out sight but not light she's a customer for walls of Daylight.

Ample stocks of Insulux Glass Block are immediately available. Installation is simple and easy . . . requires only ordinary mason's tools.

For the name of your nearest Insulux distributor, write Daylight Engineering Laboratory, Dept. AB2, Box 1035, Toledo 1, Ohio. American Structural Products Co., subsidiary of Owens-Illinois Glass Co.
When Regulation X was issued last October it was the announced plan of the government to restrict housing starts in the year 1951 to 850,000 units, about 30 per cent below the number started in 1950. Three months have passed and no further regulations have been issued which would change the government's target. At the time it was announced that terms would be stiffened if starts appeared to be too high and relaxed if there were not enough starts. So far Regulation X, which did away with easy credit, is the only regulation which applies to residential builders.

Provided the builder can finance his houses on the terms set forth in the regulation, he can build as many houses as he likes in 1951. But there are other questions which a builder must consider before he goes ahead with an abnormally large number of starts.

The principal question is "Will I be able to get plumbing and heating equipment three or four months from now?" At the moment no one is in a position to say. Everything hinging on the size of the military forces that will be established and the allocation of steel and other critical items for defense, the automobile industry, the construction industry and other large users of metals.

In the meantime builders will need to be prepared for some exasperating shortages. However, these are not likely to be shortages of cement and lumber which were so perplexing last year. Some of the problems can be solved by substitutions. If the plan requires two bathrooms, space can be provided for both and one installed at a later date. In some projects a shower stall might serve instead of a bathtub.

We know that one set of controls leads to another. Whether or not the building industry will be subject to the full set of controls that were in effect during World War II remains to be seen. It is a fact that new housing will be required in defense areas which the government will designate. There is talk about the need for 100,000 units in such defense areas. A requirement of as many as 200,000 or 300,000 units at military bases has been stated. A situation like this is likely to lead to a nation-wide permit system for new housing and allocation of building materials.

One of the first measures asked of the new Congress by the Administration is for a bill which will provide for as many as 300,000 dwelling units for such areas. This bill is intended to establish a liberalized home mortgage insurance plan for defense housing. Existing Federal Housing Administration systems of home mortgage insurance would be expanded to include "special provisions" for defense housing. Thus, private builders would build this large volume of new houses, but in places specified by the government.

The insurance would be available for both one- and two-family units and for garden-type multi-family structures, with particular assistance being given to rental housing. The insurance terms would be more liberal than the present FHA regulations.

Direct Federal loans and grants would be available in many areas for such items as water and sewer lines and other construction of general usefulness to the community.

The Government will also enter into house building directly where private contractors are not available to undertake the required construction.

The Maybank-Wherry Bill, which was enacted last year to provide for rental housing built by private contractors at military posts, will be expanded by the bill to include projects under the Atomic Energy Commission. The existing law would be extended beyond the present June 30, 1951, expiration date.

This is part and parcel of the government's plan to greatly increase production of steel, aluminum and other war materials. The huge plants now authorized will require tens of thousands of dwelling units to house workers recruited for the most part from other sections of the country. An example is the hydrogen bomb project in South Carolina which will exceed the atomic bomb projects in size. Other housing projects will be planned by the government in large and small cities over the country when defense areas are determined and the need for housing in those areas becomes apparent.

Many builders and dealers need advice on how much construction they can do this year, to what extent materials are available, how they might participate in defense housing or other defense work, etc. Businessmen are discouraged from going to Washington to get such information. The fifteen regional offices of the Department of Commerce, however, can supply available information and will obtain special information from the proper department in Washington. The Department shortly will open 35 additional regional offices to take care of the large volume of inquiries pouring in relative to defense work. These offices can be a valuable source of information to builders and dealers.
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It's Wonderful Stuff"

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"ACROSS THE BOARD"
New Delta's Best...
PROVE IT WITH THIS MITER TEST!

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Before you buy any radial saw, swing its saw-arm right and left.

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Be sure the saw can cut miters and angle-dado from 0 to 90 - both right and left.

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STANLEY SLIDING DOOR HARDWARE

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...and the J-M trademark is the sign of a quality-built home

These large tough boards reduce construction costs...can be used with any type of exterior finish!

WITH ASBESTOS SHINGLES: J-M Asbestos Siding Shingles may be applied directly to J-M Weathertite Sheathing, by using self-clinching or self-locking nails, such as Esnail, or the new Loc-Nail illustrated in inset. Drive nails at any convenient points—no need to locate or avoid studs. After the base of the nailhead strikes the shingle, further tapping flattens the head and clinches the foot against the back side of the Weathertite Sheathing.

WITH CLAPBOARDS: The clapboards are nailed in the conventional manner through the Johns-Manville Weathertite Sheathing and into the studding.

WITH BRICK VENEER: In this construction the brick ties are simply nailed through the Johns-Manville Weathertite Sheathing and into the studding.

WITH ASBESTOS SHINGLES: J-M Asbestos Siding Shingles may be applied directly to J-M Weathertite Sheathing, by using self-clinching or self-locking nails, such as Esnail, or the new Loc-Nail illustrated in inset. Drive nails at any convenient points—no need to locate or avoid studs. After the base of the nailhead strikes the shingle, further tapping flattens the head and clinches the foot against the back side of the Weathertite Sheathing.

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WITH BRICK VENEER: In this construction the brick ties are simply nailed through the Johns-Manville Weathertite Sheathing and into the studding.

Notice how easily J-M Weathertite Sheathing is handled by one man. He can make fast progress, too, covering a large area with each big sheet. And he can lift the sheets high overhead without help, getting more work done without the use of ladders or scaffoldings.

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For application vertically, J-M Weathertite Sheathing comes 25/32" or ½" thick, four feet wide, and in lengths to reach from sill to plate. For horizontal application, the sheets are 2' x 8', and 25/32" thick. “V-tite” joint (see inset above) prevents infiltration of weather.

The J-M trademark appears prominently on each board, instantly identifying the builder as a user of quality building materials. For further information, write Johns-Manville, Box 290, N. Y. 16, N. Y.

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- Good cutting control in disc sanding or polishing... curved or flat surfaces... wood or metal.

---

Keep your home-building operations up-to-date with American—to increase your profits! Put American Machines on everyday jobs to save time and labor in floor sanding, steel wooling and polishing... and small tool jobs of sawing, planing and disc sanding. These machines have what it takes—advanced design, precision construction and rugged dependability—quality features to increase your efficiency and bring costs down! For a perfect finish on any floor—specify American... a complete new line of finishes, maintenance and cleaning materials for wood, cork, concrete, terrazzo, asphalt, rubber, linoleum or plastic. Send coupon for more details.

**AMERICAN FLOOR MACHINES • PORTABLE TOOLS**

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The American Floor Surfacing Machine Co., 511 So. St. Clair St., Toledo 5, Ohio
Please send latest catalog on the following, without obligation.
- Floor Sanders
- Floor Edgers
- Portable Electric Saw
- Floor Maintenance Machines
- Floor Finishes
- Belt Sanders
- Scinta Saw
- Speedy Spinner Disc Sanders

Name ____________________________
Street ____________________________
City ____________________________ State ________
This readership study is the first survey conducted by The Advertising Research Foundation for any publication serving the light construction industry.

Readers of AMERICAN BUILDER are located in nearly every community throughout the country; and they are the factors who control specifications and buying in construction, modernization and maintenance in the residential, commercial, and farm fields.

This second in a series of A.R.F. studies of Business Papers examines primary advertising media values. It was designed to determine three factors about and for AMERICAN BUILDER and its readers: actual readership, potential audience, and specific data about the readers.

The results gathered in this study demonstrate the amount of attention devoted to advertisements in AMERICAN BUILDER. In this way, the study reflects the selling power of each manufacturer's sales message.

of the qualified readers interviewed recalled seeing one or more of the advertisements measured.

of the readers who claimed to have purchasing influence stated that they specify or recommend makes or brands.

of the home subscribers interviewed stated that they read every issue of the publication.

of the readers interviewed remembered seeing one particular black and white advertisement.

Attention NIAA Chapters
A colored strip-film presentation illustrating the results of this study, as was presented at the NIAA national meeting in Los Angeles, is available for individual chapter showings. Chapters interested should contact their New York headquarters office.
"Fastest Installation I ever made!"

Time and again it's been proved:

You can install Corbin "900" Unit Locks and Latches Faster than any other type of lock!

HERE'S WHY — No mortising is required; it takes an average workman only five minutes to drill two small holes, make a cut in the edge of the door, and fasten a Corbin "900" lock securely in place! That's all there is to it... the lock is always true and straight with the door, ready to provide years of trouble-free service!

But that's not all! The handsome appearance and rugged security of Corbin factory-assembled "900" Locks and Latches recommend them for all of your buildings. You will install Corbin "900" units with confidence and pride... in the right functions and finishes for all school, hospital, apartment, residence, and office building needs.
SELL THESE FEATURES...WIN CUSTOMER SATISFACTION

Your customers can easily see why the construction of Eljer Water Closet Tanks is the finest available.

The Eljer integral china overflow and ground-in valve seat are made of real vitreous china... a part of the tank itself. This eliminates thin metal tubes and metal seats that wear and corrode. The construction is foolproof... built to last the life of the closet. Vitreous china cannot corrode. An Eljer Fixture with this extra quality costs no more than an ordinary fixture... even less, considering the resulting savings in maintenance expense.

Any plumber who points out these extra values to homeowners will make extra sales... and have satisfied customers. To have quality customers, sell quality plumbing fixtures. Sell Eljer... see your Eljer Distributor or write Eljer Co., Box 192, Ford City, Pa.

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

Builder Groups Name '51 Leaders

State and local NAHB affiliates from coast to coast choose leaders for active year ahead

A comprehensive program of speeches and panel discussions covering many phases of the building industry marked the recent seventh annual convention and exposition of the Ohio Home Builders Association at the Deshler-Wallick Hotel, Columbus.

Business session topics included merchandising, architectural trends in residential construction, mortgage and finance, and outlook for the small home builder. Speakers included Rodney M. Lockwood, past National Association of Home Builders president; Edward G. Gavin, editor of American Builder; Robert Heinton, Cleveland Electrical Illuminating Co.; and Johnny Jones, Columbus newspaper columnist.

Peter D. Kleist of Cleveland was elected president of the state group for 1951. Other new officers are Joseph J. Robers, Cincinnati, vice president; M. E. Kimmey, Dayton, secretary; and A. B. Stanbery, Toledo, treasurer.

Retiring President Ivan H. Gore, Columbus, presented a charter to the recently-organized Clark County Home Builders Association of Springfield. Gore was awarded an association plaque for outstanding service during 1950 by President-elect Kleist.

Among national association staff members present were Joseph B. Havertick, secretary; Frank W. Cortright, executive vice president; Charles Maloney, regional vice president; Carl Luns, technical director and Mrs. Margaret Raynor, administrative assistant.

NORTHERN NEW JERSEY

OFFICERS of the Home Builders Association of Northern New Jersey at recent installation meeting in Teaneck (from left): Vice President Albert A. Stier, President Stephen Dudlak, Retiring President Carl S. Carlson and Secretary Alan D. Allen

Stephen Dudlak of Clifton was elected president of the Home Builders Association of Northern New Jersey at the group's annual meeting Dec. 4 at the Casa Mana, Teaneck. He succeeds Carl S. Carlson of Ridgewood.

Other builder-leaders named were Albert A. Stier, Clifton, vice president; (Continued on page 30)

NEW OFFICERS of the Ohio Home Builders Association (from left): M. E. Kimmey, secretary; A. B. Stanbery, treasurer; Peter D. Kleist, president; Joseph J. Robers, vice president

FEBRUARY 1951

Award for Best Home Week Section Won by Tacoma Paper

First prize in the nation-wide contest for "National Home Week" newspaper supplements—published during observance of the Week, September 10-17—went to the Tacoma (Wash.) Sunday Ledger, the National Association of Home Builders, contest sponsor, has announced.

Chosen for second honors among the 106 competing metropolitan papers was the Columbus, Ohio, Citizen. The Grand Rapids, Mich., Press was third. Honorably mentioned were Seattle, Wash., Times; Glendale, Calif., News-Press; Syracuse, N.Y., Herald-American; New Orleans Times-Picayune, and New York Times.

Judging of the special real estate sections was held recently in Washington, D.C. Judges were Mrs. Olive Clapper, radio commentator and columnist, and wife of the late Raymond Clapper; Mrs. Christine Sadler Coe, Washington editor of McCall's magazine; Edward R. Carr, past NAHB president.; and Everett B. Wilson, Washington public relations counsel.

Awards were made at the annual dinner for the press during NAHB's convention January 22.

400 Underprivileged Kids Given Xmas Party in Dallas

A Christmas party for 400 underprivileged children was a feature of the holiday program of the Home Builders Association of Dallas. Held at the association's new auditorium, the party included a Christmas tree, music, entertainment, refreshments and a present for each child.

Members contributed gifts and cash to support the function. On the party committee were George Mixon, chairman, James Galetta, J. B. King, R. S. Greathouse, Louis Grieman and R.W. MacNeil.

Sacramento Xmas Party

More than 200 members and guests attended the annual Christmas party of the Associated Home Builders of Sacramento, Calif. A short session was devoted to business, with E. L. Schutt, retiring president, and C. B. Perkins, secretary-manager, giving their annual reports of association activities.

Members cited for their work in 1950 included Stetson Shuey, legislative committee; Jim Jansen, labor committee; and Jack Heckes, chairman of the membership committee, who reported a 24 percent increase of members.
Dealer's Viewpoint

H. R. NORTHUP, Executive Vice President,
National Retail Lumber Dealers Association

Needed for '51: Triple-Threat Dealers

Three separate but closely related problems confront retail lumber and building materials dealers as we once again enter a controlled economy.

One of the problems is how to adjust our individual businesses to the perplexing new situations which arise from day to day. On the one hand, the outlook is for a fairly substantial but not drastic drop in sales this year, together with a loss of many younger employees to the armed forces. On the other hand, there will be an exhausting flood of extra paper work as wage and price controls, inventory controls, and other defense regulations take more and more attention.

Adjusting to such a situation is no easy job and will require careful planning by yard owners and managers.

The second problem is that of helping defense officials avoid well-intentioned mistakes which could demoralize production and distribution of materials without actually aiding the rearmament program.

That job is the responsibility of the industry's national organization and of those dealers who serve on industry advisory committees. It is no easy one because we too often have to deal with impatient officials who are all too ready to take sweeping actions and then smooth out the kinks later. Sometimes those kinks are very slow in disappearing.

Our third problem, which has not yet received much attention, is that of inducing the public to use the reduced supply of some key materials to best advantage. We face, at least for the time being, a peculiar situation where we will have plenty of some materials and not enough of others. The materials which will be short—those containing critical metals—will be the key to the amount of building we can do in the immediate future.

If those scarce materials are used wisely and carefully, we can do more building in 1951 because the key materials can be stretched over a larger volume of building.

Retail lumber and building materials dealers have an obligation to encourage the public to conserve the less plentiful materials wherever possible, to show them how to use substitutes when that is practical, to encourage customers to buy what they really need, and to advise them to put off or cut down on building which is not really essential.

Even though the Federal government probably will take further official steps along these lines, our industry should take the initiative. By doing so, we not only will sell something greater quantities of the materials which are in full supply, but also will serve the national interest by enabling the public to get more needed building done with the reduced supply of materials containing metal.

VITAL ISSUES were thoroughly examined at a recent discussion panel sponsored by the Texas Panhandle Home Builders Association in Amarillo, and attended by builders, lumber and material dealers, mortgage men and others. Panel members, pictured above, are (top row, from left): Jack Seale, Amarillo; William Schutts, Amarillo; C. P. Atwood, Amarillo FHA office; Clyde Bowman, Pampa; C. L. Munday, Amarillo. Bottom row: Royal Cantrell, Pampa architect; K. S. Reynolds, Amarillo; Tom Farwell, Pampa; G. W. McGuire, moderator; Charles Crowe, Amarillo.

AT DINNER given in honor of Thomas P. Coogan, National Association of Home Builders president, by Home Builders Institute, Inc., Los Angeles, are (from left): William H. Evans, president, Home Builders Institute; Fred Eldean, president, Fred Eldean Organization, New York City; Coogan; Milton J. Brock, past NAHB president; and Fritz B. Burns, president, Kaiser Community Homes. Coogan said at a press conference that recently-enacted credit controls would cause 1951 housing starts to fall under the 800,000 total the government has indicated as desirable and that there may be a modification of Regulation X upon completion of a survey now being made jointly by the Federal Reserve Board, the Housing and Home Finance Agency, Mortgage Bankers Association and NAHB.

Buffalo Membership Drive Nets 153

When the membership drive of the Niagara Frontier Builders Association, Buffalo, N. Y., was closed recently with an award dinner, 153 new members—27 active and 126 associate—had been added to the roster.

WASHINGTON scene was subject of Frank Cortright's talk before Buffalo group

Approximately 250 persons attended the party at which Frank W. Cortright, executive vice president of the National Association of Home Builders, was guest of honor. Awards were made by Chairman Victor Heaps to team and individual winners. Individual honors were taken by George Marvin.

Hold Banquet at Dayton

The annual banquet of the Montgomery County Builders Association, Dayton, Ohio, was held January 9 in the Biltmore Hotel. Principal speaker was Frank W. Cortright, executive vice president of National Association of Home Builders.
Southern Door Jobbers
Meet in New Orleans

Approximately 500 jobbers, manufacturers and their wives attended the 11th annual winter meeting of the Southern Sash and Door Jobbers Association at the Hotel Roosevelt in New Orleans December 6-8.

Speakers included Erle Racey, advertising counsel, American Wood Window Institute; H. R. Northup, executive vice president, National Retail Lumber Dealers Association; O. Harry Schraeder, managing director, Douglas Fir Plywood Association; Donald Moore, editor, Southern Building Supplies magazine; E. W. Ruddick, secretary, Joint Wood Window Promotion Program; and P. D. O'Neal, Remington Rand, Inc.

Washtenaw County, Mich., Builders Join NAHB

Washtenaw County (Mich.) General Contractors, Inc., was presented a charter by the National Association of Home Builders and the Michigan Association of Home Builders at recent ceremonies in Ann Arbor.

Following the presentation talk by David Satin, Kalamazoo, Mich., NAHB regional vice president, members of the new affiliate were addressed by Frank W. Cortright, NAHB executive vice president, and John Weinhart, president of the Builders Association of Metropolitan Detroit.

Cortright reported that admission of the Washtenaw County group brought to 20 the number of local builder associations which have joined the national since January, 1950, accounting for an individual membership increase of 2,419. Seven other communities are currently forming local chapters, NAHB now has 17,915 members in 146 affiliated associations, Cortright said.

Fred Eldean, public relations counsel for the National Association of Home Builders, was featured speaker at a December 18 meeting of the Home Builders Association of St. Louis.

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

Part-War, Part-Peace — A Confusing Economy

The similarity between Washington today and the wartime Washington of 1942 is no less than remarkable.

Our hotels are jammed—incoming planes and trains are packed—government agencies shift from building to building as they expand—at least 10,000 new persons are employed each month—new laws, regulations, orders and directives are drafted and discussed daily—super agencies are piled on agencies, and rumors of further freezes and controls circulate constantly.

It is difficult to tell whether there are more job-seekers than order-seekers—more military personnel than diplomats—more confused businessmen seeking information than confused bureaucrats unable to inform them. The fact is that there is an excellent reason for the confusion in Washington.

Instead of an all out war, such as followed Pearl Harbor, with a black and white economy—we now have a part-war and a part-peace economy.

This was called a "light gray economy" before the Korean trap was closed on us last November—now it has become a dark gray shade.

Because of the great need for high employment, high national income and high taxes, civilian production of all products is encouraged within the limits imposed by the requirements of the armament program. The main difficulty is that the military has been unable to determine the volume of critical materials required by this program. When the tonnage of steel, copper, aluminum, rubber, et cetera, is fixed, better order can be established and businessmen can proceed with greater confidence.

In home building the government wants a large number of civilian houses produced to strengthen the domestic economy and to meet the housing needs of the nation. Beyond this there is a presently unknown volume of new "defense housing" necessary for the exclusive use of defense workers at newly built war plants and plants which are being enlarged.

To encourage private enterprise to supply this defense housing, the Defense Housing Act of 1951 has been introduced. It is designed to encourage private financing of about 150,000 housing units, largely for rental. These will be single-family, two, three and four-family and multiple housing units.

The new FHA insurance device will be known as Title IX. It will be less generous than Title VI but much more attractive to builders and lenders than Title II. Under Sections 903 and 908 many builders will have an opportunity to start projects in addition to the housing they will be constructing for civilian use.

The maximum mortgage limits proposed by the bill as it enters the Congressional hopper seemed to this reporter to render it valueless in the higher cost areas throughout the country. This seems particularly unfortunate, since it is in many of these higher cost areas—Chicago, Detroit, Cleveland, Washington and countless other cities, that the greatest need for defense workers will exist. As the Banking and Currency Committees of the House and Senate study this and other provisions of the bill it may be expected that a number of remedial changes such as this will be made.

Another title of the bill is a new form of the Lanham Act, which supplied a high volume of public housing during World War II. Because this is publicly owned and operated housing it is important to study the declaration of policy of the bill, which, among other things, gives assurance that "private enterprise shall be encouraged to provide as much of the needed defense housing as it can, with special governmental assistance being made available where feasible and necessary to enable private enterprise to provide more of the defense housing. The government shall construct defense housing only where it cannot otherwise be provided when and where needed."

(Continued on page 208)
Cortright Speaks at Louisville Meeting

"An era of drastic change" for America during which builders "may be building barracks or sections and panels of buildings to be shipped abroad" was predicted by Frank W. Cortright, executive vice president of the National Association of Home Builders, at the annual dinner meeting of the Associated Home Builders of Louisville, Inc.

Approximately 200 builders, realtors and representatives of allied trades attended the meeting in the Seelbach Hotel, at which Cortright spoke chiefly of the effects of Regulation X and the problems facing the industry during 1951.

New Louisville officers elected at the meeting were: president, James P. Bourne; vice president, C. Robert Peter, Jr.; and secretary-treasurer, Ben F. Swindler. New directors are B. M. Grimes, Harris Holt, Emery Kinkead, Robert Kittle, Arthur G. Miller, L. D. Paschal, Ralph R. Stephens, Frank C. Walther and David Wilson.

1951 Builder Leaders...

(Continued from page 27)

Alan D. Allen, Hillsdale, secretary; and John S. Cucchiara, Bergenfield, treasurer.

Dudiak, long active in association affairs, was vice president the past two years. He also led a 1950 membership drive which boosted the roster to an all-time high of 265.

In his acceptance talk, Dudiak sounded a note of warning about the present world situation, at the same time pledging the full support of the association to the government's emergency program.

UTAH

"Housing in the Cold War" was the theme of the eighth anniversary meeting of the Utah Home Builders Association at Salt Lake City in December. The all-day session included speeches, panel discussions and social events.

PRIZE-WINNING model home at state convention of Utah Home Builders Association is admired by new association officers (from left), Nick E. Papanikolas, president; Homer S. Culp, second vice president; and J. Albert Smith, first vice president.

Nick E. Papanikolas was elected president of the group for 1951, succeeding A. P. Neilson. Also named to the officer roster are: Frank C. Walther, first vice president; Robert E. Kittle, secretary-treasurer.

1951 LEADERS of the Home Builders Association of Westchester, N.Y., discuss plans for new year's activities at recent annual election meeting in Roger Smith Hotel, White Plains, N.Y. From left are: James Cook, secretary; Edward A. Lashins, vice president; Frank P. Tufaro, president; and Joseph M. Baltz, treasurer.

Cook, Tufaro and Baltz were re-elected. President Tufaro pointed out that during 1950 local builders created more than 16,000 new dwelling units for Westchester families. Approximately 6,500 of these were single-family homes, while another 10,000 dwelling accommodations were provided in new apartment projects in the county.

MINIATURE BUNDLES of Certigrade shingles are offered to delegates by officers of the Red Cedar Shingle Bureau following the organization's 34th annual meeting in Seattle in December. From left are: Earl S. Wasser, Milwaukie, Ore., newly-elected vice president; W. H. Mcallen, Vancouver, B.C., newly-elected president; W. W. Woodbridge, Seattle, re-elected secretary-manager; and Virgil G. Peterson, Seattle, re-elected treasurer.
Read, in the letter above, what Mr. Coles Doty has to say about DeWalt saws!

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

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

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

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

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

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

Investigate DeWalt now. Go in to see—or call—the nearest DeWalt dealer! See, especially, the new DeWalt Model GR with 5 new features, including low dead rise motor which permits deeper cut, allows you to use 14" blade and make 4½" cut. Send coupon below for full information on DeWalt.

**DeWalt** INC.

A subsidiary of American Machine and Foundry Company
Mack says... Check the Weather

Numetal WEATHER STRIP

FOR DOORS
Conveniently packaged in sets for almost all standard doors. Available with regular brass and felt door bottom strips or with thresholds and exposed hooks. No special skill or tools are required. Easily installed with only a hammer and household scissors. Comes complete with sufficient strips for size opening, lock keeper strip, screws, nails and instructions for installing. Perfect for over-the-counter sales!

Numetal DOOR BOTTOM STRIPS
Just what your customers need to keep cold air, dust, and dirt from blowing under doors. A popular seller! Made of wool felt and extra heavy gauge brass or aluminum. Furnished in standard lengths for 28", 30", 32", 36", 42" and 48" doors. Also available in special lengths. Packed 1/2 dozen same length in each carton.

FOR WINDOWS
Numetal Window Sets also come complete in convenient packages. Fits all standard 28", 30", 32" and 36" double hung windows. Cut-to-dimension sizes available. It is a practical and efficient type of permanent weather strip and can be quickly installed by anyone. Each set contains necessary strip for top, bottom and sides, meeting rail strip, sash plugs, nails and instructions. Individually packaged — ready to hand to your customers — ready to install!

This window is completely weatherproofed with strip from Numetal Window set. Includes Style "A" for top, bottom and sides; Style "B" for regular meeting rail; sash plugs. Style "C" available for rubbed meeting rails.

Nu-WAY WEATHER STRIP
Easy to sell because it’s so easy to put on! Works perfectly on any type window or door. Made of moth-proof, pre-shrunk, color-fast, wool felt and white metal. Attractive display carton contains 12 individual 20-ft. rolls.
proof Items You Need...and Order Now!

**Nu-GARD Automatic**

Door Bottom and Draft Eliminator

This is the door bottom answer to a home-owner's prayers! Beautifully designed door bottom keeps firm contact with floor when door is closed. Saves fuel—stops drafts under door! When door is opened the hinged felt section automatically raises so clear carpet. All working parts and cover shield are made of high quality Alacrome metal which will not rust or tarnish. Easily installed. Furnished in 28"—30"—36"—42"—48" lengths. May be shortened 2". Fits right or left hand door. Packed in individual cartons, including necessary screws and completely illustrated instructions. A Nu-GARD Automatic Door Bottom is a boon to your customers and a boost to your sales. Just show 'em and you'll sell 'em!

**THRESHOLDS**

Thresholds are becoming increasingly important in the weatherproofing picture—residential and industrial! You should have a complete stock of these attractive thresholds. Available in brass or Alacrome, with holes drilled, screws furnished—each individually wrapped and labeled.

**Nu-Calk Speed Load**

America's favorite caulking compound in the most efficient caulking load on the market. Packed 10 loads to each carton and 4 cartons per shipping case. Keep a good supply on hand of this fast-seller!

**Nu-Glaze Glazing Compound**

Sells better because it does the job better. Really "stays put"! Won't crack or peel off. Perfect for all glazing. Packaged in attractive cans from 1/2 pint to 12 1/2 lbs.—in drums from 25 lbs. to 880 lbs. Order now!

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

MACKLANBURG-DUNCAN CO.

OKLAHOMA CITY 1, OKLAHOMA
NOW! MEET THE DEMAND FOR LOW-COST REMODELING WITH GOLD BOND GRAIN BOARD

Made of fireproof gypsum but looks like natural wood!

ARE a lot of your prospects "cooling-off" because they think remodeling costs are too high?

Then let Gold Bond Gypsum Grain Board be your ace-in-the-hole to sell more jobs right now! You can show those prospects how you can give them the beauty of fine natural wood paneling for just a fraction of the cost. You can tell them:

★ It's fireproof.
★ Has protective lacquer finish.
★ Easily cleaned with a damp cloth.
★ Can't tell it from real wood, without close inspection.
★ Won't expand, contract or warp.
★ Comes in: Bleached Walnut, Dark Walnut, Knotty Pine.

And you'll like it too, because:

★ It saws like lumber.
★ Easy to nail to wood framing or right over old material.
★ See full size panels at your local Gold Bond Dealer Today!

BIG, STURDY PANELS of Gold Bond Grain board can be nailed to wood framing or right over old material. They make the job go fast and help keep costs down!

You'll build or remodel better with Gold Bond

Bleached Walnut  Knotty Pine  Dark Walnut

NATIONAL GYPSUM COMPANY, BUFFALO 2, N. Y.

EVERYBODY LIKES
Bruce Ranch Plank Floors

Pegged and Finished at the Factory

There has been more unsolicited praise for Bruce Ranch Plank than for any hardwood floor introduced by Bruce in the past twenty years. And there are several good reasons for this:

(1) It's a distinctive hardwood floor, yet costs very little more installed than regular strip flooring. (2) Alternate 2 1/4" and 3 1/4" oak strips, with walnut pegs, give the charm and individuality of a custom-built floor. (3) Bruce Ranch Plank is pegged and finished at the factory, and is easily installed by blind nailing.

This popular floor gives added style and decoration to homes in all price ranges. Architects and decorators have approved it for modern and traditional styles. Write for color booklet or consult Sweet’s Files. E. L. BRUCE CO., MEMPHIS 1, TENN.

Other Bruce Products: Block and Strip Flooring • Lumber
Terminix • Bruce Floor Cleaner, Waxes, Finishes
In time saving alone, the Stanley W65 Saw will quickly pay for itself.

The Stanley W65 is ideal for cut-off work on framing or siding boards; for cutting stairs or baseboards, or for fast, clean sawing of plywood, wallboard, asbestos, or masonite.

Outstanding features of the Stanley W65 include: the multi-grip handle, positive adjustments for cut-depth and beveling, manual control on safety guard, base on both sides of saw, ball and roller bearings. See the W65 at your tool supplier's, or write for literature. Stanley Electric Tools, 492 Myrtle Street, New Britain, Connecticut.
House Beautiful builds

extra business! And that business can be yours...

(Capitalize on promotable editorials like these in the March issue... reaching and influencing your best prospective customers, month after month)

Here's the “Climate-Controller”, right from House Beautiful’s forthcoming editorial on mastering climate extremes. In June, it's a shady screened porch, as shown here, with its paved floor, screened sides and top and waterproof canvas roof. In August, it has cross-ventilation because it projects out into the normal path of the summer breeze. But its main feature is a series of glass doors, hinged together accordion fashion, which can be moved into different positions as the seasons change. If they're unfolded outward to deflect the summer breeze into the house, the “Climate-Controller” serves as a windscoop. In spring and fall, with the canvas roof removed and the glass doors acting as a windscreen, it's a comfortable sunpocket. In mid-winter, with the glass doors swung in to enclose the outer wall of the triangle under the skylight shown, it becomes a tropic hothouse.

“Worse Climate” mastered in forthcoming house presentations

March House Beautiful presents three advanced houses—all designed and built specifically to master the Minneapolis-St. Paul area climate, where the combination of winter and summer extremes is greater than in any other part of the country... all incorporating principles developed by House Beautiful’s Climate Control Project.

Based on an orderly analysis of the numerous climate factors to be met and mastered, the solutions offered will be of great practical value to home builders in any region where there’s a big difference between winter and summer. Watch for them. Use them in your business. Including such important comfort principles as correct choice of site and materials, underground living areas, winter sun traps, wind control, etc., the chances are they’ll furnish you answers to any number of design and construction problems which now face you and your customers in conquering climate extremes.

FOR MORE PROFITABLE SALES-BUILDING IDEAS, turn the page

FEBRUARY 1951
Imperials new 1951 line inaugurates a new fashion trend in wallpaper — with modern weaves and textures, with patterns giving the illusion of depth. Designers and contemporary designs having the fast look of a hand print. Traditional papers include florals, geometrics, plain, and stripes. Wallpapers to re-create the outdoor aspect indoors are featured.

**HOUSE BEAUTIFUL MAKES**

**29. BALSAM-WOOL SEALED INSULATION**

Check any or all the top-quality products below (preceded by a number), which are advertised in March House Beautiful, fill in your name and mailing address . . . mail to: Merchandising Division, House Beautiful Magazine, 572 Madison Avenue, New York 22, N. Y.

- 29. BALSAM-WOOL SEALED INSULATION
- 30. CHAMBERLAIN BLOWN ROCK WOOL INSULATION
- 31. BLUE RIDGE STRUCTURAL GLASS
- 32. IMPERIAL WALLPAPERS
- 33. STRAHAN WALLPAPERS
- 34. SUNTILE
- 35. “TREND OF THE TIMES” WALLPAPERS
- 36. VAN LUIT SCENIC WALLPAPERS
- 37. VIKON METAL TILES
- 38. WALL-TEX FABRIC WALL COVERING
- 129. GOODYEAR WINGFOOT V VINYL FLOORING
- 39. Spongex sponge rubber rug cushion
- 40. CANVAS AWNING INSTITUTE
- 41. EASTERN PRE-FAB VENETIAN BLINDS
- 42. FLEETLITE FABRICATED WINDOWS

**Push and promote big-sellers like these...**

Control of plaster cracks and safely washable colorful and finishes plus beauty of color and pattern — are featured to attract and sell investors, buyers and tenants.

- Spongex sponge rubber rug cushion, the finest cushion underfoot, soft, safe, washable.
- Custom made to fit your windows by Eastern Machine Products Company’s many custom manufacturers.
- Vikon Metal Tiles bring the luxurious custom look to every room where tiles are appropriate.
- Vikon Metal Tiles are low cost too and inexpensive to install. Write Vikon Tile Corp., Washington, N.J.
- When selecting materials for today’s building requirements builders and architects always consider the special features of Wall-Tex fabric wall coverings as advertised in national magazines.

- **32. IMPERIAL WALLPAPERS**
- **33. STRAHAN WALLPAPERS**
- **34. SUNTILE**
- **35. “TREND OF THE TIMES” WALLPAPERS**
- **36. VAN LUIT SCENIC WALLPAPERS**
- **37. VIKON METAL TILES**
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- **42. FLEETLITE FABRICATED WINDOWS**

**AMERICAN BUILDER**

**54. CASE BATHROOM FIXTURES**
- **55. ELIER BATHROOM FIXTURES**
- **56. KOHLER PLUMBING FIXTURES**
- **57. GENERAL ELECTRIC DISPOSALL**
- **58. REPUBLIC DUO-WAY DISPOSAL UNIT**
- **59. BRYANT WATER HEATER**
- **60. A. O. SMITH PERMAGLAS WATER HEATER**
- **61. AMERICAN-STANDARD HEATING**
- **62. B & G HYDRO-FLO HEATING**
- **63. DELCO-HEAT BOILER**
- **64. DELCO-HEAT OIL-FIRED CONDITIONAIR**
- **65. DELCO-HEAT “GA” CONDITIONAIR**
- **66. HEATLATOR FIREPLACE**
- **67. HUNTER PACKAGE ATTIC FANS**

**USE THE CONVENIENT COUPON METHOD OF ORDERING**
**BIGGER PROFITS EASY!!**

parading across *House Beautiful*'s pages, month after month.

The Delco-Heat Oil-fired Conditioner will be a big hit in any home— go ahead and place an order today! This exclusive "Rotary" Oil Burner, automatically heats, cleans, humidifies and circulates the air. Delco-Heat makes automatic heating equipment for all fuels, all heating systems, all sizes of homes. For literature write: Delco Appliance Division, Rochester 1, N. Y.

The Delco-Heat "GA" Conditionaire—an automatic gas-fired unit—heats, cleans, humidifies and circulates the air. Has the newest 'Multi-Rad' heat exchanger that extracts maximum heat from fuel. Available in five models. AGA approved for all gas fuels. For literature write: Delco Appliance Division, Rochester 1, N. Y.

Heatilator Fireplace is a valuable extra sales feature in any home. It circulates heat throughout the entire room instead of wasting it up the chimney. Will not smoke. Simplifies construction, with a little or nothing to limit to mantel design. Nationally advertised—people know the name "Heatilator!"

Attic fan installation has been greatly simplified by a new package unit developed by Hunter Fan and Ventilating Co., Memphis, Tenn. Quiet, powerful fan fits law attics and narrow hallways. Complete with fan, motor, suction box and ceiling shutter (automatic or pull chain). Made in four sizes (4750 to 9500 CFM) to fit any size home. Hunter Fan & Ventilating Co., Box 2858-HB, Memphis 2, Tenn.

The MOR-SUN pressed steel furnace (for gas and oil) is the world's finest PRODUCTION Furnace! Every part is dis-pressed. Beauty on the outside and rugged efficiency on the inside are not enough; the MOR-SUN gives even more—dependability—through use of quality control equipment. Test—Test—Test, most beautiful furnace in the world.

Matchless heating performance is provided by every attractive furnace and air conditioner in Waterbury's complete line. The right unit for every size and type home—the choice of any fuel—guarantees customer satisfaction every time. Complete literature available. Write The Waterman-Waterbury Company, 1212 Jackson St. N.E., Minneapolis 13, Minnesota.

Every month in *House Beautiful*, Webster advertising tells your prospects about Webster Baseboard Heating—true perimeter heating with forced hot water in more than 12,000 installations. Descriptive literature on request to Warren Webster & Company, Dept. HAB-3, Camden 5, New Jersey.

Hanovia World Renowned Ultraviolet Quartz Health Lamp. Every American may enjoy and profit from the healthful rays of the Hanovia Ultraviolet Quartz Health Lamp—the outstanding lamp, precision built, that gives you the beneficial short, medium and long waves of ultraviolet which are so helpful in keeping you physically fit.


A full-page, full-color advertisement shows why "MOTHER LOVES FORMICA®". Gay hues and distinctive patterns for sink cabinet and dinette tops. Uniformed by talking water, alcohol, fruit acids, cleaning alkalies. Never need painting or refinishing. Wipe clean with a damp cloth.

There are many new droppery needs in the current trend of house design in extensive remodeling and refurnishing. Judd's thimble-tip non-snag curtain rod threads easily. With Judd's Pleatmaster any woman can make her own pleats.... they all love it.

**FREE DISPLAY CARDS FOR YOUR BUSINESS**

Check any or all the top-quality products below (preceded by a number), which are advertised in March *House Beautiful*, fill in your name and mailing address... mail to: Merchandising Division, *House Beautiful* Magazine, 572 Madison Avenue, New York 22, N. Y.

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89. **RUSTICRAFT WOODEN FENCES & GATES**
90. **COLORADO CARNATIONS**
91. **SCOTTS' LAWN CARE PRODUCTS**
92. **ATCO MOTOR MOWERS**
93. **BRIGGS & STRATTON GASOLINE ENGINES**
94. **ORLYT LEAN-TO GREENHOUSE**
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96. **SPEEDLINE GARDEN TOOLS**
97. **WATERBURY PORTABLE POWER**
98. **NORTH AMERICAN POWER MOWER**
99. **WORCESTER 21in. SHEAR MASTER POWER MOWER**

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80. **FORMICA CABINET TOPS**
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82. **K-VENIENCES**
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84. **CUTLER—HAMMER MULTI-BREAKER**
85. **NICHOLS NEVER-STAIN ALUMINUM NAILS**
86. **MARBLE FOR THE HOME**
87. **ANCHOR CHAIN LINK FENCE**
88. **DUBOIS WOVEN WOOD FENCE**

**NAME**
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**CITY**
**ZONE**
**STATE**

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* No card available.
MEDUSA PAINTS

Give homes 20% MORE LIVABLE AREA
at Little Cost

Whether you are building to sell or on contract, you can give homes approximately 20% more livable area by finishing basements inexpensively with Medusa Paints. When painted in any of the beautiful colors of Medusa Paints, you create for the home owner the possibilities of a delightful recreation room ... a pleasant playroom ... a clean workshop ... a bright laundry ... in all 20% more livable space.

And at such reasonable cost, too! All you need to do is to have the walls painted with Medusa Portland Cement Paint. This beautiful paint actually protects basements against dampness as well as decorates. Then, on concrete floors, use Medusa Rubber Base Paint ... a super tough coating that bounces off wear and resists the action of cleaning compounds, water, and other alkalies. And while you're building a beautiful basement, be sure it's lastingly dry by using those famous Medusa Products ... Medusa Waterproofed Cements, Gray or White, or Medusa Waterproofed Powder and Paste. Properly used in all concrete and mortar, they keep basements dry for years!

Medusa Products Division of Medusa Portland Cement Company, 1012-1 Midland Building, Cleveland 15, Ohio.

You can build BETTER with MEDUSA PRODUCTS.


Letters to the Editor

Practical and NewsworthY

Sirs: We are delighted to take time out to express our appreciation for American Builder and the good job being done in covering construction jobs that are of vital interest to every builder who is trying constantly to do a better job. We think your feature articles, such as "Gypsum in Construction" and "Construction Lumber," which were recently run, are particularly helpful. We trust you will keep up the good work.

M. W. Turner, 
M. W. Turner Company, Realtors, 
Tulsa 3, Oklahoma

Sirs: . . . Believing in giving credit where it is due, we would like to tell you that we enjoy American Builder a great deal. In addition to being very interesting and educational, we find that it is the best means of keeping abreast of the building news throughout the nation. May we extend our congratulations on a job well done.

R. S. Belk, 
Southern Pacific Milling Company, 
Santa Barbara, California

"Good Time Charley"

Sirs: My compliments to you on your editorial in the December, 1950, issue of the American Builder entitled "The Basic Problem." Your line of thinking parallels my own. I have felt all along that it was our duty to bring about peace treaties with our defeated enemies as soon as possible after the ending of World War II and then bring our soldiers home. True, our position as the only nation with exportable capital, required us to lend (not give) substantial amounts of money to those nations demonstrating an ability and willingness to live up to the terms of their borrowings. As it is, we have taken billions of dollars out of our taxpayers' pockets and have been a regular "good time Charley" in squandering those huge funds all over the world. Furthermore, we have now become entangled all over the world. I would rather run the risk of being called an isolationist than to approve the wastage of the fruits of toil of the American people. Our lavish gifts have brought us no friends. Had we loaned the money we could have incurred no greater enmity than we now enjoy. As you so accurately stated in your editorial, the better policy would be to set an example to the whole world by demonstrating that, under freedom, men can produce more and enjoy more of the good things in life than under any other system. Your editorial and the one by Mr. Dunn on Page 9 of the same issue furnish beacon lights of sanity in an age when insanity seems to be more popular.

Russell & Russell, 
Attorneys and Counselors-at-Law, 
New York 17, N. Y.

A Book About Lumber

Sirs: We have received our December issue of the American Builder and have read the article on "Construction Lumber." If the succeeding three articles on lumber are as well done as this one, it would be a fine idea to have the whole series combined into one pamphlet. If this done we would like to secure a supply for distribution to our contractor customers.

Al Roth 
Farm Cash Lumber and Hardware Co. 
Wichita, Kansas

Sirs: I have just had time to finish reading the entire section (on lumber in the December issue) and am more than delighted with the excellent results accomplished. This type of presentation is certainly worthwhile. Craftsmen as well as apprentices can learn much from this fine editorial effort. So, too, can dealers, contractors and others. Of special interest to me was the understandable manner in which you covered the basic material on framing. The thought has probably already occurred to you that this information could be profitably published in handbook form, after first publication in American Builder. Assuming that the material in the next three issues measures up to the contents of the December issue, and I am sure it will, you have the makings of a fine handbook. Above all, you have been very practical in your approach to this subject matter.

Arthur W. Priaulx, 
Public Relations Director, 
West Coast Lumbermen's Association

Sirs: I have become very much impressed with the article in your December, 1950, issue of the American Builder on lumber and house construction. Inasmuch as we continually deal with builders who want to use our products for their exterior and interior work, it would benefit us greatly to have on hand a few copies of these splendid articles.

J. M. Parriott, 
Architectural Department, 
United States Plywood Corporation

Sirs: The first installment of the series on Construction Lumber appearing in (Continued on page 194)
suggested Ceco casements for the dining room

CECO STEEL

In construction products CECO ENGINEERING
Daylight and View
for the Dining Room too!

Ask any headwaiter of a plush dining place what request he hears again and again and he'll tell you:
"Table next to the window please."

And that is easy to understand because everyone enjoys the relaxing thoughts that come from distant views — the good cheer daylight brings.

So, why not daylight and view when dining in too?

Ceco design makes that possible with windows of steel that transform a whole dining room into a seat by the window — walls of window wonder that bring nature inside and brighten a room with beauty born of daylight.

Next time, plan dining rooms with Ceco Steel Windows. They have practical advantages too — such as tighter weatherseal — won't stick or warp — are easier to wash from the inside.

And remember, when you use Ceco Steel Windows, you know you've used the very best, you're sure of economy too. Send for the free booklet detailing window designs for the dining room and every room in the house.

CECO STEEL PRODUCTS CORPORATION
General Offices: 5601 West 26th Street, Chicago 50, Illinois
Offices, warehouses and fabricating plants in principal cities

makes the big difference
We’re serenading customers for you with this powerful quartet!

Yes, Flintkote advertising is going to more than 7,843,000 homeowners... telling the Flintkote story selling the Flintkote brand in almost 38,000,000 colorful, hard-hitting messages during 1951!

Homeowners right in your area are going to be exposed to this powerful program of Flintkote Advertising. You’ll profit by tying-in with it.

To help you do just that... you will have lots of convincing new literature for your use. Hard-hitting dealer helps... envelope stuffers... samples... counter salesmen... they’re all there, ready to help you sell.

Be sure you get full details from your Flintkote representative next time he calls. Or, if you’re in a real hurry, write us. We’ll rush complete information... so you’ll have plenty of time for planning.


FLINTKOTE...the extra years of service cost no more!
MAJOR IMPROVEMENT—
Painting, reroofing and repairs are major improvements under 225.2(g) of Regulation X, in the opinion of the board of governors of the Federal Reserve system. Thus, any such work costing more than $2,500 comes under the credit restrictions of the act.

LABOR ALLOWANCES—In the case of an owner doing all or part of the labor required to build a house, or accepting labor gratis from his friends, an allowance against the total value of the property can be obtained.

ALLOWABLE IN ESTIMATE—Also a reasonable estimate of the value of the labor to be performed by the borrower, his family or friends may be included in the bona fide estimate of the cost of completing new construction. This is construed to mean that if a man can build a house on which the estimated value of the entire property is $10,000 for an actual cash outlay of $8,000 in materials and employed outside labor, he can get credit for a $2,000 labor equity of his own in the extension of credit under Regulation X.

MIXED PURPOSE LOANS—A borrower seeks a loan of $8,000 on an existing residence. $2,000 of the loan will be used to retire an existing mortgage on the property, or to retire indebtedness not secured by the mortgage on the property, or for some other reason which would not make the loan subject to Regulation X. How much credit can be extended, and on what terms?

BOARD'S OPINION—The $8,000 is for financing a major addition to the residence. The maximum loan value for this would be $6,450, to which the entire $2,000 would be added. Total loan allowable is $8,450. Of this, the $6,450 would have to be repaid within the time and at the rate required by Regulation X.

SUBSTANDARD—If you do not know it, substandard as applied to residence units, need have little or nothing to do with the physical or structural condition of the building. In fact, a new, modern building may contain one or more substandard living units, according to the definition recently released by the Bureau of the Census.

EXAMPLE—A single room with cooking facilities or two rooms having a separate entrance qualify as a dwelling unit, but if either is without a bath it is substandard. If a family in a new, modern home rents out a room with cooking facilities but no private bath, both the room and the remainder of the house are classed as substandard. There are two substandard units.

NPA ORDER M-6—It requires steel producers to allot to their warehouses proportionate percentages of each steel product, based on monthly shipments during the first nine months of 1950. Purpose of the order is to assure supplies of steel to small business firms.

ALUMINUM—Use for production of civilian products reduced by 35 percent of total used in first six months of 1950.

STATEMENT OF THE MONTH—It was made by Melchior Palyi, eminent economist. He said, "How does it help to gradually compress the civilian sector if the military sector grows in proportion, or better, and if credit expansion and/or government deficit pour out additional purchasing power? (Actually, even a budget balanced with the aid of excessive and mal-distributed taxation pours oil on the fire of rising prices.) As long as defense preparations must rely on monetary inflation as their incentive, the result can only be price inflation. Perhaps it is unfair to the Fair Dealers to discuss their ideas too seriously. They may be nothing more than ideological stop-gaps for the sake of 'public relations.' What they indicate more than anything else is the compounded confusion on the domestic front from which the nation's management suffers, from top level down. That, in turn, is a reflex of an underlying confusion about what 'defense' means; against what, for how long, over what area, by which military and spending methods, etc.? The totally obsolete idea of a global Maginot Line built of men, weapons, and especially of dollars, engenders domestic production and financing policies which are bound to be destructive of the material and spiritual heritage of country."
Acclaimed by builders everywhere

From all over the nation, outstanding leaders in the building industry have given a resounding stamp of approval to Coleman Blend-Air—the spectacular new central heating and ventilating system developed, perfected and introduced by Coleman of Wichita, Kansas. Not mere words of praise, but orders! orders! orders! have poured in faster than Coleman can fill them. And why not—Blend-Air is a heating revolution!

Coleman Blend-Air is startlingly new from its 3½" heating tubes that are quick and easy to install in old as well as new homes, to the flexible elbows that bend around obstacles, to the magic blender that blends just the right amount of freshly heated air with circulated room air for even comfort, to the compact, fully automatic Coleman Blend-Air Furnace that completes the revolutionary new system.
1. 3½" Heat Tubes save costly metal work on the job. They’re pre-engineered and standardized for precision fit and lower cost. Flexible elbows bend around obstacles and overcome other job conditions. Individual tubes carry heat from furnace to blender in each room. Heat can be dampered down as desired.

2. Magic Blenders placed in the wall in each room blend hot air direct from furnace with the room air that is pulled into the blender. This blended warm air is RE-circulated through the room. Temperature can be controlled in each room. There are 3 types of blenders to fit any construction, new houses or old. (Above: Cabinet type.)

3. Special Blend-Air Furnace can be put in basement, kitchen, utility room or closet. Saves space. Heat tubes carry heated air from bonnet to blenders in rooms. A centrally located return air duct brings air back to the furnace for filtering and reheating. Models for gas or oil fuels.

Now every home . . . large or small . . . old or new . . . can have this central heating system that is as new as tomorrow, made of standardized parts, delivered on the job as a complete package, amazingly simple to install, surprisingly low in cost and remarkably economical to operate. Made by Coleman—the name that helps you sell. If you haven’t already gotten all the facts, write today to The Coleman Company, Inc., Dept. AB-751, Wichita 1, Kansas.

Comfort costs so little with a Coleman

America’s Leader in Home Heating

FEBRUARY 1951

What contractors and builders say about Coleman Blend-Air

Chicago, Ill.

"We found it to be the best heating system for our house and it is, by far, doing a better job than the unit we previously used . . . All our customers are very well satisfied."

— Fidelity Builders

Memphis, Tenn.

"One of the reasons we like Blend-Air is that it takes so little room for duct work in the attic . . . plus the fact it is easy to install. All the Blend-Air units have been so installed on time."

— Louis Weeks Construction Co.

Randolph, Mass.

"Coleman's new Blend-Air Heating System has helped in the following ways: (1) Simple installation, (2) Trouble-free operation, (3) Economical operation, (4) Neatness in appearance, (5) Increasing the selling value of houses."

— Gerald M. Callahan, Inc.

What users say about Blend-Air

New Orleans, La.

"Our Blend-Air System has kept our home completely warm from floor to ceiling . . . We have a little boy in the crawling stage and warm floors are a must . . . It was installed in less than two days time."

— Ed. J. Hemard, Jr. 1470 Granite Drive

Des Moines, Iowa

"We have been very pleased with the operation and comfort of this Blend-Air System . . . We especially enjoyed the even heat from ceiling to floor in every room throughout the house."

— John C. Lemke, 2002 63rd Street
Layouts for Perimeter Heating

THE THEORY of perimeter warm air heating, discussed in a previous article (American Builder, January 1951), is based on the principle that comfort will prevail in any structure if the heating system will replace heat that is lost, as fast as it is lost, at the point where it is lost. Delivering heat where it is needed is the logical premise on which the heating systems described were designed. Each house plan shown presents special problems. With a temperature difference (1F to 3F) between floor and ceiling the thermostat setting need not be raised above 70 F. in a perimeter distribution system. The need for high room temperatures and excessive heat losses through ceilings is eliminated. Perimeter warm air heating abandons past conceptions implied in the term: cold air. Return air intakes may be placed in the floor, on low sidewall or high sidewall because the temperature differentials between floor and ceiling denote the absence of a layer of low temperature air at the floor. Cold is avoided by preventing its formation.

The following designs of warm air perimeter systems have proved effective and are suggested design procedures for types of construction that have received widespread acceptance.

Small Basementless House with Slab Floor

A radial distribution system is recommended. Supply ducts are formed in the slab, one duct for each register. The warm supply ducts impart a mild warmth to the slab and floor, providing a comfortable radiant effect as the warm air flows to the registers located under windows.

Tri-Level House

Either a trunkline and branch or extended plenum distribution system is recommended. Use of a downflow furnace permits heat to be introduced into the system below the lowest living level, thus taking advantage of the natural tendency of heat to rise and permitting warm air to be delivered continuously at a low velocity. Note that ductwork is hidden in a crawl space and that risers are installed in a common partition.

(Continued on page 50)
"Simplified Physics of Vapor and Thermal Insulation"

by Alexander Schwartz

The New Edition is Ready!

Simply, clearly and precisely written in down-to-earth language. 44 Pages crammed with Facts, Figures, Charts, Illustrations, and Explanations of Heat and Vapor Transfer; Conduction and Density; Convection; Radiation and Emissivity; Rejection, Reflection, Absorption and Permeability.

SENT FREE! JUST USE THE COUPON


Topics include Vapor, Vapor Barriers, Humidity, Condensation, Radiant Heating. Discusses every kind of material, fibrous and reflective insulations, tells where and how to use them. Explains how to make one's own tests of heat flow.

Worth Getting Just for The Famous "Chart of Thermal Insulation Values"

Latest, specially compiled data, conveniently tabulated, on k, C, R and U factors of all insulations, of all thicknesses, and their densities, weights, cubic contents.

INFRA INSULATION, INC.
10 Murray Street, New York, N.Y. Dept. B-2

Please send me complimentary copy of "Simplified Physics of Vapor and Thermal Insulation."

Name
Connection
Address

FEBRUARY 1951
Small House with Full Basement

An extended plenum system is recommended, a variation of the trunkline and branch system but having the same advantages. This is especially good in small homes where the furnace can be centrally located. It requires a bare minimum of costly shop and site labor and needs only a bit more metal than the conventional trunkline and branch system.

The furnace in this system may be placed either in the basement or on the first floor. In either case only a small area is needed for the heating unit.

The first floor location offers many advantages when a compact downflow furnace is used. This type of unit occupies about the same area as a masonry chimney and leaves the basement free for laundry, recreation, workshop and other activities. It is an excellent solution in areas where basements occasionally become flooded. It costs no more than a basement installation.

Small House with Crawl Space

Either a radial, trunk and branch, or extended plenum distribution system is recommended. If radial distribution is used, individual ducts are run beneath the floor to each register from a centrally located furnace as in the concrete slab application. In either case floors are kept warm. Heat loss from uninsulated ducts to the crawl space is utilized in warming the floor.

Radial distribution permits the use of standard size pipe which may be purchased in 10 feet and longer lengths. The pipe may be held together and made secure with drawbands or sheet metal screws. This alone accounts for a substantial saving in installation costs.

In using any of the three systems recommended for this type of house, foundation walls should be insulated and vents in these walls should be closed during the heating season. In other words, the crawl space must be tight so most of the heat lost by the ducts will warm the floor.

Medium-Size Basementless House with Slab Floor

A loop perimeter system is recommended. This system is designed specifically for this type of house as radial distribution would call for too many individual feeder ducts. A continuous duct is placed immediately under the surface of the concrete around the entire perimeter of the building. Outlets may be taken off wherever desired. Warm air is fed into this continuous loop duct by radial feeders which are connected to a centrally located furnace.

Medium-Size House with Half Basement

A trunkline and branch distribution system is recommended. The trunkline is installed at the ceiling of the basement, usually parallel with the beam. Branch ducts may be either round or square and are connected to floor registers under windows, except in bathrooms and front entrances where it is desirable to install the registers on the sidewall. If the height of the ductwork approximates that of the beam and the branch ducts are installed between joists, the system is compact and preserves the full ceiling height.

No insulation of ducts is required. Heat loss from the exposed ductwork warms the basement. If additional heat is required, outlets may be cut into the trunk.

Courtesy Mechanical Home Systems Inc., Chicago, Ill.
Here's a new and wanted addition to Richmond’s line of winter air conditioners... giving you a still wider selection of quality heating units.

Here’s a unit built to fit easily into homes where space is tight... ideal for restricted space used in utility closet installations.

Here's a competitively priced, thrifty-to-run unit that more than meets today's demand for low-cost heating... without sacrificing quality.

Here's the new SU-P in its handsome jacket... made of sturdy steel, finished in light green Hammertone baked enamel. Note the heat exchanger... made of 12 gauge steel... welded for durability and efficiency. Use the handy coupon to get full information—fast. Remember—when quality and economy count, count on Richmond.

Oil Burner and Combustion Chamber Assembly — flange mounted with 4 nuts for easy installation or removal. Stainless steel combustion chamber. Approved by Underwriters' Laboratories, Inc.

Type SU-P
Steel Oil-Fired Winter Air Conditioner. Two sizes—85,000 BTU and 106,000 BTU output at Bonnet.

RICHMOND
RICHMOND RADIATOR CO.—AFFILIATE OF REYNOLDS METALS CO.,
Richmond Radiator Company
19 East 47th Street, New York 17, N. Y.
Please send me information and literature on Richmond heating equipment and plumbing fixtures.

NAME

COMPANY

ADDRESS

FEBRUARY 1951
Question —
Why is PAINE REZO the door that it is ........

Answer —
Proven, Guaranteed Performance that backs up the contractor who installs it

In all of the construction industry, there is no door like the Paine Rezo ... no door that combines the great strength of the interlocking wood Rezo core with lightness in weight, no door that is the equal of the Rezo in dimensional stability, no door that performs so well anywhere and everywhere that it carries an unconditional guarantee of satisfactory service.

A 1 1/8-inch thickness is the minimum required to provide this structural strength that responsible builders have wanted more than four million times — a demand that has made Paine the world's largest exclusive manufacturer of flush air cell doors. Write today for full information.
You Can Pay $50 More and Still Not Beat the

8" HEAVY-DUTY LECTRO-SAW
only $92.50

for • ABUNDANT POWER • SPEEDY SAWING • EASY HANDLING

If you're like most people, you rate a tool by the work it does ... not by the figure on its price tag. That's why it will pay you to try the 8" Heavy-Duty LECTRO-SAW! Ruggedly built for heavy-duty sawing, this husky Saw gives you the features and performance you'd expect to find only in a saw costing much more. Yet it costs you only $92.50! And it soon pays for itself in time and money saved on a raft of jobs!

LECTRO-SAWS are built by 40-year-old BLACK & DECKER, world's largest maker of quality electric tools. See your building supply dealer for a demonstration of LECTRO-SAWS—8" Heavy-Duty model, $92.50; 6" Heavy-Duty model, $56.50. Write today for free, detailed catalog to: HOME-UTILITY Div., The BLACK & DECKER Mfg. Co., Dept. 666, Towson 4, Md.

A PROFESSIONAL SAW AT A POPULAR PRICE

Tests Prove the superlative power and cutting ability of the 8" Heavy-Duty LECTRO-SAW! To make the test shown below, a variable-speed conveyor motor was hooked up with a chain to each saw to pull the saw through the wood in a ripping cut. What's more, while Saws "B" and "C" were in the same price range, Saw "A" costs almost $50 more than the 8" Heavy-Duty LECTRO-SAW!

Max. Rate of Feed—Ripping 3" Dressed Fir (Ft. per Min.)

8" HEAVY-DUTY LECTRO-SAW
SAW "A" ... 17'
SAW "B" .... 14'
SAW "C" .... 8'

EASE OF HANDLING —in the board!

Balance tricks are fine in a side show. But the only place where balance and ease of handling count with a Saw is when it's in the board, sawing wood! That's where the Lectro-Saw shines!

The shorter the distance between the handle and blade of a power saw, the easier it is to control. The LECTRO-SAW's handle-to-blade dimension is held to a minimum (3/4" less than any competitive saw listed above). Yet the handle is close to the center of gravity for good balance.

Note the two depth adjustments—front and rear—on LECTRO-SAW which permit the handle to be kept at a comfortable wrist position, regardless of depth of cut. This is not possible on saws with only one depth adjustment.

Tailor-Made LECTRO-BLADES!
The first saw blades designed specifically to take advantage of the power of a particular saw! LECTRO-BLADES have fewer number of teeth than conventional blades to give a better distribution of work load and produce chips instead of fine saw dust. As a result, they actually increase the output of the Saw!

Carbide-Tipped LECTRO-BLADES cut transite and cemento board 7 to 12 times faster than abrasive discs. Last 30 times longer between sharpenings than regular steel blades. Lose less diameter than ordinary blades when re sharpened.

NOTE: Cut-up to 20% faster in construction for extra-long life
A Prospect Gave Me The Sales Idea Of The Year!

It was funny the way it happened. We were walking around the outside of the house when my prospect said, "What's that?" And he pointed to the Honeywell Anticipating Thermostat.

"Just one of the thermostats in the electronic temperature control system," I said. "It matches your heating to the changes in weather. Working together with another thermostat indoors, it makes sure your rooms are always comfortable. This system can be 100 times more sensitive than standard controls."

Well—you should have seen his face light up. "That's really something," he said. "Why, you ought to be shouting that story from the roof. It's one of the best features in the house!"

Frankly, I was amazed. I'd put in electronic control because I knew my customers would be more comfortable—and better satisfied with the house. I'd never thought about it as a special sales feature like my modern kitchen and automatic laundry and my picture windows. But this experience changed all that.

Since then, I've been making a big point of electronic temperature control—both in my sales talks and my advertising. And the response has been wonderful.

For my money, Electronic Moduflow is the sales idea of the year.

Electronic controls can help you sell houses, too. For more of the "whys" and "hows" call your local Honeywell office. Or write Minneapolis-Honeywell Regulator Co., Department AB-2-26, Minneapolis 8, Minnesota.

Honeywell
First in Controls
Sell Roddiscraft Solid Core Flush Veneered Doors For

APARTMENTS
HOTELS
OFFICE BUILDINGS
SCHOOLS
INSTITUTIONS

You Can Tell Your Prospects Roddiscraft Solid Core Flush Veneered Doors Are

FIRE RESISTANT...
The resistance of Roddiscraft Solid Core Flush Veneered Doors to fire has been substantiated by independent laboratories where standard Roddiscraft Doors* have easily exceeded the 40-minute fire test — a fact of interest to apartment and hotel builders.

SOUND RESISTANT...
Roddiscraft Standard 1-3/4" Solid Core Doors develop an average sound transmission loss of 30.9 decibels — only a little less than specially constructed sound resistant doors of much greater cost.

WATERPROOF...
Recommended for exterior as well as interior use. Phenolic resin glue provides two completely waterproof shields over the entire area of the door on each side of the core.

Wherever doors are needed, the complete line of Roddiscraft Doors — solid core, hollow core, Protex fire doors and X-ray doors — gives you a door for every application. Order stock sizes and thicknesses from your nearest Roddiscraft warehouse.

*Nott to be confused with the Roddiscraft Protex 60, rated a 1-hour Flush Veneered Wood Fire Door by the New York City Board of Standards and Appeals.
Sliding Door Hardware?

Here are 4 reasons why you should choose KENNATRACK!

SERIES 250
FOR CABINETS AND WARDROBES
New Series 250 is an improved hanger for by-passing 3/4", 1 1/16", 1 1/8" or 1 1/8" doors. Permits doors to be mounted flush with cabinet face. Series 250 has nylon wheel for long wear, silent service. One design meets every need for by-passing doors.

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Series 300 is extremely popular because of its varied uses. Like all other Kennatrack, it is top mounted... NO floor track. Exclusive mounting feature requires minimum of headroom. Each door is carried on not two, not four... BUT on EIGHT neoprene-tired wheels.

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FOR OPEN POCKET CONSTRUCTION
Series 325 is of special design for open pocket sliding doors—same as Series 300 except for special flange which simplifies mounting in open pocket. Each door has not two, not four... BUT EIGHT neoprene-tired wheels. Wheels run smoothly on ball bearing axles.

SERIES 400
FOR HEAVY WALL POCKET INSTALLATIONS
Series 400 is for heavy closed pocket doors... extra heavy track. Full-flooting hanger design assures equal distribution of load to not two, not four... BUT EIGHT oversize, neoprene-tired wheels, on ball bearing axles. Has vertical adjustment.

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AMERICAN BUILDER
THREE GREAT SALES FEATURES!

No wonder this combination for winter comfort and home beauty is being installed in so many new homes!

Consider these features: Radiant sunny warmth from heating units which look like conventional wooden baseboards and are just as unobtrusive.

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Next, an all year 'round supply of hot water for kitchen, laundry and bath, heated by the same boiler that heats the house. Plenty for automatic washers, showers—and at amazingly low cost!

And finally—fuel economy! The automatic modulation of the heat supply prevents fuel waste—keeps heating cost at rock bottom. This accurate control is especially valuable in spring and fall, when only a little heat is needed.

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B & G Hydro-Flo Equipment can be installed on any hot water heating boiler

1 B & G Booster—An electrically operated pump which circulates hot water through the baseboards.

2 B & G Flo-Control Valve—Helps keep home temperature constantly at the comfort level.

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FEBRUARY 1951
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The clean, modern styling of this new Kawneer Stock Sash reflects its inherent strength and reliability. Famous Kawneer resilient-grip construction reduces installation problems, and it insures maximum safety and reliability. The strong steel clips minimize breakage due to sudden shocks, high winds, and building settling. For further information write The Kawneer Company, Department AB-63, 1105 North Front St., Niles, Mich., or Department AB-63, 930 Dwight Way, Berkeley, California.

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ARCHITECTURAL METAL PRODUCTS
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Modern Entrances • Aluminum Facing Materials
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The Nicoll Lumber Company of Redwood City, California, manufacturers of famous Roll-A-Way Homes, feature American Kitchens exclusively. H. W. Smith, president, says:

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- Tongue and groove are designed to fit without forcing.
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CROSSETT LUMBER CO., CROSSETT, ARKANSAS

How to Use Chalk Line Without Help

When it is necessary to mark off a wide sheet of plywood or Sheetrock with a chalk line before cutting, tie hammer to one end of line and another tool of similar weight on the other end. Drop the tools over the end of board where cut is to be made and raise the line in the center for marking.—Herbert E. Fey, New Braunfels, Texas.

How to Use Joist Spacers

After the wall plates are doubled and the studs placed in position and braced ready for the joist, cut two boards size 1 x 4 inch by 14-1/2 inches long. Set the first ceiling joist 16 inches from inside corner of plate to center line of joist. Then use these spacers between all other joists. Pull out spacer and repeat.—J. G. Caldwell, San Mateo, Calif.

A Time Saver in Roof Framing

It is a time saver to cut 2 x 4-inch blocks between the rafters and nail them in place as roof is framed. After the roof is cut there are plenty of scrap pieces around. Blocks are easy to place as the lower edge goes tight against stud line.—J. G. Caldwell, San Mateo, Calif.
BESSER BLOCK EXCELS!

@ MODULAR DIMENSIONS — For example, a block 7¾" x 7¾" x 15¾", plus ¾" mortar joint, is equal to a block 8" x 8" x 16".
@ THICKER FACE SHELL AT CENTER — Assures greater tensile strength, resulting in stronger wall.
@ VERTICAL MORTAR GROOVES ON ENDS — Provide stronger bond, improve stability.
@ WIDER MORTAR BED ON TOP — Saves mortar, keys block in place.
@ PERMANENT PLAIN END, ON ONE END, if desired — Makes every block a corner block at no extra cost.
@ ACCURATE DIMENSIONS — Close tolerances always maintained on width, height and length.
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@ HAND HOLDS — Easy to lift — less finger pressure required to pick up block.
@ FAST CURING — Rectangular cores of Vibrapac Block simplify lift truck handling of block cubes — eliminate breakage.

10 Reasons Why Besser Block Excels!

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Assure Permanent, Low Cost Home Construction!

When you build a new home, you naturally want to make it FIRE-SAFE. You never can tell when fire will strike, erasing in a matter of minutes, the dreaming, planning and savings of years. An ALL-MASONRY home assures maximum fire-safety and wind-resistance, without sacrificing charm and architectural beauty.

VIBRAPAC Concrete Masonry Units are available in a variety of attractive patterns for sturdy, fire-resistant walls. These units can be controlled and varied in both texture and density as required for sound proofing, acoustical correction or appearance of wall finish.

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Vibrapac Masonry Units are available at low cost. Write for free copy of Bulletin No. 51 illustrating standard masonry units available, plus names of Vibrapac equipped plants in your area.

Besser MASONRY — the fully automatic concrete block machine. Produces high quality masonry units of any desired texture or density.

Besser MANUFACTURING COMPANY • ALPENA, MICHIGAN, U.S.A.
SOUND BUILDING INFORMATION
SAVES YOU TIME LABOR AND MONEY — AND

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February 1951
Why Builder Ralph D. Talbott EQUIPS ALL HIS HOUSES WITH ELECTRIC RANGES

The Talbott Building Company of Baltimore, Md. sold 44 of these houses in one day. Priced at $8,990, they have two bedrooms, living room, dining room, and completely electric kitchen. They are known as low cost, luxury homes.

These Talbott houses in the Lochearn development have electric kitchens which include electric sink and dishwasher with waste disposer, automatic electric water heater and electric refrigerator. And the automatic range—of course, it's Electric!

“When I build a house,” says Mr. Talbott, “I make sure to install the kind of equipment my prospective purchasers will want. I’ve found out what they want, and the way my houses sell proves that I’m right. The equipment might vary a bit from house to house—but there’s one thing goes into every house I build. That’s a modern, automatic Electric Range. When a woman sees that range, she sort of takes it for granted that everything else is up-to-the-minute.”

Are you equipping your houses with the cooking equipment women want—automatic modern Electric Ranges?

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

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EQUIP YOUR HOUSES WITH ELECTRIC RANGES

These well-known builders are also on the Electric Range Bandwagon!

William Levitt—Levittown, L. I.
By Williams—Teesneck, N. J.
Samuel H. Walker III—Huntington, Md.
C. Ronald Marotte—Cincinnati, Ohio
William A. Zeh—Los Angeles, Cal.
A RECENT release from the Journal of Public Housing states that public housing officials throughout the country are “putting to work every means available to cut housing construction costs without sacrificing acceptable minimum space and site density standards.”

THE PUBLIC HOUSING officials, of course, overlooked the first and most effective means of solving the problem which, incidentally, is being handled very well by private builders and their suppliers.

THE FIRST and most effective way open to the officials is to quit their jobs, close their office, and relieve the taxpaying public of the necessity of maintaining them. That would eliminate one large slice of government spending, and make possible a reduction in Federal taxes, which would decrease the cost of housing to some extent.

THESE SAME officials, if they have anything to contribute, will find themselves in great demand by private builders who are always eager to employ the brains that will help them cut their construction costs.

THE REPORT goes on to state that the Chicago Housing Authority recently reduced the cost of one of its projects by 16 per cent on a re-bid following redesign. If that is the kind of cost reduction the tax payers are buying through maintaining the Chicago Housing Authority, it is a bad buy.

THOSE ARE the antique methods discarded before the war, and brought about by a designer submitting bids on a plan, often for the real purpose of learning from builders what the cost would be. Then, the expensive process of re-design is begun, and the bid-getting process repeated. The skilled private builder knows his business and his costs well enough to accept only those designs which he knows in advance can be built for a pre-determined price. If he knew any less he never would survive his first year.

THE CHA, the report goes on to say, used such means as cutting the size of elevator lobbies, modifying boiler specifications, introducing op-
*The quality group of door manufacturers is comprised of mills inspected regularly by the Fir Door Institute inspection service. This service is a check on quality completely independent of individual mill supervision. The doors produced by these manufacturers carry FDI grademarks:

Acme Door Co.
Hoquiam, Wash.

Buffelen Manufacturing Co.
Tacoma, Wash.

Craver, Langhardt Door Co.
Anacortes, Wash.

Klamath Door Company
Klamath Falls, Ore.

M & M Wood Working Co.
Portland, Ore.

E. A. Nord Co.
Everett, Wash.

Puget Sound Manufacturing Co.
Tacoma, Wash.

Robinson Plywood & Timber Co.
Everett, Wash.

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The Wheeler Osgood Co.
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THE QUALITY group of door manufacturers distinguish their product with one of these registered grademarks. By specifying FDI-stamped doors, buyers can be certain of receiving a dependable product...one preferred by six out of every ten door users.

The official FDI stamp on a Douglas Fir, Western Hemlock, or Sitka Spruce door is your assurance it meets the quality standards of the U. S. Department of Commerce. To be certain of door quality, specify FDI grade-marked doors and be sure.

Mills subject to Fir Door Institute inspection are always glad to provide Notarized Certificates to buyers upon request, showing that doors shipped have been found to be up to U. S. Department of Commerce Standards for the grade purchased.
tions for the contractor wherever possible, reducing building heights, reducing amount of painting required, omitting requirements for the contractor to wash windows. How can the public justify paying a government agency to do these things, which any top-grade architect would have known about in the first place?

ANOTHER EXAMPLE is cited by the Journal in Little Rock. Here, according to the Journal, approximately a half-million dollars were cut off the cost of a project. Every change made in the design was done "at the suggestion of the architect in consultation with some of the contractors who figured the job in the first place... This procedure was used because our architects felt... that we would be apt to cut where cutting would help if we followed the contractors' suggestions and because the contractors were obviously in possession of information concerning current material shortages and prices that should largely govern the changes we made."

IF EVER there was a frank admission that the only people who know building costs are the builders themselves, the Journal made it, and also quite frankly said that the only people to go to for economical construction methods and design information are the same builders. Again, why is it necessary for the taxpayers to support housing authorities throughout the country when they are powerless to do anything but ask the builders how to do the things the builders can do better without housing authorities?

OF COURSE, it would be unfair to question the existence of housing authorities on that evidence. It must be said for them that they are trying. The Journal states that houseors as well as architects and planners are criticizing PHA for the reduced standards stemming from reduced room space and increased site densities, and claiming that high costs can be reduced through other means—improved methods of buying materials, better design, new techniques for mass production.

HERE, the critics are unfair. How do they expect the housing officials to come up with the answers when it has already been demonstrated and admitted that the builders are the only ones who have the background and

(Continued on page 69)
These Schools Heat with Anthracite because Anthracite Heat is—


Check these case histories of actual performance:

SCHOOL No. 1
School contains sixteen (16) rooms and a gymnasium and houses three hundred and twenty (320) pupils. One stoker using one hundred and ten (110) tons of rice coal per year requires twenty two (22) man hours for a complete heating season. The building is cared for by a single custodian who performs all other janitorial duties as well.

SCHOOL No. 2
This is a seventeen (17) room and gymnasium unit housing two hundred and ninety two (292) pupils. One stoker using one hundred and fifty (150) tons of #1 Buckwheat per year requires ½ man hour of labor every two and one half (2½) days during the heating season. A single custodian performs all other janitorial duties.

SCHOOL No. 3
Three (3) stokers using five hundred (500) tons of rice per year requires two and one half (2½) man hours of labor per day for boiler room attention. A single custodian performs this and all other duties in the school.

Ask us for proof that Anthracite is more dependable, cleaner, safer and more economical for schools, apartments, hotels and similar buildings. Just write Anthracite Institute, 101 Park Avenue, New York 17, New York, or phone MUrray Hill 9-6890.
the experience? What the critics demand of the housing officials is what the top brass government planners demanded of Wilson Wyatt. While Mr. Wyatt was an excellent mayor in Louisville, and probably a brilliant attorney, he was—not unexpectedly—completely at sea in trying to cope with the problems of building houses.

THERE IS NO REASON to believe that the housing officials ever will get any closer to shore than Mr. Wyatt got.

AND THEIR CRITICS apparently are asking them to answer the same questions put to Mr. Wyatt.

IF THERE has to be public housing, and no one except the social planners seems to want it, then by all that is reasonable, turn it over to builders, liquidate the housing authorities, and thereby get the work done quickly, effectively, and with maximum economy.

ONE OF THE PROBLEMS that besets the public housing officials is the fact that costs have increased beyond the limitations set forth in the Housing Act of 1949. Unfortunately for the housing officials there are only two answers to the problem. One of them is to lift the limitations of the Housing Act of 1949. This they might be able to do with an appeal to Congress.

THE OTHER is to reduce taxes, which are reflected in the rising costs, and stop inflation. If the housing officials can accomplish this they should be decorated for distinguished service and retained forever as economic dictators.

REACTIONARIES, the real ones, says the Guaranty Survey, published by the Guaranty Trust Company of New York, are those who, under the shibboleth of welfare, would purposely lead a free-governing people backward in the direction of authoritarianism.

"WE BELIEVE," says the Survey, "that many self-styled liberals of today actually advocate some of the very principles and practices which genuine liberalism was formed to combat, and in doing so endanger not only the political rights but also the economic welfare of free men."

---

**3-Speed Milwaukee 1/2" Drill Cuts Costs for Contractors**

Exclusive Milwaukee HOLE-SHOOTER combines straight and right-angle drilling...wonder-tool for close quarters

Used by Building Contractors everywhere, this Milwaukee 1/2" HOLE-SHOOTER...America's only 3-speed Right-Angle drill...has demonstrated its unmatched time-saving performance on thousands of jobs. Most powerful drill built, of its size and 9 lb. weight. Ball and roller-bearing equipped for extra-long service life.

You'll be amazed at its versatility — unit-built for quick change to suitable speeds for drilling in wood, metal, masonry, concrete, tile. Uses wood bits up to 3"...also carbide-tipped drills.

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You'll be amazed at its versatility — unit-built for quick change to suitable speeds for drilling in wood, metal, masonry, concrete, tile. Uses wood bits up to 3"...also carbide-tipped drills.
Cut Building Costs with the WORLD'S SMALLEST and LIGHTEST TRUE COUNTERBALANCE for DOUBLE HUNG WINDOWS

PULLMAN Powerful Pigmy Sash Balance

SAVE MONEY with POWERFUL PIGMY

The Pullman Powerful Pigmy is not only the lowest priced true counterbalance on the market, but also the lightest. One set of four balances weighs only 12 ounces. This reduces shipping and handling costs. Since no head or side room is necessary easy morticing in the sash reduces installation and on-the-job costs.

Write for more detailed information. Pullman Manufacturing Corporation, 325 Holtenbeck Street, Rochester 21, New York.

No Head or Side Room Necessary—The small diameter of the new negative spring cuts the balance size by 75%, thereby allowing the Powerful Pigmy to be mounted in the window sash itself. This is the first time in residential window history that a true counterbalance is available which requires neither head nor side room. It is the greatest innovation in balancing double hung windows since the spring balance was developed by Pullman over 65 years ago.

Specify Window Units with PULLMAN Sash Balances

Sold only to accredited Millwork manufacturers and jobbers for use in complete window units.
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Your customers enjoy the finest home heating when you install THRUSH

Thrush Water Circulator

The Complete Forced Circulating Thrush Flow Control System of Hot Water Heat

No. 201 Radiant Heat Control

Thrush Flow Control Valve with Air Vent Tube

FEBRUARY 1951

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It assures your customers automatic comfort in any kind of weather. There is no fuel waste because there is no over heating. It maintains a constant flow of radiant heat and provides plenty of hot water for kitchen, laundry and bath the whole year through. If you are not familiar with Thrush Flow Control System and heating specialties, see our catalog in Sweet's or write Dept.G-2.

H. A. THRUSH AND COMPANY
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America's best truck investment is an even better one for '51! Yes, this latest line of Advance-Design trucks combines the greatest of Chevrolet's traditional advantages with new features and improvements that make your dollars go farther than ever! Along with outstanding power and economy, finest construction and superior handling ease, Chevrolet Advance-Design trucks offer new, improved-design brakes, new Venti-panes, and Chevrolet's new cab seats—plus a host of other features that mean increased value to owners. See your Chevrolet dealer and look over this new line of 1951 Chevrolet trucks today. They're "best buys" every one!

CHEVROLET MOTOR DIVISION  General Motors Corporation  DETROIT 2, MICHIGAN

ADVANCE-DESIGN TRUCK FEATURES

TWO GREAT VALVE-IN-HEAD ENGINES—the 105-h.p. Loadmaster or the 92-h.p. Thriftmaster—to give you greater power per gallon, lower cost per load • POWER-JET CARBURETOR—for smooth, quick acceleration • DIAPHRAGM SPRING CLUTCH—for easy-action engagement • SYNCHROMESH TRANSMISSIONS—for fast, smooth shifting • HYPOID REAR AXLES—for dependability and long life • NEW TORQUE-ACTION BRAKES—for light-duty models • PROVED DEPENDABLE DOUBLES-ARTICULATED BRAKES—for medium-duty models • NEW TWIN-ACTION REAR BRAKES—for heavy-duty models • NEW DUAL-SHOE PARKING BRAKE—for greater holding ability on heavy-duty models • NEW CAB SEATS—for complete riding comfort • NEW VENTIPANES—for improved cab ventilation • WIDE-BASE WHEELS—for increased tire mileage • BALL-TYPE STEERING—for easier handling • UNIT-DESIGN BODIES—for greater load protection • ADVANCE-DESIGN STYLING—for increased comfort and modern appearance.
New, Longer, Compression Packed Roll Now Available Everywhere!

Advantages for you:

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- Strong, tough vapor barrier—more than meets FHA requirements
- Made of ageless, durable, firesafe fibers of glass
- Adds value to your homes

For further information contact your local building supply dealer, Owens-Corning Fiberglas Corporation, Dept. 62B, Toledo 1, Ohio.

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FEBRUARY 1951
"POPULAR FEATURE", says Builder M. H. McCloskey, "is this big Thermopane window. We wanted to add a feeling of spaciousness so we opened up our living rooms with a window wall from floor almost to ceiling. We wanted the rooms comfortable and usable near the windows in cold weather, so we put Thermopane insulating glass in them."

**Exciting Features and Low Price**

**Zoomed 200-house Development to 500!**

Landscaped lot, two bedrooms, fireplace, built-in furniture, blinds, revolving cabinet-desk, range, radiant heat, 16-ft. Thermopane* window wall—all for $7,990.

McCloskey & Co. didn't miss a bet to give home buyers more house for their money in Academy Garden Homes, Philadelphia.

Look at that Thermopane window wall, for example. Look at the way it opens up a house—makes you feel the place is BIG and fun to live in. And it's more comfortable... any time of year... because Thermopane is insulating glass. You can sit up close to the window in winter... use more of the floor space. And save fuel, too.

What about cost? Builders all over the country are finding that the cost is comparable to standard wall construction with ordinary windows! You cut out a lot of interior and exterior trim, plastering and decorating.

You simply use standard Thermopane sizes and a simple method of routing and joining 2 x 6's for framing. Mail the coupon right now for detail drawings.

Thermopane is made with plate glass or DSA—in more than 90 standard sizes, as well as special sizes, so you can use it in all kinds of windows. Plan right now to put Thermopane sales appeal in your homes.

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**Thermopane**

FOR EASIER VISION SPECIFY THERMOPANE MADE WITH POLISHED PLATE GLASS

Look for the name on the seal between the panes.

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Libby-Owens-Ford Glass Company
1121 Nicholas Building, Toledo 3, Ohio

Please send me complete information on installation methods for low-cost window walls of Thermopane.

Name: ___________________________ (Please Print)
Address: _________________________
City: ____________________________ Zone: __________ State: __________

74 AMERICAN BUILDER
the new NATIONAL LOCK no. 150 display board

Now available in distinctive colors

Fresh New Eye Appeal Attracts Those Who Want the Finest

New "buy appeal" for National Lock's No. 150 cabinet hardware assortment. Handsome, attention-getting display board, now available in burgundy, yellow or white, suggests actual application with color. Only 21" wide, the No. 150 board saves counter space ... makes space more profitable. It reduces inventory while providing a select assortment of all major cabinet hardware. Included are only the finest National Lock items such as forged brass hardware, new type concealed hinge, concave knobs, die-cast handle and proven-popular matched sets in chrome. You'll enjoy extra profits by featuring the No. 150 board.

distinctive hardware...all from 1 source

NATIONAL LOCK COMPANY
ROCKFORD - ILLINOIS - MERCHANT SALES DIVISION
P&H shows you how to win on the 1951 Home Front

You can meet housing needs immediately, profitably by building the new 1951 P & H factory-engineered homes. Now home builders and project developers of every size can enjoy the sales appeal, controlled costs and assured profits of the biggest site operators. Serving industry for 67 years, Harnischfeger Corporation has invested $3,000,000 in research, design, engineering . . . to create P & H prices, profits and quality.

Whether you build 5 homes or 500, your projects gain unlimited variety, through choice of 60 individual P & H elevations, all reversible. Sell homes priced for every market from five basic P & H plans, ranging from 672 to 960 square feet . . . two bedrooms or three . . . full basement or utility . . . with sliding-door closets, self-storing storm windows, plastic screens.

FINANCING AVAILABLE! If local funds are limited, P & H builders can get construction loans, term mortgages through Builders Acceptance Co., a Harnischfeger service subsidiary.

Only P & H offers such a potent combination of sales appeal, competitive pricing, controlled costs — a formula that spells continuing, sure profits to the builder who follows the P & H Builder Plan. Write for details.

Harnischfeger Corporation
Houses Division
42 Spring Street • Port Washington, Wisconsin
The original and best all-steel adjustable jack post—best advertised—most popular post. Complete size range from one foot to 8' 2½".

Many patented features—constant supervision keeps TEL-O-POST first in the field.

Attractive box keeps parts from becoming mixed or lost—makes easy storing and selling.

Easy installation—exclusive adjustment features, highest quality steel makes TEL-O-POST outstanding. Special features patented under Pat. No. 2,504,291.

BRITE-LITE copper-bearing steel, galvanized areawalls offer builders the highest quality areawall in two popular designs and a wide variety of sizes.

BRITE-LITES are easily installed—just attach to foundation and backfill—roll top edge makes neat, trim appearance.

The ideal builder's post—designed and manufactured to meet minimum F. H. A. requirements—available in either fixed or adjustable types—painted both inside and outside in many sizes.

STEEL-STRONG is made of high-strength top grade steel—thoroughly inspected from ore to product.

Plates will fit either wood or steel beams—column can be concrete filled where building codes specify. By far the lowest cost post to do the job.

For further information, contact Brainard Representative or mail coupon.

**BRAINARD STEEL COMPANY**

2221 Larchmont Ave. Warren, Ohio

BE WISE — FOLLOW THE PROFIT PARADE — SEND IN THE COUPON...
New architect-designed bathroom plans in full colors... Drawings and specifications of complete bathroom layouts, and of every individual Universal-Rundle fixture...

Color schemes... Commercial, industrial, and institutional fixtures... Kitchen equipment, sinks, wall and base cabinets... The facts about fittings and trim... A catalog of complete help for the planning, specification, and installation of bathroom and kitchen fixtures... A "must" for your working library—send for your copy!

DESIGNS FOR BETTER BATHROOMS, are these full-color renderings of the finished bath, with detailed mechanical layout drawings and specifications. Planned by an architect, they help prospects visualize the fixtures in a harmonious, decorative setting, help them make up their minds.

FIXTURE PHOTOGRAPHS TO HELP YOU PLAN are here in profusion. Actual photographs of every fixture in the Universal-Rundle line, with full specification data and accompanying drawings—of bathtubs, lavatories, and water closets in the home, commercial, industrial and institutional fields.

SELLING KITCHEN FIXTURES is easier with help like this! Ten pages of photographs, drawings and specifications of Universal-Rundle Enamelled Cast-Iron sinks, cabinet sinks, base and wall cabinets, and sink trim.

WATCH UNIVERSAL-RUNDLE IN '51! 1951 will see a big-space national advertising campaign to sell home builders and remodelers on the "first" quality and style of Universal-Rundle fixtures. Smashing full-page, four-color, eye-opening advertisements will be seen in such national consumer magazines as the Saturday Evening Post and Better Homes & Gardens early this year. Watch for them! Powerful merchandising, direct mail, displays, catalogs, consumer plan-books, newspaper ads, etc., will make the American public "U/R-conscious."

Mail This Coupon Today!

UNIVERSAL-RUNDLE CORPORATION
New Castle, Pa.

Gentlemen: Please rush me a copy of your new 1951 catalog. My letterhead is attached.

Name___________________________
Street__________________________
City________________ Zone________ State_____

Universal-Rundle

UNIVERSAL-RUNDLE CORPORATION * NEW CASTLE, PA.
If it's Proof you want—

BERMICO

SEWER PIPE IS

Root Proof!

Corrosion Proof!

Lasts a Lifetime!

There's a reason why millions of feet of Bermico Sewer Pipe are now in use. It's because Bermico has what it takes to meet your most rigorous requirements all along the line.

Bermico is tough—and built to last a lifetime. Besides being root-proof and corrosion-proof, its joints won't open when the ground settles. It stands up under extremes of heat and cold... delivers high water capacity flow. When laid underground it does not shatter from traffic shock.

You'll find Bermico both easier to handle and more economical. It weighs far less than any other type of pipe—and its handy 8-foot lengths store with less breakage.

Recommend Bermico when you install or repair house-to-sewer connections, septic tank disposal and drainage systems. Once you've used Bermico, you'll always recommend it.

Get the complete story on how Bermico can do the job for you more efficiently and economically. Write to: Dept. AB-2, Brown Company, 500 Fifth Avenue, N.Y.

BERMICO SEWER PIPE

A PRODUCT OF BROWN COMPANY

Berlin, NEW HAMPSHIRE

GENERAL SALES OFFICES: 500 FIFTH AVENUE, NEW YORK 18, N.Y.

Branch Sales Offices: Portland, Me., Boston, Chicago, St. Louis, San Francisco, Montreal

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FEBRUARY 1951
Dollars shaved
without cutting values

You don't have to be a magician to make houses "look like more than they cost" if you use the Keystone System of Stucco Application. And with this system durability is added to the original good looks and economy.

More and more builders and contractors are using the Keystone System of Stucco Application. Architects are specifying it. Buyers recognize it as a real sales feature. Let us send you the facts, in the new 44-page "Keystone System" booklet today. Write:

KEYSTONE SYSTEM OF STUCCO APPLICATION WITH KEYMESH

...By the Makers of: Tie Wire, Welded Fabric, Non-Climbable Fence, Hails, Gates, Keystone Poultry Netting, Red Brand Fence and Red Top Steel Posts
YOU, TOO, CAN CUT COSTS
with this VAN-PACKER CHIMNEY

ACCEPTED PROVED

Read the Strausman Story
and see how Cost Cutting,
Fast Erecting Van-Packers
can fit into your
building picture.

THIS $1,600,000 development of 160
residences in East Meadow, L. I., N. Y.,
features Van-Packer Chimneys exclusively.
Mr. George Strausman, Secretary of the
Strausman Construction Company tells
you why...

"We take this opportunity to compliment
you on a fine product. We consider Van-
Packer a valuable new contribution to
the home building industry because it
saves cost, living space and construction
time."

"We also appreciate the prompt, de-
pendable delivery service... during
this year of critical supplies."

See how Van-Packer can contribute
genuine savings to any home building
time, whether it be a single
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dwelling or a multi-million dollar
development.

Van-Packer Corporation
136 South Clark Street
Chicago, Illinois

I want more information on how I can cut costs and save
Name ________________________
Firm _________________________
Address ______________________
City __________________________ State _________________

CLIP THIS AND MAIL FOR DETAILS

Van-Packer Corporation
136 South Clark Street
Chicago, Illinois

FEBRUARY 1951
BACKING UP YOUR JUDGMENT
WITH PERFORMANCE ... NOT CLAIMS!

Air infiltration tests by nationally known independent research organizations* confirm the confidence that builders everywhere have placed in the proven performance of AUTO-LOK...

TIGHTEST CLOSING WINDOW EVER MADE!

Only 0.095 cfm per ft... that's the amazingly low air infiltration story of Auto-Lok Windows!
In terms of effective closure it is at least TEN TIMES AS TIGHT as the established standards for casement windows and projected sash.

*Complete test results available on request.

Auto-Lok's unrivaled tight closure means year 'round comfort, reduced fuel bills... a really tight-built house. Plan now to use Auto-Lok in your next job and prove to yourself that many are the

REASONS WHY AUTO-LOK IS THE FIRST AND ONLY WINDOW TO SUCCESSFULLY COMBINE THE BEST FEATURES OF ALL WINDOW TYPES

Distinctive Beauty. Lower Fuel Bills.
Ventilation when it's raining. Maintenance costs at a minimum.
No drafts—air scooped in and Easily operated and cleaned from the inside.
upward! Removable inside screens and storm sash.
Removable inside screens and storm sash. Makes interiors more comfortable and livable.

For complete information about this all-purpose window (utilized on all types of construction in all sections of the country), consult SWEETS, or address Dept. AB-2.

LUDMAN CORPORATION
P. O. Box 4541 Miami, Florida
Dimension You Can Depend on!
Trade-marked
ARKANSAS SOFT PINE

Here's what you get:

Big-Mill Manufacture — Uniform Sizes
SPIB Revised Grades — New Stress Values
Kiln-dried Stock — Correct Moisture Content
No Shrinking — No Swelling — Stays Put
Soft Texture — Works Fast
Holds Nails — Doesn't Split

WHERE TO GET IT

Trade-marked Arkansas Soft Pine is produced exclusively by big modern mills. It is well manufactured to standard sizes, scientifically kiln dried and seasoned to specified moisture content. Available to you at local lumber dealers and planning mills east of the Rockies. For complete information, data and how to specify, write for your copy of this useful handbook.

FREE

ARKANSAS SOFT PINE BUREAU
251 BOYLE, BUILDING
LITTLE ROCK, ARKANSAS

FEBRUARY 1951
Builder Finds Radiant-Heated Ranch Homes Need Double Protection of Reflective KIMSUL

Completely obscured behind a 12-foot fence during construction, the Mystery House in Hartford, Connecticut, attracted 11,000 people the first week it was open. Louis Beckenstein of Green Acres, Inc., builder.

If you, as an architect or builder, were to determine which insulation does the most efficient job, you'd compile all the facts about all insulations. And you would discover that these facts emphasize several important advantages of new Reflective KIMSUL. For in selecting an insulation, these are the questions you would be most apt to ask:

- Does it perform effectively when installed by average labor?
- Does the insulation provide high thermal efficiency—"k" factor of 0.27 or better?
- Will it prevent condensation, with a vapour seal that meets FHA requirements?
- Will it sift, settle or disintegrate with age—will the edge attachment hold securely?
- Is it resistant to fire, moisture, vermin and mold?
- Is the insulation easy to install—does it save the most time and labor in handling?

If the insulation you've been specifying does not fulfill these requirements, you'll be interested in learning further about new Reflective KIMSUL. For complete technical data, see Swee's Architectural and Builders Catalogs, or write directly to:

KIMBERLY-CLARK CORPORATION
Neenah, Wisconsin

November 17, 1950

Green Acres, Incorporated
Hartford, Connecticut

Gentlemen:

We have completed over a hundred houses in the past sixteen months in which KIMSUL insulation was used. Since most of these houses are radiant heated ranch houses, Reflective KIMSUL was a natural for the job.

We like Reflective KIMSUL Insulation for many important reasons, several of which are:

1. With the reflective cover and blanket combination, KIMSUL provides the double protection needed in radiant heated houses.
2. Our men prefer it because it is so easy and clean to work with.
3. The neat compressed roll facilitates trucking, handling and installing, which means tremendous savings in both time and money.

Reflective KIMSUL is included in all our future building plans.

Yours truly,

GREEN ACRES, INC.

Louis Beckenstein, President

Neenah, Wisconsin
To Help You Build Better Homes Within Your Construction Budget!

KITCHEN-TYPE OIL BOILERS—the most revolutionary development in modern small-home heating—automatically heat the home, also supply ample domestic hot water.

“DUTY-DESIGNED” OIL HI-BOILERS are built to give small homes all the comforts of modern oil heat—plus automatic domestic hot water. Unusually quiet and compact.

COMPACT OIL AND GAS HI-FURNACES, specifically designed for small homes, bring to every owner the full benefits of winter air conditioning without a cost premium.

More and more alert architects and builders are gaining important design advantages—and making major construction savings, too—thanks to the matchless heating experience of Timken Silent Automatic. For some of the results of 25 years devoted to the development of fine heating equipment at realistic prices, look below.

COMPACT DESIGN—Close attention to every detail of design engineering has held required floor area to a minimum. All the finest modern features are combined in a complete line of ultra-compact units ideal for small homes.

QUIET OPERATION—The truly exceptional quietness of the famous Wall-Flame Burner—a sound level so low it can scarcely be heard—has proved its value in hundreds of thousands of installations, especially next to living quarters.

EFFICIENT PERFORMANCE—For many years Timken Silent Automatic oil-fired equipment has produced fuel oil savings of 25% or more. Now modern design has also made Timken Silent Automatic gas-fired equipment outstanding for economy in its field.

COMPETITIVE PRICE—Timken Silent Automatic heating equipment is priced to compete with other makes of comparable quality—or even less than comparable quality. Best proof is its widespread installation in the most strictly budgeted housing projects.

FACTORY ASSEMBLY—Every feasible assembly operation, including all essential wiring and plumbing, is completed before each Timken Silent Automatic unit is shipped from the factory. Installation is greatly simplified and speeded by truly unitized construction.

Write today for full details and performance data!
Better for structural work

The greater plasticity of Duraplastic concrete mixes aids proper placement and results in improved surface appearance. An air-entraining portland cement, Duraplastic requires less water for a given slump. It has proved advantageous for all types of structural concrete.

Makes more durable concrete

Because water gain and segregation are minimized by Duraplastic's air-entraining feature, the resulting concrete is fortified against the effects of freezing-thawing weather. (Left, Administration Building, McLaughlin Field, Hot Springs, Ark. Architects: Erhart, Eichenbaum and Rauch, Little Rock; contractors, Peterson & McFadyen, Little Rock.)

YET DURAPLASTIC* COSTS NO MORE

It sells at the same price as regular cement and requires no unusual changes in procedure. Complies with ASTM and Federal Specifications. For descriptive booklet, write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Avenue, New York 17, N. Y.

**"Duraplastic" is the registered trade mark of the air-entraining portland cement manufactured by Universal Atlas Cement Company.
The smaller the bore
The stronger the door

- Another reason why the Sargent 4500
  leads among bored-in locks — the 4500
  requires only a 1¼" crossbore.
  Quick and easy to install, it can be used
  in metal doors without reinforcing.

The Sargent 4500 is the most compact
of bored-in locks. No other lock in its
price class offers so many features.

A better lock by —

Sargent and Company
New York     NEW HAVEN, CONN.     Chicago

Builders Hardware and Fine Tools since 1864
IN 1950 house remodeling and home improvement work accounted for about nine per cent of the nation's total building activity. During the current year the percentage of remodeling work done will be considerably higher because with new home construction curtailed thousands of home owners who would normally be in the market for a new house will instead have to be satisfied with improving their old one.

Already, building craftsmen together with lumber and building supply dealers and manufacturers are well aware that one of the main outlets for their services and products in 1951 lies in Mr. Homeowner's great need for home remodeling, home enlargement and home improvement projects. The two books below, although written to be used by the home owner himself, are gold mines of information for that one of the main outlets for their services and products house will instead have to be satisfied with improving their remodeling work done will be considerably higher because in 1951 lies in Mr. Homeowner's great need for home remodeling, home enlargement and home improvement projects. The two books below, although written to be used by the home owner himself, are gold mines of information for American Builder readers interested in any phase of house remodeling work. HOW TO EXPAND AND IMPROVE YOUR HOME, by Lee Frankl. 256 pages. 8% by 1034 inches. Simmons-Boardman Publishing Corporation. $5.95.

Everyone in the house construction industry has probably seen one or more of the dozens of home building and home repair books that have been offered to the public during the past five years. Also, most builders have been quick to recognize that some of these titles have not lived up to the claims made for them. HOW TO EXPAND AND IMPROVE YOUR HOME, is not such a book. It does the job.

Here for the first time the average homeowner who is at least half way handy with tools is given step-by-step directions and is shown by easy-to-follow drawings just how to finish an expandable attic, build a wing on his house, add or enclose a porch, install a bathroom, make a playroom in a basement, build a garage, enlarge bedrooms by putting in dormers, in fact do any of the more important home remodeling projects. Other sections of the book are devoted to modernizing kitchens, making two rooms out of one, extending wiring systems, shingling roofs, and adding gutters and downspouts. Each project described by the author carries with it a complete material list which is an excellent sales tool for the lumber and building supply dealer.

One of the book's most important chapters describes the simple manner by which these home improvements can be financed. It ever a builder or supply dealer wanted to find out what is foremost in his customer's mind when it comes to home remodeling this is the book that will tell him.

NEW HOUSES FROM OLD

This book, too, has a good deal of pertinent information to offer on house modernization. It must be admitted, however, that it is a guide to what is done in home remodeling rather than a practical working handbook telling how to do it. Even so, its coverage is good, dealing with each room in turn then progressing to structural points that demand careful consideration in any remodeling job. Its final chapters supply data on painting, papering, heating, plumbing, insulation and wiring. The chapter titled "How to Judge a House for Remodeling" is particularly informative especially for younger builders with limited experience in this type of work.

ESTIMATING
1. THE BUILDING ESTIMATOR'S REFERENCE BOOK and Vest Pocket Estimator (not sold separately). By Frank R. Walker. Contains latest estimating and cost data on everything that goes into house construction. Most complete compilation of estimating and cost data available. $15.00.

2. SIMPLIFIED CARPENTRY ESTIMATING. By J. W. Wilson and Clell M. Rogers. Everything needed to "take off" a bill of materials from set of plans and specifications for a frame house—with many helpful quick-reference tables and short-cut methods that simplify the work. $1.75.

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

4. CONTRACTOR'S MATERIAL LIST. A full-sized take-off form for complete listing of materials and labor costs. $1.00.

5. SPECIFICATIONS. Full set of detailed house specifications (and item index), with spaces for inserting the pertinent description data. $5.00.

Carpentry and Building

7. HOUSE CARPENTRY AND JOINERY. By Nelson L. Burbank. Every step of carpentry in and around a house, clearly explained and illustrated. Covers every job from foundation forms to interior trim. $3.98.


9. FRAMING, SHEATHING AND INSULATION. Easy-to-use illustrated guide of proper ways to do house framing, sheathing and insulation. Good self-teacher. $3.50.

10. INTERIOR AND EXTERIOR TRIM. Practical how-to-instruction book for all basic carpentry steps in interior and exterior trim work. $3.50.

The Steel Square
11. STEEL SQUARE POCKET BOOK. By Dwight L. Stoddard. Illustrated and worked-out problems of laying out common rafters, hipped, octagonal, hexagonal and circular roofs, roofs of uneven pitch, and curved roofs. $1.25.

12. STEEL SQUARE. By Gilbert Townsend. This how-to-do-it steel square instruction book provides fundamentals plus step-by-step house construction problems solved by proper steel square use. $1.25.


14. STAIR BUILDING. By Gilbert Townsend. Fully illustrated explanation of every problem in design and construction of stairs. $2.50.
**BOOK ORDER SERVICE**

**PLAN BOOKS**

15. **AMERICA'S BEST SMALL HOUSES.** Exterior and interior views, floor plan sketches, material specifications and descriptions of 40 new low-cost homes. $3.25.

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

17. **DUPLEX AND APARTMENT HOUSES.** By J. W. Lindstrom. Floor plan sketches and brief descriptions of 35 duplexes, 11 4-apartment buildings, and 5 larger ones ranging from 6 to 12 apartments. Cubic footage given. $1.00.

18. **BLUEPRINT PLANS.** Contains 12 complete blueprints of modern small homes designed by leading architects. Also descriptions and floor plans of 9 other houses, 7 garages; and sketches of built-in equipment. $1.00.

19. **PREMIER BOOK OF GARAGE PLANS.** Full-scale working blueprints and pictures of one and two-car garages. Not new, but only book supplying blueprints. $1.50.

**HEATING AND PLUMBING**


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

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

**PAINTING AND DECORATING**

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

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

**BRICKWORK AND MASONRY**

25. **THE ART OF BRICKLAYING.** By J. Edgar Ray. Basic bricklaying job instruction, many illustrations, glossary, special scaffolding and cement block chapters. $4.00.


27. **MASONRY SIMPLIFIED.** Vol. II. Practical masonry procedures in the various phases of construction, from building forms for concrete to constructing fireplaces and septic tank systems. Includes discussion of handling new products such as glass blocks, waterproofing mixtures and insulating blocks. $5.00.

**ELECTRIC WIRING**


29. **WESTINGHOUSE HOME WIRING HANDBOOK.** By A. Carl Brechel. A guide for planning the wiring of moderate-priced homes, with emphasis on safety, effectiveness and efficiency. $1.00.

**MISCELLANEOUS**

30. **HOME BUILDERS MANUAL FOR CONTRACTORS.** Provides convenient data and check lists to follow all operations connected with construction of a home. Looseleaf binder permits additions of special material pertaining to project being constructed. $5.00.

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

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

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

34. **HOW TO EXPAND AND IMPROVE YOUR HOME.** By Lee Frankl. An excellent home remodeling guide written for the homeowner but invaluable for builders and lumber and building supply dealers. $5.95.


**BOOK ORDER COUPON—MAIL NOW!**

**Book Service Department, American Builder Simmons-Boardman Publishing Corporation 30 Church Street, New York 7, N. Y.**

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*No. 36 sent FREE if order totals $5 or more

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FEBRUARY 1951

This Book FREE with your order

**36 MODERN METHODS OF HOME HEATING.** Standard heating systems illustrated with 17 floor plans showing heating outlets, 40 photos of equipment and installations, 25 boiler and piping connection diagrams, and 11 heat loss calculating tables. $5.00. Your copy sent FREE if your Order totals $5.00 or more. Use coupon below—mail today.
"The men on the job preferred them because of the ease of handling and operating!"... says the J. A. Jones Construction Company.

THE DOCTOR'S BUILDING, beautiful new 10-story structure on King's Drive in Charlotte (Louis H. Asbury & Son, Architects), is typical of the jobs done by the J. A. Jones Construction Company of Charlotte, North Carolina. Where there's a Jones job there are SKIL Saws—job-planned, durable, easily handled and operated SKIL Saws.
Contractors and builders all over the country use and recommend SKIL Saws, making them the No. 1 choice of the companies who buy them and the men who use them.

“We have used SKIL Saws for a number of years and find them very satisfactory,” writes Mr. John Stafford, Treasurer of the J. A. Jones Company of Charlotte, North Carolina (they now have over 400 in use on various jobs!). And here’s their reason: “The men on the jobs prefer SKIL Saws because of the ease in handling and operating.”

There’s a SKIL Saw model to meet every need on every construction and building job. Every SKIL Saw combines durability and high-torque performance with ease of handling and safety. They’re packed with power... rated power to perform with ease and precision.

Try SKIL Saws on the job today. Your SKIL Tools distributor will give you demonstration.

Get Job-Proved results! Make full use of your SKIL Saw!

Equip your SKIL Saw with the proper blade or cut-off wheel and it’s a tool of countless uses. Cut practically every material that goes into a building...

- angle iron, rods and bars
- galvanized or aluminum sheet
- copper and brass rods or tubing
- soft wallboard
- concrete block
- brick
- art marble

Cut all these materials with ease, accuracy and speed. Your SKIL Tool Distributor has the blades and cut-off wheels that will increase the use of your SKIL Saw on every job.
This double coverage, heavy duty interlocking type asphalt shingle...

HAS BEEN TESTED IN EVERY WEATHER ...AND HAS WEATHERED EVERY TEST!

See all the selling features of Texaco's top-performing

TEX-LOK

TOP PROTECTION. Double Coverage; heavy duty, fire-resistant
LOCKS DOWN...STAYS PUT. Interlocking; concealed nailing; built to resist high winds; no lift—no rip—no tear—no curl
GOOD LOOKING. Attractive pattern; beautiful colors; textured and plain surfaces
EASY APPLICATION. Quick aligning; self-locking
ECONOMICAL. Low cost—long life

NO BETTER SHINGLE VALUE ON THE MARKET TODAY!

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WITH POWER PILOT ECONOMY

FORD’s STEP-AHEAD ENGINEERING achieves new economy, new performance. There’s a new economy-engineered Ford Truck for your job, or any job. Over 180 models, 95-h.p. Pickups to 145-h.p. BIG JOBS.

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February 1951
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|------------------|--------------------|---------------------------|

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**SEE WHAT CROSLEY-EQUIPPED KITCHENS CAN DO FOR YOU... FAST!**

You can sell prospects quicker when more kitchen equipment is included in the package mortgage...and rentals with modern, worksaving kitchens never lack tenants. A Crosley-equipped kitchen provides better, easier living from the prospect's point of view. From *your* point of view, Crosley products installed in the kitchen mean easier selling or renting—today, tomorrow and ten years from now.
10 Kitchen Cabinet Sinks offer you a practical selection: Right or left-hand drainboard ... one drainboard or two ... double or single bowl ... Custom or De Luxe Models.

Today's building codes demand modern water heaters! Crosley Center and Table-top Water Heaters save dollars because they save space. Round Models also available to offer you a complete line.

FEBRUARY 1951

Preserves are becoming more and more indispensable to modern housewives. That's why progressive builders and architects are incorporating freezers in the houses they plan and build.

Crosley's Electric Ranges increase home values with smart innovations in automatic cooking. Double or single ovens ... "cluster" or "divided" tops. 6 models including two apartment types are available.

Crosley's 1951 Shelvador® has extra appeal with "Clean-Foam" Automatic Defrosting and "non-rust" Interio Styling in many models ... and the big advantage of twice as much "frost-free" space. 18 models, including apartment types.

Electric Garbage Disposers with Crosley's patented mechanism won't clog or jam ... will practically any sink with 3½" to 4" drain openings.

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Better Products for Happier Living
The roofs will always be "new" on this street!

Long life and lasting beauty make "Century" Asbestos-Cement Roofing Shingles EASY TO SELL

When a customer says, "I want a roof that will last," he's a definite prospect for Keasbey & Mattison "Century" Asbestos-Cement Roofing Shingles!

Consider the facts: "Century" Asbestos Roofing Shingles resist fire, weather, and termites—will last the lifetime of the house!

And the beauty lasts, too! As a new roof, "Century" Asbestos Roofing Shingles present a smart, modern appearance that pleases every home owner. The attractively textured surface won't weather out; the colors are "built in"—they are an integral part of the shingles.

Then, when you point out the economies, your sale is as good as made! "Century" Asbestos-Cement Roofing Shingles save costs three ways: The initial cost is moderate. And they are specially designed for quick, easy application—save both time and labor. Finally, "Century" Asbestos Roofing Shingles need a minimum of maintenance—never need painting—to provide perfect, lasting protection.

"Century" Asbestos-Cement Roofing Shingles are made in a variety of eye-pleasing colors—White, Black, Spanish Red, Surf Green, and Graytone—and in popular patterns. All are suitable for reroofing as well as for new construction. Ask your Keasbey & Mattison dealer for complete information, or write us direct.

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ORIGINAL MANUFACTURERS OF ASBESTOS-CEMENT SHINGLES IN THIS COUNTRY

AMERICAN Builder
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Designed and built to withstand severest conditions, Mengel Solid-Core Flush Doors are better. Get all the facts. Write today for new full-color A.I.A. descriptive catalog, including specifications.
With the tremendous cut-back in new residential construction volume, it's wise to turn to the larger profit remodeling work. In both residential and commercial remodeling, Grani-lite Decorative Wallboard can be the lead product to clinch more sales for you. Having all the gleaming beauty of polished granite, Grani-lite is the newest in quality baked finish wallboard.

Grani-lite has patterns and new color tones best suited for wall and ceiling refinishing and decoration. You get them all in this one line of factory finished wallboard. Grani-lite is setting production and popularity records because it's the first real improvement in over two decades. With the change to remodeling, don't be caught short. Get established now as a Grani-lite Dealer by contacting your Jobber immediately.

MADE BY THE MAKERS OF WAL-LITE, SATIN-LITE AND LEATHERBORD

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Here's the Most Practical and Useful Floor Display Ever Developed for Wallboard Selling

All the desirable elements of Display, Demonstrator and Sampling have been combined in this new style Wallace unit. Unique, sturdy construction allows for display of 20 Wallace panels.

Because face panels of the upper and lower sections slide in and out, you can build a demonstration wall in miniature by sliding the desired color and pattern in place. All nine panels back of each face are staggered so that all colors and patterns are exposed as shown in photograph. The arrangement is simple to use by clerk or customer.

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See your Jobber first about obtaining use of this fine unit. If not available from Jobber write direct to factory.
Thousands of unfinished attics like this. Thousands of families in need of more living space. What's needed to get those attics remodeled and usable? Answer: the Nu-Wood and Balsam-Wool System.

It's the simplest idea ever. First, you suggest Balsam-Wool insulation in the attic to make living more comfortable in winter and summer. Then an application of Nu-Wood pre-decorated interior finish for the walls and ceiling. Then you show how the Balsam-Wool will save enough in fuel bills to pay for itself and the Nu-Wood, too.

This proved way to profits is working for builders all over the country. Your lumber dealer has full details. National advertising is selling the idea to homeowners in your community. Why not get started with the Nu-Wood and Balsam-Wool System now? See your lumber dealer or mail the coupon for complete information.
CHECK HERE!

- Quality-tested materials
- Practical room arrangement
- Washable Mellow-tone walls
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- American Kitchens
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A smooth, fast production line operation,
PLUS rigid testing and quality control, PLUS
the finest materials, PLUS contemporary
good looks that please today's home-buyer
... these are your assurance of value in
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The CHAMPION ...
Precision-crafted,
built to endure!

The Coronado
(pictured)

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UNITED STATES STEEL CORPORATION SUBSIDIARY
NEW ALBANY, INDIANA

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**Vinylite Colors:** FLor-Ever features the clean, lucid colors typical of plastics—whiter whites; blacker blacks; luscious reds, greens, blues and yellows, with marbelized mixtures. There are, today, 21 FLor-Ever colors. A set of samples is freely available to every accredited architect, designer or builder.

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HHFA Administrator Foley Comments On
American Builder December Editorial

December 18, 1950
Mr. Edward G. Gavin
Editor American Builder
Chicago, Illinois

Dear Mr. Gavin:

I read with deep concern your editorial in the current issue of American Builder, dealing with Regulation X.

While, as is usual in your editorials, it expresses a point of view that provokes thoughtful analysis, I am impelled to question how you can justify in the current circumstances, or indeed at any time, the inflammatory, unsupported and false statement that concludes the article. I refer especially to the statement:

"... like Regulation X which, because its alleged need has not been explained by anyone, must be viewed as another of many attempts to kill freedom and replace it with the kind of gangster despotism that holds most of Europe and Asia in its grip."

There has been much criticism of Regulation X both from sections of the industry and from some representing groups of consumers who have thought it might be too drastic. That sort of criticism is understandable and is often helpful. Of course you know the regulation's history. You say its "... alleged need has not been explained by anyone ..." Congress held hearings on the Defense Production Act, which conveyed the authority involved to the President. The legislative history is open. Congress obviously felt some such steps would shortly be needed.

While, as is usual in your editorials, it means they all agreed with us. We have explained the need publicly, many times. We knew there was bound to be disagreement and protest as to the terms of restriction when we sought to discharge this unwelcome but necessary duty. We pointed out that if the terms proved to be unreasonable they would be changed.

It is shocking therefore to have your publication suggest that in promulgating Regulation X we acted from ignoble, unpatriotic motives, charging us in effect with being engaged in an actual attempt "... to kill freedom and replace it with the kind of gangster despotism."

One of the things I question is on what basis the statement in your editorial is based. The President clearly did not mean to connect you with anything in it in any way, personally or officially, or to state or imply that you or any of your official family is guilty of anything. I state this assurance positively, because I wrote the editorial, and I know that I had no such references or implications in mind.

I was particularly amazed at the charge that the editorial is "a personal and individual defamation." You must certainly know that in the many mentions I have made of you and your office in previous editorials there has never been anything but the highest regard and respect expressed for your personal and official integrity and ability. You must also know that when the public housing issue was being debated, and at other times when there has been controversy over proposed legislation dealing with housing, I have gone out of my way publicly to reaffirm complete confidence in your attitudes on many occasions. I am unable to understand why you should conclude that I would suddenly reverse a firm conviction of long standing and launch an "unreasoning attack," or engage in "personal and individual defamation."

There is nothing in my personal or editorial records, both of which are well known, to indicate that I have ever been guilty of either charge. On re-reading the editorial after receiving your letter I can see nothing in it to warrant such a charge. It seems to me that a temperate attitude on your part, more in character for you, would have been to request an explanation before disdaining the facts and established relationships of the past in favor of a conclusion and harsh charges, warranted neither by the language of the editorial nor its intent.

The tone of your letter unfortunately closes the door on the possibility of a short letter of explanation, and makes a lengthy letter and refutation of your charges necessary.

I am, of course, fully aware that your office promulgated Regulation X, and I was acquainted in a general way with the background of the regulation as you outlined it. I thought, however, that I had made it quite clear in the first paragraph of the editorial that I do not consider Regulation X to be important in itself, that I do consider it and other proposed and rumored regulations and controls to be by-products of a government policy which, if it has been defined, is not understandable and has not been explained to the people. Until it is explained and justified, if there is a policy to explain and justify, the alleged peril in which the nation stands will continue to be viewed with skepticism, and the need for controls will continue to be viewed as alleged rather than proved.

Yours very truly,

Raymond M. Foley
Administrator

Editor E. G. Gavin Replies

January 8, 1951
Mr. Raymond M. Foley, Administrator
Housing and Home Finance Agency
Washington 25, D.C.

Mr. Foley:

Your letter relating to the editorial in the December issue of American Builder is one of the most surprising documents I have ever received. To say that it amazed me is to state the reaction very mildly. The editorial does not mention you; there is nothing in it that states or implies any mention of you; and I assure you that in its over-all foreign and military policy, and

I request publication of this letter in the American Builder.

Yours very truly,

E. G. Gavin
current war against Communist China or engage in whatever other war or wars may be impending it should demand careful consider-
ation. Congressman, I am exercising both my consti-
tutional and political rights. Now, when we face danger, real or fancied, avoidable or unavoidable, why do we im-
mediately adopt the rules of the enemy, which it appears he wants us to do, rather than exploit and sell our own strength.

Until the answers to these questions have been established in open debate neither I nor many others will view the need for controls as more proved than alleged.

It should be known to everybody who has observed trends in this country over the past twenty or more years that there has been an attempt in both peace and war to replace free enterprise with a system of government-controlled economy. In the editorial I am asking businessmen to question the need for controls, and to learn what influences are and have been at work on government to bring these controls about.

You term the last paragraph of the editorial, "the inflammatory, unsupported and false statement," presumably because it includes "... Regulation X, because of its alleged need has not been explained by anyone, must be viewed as another of many attempts to kill freedom and replace it with the kind of gangster despotism that holds most of Europe and Asia in its grip." I repeat, I take no issue with you in the pro-
motion of Regulation X. Of course, you "have explained the need publicly, many times," and the explanation was sound and logical. But the explanation was based on an assumption of political policy: a lack of policy which has not been explained, and over which, lacking your statement to the contrary, I assume you had no control. Who voted the Congress in? Who voted the President because "Congress obviously felt that some such steps would shortly be needed," it did so with practically no debate and with hardly a dissenting voice raised. Possibly Congress was in a hurry to recess before the holidays, possibly no one in Con-
gress wished to dissent for any of a num-
ber of reasons. Regardless, I feel that there should have been debate and the vigorous projection of alternatives which, to say the least, are entitled to consideration. It is worth noting here that many members of that Congress, including the majority leader, failed of re-election.

The regulation in itself is unimportant, but the regulation as one of a number of accomplished and proposed projects of policy that appear to be driving us to a condition of total economic control in order to fight another war or series of isolated wars of very questionable benefit to our country is extremely im-
portant. Since we are at war in Korea without a declaration of war, as the Con-
titution requires, I am exercising both my right and my responsibility as a citizen in asking what is happening to my country.

When has it become inflammatory to question a government course, ask whose course it is, and where the course is taking us and why? It is inflammatory, I can assure you that I am only a very small spark in a growing configuration.

And why is the statement unsupported? I well remember the reluctance with which some heads of wartime bureaus relinquished power over the nation's production and distribution following the defeat of Japan. Why, in the face of that experience, is there any reason to believe that the re-
sumption of controls by government will be any more quickly or easily dissolved than they were in 1946? It certainly is no secret that both highly and locally placed personnel in some government offices have been frequently and publicly charged with using every influence at their command to undermine free enterprise. With this matter of fact, I ask, where is the statement to which you object unsup-
ported?

You say that the statement is false. Is it? If you know what we are committed to, who committed us to it, and that those who made the commitments were acting first and foremost in the interest of the United States of America, and that, else you can render a great service to this country, and to millions of us out here in the hinterland by telling us. No one has done so thus far. I would be most happy to have the statement proved false, to receive convincing proof that there is strong, enlightened and purposeful leadership in Washington, that whatever we are doing is primarily in the interest of the United States of America, and that it is the best policy in our interest. I am neither original nor unique in my con-
fession of ignorance of what we are doing in Korea, whose interest we are serving there, why we are at war with Communist China, whose interest will be served through the deployment of increasing numbers of American ground and air forces in Europe and Asia. It is the worst kind of defensive warfare, the kind in which we use the rules laid down by the enemy. It is questionable if we can fight Russia that way. It is time we began to avert wars if possible, and fight them if necessary by exploiting to the fullest our own great natural strengths, freedom and production, and expand both if possible rather than contract them in times of dan-
ger. Washington now, as it did in World War II, seems to be devoid of faith in the country, its institutions of freedom and its people. It chooses regimentation rather than inspiration and leadership.

As matters stand now here is presumably a large majority fully aware of the Russian threat whose attitudes range from doubt of the wisdom of our present course to firm conviction that current operations, as they appear to be, are the surest and quickest way to national suicide.

If we are in a time of national peril, we had better be told exactly what the peril is and why it is present. There is a wide-
spread belief that we are in no peril that we are not pointlessly manufacturing for ourselves, and I do not attack government when I ask who created the peril, where we go from here, and why. On the con-
trary I believe that expressing the suspicion that factors with ulterior motives are at work behind the scenes, and asking the question are both the rights and the duty of citizenship.

You requested that your letter be pub-
lished in the American Builder. I am glad to agree to your request, and I am also publishing my reply.

Yours very truly,
Edward G. Gavin
Editor

FEBRUARY 1951
Now, 4 choices for the same floor space...

with

KELVINATOR “Space-Savers”!

Model AS—7.6 cu. ft., Cold-Clear-To-The-Floor! 25 lbs. frozen foods! 2 ice trays! Big refrigerated Crisper across bottom! Width, 24”; Height, 53½”.

Model AH—7.1 cu. ft., Cold-Clear-To-The-Floor! Across-the-Top Freezer (Chest for 26 lbs. frozen foods . . . 3 ice trays! Width, 24”; Height, 53½”.

Model AC—6.1 cu. ft.—in a cabinet only 24” wide; 35” high! 15 lbs. frozen foods! 2 ice trays! Shelf area of 11.9 sq. ft! Kelvinator quality in every last detail!

Model AB—4.3 cu. ft.—a gem of compactness and dependability! 23-lb. High Speed Freezer! 2 ice trays! Cabinet 24” wide; 34½” high! Can be combined with 21” range and 39” sink and drain board to make a 60” complete electric kitchen package!

ALL ONLY 24” WIDE... YET YOU GET FOOD SPACE UP TO 7.6 CU. FT.! Almost twice the food space you used to get in the original Kelvinator “Space-Saver” 4 cu. ft. model . . . which also took up a floor space only 24” wide!

Now you can take your choice—of four new Kelvinator “Space-Savers”! All four models identical in width . . . 24” . . . so that you can choose from four different food capacities . . . in refrigerators which all fit the same floor plan! And just imagine! New improvements that stem from Kelvinator’s specializing in compactness, let you provide as much as 7.6 cu. ft. of food space in that same 24” floor space! Choose the conventionally-designed Kelvinators—or the Cold-Clear-To-The-Floor Kelvinators. In every model you get advanced styling . . . Kelvinator conveniences . . . maximum economy of operation assured by the dependable Polarsphere sealed coldmaker. Get the finest possible results in your next small-kitchen planning—choose from these four great new Kelvinator “Space-Savers”!

For full information, write to Dept. AB, Kelvinator, Division of Nash-Kelvinator Corp., Detroit 32, Michigan.

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ELECTRIC REFRIGERATORS • ELECTRIC RANGES
ELECTRIC FREEZERS • ELECTRIC WATER HEATERS
ELECTRIC AIR DRIER

Kelvinator featured exclusively, nation-wide, in the Good American Home Program.

DIVISION NASH-KELVINATOR CORP., DETROIT 32, MICH.
THE MOST dangerous condition this country faces is not its foes outside. It is the apparent inability of government to learn anything from its past mistakes. The manner in which government bungled its war housing program, handicapped home builders and retarded their programs in the immediate postwar months, imposed the deadening influence of the impractical Wilson Wyatt and the unrealistic Chester Bowles on home building, launched socialism with the Housing Act of 1949, and now considers another system of controls, are excellent examples of how government proceeds to accomplish the least with the greatest degree of dislocation and hardship.

No one in Washington seems to know, or if it is known, to care about the fact that in spite of the record-breaking performance of home builders since 1947, there still are housing shortages in many industrial centers, large and small. The principal reason for this condition is the continuation of rent controls. If these had been lifted in 1946, and kept off, there would have been some added hardship for a short time, but long before now there would have been an adequate supply of small rental units, both apartments and detached houses. Now, more than at any other time since the imposition of rent controls it is necessary to remove them. The reason is that with shortages of such units in industrial areas, and these areas on the brink of great population expansion, chaos is imminent. Instead of removing rent controls, however, government contemplates extending them again.

In one industrial city, an airplane plant has been practically closed since 1946. Recently it has added 8,000 employees. Another 5,000 will be added this winter. Despite tremendous building activity in the past four years, the housing supply was not adequate when the airplane plant re-opened. What the condition will be with 13,000 new employees is unimaginable. There are dozens of similar cases. Yet, government imposes building restrictions.

Government wasted hundreds of millions of dollars worth of building materials and labor through mishandling its war housing program. Government stifled private home builders throughout 1946 and early 1947 with the Wyatt program and price controls. With these gone, private builders produced 850,000 units in 1947, broke all former records with 966,000 in 1948, topped the one million mark in 1949, and hit the almost unbelievable total of 1,350,000 in 1950. In the face of all this, government proposes to re-institute all the crippling controls of World War II, and add some new ones.

The first mistake is restricting home building when more homes than ever before are desperately needed. The second mistake is the entire announced program of controls on home building and the people who build the homes. The industry can function and do its full share in defense or war only if it is let alone and kept free of all control, including rents and manpower.
Home Week Display Houses
Indicate Design Trend

Launched as a means of acquainting the public with the achievements of the home-building industry, National Home Week has unwittingly become a barometer for the industry of design and buying trends.

The close of the biggest home show in history, National Home Week of 1950, brought approximately 15,000 new model homes to the attention of the buying public. These homes varied in size from the modest cottage under $10,000 to the more pretentious types ranging in cost up to $50,000. The homes illustrated on the following ten pages, together with those shown in a previous issue, are a cross-section of the style and types of houses built throughout the nation in the year 1950.

It is now possible to analyze the designs observed, and make an ap-
praisal of the 1950 homes in the light of the models placed on exhibition during 1949 Home Week. The exhibitions have helped to focus attention upon the nation's builders and their products and at the same time have unwittingly become a barometer for the industry, indicating clearly the changes and trends in home design and planning.

Architects and leaders of the industry have taken note of a distinct change in the type of architecture manifested in 1950 display homes. Characteristics of houses for the next half century are now beginning to emerge. A common question asked is: "What will the house of the next half century look like and have?" Although it is impossible to predict specific features so far ahead, today's new homes already give an indication of what houses in the next fifty years will look like. It is evident that the home is staging a great comeback as a center of family attraction. In all aspects the emphasis of the house of the next century already has been started by today's new homes. This emphasis is on relaxed, comfortable living with more awareness of outdoor contributions to everyday well-being.

Pioneered by forward thinking architects, designers and builders, the trend throughout the nation appears to be toward a simplified type of exterior design and roof treatment. The flat or shed-type roof, a style avoided by most builders in the past, is now receiving unqualified approval in many sectors. This acceptance can be attributed in part to the economy of its construction, and its practical aspects. It is assumed that traditional house designs will continue. This type house, however, will be tempered in its over-all aspect through the influx of new ideas and a trend toward simplification. Contemporary design with its flat roofs, overhangs and sharp profiles will soon become commonplace and gradually increase in popularity.

Other qualities that recommend the contemporary house are the "open planning" in the arrangement of rooms, frequent use of wood, stone and brick finishes instead of conventional plaster, large windows that result in "tieing together" the interior of the house with the out-of-doors, and quality planning and construction that conserve fuels and make for enduring values. In many ways con-
FRONT VIEW OF HOUSE in Rochester, N.Y., shows an interesting grouping of materials and a splendid proportional relationship of windows, walls, and roofs. Designed by Highland and Highland, architects, Buffalo, N.Y., built by Fred P. De Blase.

FLOOR PLANS of split-level house shown above indicate an exceptional room arrangement. Fireplace has a commanding position with stone surface exposed in three rooms temporary houses may easily become the best answer to the problem of erecting quality houses of good appearance during emergency building conditions.

Although decorative features on homes are still required they serve a better purpose than the old-fashioned moldings, scrolls, false shutters and false gables. The features of former days are being superseded by trellises and floor-to-ceiling glass areas, to capture sun in winter with overhangs to protect against heat in summer—features functional as well as decorative. Homes are being scientifically planned to make weather serve both house and lot.

The present trend is for the house to turn its back to traffic and noise. The backyard, as such, has begun to disappear. In the case of large operations, architects and landscape designers are commissioned to work together, creating attractive outdoor living areas with glass window-screens and fences to form separations and private outdoor living areas. In the case of the individual home the backyard with its unsightly clothes lines and garbage cans will have no excuse for existing, and its catch-all functions are disappearing. Automatic garbage disposal units are gradually becoming standard equipment along with machine dryers and retractable clothes lines. The front yard is smaller and less important. The former backyard is an outdoor projection of the living, dining and recreation areas of the home.

(Continued on page 112)
CORNER VIEW of multi-level house in Rochester, N.Y., built by Theodore Jablonksi and Son, Inc., and designed by Highland and Highland, architects, Buffalo. Pressed brick and striated plywood used for surfacing.

LONGITUDINAL SECTION above indicates the five levels of activities, with center and upper levels for living and lower levels for service. Levels are arranged to conform to site contours. Floor plans show a compact layout of rooms with all bedrooms above. Elevations at right indicate the separation of living and dining rooms with large open fireplace with a two-way hearth to serve both rooms. Planting box continues the brick facing to outside wall. Detail of planting box is shown above.

FEBRUARY 1951
Design Trends

"FLAT TOP" shown at left with plan above, was built by Earl W. Smith organization, El Cerrito, Calif., won a first award in design competition at California Spring Garden Show, and is one of many built by company to sell at less than $7,000

DESIGN VARIATION possible with flat roofs. While taking advantage of the cost saving possibilities in this type of house, builder Smith avoids monotony of appearance thru change in plan and materials

ANOTHER VARIATION of exterior treatment, emphasizing contrast of horizontal and vertical siding finished in light and dark shades of color. The garage, in the case of all three designs, becomes an integral part of house and is extended to include storage and utilities facilities.
ADVANCED DESIGN FEATURES in this Greer Park development house of Eichler Homes, Inc., Palo Alto, Calif., places emphasis on leisurely living. The extreme roof overhang above full height windows, as shown on top of page, provides shelter for terrace. Plan above indicates unusual arrangement of living room, kitchen and playroom with front entrance obtained through carport. Kitchen view at right is actually an extension of the living room area. Stub wall which conceals the equipment on open end of room extends to a point just above the highest fixture.
Large window areas are increasing in popularity. They are, and will continue to be, used with greater discrimination. Windows in bedrooms, kitchens and baths are rising to eye level and require less glass areas, thus giving greater privacy to these rooms. An exception to this rule is the large fixed window over the kitchen sink. The development of insulating glass has given impetus to the movement of increased use of glass which stems from a desire for a greater sense of freedom.

Homes with all rooms on one level share the spotlight of approval with the split-level plan that uses a sloping building site to advantage. Otherwise such a site would often be rejected. Continued improvements in panel and perimeter heating will intensify the use of slab floor installations. Again, economy of construction, inherent in the flat roof contemporary or modern house, will tend to reduce in volume the construction of one-and-a-half and two story houses.

Built-in features are now con-
MODEL HOME built by John R. Worthman, Inc., Fort Wayne, Ind. Due to the restrictions of a normal corner lot the wings are angled back on both sides of the main portion of house forming a semi-closed court at rear. Faced with siding, brick and stone considered as necessary adjuncts to the modern house. These include storage walls that act as a separation between rooms and counter-high planting areas that form a division between the living and dining room. Built-in lavatories and dressing tables are becoming a necessity in the bathroom. This is also the case of diagonally positioned vertical boards or round poles placed at regular intervals to outline an entrance vestibule or hall. In addition the kitchen, breakfast room and utility room have combined their assets into one large working area where all the activities of a normal household may be carried on with a minimum of effort.

An increase has been noted in the use of built-in furniture, particularly in connection with television. These sets are now occupying the focal position in the living room, supplanting the fireplace, once a necessity and still an appealing luxury. The use of television has already changed planning methods. Homes are now including large playrooms which adjoin or are made a part of the living room arrangement. A continuance of the trend evidenced in 1950 can be expected, although there will be no revolution in the design of houses of the future—only a gradual evolution.

PLAN provides facilities for comfortable living with all rooms located on one floor.
Design Trends

Using a combination of hinged sash and glass set in stops can now be purchased as a stock unit in various sizes. This feature has obtained ready acceptance.

Window Walls using a combination of hinged sash and glass set in stops can now be purchased as a stock unit in various sizes. This feature has obtained ready acceptance.

Another version of a window wall arrangement shown above with hinged units confined to upper tiers of lights. Brick planting area at sill of window on the exterior is repeated in the same position on the inside of living room, thus creating the illusion of planting box being continuous. Board valance at window head conceals the rod for draperies.

Design feature particularly adaptable for kitchen windows that occur above counter or sink. The scroll treatment used as a crowning member for flower box is repeated in the vertical boards that enclose the extreme ends of wood blinds. This unit is used effectively where roof soffit is at top of casing.
TRADITIONAL DESIGN given a "new look" through the use of deep colors on the wall surfaces of house and contrasting colors on trim. Flower box, scroll and blinds are used as a design feature for living room window.

FOLDING TABLE hinged to rail of door is planned for use in kitchens with limited floor area. When extended, table has ample space for two people. When closed, it blends with door.

AREA DIVIDERS are features successfully used in bathrooms and kitchens. They take the form of wood panels, cupboards, obscure glass panels and wood poles as illustrated below.
THRIFT HOME in Chattanooga, Tennessee, has soffit light over sink, convenient corner shelves, and is arranged in an efficient U-shape.

Wired For Better

26,000 people visit two demonstration homes where electricity is main feature.

To create greater initial interest in a demonstration home, many builders have found it easier to emphasize one important feature, and develop it thoroughly, rather than try to highlight all features of the house. Appliances, heating, and built-ins are featured in many homes. More recently, two homes in Chattanooga, Tennessee, have turned the spotlight on wiring as the central publicity theme.

How much interest Chattanooga home buyers have in wiring is shown by the number who visited the two display homes. In less than two weeks, more than 26,000 (about one-fifth the population of Chattanooga) went through them; hundreds of others not counted saw them during preparation, and many others came after the demonstration period ended. One home sold before it opened; the other immediately afterward. Builders of the two houses wished they had others like them to sell. Other builder visitors went away with ideas to use in their next projects.

The demonstration houses, a "Thrift Home" and a "Home of Ideas," were end results of promotion by the Better Homes Bureau of the Westinghouse Electric Corporation in cooperation with their local Chattanooga office, the Chattanooga Electric Power Board, and Builders Ralph Cameron and Creed W. Maynard. Promotion idea was to show home buyers how better living can be attained through efficient arrangement of electrical equipment.
Living

The Thrift home, which sold for $10,000, represented a “First Degree In Electrical Living,” containing equipment required (according to Westinghouse) to provide maximum livability. A fuseless wiring system in this home has six heating circuits and 11 circuits for general-purpose use and appliances. There are 76 outlets, so located that electric service is accessible any place in the house. Equipment includes a range, refrigerator, garbage disposer, water heater, clothes washer and kitchen fan.

Kitchen of the Thrift home, though only 9 x 11 feet, is arranged in a U-shape with three convenient work centers and is adjacent to a laundry-utility room with properly arranged equipment. A soffit light is placed over the kitchen sink. The living room appearance is enhanced with a fluorescent valance light over a wide window area in the front wall.

A floor plan of the Thrift home, placed in the garage during the demonstration period, drew much atten-

(Continued on page 170)
Short-Cuts From A Suggestion Box

"Every workman you have can contribute practical new ideas," is the belief of these builders, whose organization thrives on cooperation.

A SMALL suggestion box, placed on the job with workmen, can be a valuable investment for a builder. A year ago, Andrew S. Place set up a small box on his company's building site in South Bend, Indiana, and instructed three men (a painter, a carpenter, and a concrete foreman) to judge ideas submitted by their workmen. Awards were offered for ideas according to their practicality and the extent they added to productivity. The suggestion box became popular immediately, and now offers one clue to the enthusiastic attitude of Place's workmen, and an insight into the success of Place and Company, Inc., in producing some of the best homes for the money in the country.

The suggestion box is only one symbol of cooperation achieved in this organization. "When your workmen believe they are a necessary, needed part of your organization, their attitude and efficiency are improved; they take a personal interest in the job, and are willing to con-
HEATING ducts, which are imbedded in concrete slab floor, are easily assembled by one man. Curved joints are of light metal.

VAPOR resistant paper is placed over the leveled fill. Heavy rigid type insulation is placed around outer perimeter of slab.

REINFORCING wire mesh is laid over the paper before the concrete is placed. Specialized crews handle all the concrete work.

This system of lumber selection revolves around specialization. Lumber arrives at the company's warehouse by carload, is unloaded and run through a sorting shed under the watchful and specially trained eyes of one man who, in essence, converts common grade lumber to select. He

street curb forms are used for concrete slab forms. Hinged corners are securely held by an easily removed steel pin.

BENDING perfect 90-degree angles in reinforcing rods is easy with this device made by Place and Company men. The rods are used at corners of concrete slab floors.

Conferences of this nature are now common for the Place organization. Management gives labor all credit for achievement; the workmen modestly pass the credit back to management. Important thing is that the entire organization knows what the goal is, and moves as a cohesive group to achieve it. The conferences provide a common ground, where a genuine feeling of belonging is engendered in the superintendents and foremen and passed down to every workman. All workmen know that they will get just as much out of their work as they put into it.

Currently completing a project of more than 200 low priced homes, these builders employ about 250 men during 8 months of the year. Supervising them are three superintendents, 10 foremen and six other job supervisors. Main time-saving element of their operations is work specialization.

"We try to keep specialized crews on lawn seeding, concrete forming and placing, applying Sheetrock, framing and even down to painting where certain crews do nothing but priming or first coat work and other crews do finish coats," Andrew Place said. "On a project of our size, in fact on a job much smaller, we find that it definitely pays to train certain men for certain jobs and keep them on that type of work."

One of their greatest money-saving phases is in the proper selection and cutting of normal structural lumber for use in places where high price lumber is normally used. "This allows us to use common lumber at approximately $110 per 1,000 for the same purpose that many builders buy select lumber at $250 per 1,000," Andrew Place explains.

This is the Place and Company attitude toward personnel, which is a basic, fundamental principle of good management-labor relations. This management attitude is the key answer to why the Place firm is successful.

How enthusiasm for work can be generated is shown in this example: Two years ago, when this organization decided to trim costs of their already exceptionally low-priced home, Andrew, and his father, Virgil Place, called key men from their company into a conference. They issued a challenge for more short-cut work economies and practical, down-to-earth, how-to-do-it answers. All workmen made a double check of their phases of the operations. And from the conference came additional ideas that whittled the price tag of five-room Place homes down to $6,325.

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does this by selecting pieces according to where knots appear, according to the grain of the wood, and lengths needed for certain parts of the homes. He has certain jigs for lengths and angles of cuts needed, and pieces suitable for particular cuts are simply channeled to these jigs. After the lumber is cut, certain parts of the homes are assembled in the yards before they are taken to the site. Gable ends, for example, are completely framed with siding applied before they leave the warehouse yards.

Other economies are made on the job with earth moving equipment. A caterpillar tractor, with bulldozing blade and scraper attachments, is owned and operated by the company. Another caterpillar tractor, equipped with a front end loader is used, which Andrew Place says “is one of the handiest pieces of equipment on the entire project.” It is helpful on finish grading, loading trucks and light back filling. The unit is comparatively small and is easily loaded on a tilt top trailer to be pulled to different projects.

The Place firm owns five rubber-tired tractors which are used exclusively for seeding and finish grading operations. Since FHA now requires the builder to supply top soil and seeding of yards, this job assumes large proportions in a project as large as the current Place subdivision. “It would take at least 30 men at $14 each per day to do the work that five men and two tractors can do in the same length of time,” according to Place. Special crews do seeding and finish grading, and have developed high efficiency and speed in their work.

Another use made of a rubber tired tractor is in digging trenches for concrete columns. Where it would take more than an hour to dig a hole large enough for a column, if it were dug by hand, Place does it in five to seven minutes with an auger attachment mounted on the rear of a small tractor.

All of these homes are built on concrete slab floors placed over the concrete columns. Since several slabs are often placed in one day, timing is highly important. One inexpensive method successful with Place workmen is the use of burlap on wet concrete slabs to remove all surplus water. First, a length of common garden hose is dragged across the entire slab. This acts as a squeegee. The burlap is then used to absorb any water that is left. This permits the slab to be finished several hours faster than normal time required to lay a slab, and helps to cut down the overtime that might have to be paid if the men had to stay late in the evening to finish the job.

While the slab floors are curing, tilt-up type walls are assembled on the ground—even to the application of siding. When the walls are raised into position, they are held together like walls in conventional construction. At the corners where they join, top pieces overlap. The stud from the end wall is spiked to the double corner stud in the front and rear walls. This does not create a vapor barrier.
problem since insulation is continued around the corner.

All roof rafters are precut in the Place and Company shop, and are assembled on the site.

Two, three, and four-bedroom Place homes range in price from about $9,000 to $12,000 and are usually sold well in advance of completion. The company has done very little advertising. Some of their best salesmen are their workmen and home owners.

The Place homes have asphalt tile flooring, are fully insulated, and heated by forced warm air furnaces with inverted type blowers. Perimeter distribution systems are used in some of the higher cost homes; in others, heat ducts run directly from the lower part of the furnace through the slab floor to each room.

- **FLOOR PLAN**
- **FOUR bedroom Place home is easily framed. offers abundant storage, good circulation**

- **ATTRACTIVE front elevation of this low cost Place home combines vertical and horizontal siding. Landscaping is included**
A NEW ERA in construction has become evident with the increasing development and versatility of glued laminated wood arches and trusses. These structural members permit the economical construction of strong, graceful, clear spans. As a thoroughly tested building material, glued laminated wood framing members are rapidly expanding in use, and creating new markets.

Laminated wood construction was pioneered in Germany and Sweden in the 1880's. European designers and builders immediately recognized the potential in this new material—its speed of manufacture, practicability and economy of construction. In the 1930's American companies, equipped with important research findings of the Forest Products Laboratory, began manufacturing laminated wood arches for a variety of construction including garages, stores, recreation buildings, hangars, warehouses and many types of farm buildings. The movement was given tremendous impetus in this country in 1933 and the years immediately following when Dr. G. N. Brekke, of Norway, an expert on wood laminates, was employed by the Weyerhaeuser Sales Co. to adapt the system to factory production. At the present time laminated wood arches and trusses are being mass-produced...
THESE members bring engineering into farm building construction. This is a machine shed where clear span is of prime importance and distributed to builders in all sections of the United States.

This type of construction received much publicity and became generally common during World War II when hundreds of hangars, chapels and recreational halls were built at army, navy, and marine corps posts. Many unusual and beautiful architectural effects evolved, but the most salient advantages of this type of construction during the war years were the important savings made possible in time, labor and materials in erecting permanent buildings.

Glued laminated wood members not only utilize all the advantageous properties of wood, but offer the following additional advantages: (1) Laminae can be selected to place the best material at the points of maximum stress; (2) freedom from checks or other seasoning defects associated with large one-piece wood members, in that laminations are kiln-dried before fabrication; (3) members of larger cross-sections and greater lengths can be fabricated than are generally available in solid lumber; (4) arches, the most structurally efficient wood framing obtainable, are made plentiful by glued laminated wood; (5) the fabrication of large laminated structural members from smaller pieces is increasingly adaptable to the future of the nation’s timber economy.

Actually, laminated framing members are a new and different form of one of the oldest basic materials—wood. Solid lumber is subject to a number of limitations: shapes, sizes and lengths are restricted; knots, pitch pockets and other characteristics occur. But a minor miracle occurs when layers of wood are bonded together with glues in “sandwiches” or laminations. The natural tendency found in a single timber to warp, shrink and check is minimized while the inherent qualities of wood are fully realized in laminated members. These are flexibility, texture, insulation value, strength, and greater resistance to fatigue and vibration. The glues used possess such remarkable adhesive strength...

ARCHES form interior curved surface, covered with insulation board

INTERIOR effects like this are economical with arches
that, under extreme loading, the wood itself will fail before the joints give way.

Large section laminated wood structural members are an advantage in a building from the standpoint of fire. When a fire occurs the laminate members will char, but this is a surface reaction which actually helps to insulate against severe damage, while the framing's strength is only partially decreased.

The problem of constructing wide, clear spans with wood framing members is effectively overcome with laminated wood framing members. These built-up members escape the old limitations set by size and shape of the log. Modern timber connectors used in assembling these framing members develop 80 per cent or more of the working strength of the wood. Besides providing for wide, clear spans, and giving benefits inherent in wood construction, they offer additional advantages of particular importance under present conditions. Among these are the big savings they effect in time, labor and materials because they are delivered to the job site ready for fast erection.

The allowable stresses used by reputable manufacturers in designing glued laminated arches and trusses are determined by actual tests of the Forest Products Laboratory and other laboratories operated by private industries and associations. Builders who use these laminated arches and trusses, however, must depend on the integrity of the manufacturer with whom they deal for the quality of the material used in the laminations, the calibre of workmanship and other factors which the builder cannot control.

Laminated arches, rafters and trusses should be manufactured from stress graded kiln-dried construction lumber, permanently bonded with suitable glues under high pressure. Arches and curved members are fabricated by applying a uniform coating of glue to a number of laminations, and before the glue has set, the arch is assembled and bent on a special form to the required curvature. It is then clamped and kept under pressure until the glue is properly cured, after which the arch or member retains its curvature.

The width and number of laminations depend upon the building span, shape and spacing of members, and type and amount of load. After fabrication the members are planed smooth, cut to desired lengths, drilled for split rings, shear plates and bolts, and given a coat of sealer. They may be given any finish specified. Materials and production should be checked constantly for uniformity, strength and accuracy.

Glued laminated wood was welcomed by architects, engineers and builders who desired the natural arch for building where an inexpensive and practical but beautiful appearance was required with large clear spans. These members have been used economically in erecting hangars, churches, garages, skating rinks, bowling alleys, community buildings, gymnasiums, theaters, stores, warehouses and other similar buildings requiring clear-span construction. Another interesting application of glued laminated wood is its use in fabricating moving picture screen panels for drive-in theaters.

The use of glued laminated framing members has brought engineering into farm buildings as never before. Farm buildings of this construction offer greater space per square foot of area, the versatility of post-free interiors, maximum utility, and engineered strength. Erection is fast and requires no specialized equipment.
Difficult Site No Obstacle
To Woman Builder

Well planned use of land on a steep hill results in a group of neatly-arranged apartments

OTHER builders might have dismissed the site as a suitable habitat for only a mountain goat, but after a San Francisco builder, Mrs. Grace Perego, had re-made the hill, it contained 14 well-designed living units, each with a superb view.

The project, called Perego Heights Apartments, was designed by H. C. Baumann, San Francisco architect, and demonstrates both the advantages and disadvantages of hillside building: into it went the grading and foundation problems peculiar to this type of construction and out of it came an unusually attractive living site.

Each of the apartments—13 four-room and one six-room—has a small balcony and a picture window view of the city and bay. Redwood balustrades extend from landings to apartment entrances; the overhang is about 18 inches.

Entrances are provided from both the street below and the street above, where 11 garages are located. A feature of the upper entrance is a stone walk which converts what would otherwise have been a drab rear view into an attractive passageway.

The apartments are equipped with food waste disposers, and each has an individual water heater and gas furnace. There is a coin-operated automatic washer in the building.

Mrs. Perego calls the apartments a “maintenance dream,” since there are no halls to require carpeting, no heating plant to tend and consequently no janitor needed. The part-time gardener is the only employee and he hoses the stairs while watering the gardens.

The project was built under a 608 loan of $106,400. Mrs. Perego, a San Francisco builder of homes and apartments for 37 years and the first woman licensed as a contractor in California, lives in one of the units.
MORE than fifty homes were sold from this demonstration house in a 30 day period. Picture window is framed with 2x6's

FLOOR plans of McKel. Inc., homes, Portland, Oregon, are the same, with exception of optional bedroom placed over garages

HIP ROOF and reversal of same floor plan add different appearance to this home. All homes have varied exterior colors

NATURAL Redwood siding adds variation to this home. McKel. Inc., houses are heated with General Electric oil burning furnaces

Add pleasing variation with materials and color

CHANGE the design and you add more cost. Every builder is aware of this obstacle to better design in project-type homes, and with a desire to eliminate pea-in-the-pod housing, yet keep the costs down, it is a serious problem.

Formula used by many project builders is to keep floor plans the same in as many houses as possible, and add variations where they are least likely to boost costs. This can be a highly successful solution, from a standpoint of sales, as it is, for example, with McKel, Inc., builders, of Portland, Oregon. They permit few changes in floor plans; many changes in exterior colors and materials. Last year they sold two-bedroom homes with 850 square feet for $9,950; three-bedroom houses with 970 square feet for $10,750. The three-bedroom homes had the same floor plan except that ceilings of the garages were dropped and the extra bedroom was placed over the garage.

When McKel, Inc., first offered these homes last year, they had more opportunities for sales in advance of construction than they cared to accept.

Focal point of interest in the McKel homes is the kitchen. Each kitchen is completely equipped with General Electric automatic appliances, including sink with dishwasher, an 8 cubic foot refrigerator, range, ventilating fan, clock, and steel cabinets. Laundries, adjoining the kitchens, have automatic clothes washers, dryers, and table-top water heaters. By making kitchens the outstanding feature, and by adding wide variations in exterior colors and materials, McKel, Inc., has grown into one of the most successful building organizations in the Portland area.
So many versions of the so-called ranch style home have been offered since World War II that many home buyers and builders are beginning to wonder just what is the true (if there is such a thing) ranch style home.

An architect in Lincoln, Nebraska, Selmer A. Solheim, has just completed what he believes is the true ranch style home designed for himself and his family, and incorporates ideas to suit the personality and likes of his family. Meticulous about small details, Solheim insisted this home have all the elements necessary to complete the proper atmosphere for a ranch type.

An old pot-bellied stove, formerly used by a Colorado miner, marks the entrance to the large lot, and serves as an unusual mail box. The lot is enclosed by a West Virginia split rail fence of locust posts and chestnut rails. An unusual post light fixture was made by inverting a brass bucket and inserting a light in it. A winding flagstone walk leads to the front entrance.

Exterior walls of the home are constructed of Colorado Sandstone and Western cedar stained redwood. The shingles are hand split cedar shakes from British Columbia. On top of the garage portion of the roof is a bell tower housing a manually operated bell. The cast bronze bell is from an old Mississippi River boat and is rung from a location adjacent to the kitchen.

The entrance foyer is entered through a large door that has a knob located in the center. A translucent glass partition separates the foyer from the snack room, and an interesting oak cubicle lattice work separates the foyer from the living room. A large size guest closet is available at the foyer location. For illumination an Italian antique blown glass jug was wired for lighting and forms an unusual pattern on the ceiling and walls when lighted.

The home is built on a concrete slab floor. The sod was stripped off, five inches of coarse gravel applied, then 1-inch of lean concrete. One coat of asphalt and one layer of 30-pound felt (mopped with hot asphalt) lapped for double thickness is placed over the first layer of concrete. Main floor slab is four inches thick, reinforced with wire mesh and 1/4-inch reinforcing bars 24 inches O.C.
THE OUTDOORS is always a good place to start controlling indoor temperature. Weather seldom remains constant from one hour to the next. As the weather varies, so varies the rate at which heat in a building is lost to the outside. An outdoor control senses these weather changes at once and varies the heat supply accordingly.

There is a time element involved with every type of heating system before a call for heat is answered by a free circulation of the heating medium. This delay is known as lag. Some heating installations have more lag than others. This depends on many factors, such as the type of heating, whether it has a forced or gravity circulation system, and structural characteristics which pertain to each installation.

With only an indoor temperature control, an hour or more may elapse before a need for additional heat is noted. Before the heating system has a chance to catch up to this new demand for heat, indoor temperature may fall to a point where occupants feel discomfort. An outdoor control, with its ability to anticipate heating needs, permits the heating system to "get the jump" on the extra heat demand which will follow. Conversely, an outdoor control can sense a warm-up in outdoor temperature in time to prevent an over-run of heat.

This is the second of two articles presenting the fundamentals of automatic heating controls for homes and small commercial structures. The first article appeared in the January issue starting on page 147.

"On-Off" Outdoor Control

The simplest outdoor control operates with an electrical "on-off" control system. It uses two remote bulb sensing elements—one for outside, the other for mounting in the boiler or warm air supply duct. This device operates the burner according to outdoor heating needs. On a forced hot water system, the thermostat operates the circulating pump. The thermostat and outdoor control operates the burner jointly on a forced warm air heating plant.

Reset System

The "reset system" is another type of outdoor control commonly used for larger residential and commercial forced hot water heating. It utilizes a modulating outdoor control to mechanically reset the control point of a second controller. This second controller operates the burner or a control valve. It is continually raising or lowering its setting to vary temperature of the heating medium as dictated by the control installed outdoors.

When this second controller operates the burner, its temperature-sensing element is located in the boiler. An "on-off" type indoor thermostat operates the circulating pump according to indoor temperature needs.

When this second controller is operating an electric motorized modulating valve, the temperature sensing element is located down-stream of the valve. In accordance to demands of the modulating outdoor control, it modulates the flow of hot water from the boiler or heat exchanger (which is controlled at a constant high temperature).

Outdoor Control of Mixing Valve

A similar application is where the modulating outdoor control resets the operating temperature of a second modulating controller. This controller positions an electric motorized 3-way mixing valve. Being a modulating control, it is capable of operating the mixing valve to any intermediate position dictated by the outdoor control. The mixing valve has one intake from the boiler (hot water) and another from a by-pass off the return (cooler water on its way back to the boiler). In this way, the proportion of heated boiler water to cooler return water is continually varied in relation to the rise or drop in outdoor temperature.
The circulating pump operates continuously.

Another type of outdoor control incorporates an outside sensing element that is virtually a duplication in miniature of the building or zone which it controls. It is a small metal cylinder containing its own thermostat and heater. As the thermostat in this element calls for heat, the small electrical heater supplies heat until the thermostat in this outdoor element is satisfied. Adjustments are made in an indoor control panel so that heat input to this outdoor element is identical to the building or zone it controls. Therefore, whenever the thermostat in the outdoor device requires heat, the burner or zone valve supplies heat to the building simultaneously. An advantage of this type of control is the fact that it not only responds to outdoor temperature, but to the effects of cooling wind or radiant sun. This system is available in "on-off," or modulating control.

Zoned Heating Control

Zone control is the logical approach to the comfort heating problem in large or rambling type structures. This also applies to commercial buildings comprised of several areas where temperature requirements and heating loads greatly differ. It is simply the grouping of rooms or areas having common characteristics in heat load, exposure, or occupancy. Each zone has its own complete control system which accurately compensates for any variations that would affect heating comfort in that area.

In zoning a building, the piping or air ducts are arranged so that the heat to each area can be controlled separately by its own thermostat. On a forced hot water system, the thermostat operates a zone circulator; with a steam system, it controls a zone valve. The thermostat positions motorized zone dampers on a forced warm air system. Zones may also be controlled by outdoor control, or a combination of outdoor and indoor control. Any type of control, such as "on-off" or modulating, electric, pneumatic, or electronic systems are applicable to zone operation. In addition to its advantages in providing a more even distribution of heat, it saves fuel. With zoning, for example, it would not be necessary to over-heat the entire structure simply to provide sufficient heat for some portion where exposure to the weather is greater than in other sections.

Individual Room Control

Just as several thermostats give more comfort and fuel economy than one...so an individual thermostat in

(Continued on page 172)
WILL the house sell?"

This is always the big question in the minds of builders and loaning agencies when it comes to selecting home designs with flat roofs. It is a question tightly wrapped around the word caution, which is necessarily the golden rule of both builders and loaning agencies. But it is one of the greatest single blocks thrown into the growing popularity of homes with flat roofs.

Caution, in many cases, can be carried to the extreme, and before either the loaning agency or the builder turns thumbs down on flat roofs, it might pay them to find out just what the home buyers will buy. There are many builders, like Jere Strizek in Sacramento, California, who are finding that buyers will buy so-called modern design—if they are given a chance.

Since 1949, Strizek has built more than 900 flat-roofed homes, and has sold all of them long before completion, all in the same general area. There are numerous other builders in other climates throughout the country who report similar successes with flat and shed roofs, so that the old saying “Sure, they can build them in California, but...” is rapidly becoming an invalid excuse. Examples are Joe Driscoll in Fort Worth; Paul Enghauser of Minneapolis; Nobel S. Clay of Pittsburgh; John W. Steinmann of Monticello (Wis.); Edward G. Hawkins of Denver—all builders who have successfully built flat top homes to sell.

It takes more than a flat roof to make a home sell, though if they are properly done they may be the main feature. Strizek builds flat roofs so that 4 x 8-inch beams are exposed. These beams, set 4 feet O.C., are supported by 2 x 4-inch studs placed 16 inches O.C. and 4 x 4-inch columns set 4 feet O.C. Over the beams, 2 x 6 inch Douglas Fir boards (also ex-

PARTICULAR emphasis is placed on entranceways by Jere Strizek. Note exposed boards and beams in overhang of flat roof

A Vote for Flat Roofs

Before turning thumbs down on modern design, it might pay to make a double check on buyer demand
COMBINATION of brick, vertically and horizontally placed boards on exterior walls, and a simple entrance motif, add appeal. All the homes are built on concrete slab floors, properly insulated, over a layer of Sisalkraft moisture resistant paper. Boards are applied vertically and horizontally on exteriors of walls, which are embellished with brick veneer in the front and with planting boxes made of brick. Various types of ornamental frames are used for covered entrance areas. Mahogany slab doors add to the appearance of the entranceways. Some models have picture windows in both the living room and dining room.

Natural wood of the flat-roof ceilings is enhanced in appearance by colors of paint and wallpaper selected to cover Sheetrock on interior walls. Some walls are paneled, usually the fireplace wall. In his latest tract Strizek used a fine mahogany paneling which gives a rich appearance to the living room and bedrooms where it is used. Kentile asphalt tile covers all floors.

Tracy steel sinks and cabinets are featured in the kitchen. Duratile is applied over the tub. Other materials used include Briggs Beautyware, Soule windows, Weiss and Kwikset locks, Commonwealth Dual furnaces. Strizek has a shop equipped with power tools where he makes cabinets, window frames, moldings and even assembles parts of the framework on jigs.

Popularity of the Strizek homes is due to the many distinctive touches and quality items not commonly found in tract homes. Buyers like the size of the houses, the low price, the fireplaces, beamed ceilings, mahogany paneling, slab doors, steel sinks and cabinets, soffits in the kitchen with recessed lights, brick veneer embellishments on the exterior. But first of all, they cast a strong vote for the flat roofs.

The homes, with 915 square feet, sell for $7,300 on 55 x 100-foot lots.
IT IS USUALLY assumed that a home buyer who expects to pay $25,000 to $50,000 for a house will insist that it be custom-built. Yet builders can build to sell in these price brackets—and do it successfully.

Landerwood Estates near Cleveland, Ohio, is an excellent example. Homes in this development offer proof that architects and builders can often anticipate the wants of people who buy high priced homes, and can sometimes know more about the wants of a buyer than the buyer himself.

Homes in this 420-acre project combine the warmth and beauty of traditional and the practicality of contemporary design. The development, when completed, will consist of 350 homes in the $25,000 to $55,000 class. It has already won first prize in the Complete Community Development of Larger Homes Division of the 1950 contest sponsored by the National Association of Home Builders.

From the exterior, these homes appear to be completely traditional except for the combination of several different exterior wall materials and the location of windows and doors. Front elevations maintain a pleasant traditional balance of fenestration and wall materials, yet escape less imaginative symmetry common in traditional.

Practical variance from traditional is made in the location of garages, which in most instances, are a structural part of the homes. But garage entrances are kept away from front elevations of the houses, and are usually situated on one or the other side, to preserve the traditional front elevation appearance. Another variance from traditional is the use of simple, unimbellished materials around fireplaces, cornices, gables, porch columns, and in other areas where proponents of true traditional insist on ornate treatment. Other contemporary ideas are represented in modern electric kitc-
ens, the use of built-in bookcases in many of the living rooms, and the use of living-dining room combinations.

An unusual quality about the Landerwood Estate homes is the appearance of size. The homes are not small, but the design techniques used have caused them to appear much larger than their square footage. In general, the appearance of greater size is achieved by establishing long, unbroken roof areas and by situating garages at the side of the homes. The latter could be done because each home is located on more than an acre of land, with at least a 125-foot width.

The idea for Landerwood Estates (now about 20 per cent completed) originated 14 years ago when Alex A. Treuhaft and Charles A. Keyes, builder-developers of Cleveland, surveyed the southern portion of Pepper Pike Village, a wooded section near Cleveland. Development of the idea began with the construction of homes by their company last year, after landscape architect Maurice Cornell completed an outstanding job of land planning.

The cul-de-sac type of street layout was used, eliminating through traffic in Landerwood Estates. Each home is fully landscaped, and takes the best advantage possible of surrounding view. A thorough topographical study

**FEBRUARY 1951**
LARGE trees and gently rolling lot furnished a picturesque setting for this luxury dwelling.

PLANNING of first and second floor layout shows ideas of contemporary practicality. Upstairs may be finished by owners as desired.

COMBINATION of stone and wood and recessed lights are variances from the traditional, left. Attractive breakfast room is walled from view of the kitchen.
is made of each lot to determine natural grades and correct them to requirements of the homes.

To speed and simplify construction of the homes, the Keyes-Treuhaft company maintains complete control of all design. Several better known architects design the homes to conform to the high quality desired for the development. Any changes desired by home buyers can be made, but at extra expense to them.

The advantage of permitting different architects to design homes for the tract is immediately seen in the distinct difference of each home.

The demonstration house, opened for one month last Fall beginning with National Home Week, featured an electric kitchen and automatic laundry, including range, refrigerator, garbage disposer, ventilating fan, water heater, clothes washer, dryer, and freezer. This home, a one-and-one-half story structure of natural stone and wide wood siding, sold several weeks before its completion. It has a large recreation and laundry room in the basement. These, as well as furnishings and decorations, were publicized widely in the local Cleveland Plain Dealer newspaper. A local public relations counsel, employed by Keyes-Treuhaft, handled all publicity and advertising. An attractive 16-page brochure was circulated to about 2,500 people on a select mailing list, describing highlights of the estates.
Three for One

Three HOUSES designed around one floor plan. These are part of a development at Closter, N. J., built by Russell H. Willis and Esko J. Koskien of Greenway Homes. Architect was Leonard G. Feinen.

In the case of this project the builders were agreed that split level houses would be the answer to a high water table that prevailed over the entire property. They conceived the idea of laying a concrete slab on the ground level, building the foundation up instead of down, and carrying backfill to the property. This fill is sloped gently from the house to the road except for garage drive which extends directly to garage at street level. In this manner three floors are provided: the garage and basement at street level; living room, kitchen and dinette three steps above grade at wall of house, and the bedroom area a normal room height above the garage and basement. In addition, considerable bulk storage space over the living room and kitchen area is easily available from the bedroom hall.

The entire super structure above foundation walls, which extends in a level line about 12 inches above the highest point of grade, is framed with wood. A change in the type and character of the exterior facing, both on front and side walls, provides the background for color variations which add to the interest of the individual houses.

Materials used in these homes include Lemco metal windows, Atlantic asphalt shingles, Westinghouse hot water heater, Eljer plumbing fixtures, Youngstown kitchen cabinets, Commander garage doors, Air King ventilating fan and Reynolds insulation.

AMERICAN BUILDER
Blueprint House
Number 50
Leonard G. Feinen, A.I.A.

Further information and complete ¼ inch scale blueprints available on this house from American Builder Plan Service, 30 Church Street, New York 7, N. Y.
LARGE trees and gently rolling lot furnished a picturesque setting for this luxury dwelling.

Planning of first and second floor layout shows ideas of contemporary practicality. Upstairs may be finished by owners as desired.

Combination of stone and wood and recessed lights are variances from the traditional, left. Attractive breakfast room is walled from view of the kitchen.
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SPLIT-LEVEL HOUSES are particularly adaptable to sloping building sites where floor levels are made to conform to existing grades. Roof surfaces are varied in this type house.

DESIGN VARIATION in split-level houses occurs in the change of roof lines and exterior materials. In these three houses the same plan and window fenestration were used.

THREE HOUSES designed around one floor plan. These are part of a development at Closter, N. J., built by Russell H. Willis and Esko J. Koskinen of Greenway Homes. Architect was Leonard G. Feinen.

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Number 50
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Homes Grow from Magazine's Pages

From a real estate salesman to a 50-house-per-year builder in four years is the amazing success story of Lester Harris

WITH a shortage of good houses to sell as the inspiration and the American Builder as a guide, a young real estate salesman became a successful 50-house-per-year builder in less than four years. Lester Harris, Jr., of Cheshire, Conn., freely admits that while he was sitting around an office four years ago trying to figure out some way to get more house listings to satisfy his prospective buyers, he started reading copies of this publication and found the information on all phases of home building so complete he decided to start building houses for sale. By studying American Builder houses, particularly the gatefold blueprints, he and his wife were able to select a distinctive style of house for themselves as their first undertaking.

When their first house was completed, Harris acquired more land on the same street, obtained financing from the First Federal Savings & Loan Association of Meriden, and proceeded to build houses for sale. Source of most of his plans as well as his brand name materials and home equipment continued to be...
American Builder. The advertising and editorial pages also guided him in the acquisition of tools and power equipment for use on the jobs.

This winter, moving at a 50-house-per-year pace, he was employing about 16 carpenters, six laborers, two truck drivers, two masons and two mason helpers, two painters, one bulldozer operator, one general foreman, two office girls, his wife and himself. The only work being sublet is wiring, plumbing and heating.

Harris houses now consist of two basic floor plans, one for two bedrooms and one for three bedrooms. Elevations, garage locations, and orientation depend on the site. The houses are adapted to the location. Mrs. Harris works very closely with her husband in selecting and revising the plans.

Harris learned early in his experience that power tools made quality work and good profits easier to achieve. He now owns two Multiplex draw saws, three Porter-Cable powered hand saws, one Skilsaw, one Homelite electric generator, two Darra-James table saws, two Porter-Cable power sanders, one Delta disc sander, one Stanley router and planer, one Ford pickup, one Chevrolet dump truck, one Ford dump truck, one Allis-Chalmers HD-5 tractor-loader.

"That tractor-loader is one of the best investments I ever made," says Harris. He paid as much as $100 to hire an excavator to dig basements for him before he bought the tractor-loader. Now he says it costs as little as $10 and he gets it done right when he wants it done. This machine is used by Harris for excavating, loading trucks, grading, building roads, laying sewer pipe, digging dry wells, and holes for septic tanks. He plans to buy a Mack tractor and a Fruehauf trailer to haul lumber to his job from sawmills cutting native northern timber.

Harris pours his foundation footings and basement floors as a single unit. Reinforcing bars are used to assure a permanent tie between the floor and footing. Bad weather sometimes delays pouring this type of combination footing and floor, but experience has proved that about $100 a house can be saved with this method. All foundation walls are poured concrete in plywood forms. He makes his own forms and gets about 40 houses from each set. The foundation walls, stoops, garage floors are all poured at the same time.

Because this project is located in hilly wooded Connecticut terrain with a brook running through the site, Harris is able to achieve some unusual and attractive arrangements of houses on sites with rear terraces, stone retaining walls, walks and similar devices. Fireplaces are standard in all houses. Kitchen cabinets, front entrances and built-in features are fabricated on the site.

The houses are heated with hot water boilers and convectors. In most cases all piping is copper. Ceramic tile bathrooms are standard throughout the project.
LARGEST home built by Harris has three and one-half bathrooms, one in game room in basement. Selling price was $40,000, with lot.

SHELTERED entrance is attractive feature of higher cost home.

PRODUCTS SELECTED BY HARRIS FROM AMERICAN BUILDER

- American Standard heating units and plumbing
- Andersen windows
- Armstrong linoleum
- Balcom West insulation
- Benjamin Moore paints
- Bealitch metal lath
- Bradford oil burners
- Carey mineral wall
- Chase copper water and heating pipes
- General Electric mercury switches
- Gerity bathroom cabinets
- Heatmaster fireplace units
- Hilo paints
- Homemaker board
- Insulux glass blocks
- Komaxault sliding door hardware
- Komaxault flush doors
- Kentile asphalt tile
- Lee clothes hampers
- Libbey-Owens-Ford glass
- Lightbelle lighting fixtures
- Milnor wood doors and louvers
- Minneapolis-Honeywell heating controls
- Modernfold doors
- Mosaic and Roman tile
- National Gypsum plaster
- NuTone kitchen fans
- Rowe garage doors
- Rubberoid asphalt shingles and asbestos cement board
- Schlage hardware
- Stantley cabinet hardware
- Taco hot water heaters
- Trane coolers
- Tuttle & Bailey convectors
- Yale & Towne hardware
- USG gypsum lath and mineral wool

PLAN of home, left, shows well-arranged kitchen and garage.

FIREPLACE in small Harris home has bookcases on side.
An Impressive Record Speaks for Itself
By R. E. Saberson

Once again the home building industry is face to face with problems that are numerous and challenging to say the least.

However, this isn't the first time that such a thing has happened. Actually, problems of one sort or another are nothing new to the far flung industry.

"It's just a different kind of trouble" is the way a home builder put it with an air of resignation when we recently discussed the subject with him.

Then we fell to talking about the great ups and downs of the home building industry—the sudden collapse of the building boom in the early Twenties and the over-night drop in the price of building materials which left many a home costing far more half completed than it could be sold for fully finished; the rapid recovery which reached a record-breaking high of 937,000 completions in 1925; the big bust of 1929 and the dreary years which followed when homes were a drug on the market and home construction descended to new lows; the recovery period in the late Thirties interrupted by World War II: the shift-over to long years of war economy; the postwar boom of the late Forties which smashed all existing 5-year records and ended in an unbelievable new high of approximately 1,300,000 homes in 1950—a figure that had never been mentioned as a possibility in the most optimistic forecasts of the best posted experts in the industry.

Then in order to make the picture even more vivid, we checked back on the figures for thirty years and set down the totals that are more or less familiar to practically every one in the industry, but which well deserve an over-all scrutiny at a time when the future is uncertain. What other industry can point to such a jagged life line:

<table>
<thead>
<tr>
<th>Year</th>
<th>Homes Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920</td>
<td>247,000</td>
</tr>
<tr>
<td>1921</td>
<td>449,000</td>
</tr>
<tr>
<td>1922</td>
<td>716,000</td>
</tr>
<tr>
<td>1923</td>
<td>871,000</td>
</tr>
<tr>
<td>1924</td>
<td>893,000</td>
</tr>
<tr>
<td>1925</td>
<td>937,000</td>
</tr>
<tr>
<td>1926</td>
<td>849,000</td>
</tr>
<tr>
<td>1927</td>
<td>810,000</td>
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<tr>
<td>1928</td>
<td>752,000</td>
</tr>
<tr>
<td>1929</td>
<td>509,000</td>
</tr>
<tr>
<td>1930</td>
<td>330,000</td>
</tr>
<tr>
<td>1931</td>
<td>254,000</td>
</tr>
<tr>
<td>1932</td>
<td>134,000</td>
</tr>
<tr>
<td>1933</td>
<td>93,000</td>
</tr>
<tr>
<td>1934</td>
<td>126,000</td>
</tr>
<tr>
<td>1935</td>
<td>211,000</td>
</tr>
<tr>
<td>1936</td>
<td>319,000</td>
</tr>
<tr>
<td>1937</td>
<td>336,000</td>
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<tr>
<td>1938</td>
<td>406,000</td>
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<tr>
<td>1939</td>
<td>515,000</td>
</tr>
<tr>
<td>1940</td>
<td>402,000</td>
</tr>
<tr>
<td>1941</td>
<td>706,100</td>
</tr>
<tr>
<td>1942</td>
<td>356,000</td>
</tr>
<tr>
<td>1943</td>
<td>191,000</td>
</tr>
<tr>
<td>1944</td>
<td>141,800</td>
</tr>
<tr>
<td>1945</td>
<td>209,300</td>
</tr>
<tr>
<td>1946</td>
<td>670,500</td>
</tr>
<tr>
<td>1947</td>
<td>849,000</td>
</tr>
<tr>
<td>1948</td>
<td>931,600</td>
</tr>
<tr>
<td>1949</td>
<td>1,025,000</td>
</tr>
<tr>
<td>1950</td>
<td>1,300,000 or thereabouts</td>
</tr>
</tbody>
</table>

 Naturally these sharp peaks and deep valleys are not peculiar to the home building industry alone. The chief difference between it and others exists in the fact that home building is hit harder and sooner than most other commercial activities and that it takes somewhat longer to regain its momentum once it has been slowed down.

While it is true that World War II raised havoc with the home building industry, if we base our calculations upon the year-to-year figures alone, actually the industry came through with flying colors considering the colossal handicaps imposed by shortages of essential materials, rules, regulations, restrictions and the countless other handicaps that threatened its very existence. Despite these obstacles, it managed to keep existing property in a state of reasonable repair by exercising admirable ingenuity in making good use of such materials as were available. Of even greater significance was the construction of the countless housing units that had to be erected overnight to accommodate the great shifts in population to defense centers. It must not be forgotten that this know-how came from within the ranks of the building industry and not from inexperienced military men.

And so in one way or another the home building industry has been able to keep itself alive during re-occurring thin years and to do a whale of a job during the good years... of which 1950 was undoubtedly the largest.

It is interesting to reflect upon the industry's ability to recoup as quickly as it does after prolonged periods of inactivity, to readjust itself to changed conditions and to expand or contract mightily. No other industry can boast of such elasticity.

Consider for example, the plight of the industry during the dark days of the depression when houses were a dime a dozen and Uncle Sam was bailing out home owners via HOLC. Ponder well the immense responsibilities which confronted the nation's home builders at the close of World War II when the pent-up housing shortage was so acute that it promptly became the greatest political football of all time.

Probably no other period in the hectic history of the home building industry provides more substantial proof of its amazing flexibility and versatility than that which followed World War II when it was discovered that no provision whatever had been made for housing the millions of families who would need homes once the war was over and the armed forces would be returning to more peaceful pursuits.

Promptly the ever-zealous government planners turned thumbs down upon the industry that had once provided American families with more homes per capita than any other nation in the world. For some strange reason it was immediately indicted as wholly unfitted for the job. Then the ever-zealous government planners took over... or attempted to do so.

There is no need to repeat here the Lustron story or any of the other fantastic attempts that were made to find a magical short-cut to home ownership. Anyone with a "new approach" to the problem could get the ear of Washington. Millions of dollars were wasted in untried, impractical experiments which produced nothing but headaches for hopeful sponsors.

Traditional builders clamored in vain for the same recognition that was being given the innumerable untried schemes which were being churned up to turn out houses faster and cheaper but their pleas, generally speaking, were in vain. Time tested construction methods which had dotted America with happy homes had little appeal for the bureaucrats. There was much talk of assembly lines—of raw materials coming into one end of mile-long factories and emerging from the other end as ready-to-live-in homes... of expeditors who were to crack the whip over the laggards in order to end the housing shortage pronto.

As we come to grips with another great international crisis (regardless of whether we must meet it head-on immediately or succeed in postponing it for the time being), we should appraise thoughtfully the part that the home building industry has played and can continue to play in coming to the aid of the nation in a period of emergencies.

First of all, the year-to-year figures show that it is rich in experience when it comes to meeting great crises within its own confines and that the end results invariably have been spectacularly successful. In the early Twenties, it zoomed from a bust to a record-breaking high in five years. Then it did exactly the same thing in the late Forties when it completed more than four million homes in five years in the face of the disheartening shortages of materials and man-power which sent prices sky-high.

(Continued on page 178)
that's Ro-Way doors

No matter how you look at 'em, Ro-Way Overhead Type Doors are dependable. Dependable in service to the owner, dependable in quality of construction, dependable in sales and installation service.

Owners appreciate Ro-Way Doors for their easy operation, regardless of weather conditions. Ro-Ways are good-looking—and stay that way, because all hardware is Parkerized and painted after fabrication to resist rusting and streaking. Construction is particularly rugged. Wood sections are made of specially selected lumber and exterior-grade plywood. Doors always hang true, thanks to Ro-Way's careful workmanship and the steel dowels used in all mortise and tenon joints.

And you will appreciate Ro-Way's nationwide group of distributors, factory-trained to help you, and to make sure that every Ro-Way Door is installed right.

That's why Ro-Way Doors are so dependable—from any angle. And that's why it pays to specify Ro-Way on all your industrial, residential and commercial jobs.
MORE AND MORE BUILDERS who use American-Standard Heating Equipment and Plumbing Fixtures, are finding this a strong selling point to stress in their own advertising. It tells the public that only the best products were used... creates confidence in the top quality of the whole dwelling.

"I feel that the success of the Sherwood Forest plan is largely due to the quality materials used—including American-Standard Heating Equipment and Plumbing Fixtures. From experience I have found that the American-Standard name is well known and carries a lot of weight with home buyers."
happening to Sherwood Forest!

In this Sherwood Forest, a residential subdivision of Memphis, Tennessee, there's a buzz of activity these days. Here, smart, modern homes—some still in the process of construction—line the streets which bear the names of such legendary characters as Robin Hood, Friar Tuck and Little John. But these quaint street names are about the only connection with the Sherwood Forest of old . . . for this new residential district is as modern as tomorrow. All houses have central heating. And, naturally, they are equipped with the latest features and conveniences . . . including both American-Standard Heating Equipment and Plumbing Fixtures.

The idea for the development of Sherwood Forest was conceived by builder Herbert W. Morton. The subdivision contains 568 lots, laid out on contours to preserve as much as possible of the hardwood forest. The cheerful, distinctive houses were built to market for a maximum price of $12,000.

In 1946 and 1947, 156 houses were built in Sherwood Forest. These were single family units of brick veneer or frame construction and were sold for prices ranging from $10,000.00 to $12,000.00. During 1948 Mr. Morton built and sold 40 additional units in this same price range. In 1949, 156 houses were erected on some of the remaining lots and sold for prices ranging from $6,500.00 to $10,000.00.

As Mr. Morton says, American-Standard Heating Equipment and Plumbing Fixtures were an important factor in creating the enthusiastic demand for the Sherwood Forest homes.

The outstanding quality of American-Standard products, backed by strong, consistent advertising, has created a public acceptance throughout the country. You will create satisfied customers when you install American-Standard products in the structures you build or remodel. Whatever the type or the size of the project, you will find just the heating equipment and plumbing fixtures you need in the complete American-Standard line. Ask your Heating and Plumbing Contractor for details. American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pennsylvania.

AMERICAN-Standard
First in heating . . . first in plumbing

Serving home and industry

AMERICAN STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE ROILERS • RUSS MATER • TONAWANDA IRON

FEBRUARY 1951
PARKAY Hardwood Floors in Model Home Withstand Grueling Traffic

Over 1,300,000 visitors trod the Parkay ready-finished hardwood floors in the model home sponsored by Living Magazine at the 1950 Chicago Fair. At conclusion of the 90-day exhibit the architects—Tsuruoka, Osborne, Martini & Melun, Evanston, Ill.—wrote the following: "...although the flooring was not refinished during the Fair and had only minor daily attention, it wore beyond our expectations and retained its fine appearance..."

Here's proof that Parkay—3/8" thick—offers all the wear of standard floors—that its factory finish makes for lasting beauty. And remember—Parkay's speedy application to any sound subsurface with special adhesive saves valuable time on both new and remodeling jobs alike.

Parkay flooring, made of choice American Oak, is available in two styles—9" x 9" Tiles and 9" wide Broadboard. For complete details see Sweet's Architectural File or write direct for free samples and literature. Parkay, Inc., Louisville 9, Ky.

No. D-75
Eaves...
Gravel Stop...
Gutter...

New ideas of design as applied to the modern type dwelling of today with its flat or semi-flat roofs call for new methods of construction to properly express the new mode. The detail drawings on opposite page indicate an arrangement of eaves, gravel stops and gutters used in connection with the roof treatment of a large home in Sherman Oaks, Calif., from the design of Summer Spaulding and John Rex, architects. Contrary to the traditionally designed home, the modern or contemporary styled house indicates a broad flat wall surface crowned at roof with a wide overhang or a simple wood facia and gravel stop which is applied directly to the exterior facing of the wall. Gutters are made an integral part of the design of the house. These are built into the eaves of the roof in place of applying hanging metal gutters from the roof edge, which is the method commonly used with the traditionally sloped roof line.

The plan and elevation at (G) on the detail plate is of particular interest. This indicates a partial return of the built-in gutter shown at (A) with the return section shown at (G). It is an excellent solution to the somewhat perplexing problem of gutter return. Other sections on the detail plate show the simple yet effective method of treating the intersection of wall and roof, other than the gutter line, with a shaped metal gravel stop.

Nailing Studs with Ease

If studs persist in shifting when they are nailed in position then a large C clamp placed as shown in drawing will correct this condition. The block prevents stud from shifting.—Herbert E. Fey, New Braunfels, Texas.
New Hunter Package Fan
is easily installed in any attic, any home

Thousands of owners call the Hunter Attic Fan a feature of their home that they “couldn’t do without.” Low in initial cost, and with no upkeep expense, it provides an efficient cooling system for homes in all price ranges.

Installation of Hunter’s new, compact Package Attic Fan is so simple and inexpensive. Fan, motor, suction box and shutter are all in one unit that requires only a ceiling opening in hallway and 18” clearance in attic. Four models, ranging from 4750 CFM to 9500 CFM (ratings certified) fit any home size and climate. Quiet, powerful, dependable—guaranteed by Hunter, exclusive fan makers since 1886. Mail the coupon below for new booklet on home ventilation.

Hunter PACKAGE Attic Fans

Hunter Fan and Ventilating Company
381 South Front St., Memphis, Tenn.

Send copy of “How to Cool for Comfort” to:

Name: ............................................
Address: ...........................................
City & State: ...........................................

No. G-16
Show Window Details

The new front for the Blackton 5th Ave., Ltd., store located on West 57th St., New York City, was designed to meet the demand of customers accustomed to luxury shopping and to provide an open appearance to the entire front to attract all trade.

The store front, although small in scale because of restrictions imposed by the large building columns, has been given an outstanding appearance and assumes larger proportions, through the skillful use of projecting display windows and recessed bulkheads.

The projecting display windows are supported on cantilevered construction consisting of double steel channels over steel angle struts, both of which have been spaced so that the precast concrete platforms fit between struts. This concrete platform is covered with a removable plywood floor to facilitate window dressing. The platform also has a 3/4-inch plywood show window back and floor on wood furring strips.

The intent of the design of the bronze members of the show window was to impart the effect of a large scale show case set on a cantilevered base, thus providing a delicate glass box in which intimate apparel, also light in scale, could be shown.

The wall behind the show window, which continues into the store, is constructed of a veneer of long narrow tiles glazed in rich tones of antique gold set on a backing of metal channels, lath and cement plaster.

The lighting for the show window consists of fluorescents and adjustable incandescent in porcelain sockets recessed beyond the sideline, above and behind the gold tile wall.

The vestibule floor of the store front is terrazzo in ebony black marble chips with brass divider strips. The vestibule ceiling is painted plaster of a Morocco gray color which provides a soft background for the large white domes of indirect light and recessed downlights.

How to Repair Knotholes

Drive a few tacks into the wood inside the hole to be repaired and fill hole with plaster of Paris. The patch can be cut, planed or sanded smooth after the plaster has set for approximately thirty minutes. The patch will look inconspicuous when the adjoining wood is finished natural.—Submitted by Werner Kraatz, Santa Cruz, Calif.
STOCK RAILING

MOST IMPORTANT DEVELOPMENT IN ORNAMENTAL IRON IN THIS CENTURY

For the first time contractors can buy railing at prices which compete with wood or pipe... railing which is immediately available from building supply houses... in Modular lengths.

EASY TO FIT

STOCK RAILINGS

1. Build your forms to fit stock rail sizes (steps 7" x 12")
2. Set your Coffman No. 205 rail in form,—plumb and level.
3. Pour your concrete.

EXTRA BEAUTY AT NO EXTRA COST

Coffman Railings are hand-wrought by skilled artisans to have the traditional beauty of ornamental iron. Each operation is performed with the careful workmanship of a custom job. Look for the hand-forged tips on the scrolls.

Yet this meticulous work is done by production methods which permit the lowest prices on the market for hand-wrought ornamental iron. A 2-step rail section, for instance, costs $8.65—less than it costs to build a similar section of other materials.

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P.O. Box 1113, Orlando, Fla.

TECHNICAL GUIDE
for Builders and Craftsmen

How to Set Glass in Wallboard Construction

When it becomes necessary to cut an opening in a single thickness wallboard partition where the inset glass is for the purpose of providing additional light, then it can be done in the manner shown.

(A) Represents broken portion of wallboard in which a square hole is cut for glass installation. Two special mouldings are made as indicated by (B) and (C). The deep groove in (C) is made to receive the extended member of (B) with an easy sliding fit. These pieces are arranged to clamp tightly together on the wallboard (A) and then nailed at (F) so nail will pass through (C) and (B) and on into the edge of wallboard (A). When glass is set stop (E) is screwed in position.

—John E. Hyler, Peoria, Ill.

How to Cut Bevels on Non-tilting Saw Tables

Bevel cuts can be made on any number of boards by using an extra wood strip when tilting saw is not available. A wood strip of the width required to obtain the necessary angle of cut is nailed lightly to the work piece. The two pieces are then pushed across the table in the usual manner.—Herbert E. Fey, New Braunfels, Texas.

How to Make an Emergency Rabbet Plane

A short piece of 2x4 hardwood can be quickly made into an improvised rabbet plane. Five flat-headed steel wood screws are placed along the center of block at two inch intervals, the first screw to project one sixteenth and the fifth screw about five sixteenths of an inch. These are all set at an angle with the edge of heads sharpened with a file. Wood strips nailed on both sides for guide.—H. E. Fey, New Braunfels, Texas.
MircoR
ideal for sturdy, rounded corners

Straight, true corners — 26-gauge galvanized sheet steel.
Expansion wing — integral with nose of bead.
Perfect plaster bond — provides strong plaster key and sturdy reinforcement.
Small package for easy handling — boldly labeled for easy identification.

From the world's most complete Corner Bead line

Ideal for sturdy, rounded corners

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New York 22, N. Y. • Rochester 9, N. Y. • St. Louis 10, Mo.
"A New Feature in Every Project"

For quick home sales, these builders emphasize one outstanding product

All display is no display." This is an old saying in the advertising business, and many builders are finding that it also applies to selling homes. They have found that it is more effective to emphasize one feature of a home, in advertising or publicity, than to try to highlight everything. Albert Strasner and Walter B. Wishnow, builders of "Monogram Homes" in San Fernando Valley, California, like to feature some innovation they feel will capture public attention in each tract. Their selection of features to emphasize has brought quick sellouts.

In 1949, for example, they incorporated air-conditioning in all their homes. They installed so-called "desert coolers," or evaporative coolers, in the attic spaces. Their homes were the first in the valley with this feature—and were among the first to be sold.

In 1950, they secured an excellent property covered with productive apricot trees and had a model home, designed especially for the tract, featuring indoor-outdoor living. This still was not enough. These combined features, the land and indoor-outdoor living, would help insure ready salability. But they wanted to add one more feature—something new in the house. They chose the Revolvodor, a new type of closet manufactured by the Revolvodor Corporation of Los Angeles, which features conveniently accessible storage space, is designed to replace one or two dressers, offers a full-length mirror, and serves as an independent dressing room.

The Revolvodor model they chose added about 35 or 40 dollars to the cost of each house, but Strasner estimated that each mirror alone would have cost 15 dollars. The Veterans Administration allowed this extra cost in their appraisal—and all 71 homes were sold long before completion.

The Revolvodors are not the only outstanding features in the homes, but they were chosen by Strasner and Wishnow as features to emphasize. The other features could be seen, and sold, when home buyers came to visit.

The homes ranged in price from $10,000 to $11,500. They are placed in among the trees so that every home has one or more fruit bearing trees. The best-selling home model has a U-shape, permitting a patio in the rear to be enclosed on three sides. A plate glass picture window in the living room faces the patio.
HARD USE makes your decision easy

The heavier the washroom traffic for which you must plan, the more vital it is to make sure the plumbing fixtures will give long years of service with a minimum of maintenance. Case fixtures are molded of the finest vitreous china, highly lustrous and unsurpassed in permanence, sanitation, and resistance to acids and discoloration. Fittings are specially designed for the needs of the fixture in which they are used—a factor of great importance in long service life. The fixtures are available with chair carriers—a necessary safeguard in many installations. For the name of your Case Distributor, see your local Classified Telephone Directory—or write W. A. Case & Son Mfg. Co., 33 Main Street, Buffalo 3, New York. Founded 1853.

For industrial, institutional and commercial installations

FEBRUARY 1951
NEW PRODUCTS
Offered by Manufacturers

STEEL TAPE RULE AB25119

A 50-foot steel tape rule which rewinds automatically, the Master Longboy-050 offers advantage of easy tape replaceability and oneman use. Its end-loop can be freed from hook or a half-driven finishing nail by a simple flip of the case at full tape extension. Thumb pressure on the center plate-button starts rewind action; release of pressure stops action instantly. Master Rule Manufacturing Co., Inc., Dept. AB, Middletown, N. Y.

ADJUSTABLE STOP GAUGE AB25124

Designed to put power cut-off sawing on a mass production basis, Comet adjustable stop gauge can be used with any power saw. Permits several predetermined lengths to be set at one time and accurate cuts to be made as rapidly as the saw can be pulled through the work. All stop blocks have four square inches of gripping surface and can be pre-set at any position without using a wrench. Consolidated Machinery and Supply Co., Ltd., Dept. AB, 2031 Santa Fe Ave., Los Angeles 21, Calif.

MASONRY SAW AB25111

Four wheel Model CHD cart quickly converts Clipper masonry saws to Clipper concrete saws. Triple duty use can be obtained with gasoline or electric powered units. Standard Model HD saws are used to cut brick, tile, stone or any masonry material that can be placed on its conveyor cart. Now with convertible design cutting heat can be positioned in CHD cart to saw concrete floors, walls and streets. Clipper Manufacturing Co., Dept. AB, 2800 Warwick, Kansas City, Mo.

JOINTER AB25116

Six-inch jointer with 60-inch table has facilities for feeding precision jointing operations. Setting of table is controlled by handwheels located in front. Balanced three-knife head, 2½ inches in diameter, is used. It operates at 6,000 r.p.m. on heavy duty, life-sealed bearings. Guide fence is 374 x 4 inches. Fence tilts 45 degrees and may be set at 70 degree angle across the cutter head. Heston & Anderson, Dept. AB, Fairfield, Iowa.

FLOOR BRIDGING AB25127

With metal supply permitting, a new floor bridging that needs no nailing should prove a welcome and practical product for home builders. Easily installed, sharp points on each end bite into the joist as the two pieces snap-lock together when pulled down. Flooring can be nailed first, and bridged underneath later. The new bridging, called Hercules, allows builders to know their true cost of bridging. Made of 20 gauge rust-proofed steel. Glover Manufacturing and Sales, 2491 Manchester Road, Akron, Ohio.

HOME FREEZER AB25104

Large storage space within small cabinets is a feature in the Quickrez line, which incorporates a high density insulation making it possible to cut down the size of freezer walls. Compressor units also require small space. Available in 12½, and 16 cubic foot sizes. Each model has two compartments. Sanitary Refrigerator Co., Dept. AB, Fond du Lac, Wis.

SANDER-POLISHER AB25105

Industrial type No. 150 Speed Sander makes a 3½-inch diameter orbit 3,450 times a minute with its 4⅞-inch sandpaper pad. Can sand or polish to a feather edge without danger of burning or dulling the smoothest surface. Three pad coverings obtainable from any standard 9 x 11-inch sheet of sandpaper. Speed Way Manufacturing Co., Dept. AB, Cicero, Ill.

FLOOR BRIDGING AB25127

No. 222 Three-lite window is 18 inches in diameter, and fits in a round frame that can be trimmed on the inside. Two muntins can be installed in a horizontal or vertical position to match various types of windows. Webb Manufacturing, Inc., Dept. AB, 211 E. Main Rd., Conneaut, Ohio.

SANDER AB25120

"Smoothie" sander, Model OS, is compact and easy to operate in horizontal, vertical and overhead positions. With a sanding surface of 4½ inches by 8 inches, it is powered by a General Electric fan-cooled motor. Operates on 115 volt, AC, 60 cycle current, delivering 3,000 cycles per minute. Weight, 8½ pounds. Clarke Sanding Machine Co., Dept. AB, Muskegon, Mich.

New Products continued on page 158

AMERICAN BUILDER
RESERVE SPACE NOW...

AMERICAN BUILDER

DIRECTORY ISSUE

TO BE PUBLISHED APRIL 1951

The Directory Issue with year-round sales value
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Get the complete story from your nearest AMERICAN BUILDER representative.

AMERICAN BUILDER is the Readbook of the Light Construction Industry
NEW PRODUCTS
(Continued from page 156)

SPACE HEATER
AB25125

Cool safety cabinet vented gas space heater stays touch-cool on top and sides, with heater going full blast. Heat is directed forward through directional louvers at 300 degrees. Will not scorch drapes, furniture or woodwork or burn fingers. Uses natural, manufactured, butane or propane gas. Available with Robertshaw thermometer or Unitrol for automatic heating. Dearborn Stove Co., Dept. AB, 619 Mercantile Bank Bidg., Dallas, Tex.

CEDARWOOD COMPOUND
AB25118

“Cedar-Lux,” compounded of crushed genuine red cedarwood, is mixed with water to a plastic consistency and applied over walls and ceilings of a closet about 1/16-inch thick to offer moth-protection and fragrance of regular cedar. Original fragrance may be maintained by spraying annually with Cedar-St. One pound of Cedar-Lux covers 8 square feet over smooth surface and 6 square feet over a true and even brown coat. Cedar-Lux Products Co., Dept. AB, 1401 Waldheim Bidg., Kansas City 6, Mo.

REVOLVING DOOR VIEWER
AB25117

Detector optical door viewer is equipped with a wide angle optical lens and provides a comprehensive, three-dimensional view of the porch or area around the door at a glance. Permits persons inside to see out, but prevents those outside from seeing in. DeLuxe model incorporates lens in a patented, movable part, so that the person viewing can swing the viewer to the desired position. The Home Protector Manufacturing Co., Dept. AB, 8258 Melrose Ave., Los Angeles 46, Calif.

PAINTING TOOL
AB25112

New painting tool enables anyone to do an expert job of painting around windows, wall-paper moulding or door frames, without smearing paint on unwanted surfaces. “The Expert” is made of two metal plates, the lower one covered with cloth. When paint from brush creeps over edge of upper plate it is absorbed by cloth underneath. Low priced. Guaranteed. Cleveland Tri-Ko Manufacturing Co., Dept. AB, 1421 East 25th St., Cleveland, Ohio.

VENTILATOR
AB25121


UPWARD ACTING GARAGE DOORS
AB25108

Latest addition to the Frantz family of “Over-the-Top” garage doors are sectional-type units for double-width door openings. Model 226 is 16’7” feet and Model 228 is 15’7” feet. Exclusive two-point spring adjustment for balance; exclusive adjustable brakes which prevent door rebound. Compact track support assembly properly spaces tracks for bind-free operation. Offset, rabbed joints seal out weather. Frantz Manufacturing Co., Dept. AB, Sterling, III.

EXTRA LONG PLYWOOD
AB25109

Extra long plywood produced by scarf-jointing standard length panels of exterior Douglas fir plywood is the first of three new products offered by this firm. Other products, soon to be introduced, are plastic-surfaced plywood and an entirely new hardboard for construction and industrial uses. Long length plywood is produced with completely waterproof adhesives. Thicknesses, ½, ¾, 1½, 2, and 3½ inches. Widths of four and five feet. Lengths of 12, 14, 16 feet and longer. Anacortes Veneer, Inc., Dept. AB, Anacortes, Wash.

DECORATIVE MOULDINGS
AB25122

New line of Bendix decorative mouldings is especially adapted to furniture and cabinet trimming. Available in a wide variety of designs, mouldings are manufactured of many different kinds of wood in order that pieces of furniture may be perfectly matched. Quality of wood is such that it resists splitting and cracking. Bendix Manufacturing Co., Dept. AB, 192 Lexington Ave., New York 16, N. Y.

SAW GUIDE
AB25101

Crosscutting, mitering, beveling, and ripping are performed quickly and precisely with the new Universal saw guide and any standard portable electric saw. Consists of rigid clamping device for attachment to front member of a wooden miter box and a locking quadrant to which are attached either the crosscutting or the ripping cradles. Universal Saw Guide, 10804 Howard St., San Antonio, Calif.

New Products continued on page 164

INSERT NUMBERS AND MAIL COUPON FOR INFORMATION

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

Name

Address

City State


When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.
Balanee
makes all-day sawing easier...

All these Speedmatic Features
Add Up to True BALANCE!

When you use a Speedmatic, you discover why “It's Balanced When You Lift It; It's Balanced While You Run It.” You'll like the center-mounted handle; the extra broad base; the blade on the right; the straight-line, helical gear drive; the compact motor and counterbalanced moving parts...features that make the big difference between ordinary power sawing and Speedmatic sawing. Ask for a Speedmatic demonstration at your dealer’s, or on the job. It’s an eye opener.

"I grab for the Speedmatic when all-day sawing is ahead of me"...

...that’s the way the man on the job shows his preference for the saw that is built for easier handling. Speedmatic is center-poised, to cut straight and true. No “power jump” when starting to cut. It practically feeds itself—no cramping, no veering. Follows the line with only the slightest guiding. Ends the cut with the saw resting on the main piece. On bevels, Speedmatic holds as steady as on straight cuts. And when the work is in an awkward or hazardous location, the Speedmatic operator always has one hand free for safe support.

PORTER-CABLE MACHINE CO.
7002 N. SALINA ST., SYRACUSE, N. Y.
In Canada: Write Strongridge, Ltd., St. Catharines, Ont.
871—GARAGE DOOR OPENER—The Crane "300" remote controlled unit which automatically opens and closes garage doors and lights up interior and driveway is described and illustrated in a four-page pamphlet distributed by H. W. Crane Co.; 1443 W. Lake St., Chicago 7, Ill. (We regret that this pamphlet when covered in our Dec. catalog section was erroneously listed).

872—"ROOF SAVERS"—Title of a folder that shows how to prolong the life of a roof and repair accidental damage, is offered by Johns-Manville, 22 E. 40th St., New York 16, N. Y.

873—PUMPS—Pump Catalog No. P-10, issued by The Jaeger Machine Co., 550 W. Spring St., Columbus 16, Ohio, is a handy reference guide, divided in sections, so that anyone desiring information about a certain type of pump can easily find it. Sections include "Dewatering Pumps," "Pressure Pumps," "Electric Pumps," "Well Point Systems" and "Useful Data."

874—TWO-WAY PROTECTION WINDOWS—Steel windows with strong steel guards are presented in Bulletin IND-9 issued by Detroit Steel Products Co., 3101 Griffin St., Detroit 11, Mich. These windows give protection from inside and outside, against prowlers and against removal of material by passage through unprotected windows. Types and sizes of Fenestra Security windows are listed, as are installation details.

875—WOODWORKING MACHINES—and other tools in the broad Delta line of 53 machines, 246 models, and more than 1,300 accessories, are illustrated and described in a new 60-page catalog. This catalog, AB-50, is available from Delta Power Tool Div., Rockwell Manufacturing Co., Milwaukee 1, Wis.

876—HOME HEATING EQUIPMENT—Advanced models of Coleman Blen-Air central heat units, gas forced air furnaces, L-P gas forced air, oil forced air, gas floor furnaces, and others are graphically presented in an attractive 20-page catalog available from The Coleman Co., Inc., Wichita 1, Kansas.

877—NEW DEVELOPMENT IN SOIL COMPACTION—A new self-contained gasoline compactor, the Barco Pegson Rammer, is introduced in literature available from the Barco Manufacturing Co., 1841 W. Winnemac Ave., Chicago 40, Ill. Operated by one man, the new rammer will tamp an area of one to one and one-half square yards per minute.

878—DRY-WALL MATERIAL—New Masonite %4-inch "Panelwood," which can be applied directly over stud or furring strips, is described in literature offered by Masonite Corp., 111 W. Washington St., Chicago 2, Ill.

879—FLOOR TILE—Features of Dodge Vinyl-Cork floor tile are shown in a new 8-page catalog issued by Dodge Cork Co., Inc., Lancaster, Pa. A color chart shows 23 patterns in which it is made. Specifications, installation instructions and care and maintenance directions are given.

880—"KITCHEN PLANNING ON A SMALL BUDGET"—A 20-page booklet revised by Youngstown Kitchens, Mullins Manufacturing Corp., Warren, Ohio. (Continued on page 162)
TRADEMARKED
as well as grademarked
...your double guarantee
of plywood quality

Something has been added in the labeling of plywood produced at Associated Plywood Mills, Inc. It is the APMI trademark, and you'll find it together with the DFPA grademark on both exterior-type and interior-type panels manufactured by this company.

This combination of trademark and grade-mark is your assurance that regardless of where you buy APMI plywood, you get the guaranteed products of a pioneer mill in the industry...There is a type, size and grade of APMI plywood for every building need... Sold from centrally located sales warehouses, and sold by experienced plywood men who welcome your inquiries for general information, for prices, for delivery schedules.

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PLYWOOD MILLS, INC.
General Offices: Eugene, Oregon
Catalogs

(Continued from page 160)

includes photos and reference to the new Youngstown Kitchens Jet-Tower dishwasher and other new equipment. Up-to-date "before and after" kitchen pictures are also included.


882—EXPANSION JOINTS—The Kapco Fiberglas expansion joint is illustrated and described in Fiberglas Standards CP6.A1, a brochure available from Owens-Corning Fiberglas Corp., Wayne Building, Toledo 1, Ohio. Common uses with concrete, product data, and characteristics of concrete are given.

883—BETTER CONCRETE CONSTRUCTION—is theme of 12-page illustrated booklet containing detailed information and specifications on Sika compounds engineered to answer specific problems of concrete and masonry construction. Describes the use of Plastiment Retarding Densifier and 14 additional materials of construction engineered for coating, sealing, hardening and repair work on concrete and masonry. Complete with descriptions and specifications, booklet is published by Sika Chemical Corp., Gregory Ave., Passaic 2, N. J.

884—SPECIFICATIONS FOR FURNACES—are listed on four new specification sheets covering the Ingersoll GL series lowboy winter air conditioner, GH series highboy winter air conditioner and vented wall heater and GCB series gas conversion burner. These complete specifications list all equipment, capacities and dimensions. Ingersoll Steel Division, Borg-Warnor Corp., Kalamazoo, Mich.

885—LOADGRIP HANGERS—are described in folder that lists uses, instructions and specifications for Load- grip hangers designed specifically for use on pre-cast concrete joists. Folder is illustrated; available from United Industries, Box 449, Madison 1, Wis.

886—GAS-FIRED HEATING—Gas-fired warm air heating and zone-conditioning equipment is the subject of a 20-page catalog issued by the Payne Furnace Division, Affiliated Gas Equipment, Monrovia, Calif. Specifications, illustrations, descriptions and dimensional diagrams are included on floor furnaces, wall heaters, etc.

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What other wall or floor covering material can take a drenching with hot water so well? Or for that matter what other material can resist knocks and scratches so stubbornly . . . and stay fade-proof and fire-proof for a lifetime?

Genuine Clay Tile cleans as easily as a china dish and commands respect wherever it is used. Have you considered the use of tile in the kitchen, foyer, utility room or powder room? It is worth a fresh appraisal every time you design or build any type of building. And remember—tile is one of the most versatile materials you can use in designing distinctive color schemes.

Tile Council of America, Room 3401, 10 East 40th St., New York 16, N. Y. or Room 433, 727 W. Seventh St., Los Angeles, Calif.

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This revolutionary fastener is scientifically designed, drives like a regular nail and its
EXCLUSIVE AUTOMATIC RADIAL ACTION CLINCHES TIGHT EVERY TIME—NO RATTLING

The very fine point and shank penetrates easily and does not displace or mutilate the non-wood sheathing material.

No expensive cross furring required to fasten asbestos cement siding or red cedar shingle to 3/4” or 29/32” non-wood wall sheathing.

Unbiased laboratory tests report LOC-NAIL terrific holding power up to 99.9 LBS.

LOC-NAILS AVAILABLE THROUGH:
JOHNS-MANVILLE SALES CORP.
THE HOMASOTE COMPANY
YOUR BUILDING MATERIAL SUPPLIER

Included in the Celotex Corp. Specifications for Applications.

Approved by the Red Cedar Shingle Bureau, Seattle, Wash.

The LOC-NAIL is a product of
E. G. BUILDING FASTENERS CORP.

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101 Park Ave. New York 17, N.Y.

New hanger system for Ez-Way folding stairway provides smooth operation, safe and easy action. Mechanism maintains a slight upward tension on the stairway, yet holds panel tightly in jamb to seal out draft and dirt when stairway is closed. Minimum of working parts, long life operation. Stairways are of ponderosa pine construction. Heavy steel hardware. Units came completely assembled, jamb included, with panel attached for easy installation. Ez-Way Sales, Inc., Box 300, St. Paul Park, Minn.  

(Continued from page 158)
New Lavanette
Serves Dual Purpose

The idea of a new bathroom fixture that would combine the functions of a lavatory, medicine cabinet and linen cupboard in one unit, was born to Bernard McMahon, St. Louis, Mo., architect one morning while shaving. "Why," he said, "I opened the medicine cabinet five separate times while in the process of shaving. I then realized that many other people must be having the same trouble so I decided to do something about it."

The result of this experience is the design of a new oversize fixture called a Lavanette. The unit is 38 inches long by 32 inches deep, which is larger than the conventional lavatory. Broad flat surfaces on each side of the bowl serve

(Continued on page 167)
HERE'S HOW to build in INDOOR COMFORT
without sacrificing useful space!

When you discuss heating equipment with the home owner and the heating contractor...

You will be interested in MOR-SUN, the efficient winter air conditioner that adds beauty to the basement or utility room.

MOR-SUN FACTORY-ASSEMBLED AND PACKAGED HEATING EQUIPMENT FOR GAS AND OIL!

"Sells on Sight!"

MOR-SUN FURNACE DIVISION
MORRISON STEEL PRODUCTS, INC.
649 AMHERST ST. • BUFFALO 7, N. Y.

NEW PRODUCTS
(Continued from page 164)

HEAT REGULATOR AR25110
B & G Comfort Control anticipates changes in outdoor temperature and wind velocity before they are reflected in the indoor temperature. Entirely mechanical in operation and containing no bellow or capillary tubes, the regulator extends through the building wall, with the outdoor and exposed to wind and weather while a circulation of radiation circuit water flows through the indoor end. Can be adapted to forced hot water systems using floor or ceiling panels, radiators, convectors or baseboards. Ball & Gossett Co., Dept. AB, Morton Grove, Ill.

STEEL GARAGE DOORS AR25123

New 9x7-foot Morrison Roly-Door, a four-sectional steel, upward acting garage door, operates completely within the garage. Perfectly balanced in any position, it is quiet, safe and effortless, with no protruding obstructions to catch clothing or auto bumpers. New 9x7-foot door and the Standard 8x7-foot Roly Door are adaptable to a 6-foot 6-inch-high opening where ample headroom is available. Morrison Steel Products, Inc., Dept. AB, Buffalo, N. Y.

MASONRY WATER REPELLENT AR25115
Silaseal, a stone and masonry transparent liquid silconce water repellent, protects unglazed exterior masonry and stone building materials. Stops capillary action, but does not block pores to interfere with natural breathing of stone and masonry. Contains no wax or oil. Penetrates well below masonry surfaces without altering natural appearance of treated surface. The Surface Protection Co., 16808 Euclid Ave., Cleveland 12, Ohio.

UTILITY GRINDER AR25107
Model A, 6-inch Lima Deluxe utility grinder, has adjustable tool rests, dynamically balanced rotors, integrally cast wheel guards. Fast-grinding, long wearing abrasive wheels furnished as standard equipment. Heavy-duty off-on toggle switch in base. Cast iron base is rubber mounted and drilled for permanent mounting. Dust resistant 1/2 H.P., 3450 r.p.m. motor, Single phase, AC, 60-cycle, 115 or 230 volt. Also larger sizes. The Lima Electric Motor Co., Dept. ACH, Lima, Ohio.

(Continued on page 168)
DOUBLE BATH PLAN with single tub, using a minimum of space

as preparation areas. The Lavanette works on the principle that it is easier and more natural to open a steam cover type lid, once, and leave it open during cleanup period, than it is to reach up on the wall and pull open a door.

Part of the merchandising that will go behind the Lavanette will include McMahon's design for bathrooms. These will show how the new unit can be used to the best advantage in a standard sized room. A number of examples are shown of single, double and divided bathrooms, also a combination of a double bathroom with single tub accessible to both units. It is McMahon's thought to make available a variety of bathroom plans to builders and architects without cost. These will be distributed in connection with sales of the Lavanette and will indicate an arrangement for the average size home and apartment.

SMALL AND DIVIDED BATH: for use where area is limited
**NEW PRODUCTS**

(Continued from page 166)

**COMBINATION DOORS**  AR25113

Screen or storm door for these combination units are locked in place with unique patented steel pockets. A metal key locks into each pocket when storm or screen door is attached, and pockets reinforce slots in the wood to prevent splitting and breaking of stiles. Dowel construction. Sizes range from 2 feet 6 inches by 6 feet 7 inches, to 3 feet by 7 feet 1 inch. Angel Novelty Co., Dept. A8, 340 Broad St., Fitchburg, Mass.

**NAILING SYSTEM**  AR25106

Matt-Lock system for nailing to metal to support gypsum board materials used for suspended acoustical ceiling tile or for furring in masonry wall construction is said to afford new simplicity of erection. All parts of the system are incombustible, while close-fitting joint and end clips are designed to eliminate breathing and ghost marks. Parts include nailing channel and annular nailing. Channel utilizes inverted V-shaped nailing course with sides at 45 degree angles. The Mid-West Acoustical & Supply Co., 1183-M West 69th St., Cleveland 2, Ohio.

**HHFA Probes Utility Costs, City Site Preferences**

Methods of measuring housing demand in particular locations within any urban community, and for measuring and analyzing the relation of the cost of municipal services to the cost of housing are to be explored in studies under the Housing and Home Finance Agency research program, HHFA administrator Raymond M. Foley has announced. Georgia Institute of Technology will study the within-the-city demand for housing and Harvard University the cost of municipal services to residential developments.

---

**STEEL TAPES**

are best for

**BUILDERS...**

the facts prove it!

FIRST AND FOREMOST, Roe Steel Tapes are extremely easy to read—and they go right on being clearly legible year after year. The black markings are permanently etched into the steel which is then nickelplated to provide a lustrous contrasting background. A transparent plastic overcoating is added for topmost wear resistance—and durability.

Pictured here is the Roe Steel Tape 302 with polished chromeplated, sturdy welded steel case. Other Roe models feature cases in handawn leather, and in metal-haded leather and leatherette. They have a reinforced rust-resistant liner, precision winding drum, flush-folding handle, pressed center and roller mouthpiece. All are available with 25, 50, 75 or 100-foot tapes; feet in inches and eighths, or in tenths and hundredths.

Get Roe Steel Tapes from your hardware dealer—or write us giving his name and address.

STEEL TAPES

are best for

**BUILDERS...**

the facts prove it!
Wood finely fashioned

... does so much for a kitchen!

For a friendly, livable kitchen nothing quite takes the place of hardwood cabinets — their warmth and beauty, their permanence, their adaptability to home design and decoration. And in cabinets by Kitchen Maid you get wood at its best; selected hardwoods and wood compositions, finely fashioned and masterfully constructed by the nation's foremost wood cabinet maker. Kitchen Maid cabinets are in greater demand now than at any time in history. Their fine quality is recognized by builders everywhere. Choose them for the kitchens you plan or build. For free catalog showing plans and details, send coupon below.

Mengelbord* is a low-priced 3-ply utility hardwood plywood, ⅛ thick. It is made from beautiful White Gum (Tupelo), has a one-piece face, with no joints or oval patches to mar its appearance.

Mengelbord is ideal for all interior uses:
- DRY WALLS
- PARTITIONS
- CABINETS
- STORE FIXTURES
- FURNITURE

Write today for descriptive literature. No obligation, of course.

Where fine wood panels of Mahogany, Oak, Birch or Walnut are desired — ask for Mengelux®. Literature on request.

THE MENGEL COMPANY
Plywood Division - Louisville 2, Ky.

Good Plasterers Know...

...that to do their work best they must have a finishing lime that's easy to work, smooth, and far spreading.

That's why the plasterer's hawk, above, carries Hawk Spread (or its twin brand: Ohio White Finish), wherever quality plaster is demanded.

You too may rely on Ohio Hydrate's brands of finishing lime, scientifically processed from hand picked, kiln burned rock, always of uniform good quality, 99% pure.

The OHIO HYDRATE & SUPPLY Co.
WOODVILLE, OHIO

---

Wired For Better Living
(Continued from page 117)

It was mounted on a 4 x 3-foot board, and by the push of a button, displayed the entire wiring system of the house with lights accurately located on the plan.

The Home of Ideas, which sold for $25,000, represented the "Fourth (or highest) Degree of Electrical Living." A 27-circuit home, it has a fuseless wiring system with 12 heating circuits and 15 circuits for general-purpose use and appliances. There are 143 outlets to provide electricity wherever needed. Channels to convenient telephone outlets are installed in the kitchen, master bedroom and den. Equipment includes a refrigerator, range, waste disposer, water heater, washing machine, kitchen fan, clothes dryer, bathroom heater, home freezer, dishwasher, ironer, and abundant fluorescent lighting.

In both homes, small cards were placed to point out valance lighting, pin-point lighting, and all other electrical features.

One of the most successful promotions of builder activities in Chattanooga, the homes offered abundant ideas for local builders, and whetted home buyer appetite for better lighting and more equipment. Pivot man in the promotion was C. B. Osborne, sales manager of the local power board, who took active part in making arrangements for the builders, worked with Westinghouse in setting up local publicity campaigns, making plans for operation of the homes, and seeing that his staff did a thorough job. He had his own home economists act as hostesses.

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Cooperative Advertising Pays for Builders

Institutional cooperative advertising, as developed recently by the Cleveland News, has afforded builders in the Cleveland area a good low-cost way to keep their names before the public at times when they have no homes for sale.

The idea is that the local builders, through the Home Builders Association of Greater Cleveland, participate once a month in a full-page collective advertisement. The make-up of the page consists of individual business cards with each of 65 merchant home builders separately printed. Cost is $10 for each. The display, in addition to publicizing the individual builders, gives the association an opportunity to present its views on matters of public interest.
This complete, all-in-one oil heating unit provides heat and ample domestic hot water, automatically. Occupying approximately 4 square feet of floor space, it is readily installed in basement or utility room. An enclosing cabinet is available for kitchen or playroom installations. Only service connections and simple wiring are needed for installation—saves time—saves money.

**EQUALLY EFFECTIVE WITH ALL MODERN TYPES OF HEAT DISTRIBUTION**

- National Art Baseboard
- National Art Radiators
- Radiant Panel
- National Art and Aero Convectors
- Tankless Hot Water System
- Boiler and Water Heater

**PRACTICAL "PACKET" FEATURES**

- Factory-Assembled—Boiler, burner, controls and accessories are assembled and shipped at the factory and installed at the job—easy to handle, simple to install.
- Code Constructed—Meets rigid construction requirements of the ASME Code, successfully passed laboratory tests prescribed by the SBI Rating Code and approved by a "Hartford" inspector.
- Simplified Control—A unique "Raytrol" control system assures predetermined maximum temperature, modulates the heating system and maintains high boiler water temperature for tankless heater operation.
- Domestic Hot Water—Fast, active scrubbing of hot boiler water against a built-in tankless heater provides ample domestic hot water, year 'round.
- High Operating Efficiency—All components have been selected for quality, dependability and efficiency. Horizontal flue travel and a special baffle contribute to lower fuel costs.

Write for detailed information and literature.

**THE NATIONAL RADIATOR COMPANY**

Johnstown, Pennsylvania

February 1951
NOW
the
1951
ES-NAIL

4 new performance improvement features

NEW DESIGN INCREASES PERFORMACE AND SAVINGS

1 The 1951 ES-nail is distinguished by a design change which positively eliminates danger of loose shingle corners at nailing points where sheathing is backed by studs or wood members. As shown by the adjoining sketch, when the driving leg penetrates a stud, the new design permits a bellows-like expansion into the sheathing material... allowing the nail head to flatten completely without distortion.

2 New, longer, wider locking foot increases holding power of the 1951 ES-nail more than 30% when used with gypsum sheathing and up to 50% with insulation sheathing. Redesigned locking mechanism provides a tight clinch regardless of variations in sheathing, paper, and shingle thicknesses.

3 New, sharper ES-nail point assures quick, clean penetration of sheathing—prevents rupture of sheathing back.

4 New ES-nail head can be driven home with approximately 25% less force—automatically provides a complete clinch of the locking foot even with wide variations in shingle quality and nail-hole size.

Try the new 1951 ES-nail on your next side-wall shingling job!

For complete information write to Elastic Stop Nut Corporation of America, 2330 Vauxhall Road, Union, New Jersey.

Heating Control Systems

(Continued from page 129)
each room operating a valve on each radiator can give even better results. Pneumatic (air-operated) controls are especially well suited for individual room control. An air compressor is placed in the basement, and air pipe or tubing is run inside the walls to the various thermostats and valves. Individual room control provides the homeowner with the luxury of perfect heating. Each room is controlled precisely at the temperature which best meets personal requirements. Amusement rooms and other portions of the home which are occupied only part of the time can normally be maintained at an economically lower temperature.

Commercial structures generally contain numerous rooms or areas where temperature demand widely varies. Stores, offices, work areas, and other portions of a building all require individual control for most efficient and comfortable heating. If forced hot water heating is used, the boiler or heat exchanger may be controlled at a constant high temperature, or can be operated by an outdoor control. The circulating pump runs continually as long as there is any demand for heat. Where two-pipe steam heating is used, a pressure control can operate the boiler to maintain a steady pressure. Outdoor control can also be used to control the burner or to operate a main steam valve where a district heating system supplies steam to the building. Automatic day-night control and week-end shut-off may also be incorporated in any zone or individual room control system.

Control of Panel Heating

Much material has been written on all phases of forced hot water panel heating, and its cousin, baseboard heating. The baseboard heating unit is simply an elongated radiator or convector placed along the base of an outside wall. Temperatures are controlled in a manner similar to that of any conventional forced hot water system. However, radiant panel heating is such an integral part of a structure that certain portions of a building become a great low-temperature radiator. For the best results, it is well to provide some type of outdoor compensating control. Properly designed and balanced, such a control can use the lag characteristic of this system to advantage in maintaining stable indoor temperatures under all heating conditions.

There are two types of panels used for supplying heat in this system—floor panels and ceiling panels. Floor panels, with pipe or tubing imbedded in a concrete floor, for example, re-

(Continued on page 174)

Save HALF Your Time

BUILDING STAIRCASES

in 10 seconds gives you BOTH correct length and angle of stair treads, risers, closet shelves, etc., ready to mark board. Each end pivots and locks at any LENGTH OR ANGLE automatically. Adjustable from 90° up. Saves a day or more, increases your profits 850 or MORE on each staircase. Fully guaranteed. Circular on request.

Only $14.95 cash with order, or C. O. D. plus postage.

ELIASON TOOL CO.
2119 E. 56th St., Minneapolis 17, Minn.
Dealer Inquiries Invited

ELIASON STAIR GAUGE

Red Cedar Closet Lining

Brown's SUPER-CEedar
NATIONALLY ADVERTISED

Guaranteed 90% Red Heart or Better

Only SUPER-CEedar is of the same uniform high quality standard that guarantees every package to contain 100% Red Heart or better, and 100% oil content that produces the pleasing aroma

100% oil content
Suggest Cedar Lined Closets to Every Home Builder. There is Nothing Better than

All Widths Put-Up 40' FT. To Package

More home builders are specifying cedar lined closets today than ever—and Brown's SUPER-CEedar is nationally advertised to thousands of new home prospectives, architects and builders. SUPER-CEedar closet lining is surfaced, tongue and grooved, ready to put up with no waste. Packaged and sealed with the Geo. C. Brown label and guarantee, famous since 1886.

Product of

GEO. C. BROWN & Co., Inc.
GreeNboro, N.C.

AMERICAN BUILDER

ELIASON TOOL CO.
ANNOUNCING!

NEW

DODGE

"Job-Rated" TRUCKS

The trucks that do the most for you!

NEW Greater Power! Eight engines—with horsepower increases as high as 20%. You'll enjoy the right power for your job! With all their extra value, Dodge "Job-Rated" Trucks are priced with the lowest!


NEW Easier Handling! Now, even sharper turning! More comfortable steering angle and easier-operating new worm-and-roller steering gears! You also get such proved features as cross-steering, wide front tread, short wheelbase.

MORE THAN 50 BRAND-NEW IMPROVEMENTS... INCLUDING

NEW! SMOOTHER RIDE
NEW! EASIER LOADING
NEW! EASIER BAD-WEATHER STARTING
NEW! GREATER ELECTRICAL CAPACITY
NEW! EASIER-TO-READ INSTRUMENTS
NEW! BETTER VISIBILITY IN BAD WEATHER
NEW! MORE EFFICIENT FUEL PUMP

ANOTHER DODGE EXCLUSIVE! gyrol fluid drive now available on ½-, ¾-, and 1-ton models.

See the NEW DODGE TRUCKS on display at your dealer's SATURDAY, FEBRUARY 10th
TAMBLYN BUILDING LABOR CALCULATOR
You, too, can make accurate estimates. Forty years of on-the-job cost analysis has produced the factors given in the TAMBLYN Building Labor Calculator. Use these factors and make your estimate right!

HOW TO USE THE TAMBLYN BUILDING LABOR CALCULATOR

simple multiplication of figures

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Rate</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>111 Pcs. 8&quot; x 8&quot; x 16&quot; cinder block</td>
<td>$0.34</td>
<td>$36.64</td>
</tr>
<tr>
<td>4.4 C. F. Mortar</td>
<td>$0.55</td>
<td>$1.98</td>
</tr>
<tr>
<td>4.0 Hrs. Mason</td>
<td>$12.00</td>
<td>$48.00</td>
</tr>
<tr>
<td>4.4 Hrs. Tender</td>
<td>$1.75</td>
<td>$7.46</td>
</tr>
<tr>
<td>4.4 Hrs. Foreman</td>
<td>$3.50</td>
<td>$15.40</td>
</tr>
<tr>
<td>Total Material Cost</td>
<td>$82.65</td>
<td></td>
</tr>
<tr>
<td>Total Labor Cost</td>
<td>$20.40</td>
<td></td>
</tr>
</tbody>
</table>

Or $0.6c per square foot for material—and $0.4c per square foot for labor. Figuring for all the trades is as easy as this example—and accurate!

WHAT CONTRACTORS SAY ABOUT THE TAMBLYN SYSTEM

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

TAMBLYN BUILDING LABOR CALCULATOR

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

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

THE TAMBLYN SYSTEM

1135 So. Ponte St., L-A-D Denver, Colo.

Rush the TAMBLYN Building Labor Calculator on free 10-day trial. At the end of 10 days I will return for free if you are satisfied.

FREE OFFER

READER'S DIGEST

AMERICAN BUILDER
Albert Balch knows building. He knows buyers. He knows how to give prospects the value that they want. That is why his building operation shows a rapid, steady growth. Knowing values, he uses Westinghouse Appliances. It is a name people know and respect. It builds business for him. It can do the same for you.

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division - Mansfield, Ohio

YOU CAN BE SURE...IF IT'S Westinghouse
EASY
speedy operation
LOW COST
with top features
STURDY
and trouble-free

$107.50
Smith-Corona
ADDING MACHINE


Smith-Corona Adding Machines last for years without costly servicing. Shop and compare . . . you'll find Smith-Corona offers appearance and advantages for which you'd expect to pay dollars more. For complete facts, see your Smith-Corona dealer or mail coupon.

* Price for all states permitting Fair Trade Laws. Subject to change. Tax extra.

SMITH-CORONA
CASHIER

A complete cash register plus adding machine service at lowest cost.

SEND COUPON FOR FULL FACTS
L. C. SMITH & CORONA TYPEWRITERS INC.
137 ALMOND STREET, SYRACUSE 1, N. Y.
Gentlemen: Send detailed literature on
☐ Adding Machine
☐ Cashier

Heating Control Systems
(Continued from page 174)

All types of panel heating systems lend themselves exceptionally well to zone operation. An electronic system can be effectively used to control temperature needs for each zone. The boiler might be kept at a constant temperature, or may be varied by modulating outdoor control operating the burner. Each zone control system operates a zone circulating pump whenever heat is required.

In conclusion, it is quite evident that with automatic control (just as with any other engineering problem) consideration for details has a direct bearing upon the result. Each heating installation should be carefully considered by a competent heating man, and its control requirements carefully evaluated. A simple type of heating system normally calls for a simple, basic type of control. As a heating system becomes larger, complexities in temperature control increase proportionately. The best time to clarify all questions regarding the heating and control system is while the job is in the blueprint stage. Whenever an installation indicates heating and temperature-control problems beyond the limitations of a basic control system, it is advisable that the heating man call in a control manufacturer's representative. These men are usually competent engineers who are specialists in control application. Their service is primarily in the capacity of a consultant. There is no more incentive for them to "over-control" a heating system, than for a professional automotive engineer to design cars with a useless fifth wheel.

- It is much simpler and infinitely cheaper to lay out the proper temperature control while the job is still on paper. Builders, architects, and engineers all know instances where attempts to skimp on some basic type of equipment only led to costly and embarrassing revisions later on. A well engineered control system takes the guesswork out of heating efficiency and comfort for the life of a building.

Small Builder Does Mass-Production Job

When the International Paper Company decided to erect a new plant at Natchez, Miss., it gave Bolton Pickett, a home builder, the chance to prove how a small scale builder can do a mass-production job.

He built 315 homes in the Montebello subdivision, at the rate of two per day for families of plant employees. Two bedroom houses sold for $6,700 and three bedroom houses for $7,500.
HOLT Floor Machines
are your BEST BUY
and here's WHY!

Exclusive Holt patented features help you to do
duro work faster. Every Holt Machine is job
proved through years of trouble-free, top-notch
performance on the toughest floor work.
And — every Holt Machine is built to
make more money for you.

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

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

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

HOLT HAND SCRAPER. Life-Time,
Vice-Jaw scraper for old paint and var-
nish. Easily sharpened double-edge tool
steel blades. Heavy brass or light weight
aluminum models.

HOLT HOPPER-TYPE NAILING MACHINE
For accurate top nailing of floors, ply-
wood, wallboard, sheet metal, tile board,
etc. Comes complete in handy case. Mag-
netic feeder prevents clogging, jamming,
speeds up work. Takes floor brads and
common flat nail heads.

HOLT HORIZONTAL ROTARY EDGER,
HD EZE-77. Designed for accuracy,
 ease of control and dust-free operation.
Ideal for close work in confined areas,
also for glass beveling, marble and tile —
many other uses. Sturdy, universal motor.

Write to Department 251 today for
complete information on these and
other of the famous profit-making, pre-
cision-built Holt line of Floor Machines.

FEBRUARY 1951

IF you can keep your head — while others
are losing theirs . . . If the garage doors you specify
and install are four-sectional — all-steel — overhead . . .
If they cost less to buy . . . if they are installed in a
fraction of the time required for other doors . . .
If your garage doors need minimum field assembly . . .
if all the hardware that can be fastened is permanently
fixed to them at the factory . . .
If they're built to outlast the garage and the home . . .
if their operation is fingertip — permanently "touch
and go" . . . safe and quiet . . . and weatherproof . . .
Then your language is fine . . . business is fine and
dandy . . . because you're specifying and installing the
sensational New MORRISON four-sectional, all-steel
ROLY-DOORS!

WRITE FOR YOUR FREE GUIDE
to the selection of residential
garage doors.
Saberson ...
(Continued from page 144)

Just how well it did the job (despite unprecedented high prices) is revealed in an FHA study which shows that last year the typical home insured by FHA was a one-family structure of five rooms with a floor area of 840 square feet. It was valued at $8,502 including lot, landscaping and garage.

The typical new owner, according to a report of the survey in the St. Paul Home Building News, financed his purchase with a $7,143 mortgage. It was amortized over a 23-year period with a monthly payment of $55.59. Average monthly payments amounted to about 16 per cent of the buyers’ income.

It requires nothing more than a prewar-postwar comparison of wages and material prices to reveal how successfully the home building industry was able to shift from a wartime to a peacetime economy and to measure the spectacular results it was able to attain in providing homes well within the buying range of a very high percentage of employed persons in the entire country.

This fact should receive the serious consideration of those who are setting up the plans for a wartime economy. Assuredly the home building industry has demonstrated that it has what it takes to do a good job under any and all circumstances. Such being the case, it is entitled to the fullest consideration in whatever construction tasks are necessary.

We have not talked with anyone in the industry who assumes that home building should proceed in 1951 at the 1950 pace. Far be it from such. On the other hand, it is a well-known fact that wars or total military preparedness cannot be carried on successfully without adequate housing. It is our steadfast belief that the industry has demonstrated time and again that it is well-qualified to tackle whatever job is necessary and that it can do it better than it can be accomplished in any other way.

Australia To Erect
European Prefab Houses

Houses prefabricated in Europe will be erected in Victoria, Australia. Contracts totaling $11,550,000 have been signed and at least 2,500 new homes are expected to be delivered by the end of 1951.

The Victorian government, through its Housing Commission, has a $9,000,000 contract with a German firm, and private Australian interests, and a $2,250,000 contract with a French organization.
ALL FLUSH DOORS ARE NOT ALIKE!

There is only one

Thomason

FLUSH DOOR

(All-Wood Throughout)

This flush door, with its unique all-wood core construction, has been specified by architects and contractors for new homes, churches, schools, hospitals, apartments, hotels and public buildings in all sections of the country.

Go to your THOMASON distributor and ask him to show you a cut-away of the THOMASON Flush Door. See for yourself how expertly it is made . . . see how extra strong it is, yet light in weight. Don't be satisfied with anything less than the best when the best doesn't cost any more than the ordinary.

AVAILABLE WITH THESE FACE VENEERS

You can choose from Mahogany, Walnut, Oak or Birch. The THOMASON Flush Door also comes faced with natural Gum that provides a satin-smooth surface for staining any color desired.

ALSO MADE FOR EXTERIOR USE

You can order the exterior door either plain or with any one of the three standard light opening patterns. Or you may have the THOMASON Flush Door with a solid all-wood core, faced with your choice of several fine veneers.

Don't delay!

If you do not know him, write us today for the name and address of your nearest distributor.

SOLD ONLY THROUGH DISTRIBUTORS MANUFACTURED BY

THOMASON PLYWOOD CORPORATION
FAYETTEVILLE • NORTH CAROLINA
MUSTANG MERCHANDISING PLAN MAKES YOU MONEY

The four new colors of Mustang Asbestos Shingles are right for every style of architecture. Your customers will like the beauty, the charm of Mustang Asbestos Shingles.

Strong, tested advertising and merchandising helps back you when you sell Mustangs! These merchandising and advertising helps are yours for the asking. They are furnished at no charge to you.

WRITE TODAY Get the full facts about how you can make money selling Mustang Asbestos Siding for remodeling jobs, for new homes, for housing projects. Write for free descriptive folder and price list. Dealer inquiries welcome.

MUSTANG
ASBESTOS SIDING SHINGLES

* NATURAL WHITE
* FOAM GREEN
* DOVE GRAY
* PALOMINO TAN

Dealer 'Bargain Basement' Cuts Loss on 'Slow' Items

A "bargain basement" is being effectively used by the Independent Lumber Co., Grand Junction, Colo., as a means of preventing losses on slow-selling items, including lumber and materials damaged by weather, handling or shipment, and those returned by contractors.

Constantly weeding out merchandise which is losing sales appeal, the firm places it in a special "sales lot" area to be packaged for specific uses, such as construction of a garage, shed or other small building. The packages, priced above net cost, are then advertised in the classified section of the local newspaper as "Builders Bargains" or "Sales Lot Specials."

Donald K. Collins, the company's advertising manager, said the bargain basement idea had not only disposed of the less appealing items but had also resulted in higher dollar volume with less handling. Other advantages, he pointed out, were increased traffic through the store which often led to extra sales of regular merchandise and new customers for remodeling and small building jobs.

The packages are made to appeal to persons who plan to spend between $15 and $50 and to do the work themselves. A full explanation is given of why the bargains are being offered.

Movie Shows
Lumber Grading

"The Magic of Lumber," a new 16mm motion picture which tells the story of lumber grading, has been produced by the West Coast Bureau of Lumber Grades and Inspection, and will be ready for distribution this month.

The informative movie represents the first attempt ever made to give a pictorial explanation of the science of lumber grading.

The 20-minute color and sound film explores the formation of characteristics in the tree, reveals the laboratory tests upon which grading rules are based, explains the work of the lumber grader, and classifies lumber grades on the basis of use.

Bookings for the film may be obtained without charge by writing the West Coast Lumbermen's Association, 1410 S. W. Morrison St., Portland 5, Oregon.

FRAMING FARM BUILDINGS Fourth and final article on Construction Lumber March American Builder

Bostwick has a complete line of expanded and solid wing metal casings, specially designed to increase economy in modern construction.

Bostwick Metal Casings are built straight and uniform. They're easy to mitre at the corners and they're formed to make a more secure bond and key for glister around door frames, windows and other wall openings. Bostwick Steel Lath and lath accessories are preferred by dealers and builders all over the nation. Send today for new, free catalog showing the entire Bostwick line.

THE BOSTWICK STEEL LATH CO.
103 HEATON AVE. • BILES, OHIO

AMERICAN BUILDER
Name 15 Winners in NAHB Neighborhood Development Contest

Fifteen winners in the 1950 Neighborhood Development Contest, sponsored by the National Association of Home Builders, were awarded scrolls for achievement at the annual NAHB convention-exposition January 21-25 in Chicago. The winning entries were on exhibit at convention headquarters in the Stevens Hotel.

The contest was conducted by NAHB's technical service department under the direction of David D. Bohannon, prominent California land developer and home builder. The Urban Land Institute, Washington, D.C., was technical consultant.

The judges—Waverly Taylor, Washington, D.C., builder and developer; H. Everett Kincaid, Chicago land planning consultant; and John S. Highland, Buffalo, N.Y., architect—said the projects were an excellent cross-section of residential developments and garden apartments being built in this country and were a great credit to the home building industry. The winners:

Project of Economy Homes Over 50 Units


Project of Larger Homes Over 50 Units

First Place: Victor L. Regnier, Kansas City, Mo. (Missiondale, Kansas City, Kas.) Second: Peartree and Pasfield, Inc., Wynnewood, Pa. (Devonwood, Devon, Pa.)

Project of Larger Homes Over 50 Units

First Place: Robert R. Platt, Walnut Creek, Calif. (Walnut Creek Homes.) Second: Mi-Home, Inc., Yonkers, N.Y. (Hearth-Stone.)

Rental Homes

First Place: Jesse Hartman, Stamford, Conn. (Fairlawn Garden Apartments.) Second: Arthur Olson, Inc., Noroton Heights, Conn. (Sylvan Knoll Apartments, Stamford, Conn.) Third: Triangle Construction Corp., Chapel Hill, N.C. (Glen-Lennox Apartments.)

(Continued on page 182)
KOHLER ELECTRIC PLANTS
Independent Source of Electricity
PORTABLE AND MOBILE

Low cost power to operate saws, drills, pipe threaders and cutters, and other tools having universal (AC-DC) motors. Develops 1500 watts for intermittent service. Fits into small space and can easily be taken along for jobs where power line service is not available—saves time. Weighs only 75 pounds. Other sizes and models from 350 watts to 15 KW. Write for folder 16-A. Kohler Co., Kohler, Wisconsin. Established 1873.

Model 1.5M5, 1500 watts, 115 volt DC. Manual control Length 18", width 14", height 21".

KOHLER OF KOHLER
PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS
AIR-COOLED ENGINES • PRECISION PARTS

COST-CUTTING PORTABLE ELEVATOR AMAZES BUILDERS • CONTRACTORS

More Middle Income Dishwasher Buyers in 1950, Survey Shows

With middle income families becoming an important factor in the market for the first time, appliance dealers sold more than a quarter of a million automatic electric dishwashers in 1950, according to a consumer survey and market analysis conducted during the year by Hotpoint, Inc. Also indicated was that dealers made substantial progress in meeting the problem of installation, which has limited sales in the past.

More than 1,000 questionnaires were tabulated in the study, which produced data on a number of marketing phases. Included were: population center in relation to sale; whether dealer gave a demonstration after machine was installed; factors most influencing purchase; cost of installation; reasons for brand selection; valuation of consumer's home; types of dealers making sales; effect of Korean war; sales by geographical areas; and outlook for 1951.

The survey was interpreted by John F. McDaniel, Hotpoint sales manager, to indicate that the dishwasher is now established as a wanted appliance for families in the middle income range. Tabulations showed that, in 1950, 49 per cent of the buyers lived in homes valued at less than $15,000, compared with only 38 per cent in 1949.

The largest single group of purchasers in 1950 (based on house valuation) was the $10,000 to $15,000 category, while in 1949 it was the group over $25,000. McDaniel said that owners of homes valued at $10,000 to $15,000, the price range which represents 60 per cent of new home building, bought 31 per cent of the machines in 1950 compared with 23 per cent in 1949.

Name 15 Winners...
(Continued from page 181)

Complete Community Development of Economy Homes

First Place: W. P. Atkinson, Midwest City, Okla. (Midwest City.)
Second: 20th Century Builders, Inc., Columbus, Ohio. (Amvet Homestead Subdivision.)

Complete Community Development of Larger Homes

First Place: The Keyes-Treuhaft Company, Cleveland, Ohio. (Landerwood Estates, Pepper Pike Village, Cleveland, Ohio.) Second: Housing Associates, Jamaica, N.Y. (Forest City.)
decorative plastic laminate

for durable, handsome walls, ceilings, top surfaces

- Beautiful Wood Grains, Patterns, Colors
- Panels up to 4 x 12 feet
- Tough Presdwood Base

YOU WILL WANT TO USE IT when you see the unusual wood grains, the attractive patterns and colors, and the smooth hard surface of Lamidall. YOU’LL WANT TO USE IT when you see how easily you can apply it on the job because of its tough structural Presdwood base — and its large size panels. Then when you discover the square foot economy of Lamidall you’ll plan on it for walls and wainscoting, ceilings and counter tops in your residential, commercial, industrial work — wherever you’d like to build lifetime, maintenance-free beauty into a job.

Lamidall will not chip, crack or peel . . . it resists heat, stains, hard blows and wipes clean with a damp cloth. It is made by a unique Woodall process developed after long research.

Whether you are planning new buildings or doing remodeling, Lamidall offers you a new opportunity to capitalize on growing demands for the use of a genuine plastic laminate.

Get a set of samples and complete details of new Lamidall — you’ll like it and want to use it! Ask your dealer, or write

Woodall Industries Inc.
3504 Oakton St., Skokie (Suburb of Chicago), I.I.

Other plants in: Cleveland, Detroit, Laurel (Miss.), Mineola (N. Y.), Monroe (Mich.)
A long-time favorite with craftsmen, the No. 923 Bit Brace with the new self-centering chuck is now better than ever. It saves time... speeds work. Just drop the bit into the square socket, tighten the chuck, and the bit automatically centers itself. Securely seated in a square steel socket, it’s ready for any boring job. For fast, smooth action... long, dependable service, get the No. 923 with the new self-centering chuck... it has everything you want in a Bit Brace. Stanley makes a complete line of Bit Braces. See the style and size you want on display at your local dealer’s.

OTHER WORK-SAVING FEATURES. Head spins on ball bearings and a bronze bushing. Cocobolo hardwood handle and head. Nut and cotter pin lock chuck in place. Forged Universal jaws take both round and square taper shank bits to 1/2”. 5 sizes—6” to 14” sweep.

STANLEY TOOLS, NEW BRITAIN, CONNECTICUT

THE TOOL BOX OF THE WORLD

[STANLEY]


HARDWARE • TOOLS • ELECTRIC TOOLS
STEEL STRAPPING • STEEL

ASSOCIATION NEWS

1951 Builder Leaders

(Continued from page 30)

ter were J. Albert Smith, first vice president; Hamer S. Culp, Jr., second vice president; and Directors Graham Doxey, Grant Jensen, Wayne Sandberg, Stanley J. Spencer, Art Christiansen, N. H. Hansen, Alex G. Adamson and Neilson.


ATLANTA

Ben M. Smith Sr. was installed as 1951 president of the Home Builders Association of Atlanta at the recent annual dinner and business meeting. He succeeds E. R. Hawkins.

Other new officers installed were Edward A. Barton, vice president; R. W. Johnson, Jr., treasurer; and J. A. Graham, secretary. Luther B. Stephens will continue as secretary.

The association was told by its guest speaker, H. E. Riley of the Bureau of Labor Statistics in Washington, that 36,000 new housing units have been built in Atlanta during the period beginning January 1946 and continuing through March, 1950. The government official pointed out that this figure represented the erection of 247 homes for each 1,000 population increase, a mark bettered only by Miami, New York and Pittsburgh.

INSULITE

INSULATING WOOL

light—easy to handle and apply
resilient—doesn’t pack down or settle
Specify Insulite Insulating Wool with confidence.

MINNESOTA AND ONTARIO PAPER COMPANY, MINNEAPOLIS

AMERICAN BUILDER
Retiring President Hawkins received a silver bowl from the association for his service during 1950. The presentation was made by V. S. Beem, past president and now a national director.

MARYLAND

Installed in office at the annual banquet of the Home Builders Association of Maryland January 4 in Baltimore were Charles A. Mohr, president; Julius H. Reguard, vice president; C. Philip Pitt, secretary; and C. Braddock Jones, treasurer.

Thomas P. Coogan, president of the National Association of Home Builders, was principal speaker.

CALIFORNIA

William Baines of Westwood was named president of the Building Contractors Association of California at the annual election meeting held recently in Riverside.

New first vice president is William Millerburg of Sherman Oaks. Nels Severin of San Diego is secretary and S. T. Ziller of South Gate, treasurer. Ed Sills was reelected executive vice president.

Baines, a native of England, first entered the construction field in Michigan, moving to California in 1929. Most of his home building has been in the $20,000 to $125,000 class. He is currently president of the Westwood Rotary Club and the Los Angeles chapter of Building Contractors Association of California. During 1950 he acted as chairman of the California Contractors' public relations committee.

SAN FRANCISCO

Boyd C. Lindsay was elected president of the Associated Home Builders of San Francisco, Inc., at the annual membership meeting in December. Other officers for 1951 are Oliver M. Rousseau, vice president; A. F. Oddstad, Jr., secretary; and Eugene Vignati, treasurer.

In addition to the officers the following members were elected to the 1951 board of directors: Andrew Berwick, Henry Dodger, Joseph Filippo, Fred C. Rudisill, Peter MacArthur, Theodore G. Meyer, Howard Mohr, Frank Oman and Joseph Rude.

Carl Gellert, Earl Popovich and Boyd

(Continued on page 186)
Assure your clients
Scotts
LAWN PERFECTION

Lawn Care TELLS HOW, and it's Free!

Poor lawns can plague a builder for years... while lawns of Scott beauty are a lasting boom to his reputation. The easy way to specify and always get outstanding lawns is to read LAWN CARE. The practical soil conditioning tips, grading, feeding and seeding procedures outlined can save you time, money and above all assure your clients outstanding lawn beauty. Send today for a digest of over 100 LAWN CARE bulletins, and Free subscription to future issues. Both are free and without obligation. Just ask for LAWN CARE on your business stationery.

O M Scott & Sons Co. 36 Spring Street, Marysville, Ohio
also Palo Alto, California

Association News

1951 Builder Leaders
(Continued from page 185)

Lindsay were elected to represent the San Francisco group on the board of directors of the National Association of Home Builders.

LONG ISLAND

Frederick E. Gibson was elected president of the Long Island Home Builders Institute at the recent annual organizational meeting. James Graham, John L. Turner, and Fred J. Dolan are the new vice presidents, Saul Z. Sokolov was named secretary and Ernest C. Beck, treasurer.

On the new board of directors are:

Frederick E. Gibson

Adolphus Flowers, Cy Williams, Charles J. Rorech, Jerome Miller, Anthony Villlett, Maxwell Sneddon, Bernard Kaplan, Emil Keen, Roy Newell and Leon Edelstein.

NAHB president Thomas P. Coogan was the guest speaker. The annual report of Institute activities for 1950 was given by the retiring president, Leonard L. Frank.

YOUNGSTOWN, OHIO

The annual president's ball, honoring the new and retiring association presidents, was held by the Home Builders Association of Mahoning Valley, Youngstown, Ohio, January 8 at the Pick-Ohio Hotel.

Sharing honors with the Youngstown leaders—Edwin R. Thompson, 1950, and Luther T. Patterson, 1951—was the guest speaker, Frank W. Cortright, executive vice president of the National Association of Home Builders.

Other officers for 1951 are: Roy W. Thillberg, vice president; Milton Rudick, secretary; and Chris Bode, Jr., treasurer. Trustees elected for two-year terms were Bode, Carl G. Johnson, Harry A. Wiles and Arthur J. Smith.

DAYTON, OHIO

Melvin E. Kimmey was elected president of the Montgomery County Builders Association for 1951 at a special election in December. He succeeds Robert Havestick. Other officers named were Anthony Wenzler, vice president; Richard Rut-
mann, secretary; and Ralph Sharp, treasurer.

On the board of directors, in addition to the above officers, are Gene Kreusch, Walt McCluskey, Alex Simms and Lou Zeiger.

**Three-Generation Publicity**

ST. LOUIS BILDORS Home Show
Chairman Ralph S. Duke, right, poses with son, Jerry and grandson, Ralph S. Duke II in picture duplicating publicity photograph used more than 20 years ago.

In old picture, Jerry was the little fellow. The senior Duke has been highly lauded for his organization of the annual home show. Space is already sold out for the 1951 event, scheduled February 17-25 at the Kiel auditorium.

**Portland Cement Association Names New Directors**

Smith W. Storey, president of the General Portland Cement Co. and the Consolidated Cement Corp. of Chicago, was elected board chairman when the Portland Cement Association's directors met recently in Chicago. Storey succeeds Walter C. Russell, president of the Peerless Cement Corp., Detroit, chairman for the past two years.

Four new directors were elected at the annual meeting—Donald S. McBride, Philadelphia; F. A. Weibel, Catasauqua, Pa.; Eugene D. Hill, Louisville, Ky.; and Harold M. Scott, Philadelphia.

**New Interest Planned for Michigan Home Show**

Interest-appeal of the 1951 Greater Michigan Home Show will be directed to both home builders and home buyers, according to Hirtus E. Alles, executive secretary of the Michigan Association of Home Builders. The Annual Home Show, to be held in Grand Rapids March 15, 16, and 17, will be co-sponsored by Michigan Home Builders and by the Builders and Traders Exchange of Grand Rapids. Exhibits in the Civic Auditorium will be open to both builders and home buyers.

Though most exhibit space for the Home Show is already contracted for, Alles indicated that a limited display area is still available.

**FIAT GLASS SHOWER DOORS**

...dress up the bathroom

A Fiat glass door greatly improves any shower. Tile, marble, structural glass, or metal showers are enhanced in appearance and practical usability when equipped with a Fiat door. Perhaps at no other place in a house can so little cost mean so much in desirability.

The solid extruded metal used in all Fiat doors is a much superior type of construction that permits a fine elite styled frame combined with strength.

The Fiat Dolphin shower door is constructed of extruded solid brass, heavily chromium plated with continuous piano hinge forming a smooth-working, rigid door. Double friction bullet catches, offset handles and water channel to prevent dripping on floor are features that mark the Dolphin as the finest in shower bath doors.

The Zephyr is a medium priced door, styled same as the Dolphin but made of extruded aluminum with satin aluminum finish. Standard size of both the Dolphin and Zephyr shower doors is 72" high for opening 24" wide.

The Neptune is the lowest priced Fiat glass door. Made of one piece heavy extruded aluminum with satin finish. Size 24" x 64" and is reversible for left or right hinging.

All Fiat doors are simple and easy to install on Fiat shower cabinets, tile, marble or structural glass showers.

FIAT METAL MANUFACTURING COMPANY

Three Manufacturing Plants
9301 Belmont Ave. (Chicago area plant) Franklin Park, Ill. Long Island City 1, N.Y. Los Angeles 33, Calif.

In Canada—Fiat showers are made by The Porcelain and Metal Products, Ltd., Orillia, Ontario
Another quality Delfair flooring product is now ready for builders everywhere—new distinctive Delfair OAKBLOK.

Available either unfinished or prefinished, Delfair OAKBLOK brings extra beauty and durability to any home or commercial building. Easy to install—either in mastic or by nailing—and surprisingly low in cost, Sizes for every job—6¾", 9" and 11¾".

Stock up on Delfair OAKBLOK today . . . flooring which is sure to win the praise of both homeowners and builders everywhere.

**D. L FAIR LUMBER COMPANY LOUISVILLE, MISSISSIPPI**

DELFair FLOORING PRODUCTS:

- Standard Strip
- Prefinished
- Oakblok
- Plank
- Square Edge Strip

**THE VITROLINER units were easily adapted to the style of homes in project**

**Prefabricated Chimneys Help Achieve Economy in Chicago Housing Project**

Vitroliner chimneys were used successfully by the Joseph E. Merrion Companies, Inc., in one of the latest major low-cost home projects, known as Hometown, located on the southwest side of Chicago.

Each unit in this group of single story, ranch-type duplexes, contains a combined living-dining-room, room, two bedrooms, kitchen, bath and utility room. An oil-fired warm air perimeter system heats each section of the duplex. Units in the project are priced at $8,250 each.

Vitroliner chimneys not only saved valuable floor space but saved time and money since each chimney was installed in an average of eight days.

**SPACE-SAVING chimney does not extend to floor as shown in this installed unit**

The Vitroliner casing provides attic ventilation through flue housing and under chimney cap.

**OPENING in roof larger than Vitroliner casing provides attic ventilation through flue housing and under chimney cap.**

**BACK VIEW of Delfair unit block shows sturdy, reinforced construction. Two built-inSplines give extra ruggedness and durability. In addition to these Splines, each block features five cross-wise grooves spaced to insure complete rigidity when laid in mastic. With Delfair OAKBLOK you get hardwood floors of lasting beauty and superior strength.**

**B.V**
ONE PIECE housing quickly installed minutes at a cost of $68. Crews of the heating contractor, the Sunbeam Heating and Air Conditioning Co., Inc., Chicago, quickly became expert in erecting these "tailor-made" chimneys.

The chimney is built around a vitreous flue liner and is encased in a seamless tube of high-temperature resistant asbestos insulation. This is covered by a round aluminum pipe. A flue support anchored at the ceiling, a metal roof housing and a combined housing top and rain cap make up the other component parts.

Vitroliner chimneys have been approved by the Federal Housing Administration and the National Board of Fire Underwriters.

RAIN CAP is welded to housing top. New units have added welded-on baffle ring around cap

Tractor Speeds Roofing

ROOFING-SPEEDUP on this 100-home project near North Bend, Ore., is achieved with Allis-Chalmers HD-5G Tractor-shovel. Special home-made fork designed by Rower-Edmonds Corp., Portland builders, enables tractor to hoist a half-load of 16-foot sheathing and a bucketful of asphalt shingles in one operation. Machine is also used to backfill basements, level yards and, with trench-hoe, dig sewer trenches.

FAN-PLAN

with

EMERSON-ELECTRIC

Kitchen Ventilators

You put "sales appeal" in your homes when you specify Emerson-Electric Kitchen Ventilators! You can say "cooler, cleaner kitchens" when you point out this looked-for feature in modern home planning. Economically priced, easily installed in any construction, these dependable fans will give years of trouble-free service . . . and that means satisfied buyers, too. So close your sales in the kitchen—be sure to specify Emerson-Electric Kitchen Ventilators! For complete data, write for Bulletin No. 416.

THE EMERSON ELECTRIC MFG. CO., ST. LOUIS 21, MO.

Wall Model . . .

- Telescoping adjustable sleeve fits walls 5 1/2" to 13".
- Square outside frame, easy to brick or frame around.
- Special outer door seal gives weather protection.
- Induction motor, 10" blade moves 470 c.f.m.

Ceiling Model . . .

- Adjustable sleeve joint fits standard 3 1/2" x 10" duct
- Outside grille has angle baffles for weather protection
- Automatic shutter closes duct when fan is not operating
- Dependable Emerson-Electric motor equipped with special thrust bearings.

SPECIFY EMERSON-ELECTRIC ATTIC FANS

Build cool, summer comfort right into your homes by installing Emerson sales-clincher Electric Attic Fans! Here is another sale-starter . . . available in sizes from 30" to 48". Note: you'll save half on installation by installing during original construction.

EMERSON ELECTRIC

FANS • MOTORS

APPLIANCES

FEBRUARY 1951
Help Beat Rising Costs with "TROUBLE SAVERS"

Men can do more work in less time because of the extra convenience, fast-handling features, safety and efficiency of ‘Trouble Saver’ Scaffolding accessories.

SCAFFOLD BRACKETS

- Nail Attached
- Studding Attached

- Erect and dismantle faster than you can build a make-shift wooden scaffold.
- Nail, studding and bolt-attached types—in 3” and 3½” lengths—rail carbon steel.
- Attachments available to convert any one type to any other type.

LADDER JACKS

- ONE-MAN RUNG-TYPE Ladder Jacks (left) adjust to any pitch on either side of the ladder. Takes weight on three rungs.
- NEW RAIL-TYPE Jacks (right) use slip rails of ladder for extra safety.

Manufactured by thousands of builders. Write for literature giving information on all money-saving “Trouble Saver” Scaffolding Accessories.

The Steel Scaffolding Co., Inc.
856 Humboldt Street, Dept. AB - Telephone EVergreen 3-5510 - Brooklyn 22, New York

HOW TO KEEP ON-THE-GROUND CONCRETE FLOORS WARM AND DRY

No cold, damp, on-the-ground concrete floors when you use Zonolite Vermiculite aggregate in place of sand. For Zonolite makes a concrete that stops heat loss into the ground, prevents condensation. And Zonolite is light, economical, easy to handle.

On a level, well-drained base prepare a 5 or 6-inch fill of coarse stone or gravel. (A) tamper smooth and firm. On top of this, lay a moisture barrier of one or more saturated felts.

Pour 4 inches of Zonolite concrete and allow it to set. (B) Zonolite Aggregate replaces sand, in proportions of 1½ bags of Zonolite Aggregate to 1 bag of portland cement, providing up to 16 times the insulating value of ordinary concrete.

You can now pour your floor of ordinary concrete (C) and you’ll have a job as permanent as the earth itself! A job that stops heat loss into the ground, eliminates condensation, saves fuel, provides comfort.

This is only one of many jobs where Zonolite concrete will save you money and time and give marvelous results. Why not write in for full information on Zonolite concrete. Here’s information you ought to have handy. No obligation, of course.

ZONOLITE COMPANY
135 S. La Salle Street • Chicago 3, Illinois

Home Market Cut by Curbs, Prefabricator Expands General Contracting Work

A good example of how manufacturers are adapting their programs to meet changed conditions caused by the national emergency is offered by the Texas Housing Co., Dallas. The firm announced recently that restrictions on credit have so narrowed the market for its factory-built Town and Country Homes that it has decided to insure full use of the large plant and fabrication facilities, as well as the architectural and engineering staffs, by expanding operations to include the field of general contracting.

The company already had in its organization W. D. Twing, formerly vice president and western manager for J. A. Jones Construction Co., large-scale general contractors, and W. G. Reid, active in contracting for many years in Texas and other states. Winfield Morten, company president, said that the training and experience of these men are now being utilized in the preparation and submission of bids on large public housing projects and other construction jobs that can be handled by a general contractor.

Through previous work with the government, the firm was already established as a general contractor. This included construction of a White Rock Housing Community near Los Alamos, N.M.; fabrication and erection of 105 residences at White Sands Proving Grounds, N.M.; and supplying of 120 two- and three-bedroom housing units for the Air Forces at Fort Hood, Texas.

Since entering the new phase of activity, the company has submitted the lowest bid on three successive openings covering public housing projects in three Texas cities.

HHFA Probes Utility Costs, City Site Preferences

Methods of measuring housing demand in particular locations within any urban community, and for measuring and analyzing the relation of the cost of municipal services to the cost of housing are to be explored in studies under the Housing and Home Finance Agency research program, HHFA administrator Raymond M. Foley has announced. Georgia Institute of Technology will study the within-the-city demand for housing and Harvard University will study the cost of municipal services to residential developments.

Renew Your Subscription
Do YOU mix the way the Egyptians did?

Change to the MULLER
—it’s better, faster, and costs less!

You are losing money if you mix mortar and plaster with a hoe these days. The new Muller Three Cubic Foot Mixer, for a small investment, eliminates this old-fashioned, back-breaking, costly hand operation. Its perfectly mixed plaster makes better walls in less time. Its mortar has just the right consistency to please the most particular bricklayer and increase his production. Light and portable, the Muller is ideal for inside mixing and holds a full bag batch of most mixtures.

PRICE: $300 with electric motor and extension cord
$320 with air-cooled engine—FOB Factory.
Also available in 6 (2 models), 9 and 12 cubic foot sizes.

Start now to cut your costs and increase your profits. Write or wire for name of nearest Muller Distributor.

Manufacturers of tilting and non-tilting concrete mixers, concrete carts, mortar boxes.

MULLER MACHINERY COMPANY, Inc.
Metuchen 4, New Jersey
Cable Address: “Mulmix”

UP in Less Time
at Lower Cost
with RILEO Arches

With Rilco pre-engineered arches, you can cut the cost of arch construction to the bone. Arches come to you ready for rapid erection. Wrapping protects smooth surfaces during shipment and construction. Hardware for engineered connections provides an adequate joint at the ridge, solid anchorage at the arch base.

Manufactured for each individual job from finish grades, kiln dried West Coast Douglas Fir in accordance with recommendations of U.S. Forest Products Laboratory, Madison, Wisconsin.

RILCO Laminated PRODUCTS, INC.
1667 FIRST NATIONAL BANK BUILDING - ST. PAUL 1, MINNESOTA

JOB FACTS:
ZION LUTHERAN CHURCH
Hopkins, Minnesota
39' 2' wide
118' 4' long
Arches: 34' 10½" high, spaced 16' 6" O.C.
Contractor: Desh L. Witcher, Inc.
Minneapolis, Minn.
Architect: Long & Roughland

FEBRUARY 1951
INDUSTRY BRIEFS

E. J. O'Leary has been named general sales manager of the Ruberoid Co. with headquarters in the firm's main offices in New York City, it has been announced by Stanley Woodward, executive vice president. Associated with Ruberoid for the past 20 years, most recently as assistant to the executive vice president, O'Leary has occupied various responsible positions. Prior to joining the company he had been affiliated with Eternit Inc., St. Louis, producer of asbestos building materials, which in 1930 was acquired by Ruberoid.

Twelve wholesaler salesmen participated in a December Wholesaler Salesman Seminar sponsored by the Armstrong Cork Co. Building Materials Division at Lancaster, Pa. It was the last of a series of four such meetings sponsored by the company in 1950. Discussions featured wholesalers' problems in relation to promotion, advertising and selling aids. Tours of the firm's home offices in Lancaster and fiberboard plant in Macon, Ga., were included on the program.

A new 1,250 ton hydraulic extrusion press, capable of developing 2,500,000 pounds, was recently installed by Trimech, Inc., of Youngstown, Ohio. The press, to be used in the fabrication of aluminum decorative moldings and other aluminum extruded products, is the third placed in operation by the firm.

Directors of Black and Decker Manufacturing Co., Towson, Md., recently elected Thomas I. Burbage as corporation secretary to succeed Harry G. Wheeler, who died July 12. Burbage joined Black and Decker in 1930 and, prior to his new appointment, was assistant to the vice president in charge of manufacturing.

Appointment of Edwin Reichert as advertising manager of the Richmond Radiator Co., affiliate of the Reynolds Metal Co., has been announced by Cecil W. Farrar, vice president and general manager of sales. Before joining Richmond, Reichert was assistant advertising manager for the Riegel Paper Corp. and the Riegel Textile Corp.

---

...with MODULAR SIZED

Ualco Lifetime

ALUMINUM CASEMENTS

With the increasing popularity of masonry structures...particularly brick, brick veneer and cement block, MODULAR Sized casements are a must, and Ualco windows are the ONLY modular sized aluminum casement windows available in the world, today! These Ualco Lifetime Aluminum Casements are made to sizes based on the modular system of dimensional coordination of building products. This coordination conforms to the modular standards for masonry openings and cutting glass panes, thus, greatly saving construction time...reducing building costs...making you the most popular and demanded builder in your vicinity! Ualco Lifetime Aluminum screens and storm sash are available for all sizes and types of Ualco Lifetime Windows.

Take a few minutes of your time now...clip, fill in and mail coupon, today...get complete details. See our catalog in Sweet's Files.

write for this
FREE CATALOG
Today!

Unlon Aluminum Company, Inc.
Department A-75
Sheffield, Alabama

Gentlemen: Without obligation, please send me a FREE CATALOG.

Name:
Company:
Street:
City:
Zone:
State:

SPECIAL DISCOUNT TO BUILDERS!

helps you

SELL & RENT FASTER!

The "Lifetime"

SHAMPOO SPRAY

Every woman who sees a "Lifetime" Shampoo Spray permanently mounted on the wall of your model house or apartment, will want to live with its beauty and enjoy its convenience.

Home hair care, permanents, tinting, etc., have grown enormously recently, creating a demand (unsatisfied up to now!) for a good looking, easy to use, professional shampoo spray. The "Lifetime" is the perfect answer—gleaming, stainless steel hose, triple chromium plated brass spray head and holder hook (holds spray in "no-drip" position when not in use)...instantly available...nothing to screw on, take off, get out of order or wear out...performance proven by years of use by professional beauticians AND, the "Lifetime" is sold with a written five year guarantee! The "Lifetime" is wonderful for the whole family—even the pup!

Write today for complete details—The "Lifetime" Shampoo Spray will pay off handsomely for you! SPECIFICATIONS: Four foot hose (longer lengths available). Wall hook tapped out with 3/4" I.P.S. female inlet, hose screwed directly to outlet. Water feed controlled via diverter valve on washbow! or bath tub fixtures, or separate controls for spray can be installed. Consumer list price $13.50 (spray unit only). SPECIAL DISCOUNT TO BUILDERS!

Dealers: Territories open—write for liberal sales plan.

121 East 2nd Street, Mineola, L. I., N. Y.
CABOT'S STAINS!

Architect Huson Jackson,
New York City

Samuel Cabot, Inc.
231 Oliver Bldg., Boston 9, Mass.

COSTS LESS
LASTS LONGER
WHEN YOU USE
CABOT'S STAINS!

Cabot's Stains give your houses attractive variety at minimum cost. They come in a wide range of colors from clear, brilliant hues to weathering browns and grays. Cost 1½ as much as good paint — go on quickly and easily — provide lasting beauty and protection.

Cabot's Stains contain 60-90% of refined creosote oil — the best wood preservative known. They penetrate deeply — bring out all the natural beauty of grain and texture.

Write today for Cabot's Creosote Stain Color Card and complete information. Many Cabot colors are unique and available from no other source.

INDUSTRY BRIEFS

Appointment of J. W. Purvis of Detroit as assistant sales manager and manager of dealer sales for Youngstown Kitchens, manufactured by the Mullins Manufacturing Co., has been announced by C. D. Alderman, Youngstown's general manager of merchandising. D. F. Sembach of Chicago succeeds Purvis as zone manager in the Chicago, Detroit, St. Louis area. Both Purvis, who will make his headquarters at the factory in Warren, Ohio, and Sembach have been with the company since 1940.

The board of directors of M and M Woodworking Co. has announced the election of Thomas B. Malarkey to the presidency of the corporation. Malarkey, formerly executive vice president, has served as chief executive of the plywood and door company since the retirement of former president Herbert Malarkey last April. The new president joined the firm in 1936 after a career in newspaper and press service work which began in 1922.

The heaviest publicity program in the history of Morrison Steel Products, Inc., Buffalo, N. Y., will be carried out in 1951, it has been announced by Gene Brown, sales manager of the firm's Mor-Sun Furnace Division. Brown said the 1951 program intensifies consumer publication advertising started last year, and continues the heavy program in furnace, architectural and building trade magazines.

The Porter-Cable Machine Co., Syracuse, N. Y., has completed purchase of Johnson Engineering and Sales Corp., Rockford, Ill. Porter-Cable president De Alton J. Ridings announced recently. He said the purpose of the move is to extend Porter-Cable's line of electric tools in order to provide a complete selection of portable woodworking machines. The Johnson corporation manufacturers air-driven sanding machines and a line of Guild homecraft tools, floor sanding machines and industrial abrasive belt grinders.

Correction: M. O. Harum was recently promoted to vice president of Allied Building Credits, Inc. American Builder regrets an error in December Industry Briefs which reported the promotion as to assistant vice president.

YOU'RE LEADING US ON A MERRY CHASE

Yes, you're buying so much Paine Perforated Hanger Iron that right now we're having some trouble keeping up with your demands. Accurate perforations plus burr-free milled edges makes Paine Hanger Iron easy, safe to handle. Paine Perforated Hanger Iron comes black or galvanized, in five widths and gauges. You know how it quickly, surely and economically solves your fastening, or hanging problems... you know that it's worth waiting for. We'd just like to tell you we're doing our best to catch up with you.

THE BEST CRAFTSMEN ALWAYS TAKE PAINE'S
**Letters**

(Continued from page 41)

the December, 1950, issue is to be commended very highly. It is of special interest to us due to the fact we are training in excess of 500 men to a journeyman’s level in the carpentry field. We find that the information contained therein is invaluable to our students in their related carpentry courses. We are anxious to learn if it would be possible to get reprints of the article for classroom purposes. If so, would you quote the cost of 1,000 copies. The titles of the forthcoming installments indicate that these articles will be of the same caliber and will lend themselves equally well to our teaching program. We are interested in reprints of these articles also.

Ralph O’Berg,
Educational Director,
The Terrace School For Craftsmen
New Castle, Pa.

EDITOR’S NOTE: We have strongly considered combining the “Construction Lumber” features in book form as soon as the last installment has been published.

**How Plumbing Fixtures Are Manufactured**

Before viterous china plumbing fixtures are finally installed by the builder, a fascinating story of production has been concluded, often involving materials and workmen from two countries, thousands of miles of ocean travel, and work with a 7,000-year-old building material.

Many times each year Norwegian steamers put in to the port of Sheboygan, Wisconsin, on Lake Michigan, and disgorge about 1,600 tons of clay into waiting trucks which hurry the material to reserve bins at the Kohler Company, four miles away.

Five thousand miles are covered on each voyage by the clay boats which load their cargo at Fowey, Cornwall, England, then cross the north Atlantic and enter the St. Lawrence river on their way to the Great Lakes waterways and Sheboygan. The white, fine-textured clay is blended with flint, feldspar and other minerals and cast into a wide variety of plumbing fixtures which are then fired and glazed at high temperatures in tunnel kilns.

The origin of clay as a building material was over 7,000 years ago. The ancient Babylonians, Egyptians, Chinese, Greeks and Romans also worked with clay, advanced and perfected its possibilities, and ultimately translated it to more artistic uses such as translucent porcelain.
Shade Screening has home selling advantages!

New, revolutionary Kaiser Aluminum Shade Screening gives your homes selling features no other screening can match:

Cuts room temperature as much as 15°. Tiny, one-inch-wide louvers (shown at the right) are set at an angle against the sun.

Made of tough, high grade aluminum. Kaiser Aluminum Shade Screening can't rust or stain, never needs paint, stays handsome for years!

Keeps out biting insects. Proved by engineering tests.

Gives daytime privacy. People inside can see out—folks outside can't see in!

Protects rugs, draperies, furnishings. Direct rays of the sun can't get in to fade interiors.

Low in cost. And easily installed.

Low-cost Kaiser Aluminum Shade Screening comes in regular or tension frames from sash and screen manufacturers, and in 50-foot rolls from jobbers.

Plan now to use Kaiser Aluminum Shade Screening in commercial, industrial or residential buildings. Send for free AIA file and name of nearest manufacturer or jobber.

Kaiser Aluminum SHADE SCREENING

Kaiser Aluminum & Chemical Sales, Inc., Kaiser Building, Oakland 12, California
FOR DEPENDABLE, LOW-COST protection
WHEREVER YOU BUILD, USE

You'll find it pays to use SISALKRAFT in every possible way on every job... for closing-in... for sheathing-paper... under all concrete slabs... under all flooring... under stucco... as a moisture-vapor barrier... for curing and protecting concrete... and many other uses.

SISALATION Reflective Insulation combines insulating and moisture-vapor barrier qualities in one low-cost quality product.

More contractors and builders use SISALKRAFT Products than any other similar material.

Write Dept. AB2 for free samples and data

THE SISALKRAFT CO.
205 West Walker Drive Chicago 6, Illinois
New York 17, N. Y. • San Francisco 3, Calif.

Report First Results of NAHB Educational Program

First results in the National Association of Home Builders' educational program to build understanding for the home building industry and to correct misinformation about the industry have been reported by the association's educational committee. Plans for the program were launched at the 1950 NAHB convention in Chicago.

Thousands of home builders have contributed to the fund, the committee said; and professional public relations counsel, the Fred Eldean Organization, New York City, has been retained to guide the program at the national level and to assist local associations.

These are the five basic objectives listed by the committee:

1. To get public understanding of the industry and to create a climate of public opinion that will make it unwise and difficult for any group to damage or destroy the industry.
2. To establish the home building industry as "a real industry," to give the industry a new standing in the local and national communities.
3. To get recognition for the industry on a par with that accorded the nation's other major industries, such as oil, steel communications, the automotive industry and others. To assure fair and equitable treatment for the home building industry in all industry-government actions and to help the industry get its fair share of the consumer dollar.
4. To help the individual home builder get credit for the social and economic contributions that he makes as a member of a great industry.
5. To help the industry anticipate and be prepared to meet, immediately and effectively, emergencies that may arise in the future.

As a step in the campaign a nationwide survey of public attitudes toward the industry and individual home builders has been completed and is being studied. The Eldean Organization has begun a series of personal conferences with editors of national magazines, major newspaper chains and supplements, and syndicated writers, in which the strategic importance of the home building industry is outlined with particular reference to the effects of current home mortgage credit restrictions.

Public relations field men are making the rounds of local and state associations, getting first hand data on industry problems and assisting association secretaries in local development of the program.

(Continued on page 198)
NOW! Every door can be a sliding door with Sterling Hardware

The NEW 600 line
- Mounts in standard door frame!
- Requires only 1" head room!
- Provides vertical adjustment!

The most outstanding achievement in sliding doors today! Now anyone can easily and quickly install a sliding door. Mounts in standard door frame. Requires only 1" head room! Made for ¾" and 1½" doors . . . also for light cabinet doors.

NEW STERLING GUIDE STRIPS
Eliminate difficult and costly door grooving with new Sterling Guide Strips! Made for doors of all widths. Quick and easy to install.

Here is the quick, easy way to install by-passing doors. No special millwork . . . no notching or grooving . . . no troublesome hanging.

What an orchid is to a beautiful lady, Canvas Awnings are to distinctive domestic architecture. Well-planned homes and apartments glow with the charm of color. They give assurance of comfort and protection in summer—and allow maximum outside light during the comparatively sunless days of fall and winter.

Consult your local Canvas Awning maker. He offers a wide choice of fabrics and hardware to meet all practical needs.

THE CANVAS AWNING INSTITUTE, INC. and NATIONAL COTTON COUNCIL
"There is No Substitute for Canvas Awnings"
FINER FINISH SANDING AT A NEW LOW PRICE!

STRAIGHT-LINE RECIPROCATING ACTION LEAVES NO MARKS

- 14,400 SANDING STROKES PER MINUTE

(PATENTED)

ONLY $24.50

RUGGEDLY BUILT FOR AN ECONOMY-WISE BUILDING INDUSTRY

The new Dremel Model 2000 is a fast-cutting, finish sander. It offers for the first time in the building field, a top-quality electric sander at a remarkably low price. Truly a versatile performer, it sands dry-wall joints, smooths plaster, puts a satin-like finish on doors, woodwork, siding, etc. Rugged construction, trouble-free design—plus low initial purchase and operating cost—all demand your thorough investigation. Call your supplier, or write us for details.

DREMEL MANUFACTURING CO., 2414 18th Street, RACINE, WIS.

EVERY BUILDER NEEDS . . . EVERY BUILDER CAN AFFORD
THE NEW DREMEL ELECTRIC MODEL 2000 SANDER

PARKS No. 20
20” PLANER

Here is a modernly designed, rugged, high-speed, low-priced planer that is ideally suited for every shop and industrial plant requiring a quality surfaced planer. The Parks No. 20 Planer has a four-knife cutterhead with a speed of 3600 R.P.M. and offers two feed speeds—20 and 40 F.P.M., and 40 and 80 F.P.M. Write for complete descriptive literature.

The PARKS Heavy-Duty 12” x 4” Planer
A compact, sturdy, thickness planer that offers mill planer precision and ruggedness at a sensationally low price. Write for descriptive catalog sheet.

The PARKS WOODWORKING MACHINE CO., Dept. 30-A4, 1546 Knowlton St., Cincinnati 23, O.
THE Graded Hinge that means Greater Profit to Raynor Door Dealers...

Pictured above is the Patented Raynor Graduated Hinge. By inserting the track follower in the special hole for each section the Graduated Hinge, combined with a tapered track, produces Raynor Graduated Seal.

Graduated Seal is built into every Raynor door to lend extra sales appeal for the dealer and added satisfaction for the user. By eliminating the use of a complete set of special hinges in the construction of a perfect weather tite seal, Raynor offers the Graduated Seal on every door at no additional cost!

Raynor wood sectional up and over doors are outstanding in performance, and moderate price.

Nationally Advertised—Write Direct for Dealer and Distributor Franchise Information.

RAYNOR MFG. CO.
River St., Dixon, Ill.

Send The Coupon Today

R.C.S. TOOL SALES CORPORATION
JOLIET, ILLINOIS, U.S.A.

Gentlemen:

Please send us Bulletin 2L and name of the nearest Super Saw distributor.

Name_________________________

Address_____________________

City_____________________Zone____State______
Production methods have changed greatly within the past few years. New building materials have come on the market. New tools have improved construction methods. Costs are way up on many items. These changes have made previous estimating data obsolete.

The Eleventh Edition contains up-to-date estimating and cost data on all classes of building construction. Information on house and other light construction work is complete. Thousands of items that enter into estimates are logically arranged and tabulated for ready reference.

Since the first WALKER appeared 35 years ago more than 106,000 have been published. Kept abreast of developments in the industry by frequent revisions it became the leader in its field. It has long been recognized as the only complete compilation of estimating and building cost data available in one book. Whether you build houses, do remodeling, alterations or repair work you will find in it the information you need to prepare accurate, dependable estimates.

**This New Edition Will Help You**
1. Increase your profits with more accurate estimates
2. Stop losses by checking out costly omissions and mistakes
3. Prepare more accurate estimates by using correct methods of measuring and “taking off,” figuring quantities and labor hours
4. Save your estimator valuable time by providing him with latest cost data
5. Increase your daily volume and reduce labor costs on the job by adoption of the most economical methods and utilizing some of the new tools that are pictured and described

**SEND FOR YOUR COPY TODAY**
Send for your copy of the new Eleventh Edition of THE BUILDING ESTIMATOR’S REFERENCE BOOK today. Then you can take advantage of the many new methods and ideas in it for increasing your profits through better estimates.

**With Your Copy You Will Receive**
FREE a Copy of the Vest Pocket Estimator

This 220-page 2 1/2 x 5-inch book is not sold separately. It is the most popular vest pocket reference ever used by contractors. Estimating and cost data most frequently referred to is herein presented in condensed tabular form. Rough cost figures on small jobs can be worked out and submitted within a few minutes.
Still the Best Window Value

Lupton Metal Casements are still the best window value—for ease of installation, high durability, low maintenance cost, outstanding design features.

In every Lupton Metal Casement installation you get abundant daylighting, controlled draftless ventilation, extended hinges that permit cleaning both sides of glass from inside room. Sturdy metal frames are precision built at every point—cannot warp, swell or shrink. Delivered as complete units ready for installation. Available in steel or aluminum.

And don’t forget Lupton Metal Windows for commercial and industrial work—"Master" aluminum windows, Architectural Projected windows, Commercial Projected, Pivoted and Security windows. New 1951 Catalog showing all Lupton Window types sent on request.

MICHAEL FLYNN MANUFACTURING CO.
700 East Godfrey Avenue, Philadelphia 24, Penna.
Member of the Metal Window Institute and Aluminum Window Manufacturers Association
Mengel Wood Wall Closets are complete "packaged" units, ready for quick installation. Their prefabricated design eliminates costly wood-stud closet construction — thus provides more storage for the same costs, or equal storage for less cost, than conventional closets!

In addition to space and money-saving advantages, Mengel Wall Closets add real sales features to a house by providing better storage and greater beauty than ordinary closets. Movable shelves, rods and sliding drawers (optional) can be quickly rearranged to meet changing needs. Easy-rolling sliding doors make any part of the interior readily accessible and provide a handsome flush-wall appearance!

Mengel Wall Closets are available in a variety of sizes and models. Shipped KD with all hardware included.

Meet FHA requirements. If complete closets are not needed, use Mengel Closet-Fronts-with-Frames or Mengel Topflight Sliding Doors. Mail the coupon for complete information!

New Plastic Roof
Applied by Spraying

The R. M. Hollingshead Corp., Camden, N. J., has announced the adaptation for civilian use of its war-born plastic spray coating, Cocoon.

Through the principle of "continuous seal," the roofing method is said to provide a high degree of waterproofing. The process is particularly advantageous for the repair of old roofs; its light weight and the fact that it is applied by spraying make removal of the old roofing unnecessary.

Cocoon is a vinyl plastic film that was developed during the war by the Hollingshead firm in cooperation with the U. S. Government. In the postwar "Operation Mothballs" B-29 bombers, tanks and the electronic and radar equipment on battle ships were spray-coated with the material to preserve them from the destructive action of the elements and the corrosive action of salt air and industrial acid fumes.

By "continuous seal," an entire roof is sprayed from the top of one parapet to the top of another with one continuous coating. There are no seams, laps or joints.

Two top coats are added to the Cocoon in this new method of roofing. A coat of mastic containing gilsonite asphalt for durability and a coat of gilsonite vehicle with aluminum paste for insulation purposes round out the procedure.

The roofing is particularly suited to repair jobs on commercial buildings. In application over the old roof coating all that is usually needed is to sweep loose gravel off the old roof and spray on the new coating right over it.

Expansion and contraction with temperature changes is another characteristic of this roof coating. It is also said to provide a certain degree of insulation with the aluminum top-coat reducing both roof temperatures and interior temperatures. The continuous seal has proved an especially good insulation for specialized jobs like refrigeration plants.

Experience with the application of the roofing to date indicates that one man can cover about 500 square feet per hour with any of the coatings. Power spray guns are the only equipment necessary for application.

The first step is to spray on a prime coating known as Flex-Seal Clear. This seals the old roof in a thin wash coat which provides a good adhesive base for the next coat. The entire roof should be sprayed, including the insides and top of the parapet. Coverage should be about 250 to 300 square feet per gallon.

(Continued on page 204)
Now... It's even better!

THE OLIVER-WARE Hydro-Trencher

It's Smoother Operating...
No hesitation or "jerks" in the smooth application of hydraulic power. You get smoother, easier handling... more positive control with less operator fatigue.

By simply reversing the bucket and dipper stick, you get a swing loader that loads out material faster than you'd believe possible. "Forced ejection" bucket is available as optional equipment. Standard trencher bucket and standard swing loader bucket are available at slightly lower cost. With standard loader bucket, loading height is 12 feet. Loading height with "forced ejection" bucket is 12½ feet.

Have you seen the Oliver color movie, "Task Force on Wheels"? Your Oliver Distributor will be happy to arrange a showing.

THE OLIVER CORPORATION
Industrial Division: 19300 Euclid Avenue, Cleveland 17, Ohio
A complete line of Industrial Wheel and Crawler Tractors

FEBRUARY 1951
The next coat is the Cocoon itself and like the prime coat it is applied with an ordinary pressure spray gun such as is manufactured by Binks or DeVilbiss. Coverage of this coat should be about 2 1/2 gallons per 100 square feet. There should be 20 pounds of air pressure in the tank and 60 to 70 pounds on the gun. The best spray pattern is “fanlike” in order to give the material a greater dispersion and provide best adhering qualities. Where the roof has parapets, the coating is continued up the sides of the parapet, over the top and down the outside for about three or four inches in order to make a continuous seal through which no water can penetrate.

Mastic which contains gilsonite asphalt is the third coat. This material, being heavier, must be applied with a heavier type of spray gun than that used with the first two coats. A Binks spray gun with a one-quarter inch round nozzle and an Alemite pump put directly into the barrel will do the job. Coverage should be about six gallons per 100 square feet. Longest drying time will be for this third coat. Drying times for the first two coats are negligible since the material dries in a matter of seconds after being applied.

After the third coat has thoroughly dried, the final coat of gilsonite vehicle with aluminum paste is applied with the new, simple method of installing PC Glass Blocks in small panels (up to an area of 25 sq. ft.) offers builders a proven medium for easier and quicker installations. It saves time and money on the job... makes the selling task much simpler. All you need to do a hang-up job are the PC Glass Blocks, mortar, asphalt emulsion, and regular bricklaying tools. Such things as wall ties, wall anchors, expansion strips are no longer needed.

With PC Glass Block panels, you add distinction to any home—regardless of the architectural style. These panels assure plenty of clear daylight while protecting privacy. They don't require periodic painting and putting. There's no storm sash needed. Repairs or replacements are seldom, if ever, necessary. And they lower heating and air-conditioning costs. That's because PC Glass Blocks have more than twice the insulating value of ordinary single-glazed windows.

Make sure that you consider PC Glass Block panels in all your jobs. And for complete information, why not fill in and return the coupon below.

**Infiltration Test Passed**

By Wood Window Unit

The “Superior” window unit manufactured by Carr, Adams and Collier Co., Dubuque, Iowa, recently passed the infiltration tests prescribed under the new American Wood Window Institute specifications. It was one of the first wood windows tested under the program, conducted by the AWWI-approved Physical Laboratory Division of the Robert W. Hunt Co., Engineers, Chicago.

Tests were made by installing the Superior unit against an air chamber. A compressor was used to develop various air pressures in the chamber, with a meter measuring the amount of air that passed through the window. Various pressures were maintained equivalent to the “blow” of winds up to 50 miles per hour.
BOSTITCH T5 TACKERS SAVE YOU TIME, MONEY AND WORK... on cornerite, ceiling panels, insulation, metal-lathing, and other jobs. It’s easy to see why. Tacker positioned... trigger squeezed... staple driven home! It’s as quick and easy as that. One-hand operation. No marred edges... no bruised fingers... no fumbling for nails. Give Bostitch T5 Tackers a trial on your next job... and see how much you save.

FUSSY JOBS MADE EASY!
Bostitch T5 Tacker drives staples up to 9/16" long, within 1/16" of edges or inside corners, on jobs that call for a free hand for stretching, positioning or holding the work. Works just as well in either hand.

LOOK INTO BOSTITCH. Get more facts about these easy-to-load, easy-to-use Bostitch self-feeding stapling tackers and hammers. They can save work, time, and money for you. Fill in the coupon below.

ATTACH THIS COUPON TO YOUR LETTERHEAD

BOSTITCH, 554 Mechanic Street, Westerly, Rhode Island
I'm interested in more information about time-saving, cost-cutting Bostitch machines for applying:

☐ Insulation  ☐ Paneling  ☐ Building Paper
☐ Roofing  ☐ Metal Lath and Corners
List other applications: __________________________________________________________

Name __________________________________________ Title ____________________________
Firm: __________________________________________ Address: _________________________
City: __________________________________________ Zone: ______ State: _____________

BOSTITCH®
and Faster. fastens it better with wire

FOR EXTRA QUALITY

TROLLEY TRACK and HANGERS by

FRANTZ

For weather protection and easy operation you can’t beat the Frantz Trolley Track and Hanger combination. And you’ll find, as in all Frantz Products, many points of superiority when you make comparisons with similar equipment of other brands. It’s the "extras" Frantz offers that make selling easier and satisfaction greater.

Write for full information and prices.

AVAILABLE AS PACKAGED SET NO. 62

For quick and easy handling Frantz packages 1 pair No. 61 Hangers and 3 No. 123 Track Brackets with two Track end caps and all necessary lag screws and bolts.

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS
Wurdack pioneered in the development of silicones as a masonry water repellent back in 1946. CRYSTAL backs its claims for superiority with on-the-job performance. In Wurdack's new, comprehensive manual you will find:

Information about Silicones
What CRYSTAL is
What CRYSTAL Does...including its
5 Way Protection...1. Repelling water. 2. Preventing efflorescence. 3. Retarding staining. 4. Protecting masonry joints. 5. Safeguarding interior decorating.

How CRYSTAL is Applied
Where CRYSTAL Can Be Applied
Where To Obtain CRYSTAL

Some of these pages are filed in Sweets 1951 Architectural and Engineering Services Catalog

Start Advertising Drive for Wayne 'Dream Home'

A 1951 national advertising and merchandising program with local participation by its wholesalers and dealers is being launched by the Wayne Home Equipment Co., Inc., Fort Wayne, Ind., according to an announcement by B. G. Duer, vice president in charge of sales. The

Distributors Tour Insulux Plants

Sixteen men, representing 13 middle west distributors of Insulux glass block, recently made a five-state, 1,256 mile plane tour of Insulux factories and laboratories of the American Structural Products Co., a subsidiary of Owens-Illinois Glass Co. Prime purpose of the trip arranged by Vern L. Larson, Minneapolis branch sales manager for American Structural Products, was to give the distributors a firsthand view of Insulux manufacturing procedures and research techniques. Distributors paid their own transportation and hotel expenses while the manufacturer paid for local expenses.

Installations visited by the distributors were American Structural's Muncie, Ind., plant; and the company's Daylight Laboratory at the University of Michigan, Ann Arbor.

International RADIANT PERIMETER HEATING

The most wonderful heat we ever used...saves 30% on our heating budget!

says William Schuster
Wilrod Corp., Erie, Pa.

For basementless as well as basement type homes.

- The amazing new way of providing all the advantages of radiant heat PLUS greater heating uniformity without lag PLUS lower heating costs...PLUS circulation of filtered and conditioned air—at savings in cost of 30% and more.
- Takes less than 4 sq ft. floor space...provides warmth at floors with blanket of heat at outside walls.
- Tested and approved by National Warm Air Heating and Air Conditioning Association in conjunction with University of Illinois. Highly publicized by authoritative builder, architectural and heating trade papers and newspapers throughout the nation.

Send plans for free heating estimate.

International OIL BURNER CO.
3814 Park Ave., St. Louis 10, Mo.
Right: Plywood forms in place preparatory to pouring porch deck which creates an overhang for terrace below. Big, versatile plywood panels were also used to form smooth surfaces for basement and foundation concrete—then re-used for sheathing and subflooring. Wall sheathing and subflooring is \( \frac{3}{8}\)" thickness. Roof sheathing is \( \frac{3}{4}\)".

Owner-designer is Charles T. Pearson of the architectural firm of Lea, Pearson and Richards, Tacoma.

"Plywood Sheathing Specified For Extra Strength",

Says Architect-Owner

Charles T. Pearson, A.I.A.

Situated on a picturesque view-bluff overlooking Puget Sound—and subject to the same strong prevailing winds which blew down the first Tacoma Narrows Bridge—this striking modern home relies on the rigidity and strength of plywood sheathing throughout. Even interior cross-walls have a membrane of PlyScord, to give added lateral bracing.

"The unusually windy location made the specification of plywood doubly important," says Mr. Pearson. "The strength and rigidity of the material definitely contributes to better construction."

Plywood sheathing is stronger—proved in government tests to be more than twice as strong and rigid as diagonal sheathing. Plywood has other advantages, too. The big panels cover quickly, require less sawing, fitting and nailing, eliminate material waste. Contractors report savings of more than 25% in applying wall and roof sheathing... up to 50% in laying subflooring.

If the government lives up to that assurance this Title of the bill will be used only for housing in reactivated military establishments and other areas where the need is purely temporary and private capital could not be expected to finance permanent housing.

One of the major differences between this and the former Lanham Act is that great emphasis will be placed on permanent housing, as contrasted with World War II when the major part of such housing was called "temporary" (most of which will be permanent for generations to come).

In addition to the new housing bill, the government has restricted and licensed commercial construction. It has drastically reduced the supply of copper, brass, steel, aluminum and many other metals necessary for the heating, plumbing and wiring of new homes. It has restricted the sale of housing by Regulation X and parallel FHA, VA controls on mortgage credit.

Thus, as it restricts by one method, it encourages and relaxes by another in those areas which are determined to be "defense areas," and it all adds up to an involved, difficult, artificial manipulation of a vast industry's functioning.

Looking back to 1950 we see our industry producing 1,350,000 new homes —2½ homes per minute—a record which probably will not be reached again until the communistic threat of aggression is ended.

In the meantime, home builders will demand the right to build to their maximum capacity within the limitations imposed by the nation's preparation for war.

The industry will accept all reasonable restrictions which may be necessary and will build the major part of the housing needed, whether for defense workers or for civilians. It will resist, however, with its full strength, brought about through organization, whatever unnecessary, impractical and unworkable controls are dreamed up by inexperienced, ivory tower experts.

This is a time for cooperative effort between builders, lenders, suppliers, manufacturers and all segments of this vast industry.

---

Looking for a Building Product?

Look in Your April Directory Issue of American Builder

You'll find it listed by name--trade name--and name of manufacturer.

---

**MASONRY SAW**

**LOWERING OPERATING COSTS . . . . THROUGH PERFECT BLADE ALIGNMENT**

**CUTS WET or DRY**

- **ADJUSTABLE SAFETY GUARD**
- **MATERIAL CART MOUNTED ON "V" SHAPED BALL BEARINGS**
- **JIG WELDED STEEL TABLE**
- **SMOOTH OPERATING FOOT FEED**

**Features**

1. One-piece aluminum arm casting — precision machined for perfect blade alignment.
2. Independent pumping unit for coolant liquid circulation.
3. Borettle type valve eliminates clogging during wet cutting.
4. Double-sealed ball bearing mandril eliminates lubrication difficulties.

**Construction Machinery Sales Co.**

Waterloo, Iowa
Vitrified Clay Septic Tanks

offer the suburban homebuilder maximum sewage disposal efficiency, and the outstanding advantage of never wearing out ... they're completely resistant to corrosion or deterioration of any kind. Your professional reputation is safe when you install Clay septic systems — and you're safe on cost, as well. Clay products are low in initial price and easy to install. Check the table below and install Vitrified Clay Pipe disposal fields with all your septic tanks. Clay Pipe and Clay Septic Tanks are the perfect team ... they never wear out!

Write FOR MORE INFORMATION on private Sewage Disposal Systems. We'll send it with our compliments, along with many more suggestions on how Clay Pipe can help you serve customers better and increase your sales.
Gate City WOOD awning WINDOWS

and here is the quality window with
Plus performance to meet every need!

Gate City WOOD awning WINDOWS are the proven, practical products of an old established firm of wood window craftsmen. Their modern functional design simplifies climate control during all seasons, in northern and southern homes. Installation in thousands of homes, apartment buildings, hotels, schools, and hospitals during the past ten years is evidence of their extreme popularity.

*Weathertight, Draft-Free, Easy To Operate and Easy To Look At!

ALL-SEASON ADVANTAGES

PROTECTION from rain, wind, snow, cold and severe storms.

VENTILATION CONTROL through easy adjustment of sash for "draft-free" regulation of air currents, or 100% ventilation. Sash may be left in open position for ventilation without fear of damage from rain.

BEAUTY that creates desire for ownership, reduces sales resistance.

INSIDE SCREENS of Lumite, are precision fitted for insect control.

STORM SASH is available, to fit screen openings.

Extra PROFIT ADVANTAGES

EASY TO PAINT, on the job, the exact color customer wants, to harmonize with exterior and interior.

EASY TO INSTALL, because each window or tier is delivered as a complete packaged unit.

* Horizontal weatherstripping, Storm Sash and Thermopane at slight extra cost. Refer to SWEET'S Architectural File

1950 Record Year for New Construction Spending; Physical Volume Below '27

Spending for new construction reached an all-time high in 1950, rising above $27 billion, but the physical volume of new, privately-financed building fell somewhat short of the 1927 peak, according to a year-end statement by Clyde A. Fulton, president of the National Retail Lumber Dealers Association.

Fulton pointed out, however, that the quantity of materials handled in retail lumber and building material yards reached a record high during 1950, because of the "unprecedented volume of home building and repair and modernization work."

Calling attention to the $100 billion of new construction since World War II, the lumber dealer leader said there has been little, if any, of the overbuilding which characterized the construction boom that followed the first World War.

"The 5,500,000 new homes built since 1945," he said, "were just enough to catch up with the demand, and the physical volume of industrial and commercial construction has remained below the peak level reached in the 1920's, even though the population has increased by one-third in the meantime.

"Inventories of materials in retail yards, which were greatly depleted at the height of the 1950 building season, are being rebuilt steadily in anticipation of a relatively large amount of building in the new year, although stocks of most materials containing strategic metals will remain relatively low as a result of the diversion of steel, copper and other materials to the defense production program."

"The trend toward increased efficiency and lower handling costs in the distribution of materials continued steadily during the year with greater use of mechanized and time-saving equipment, continued training of the 100,000 or more new men employed in retail yards since World War II, and development of better methods of inventory control."

Land Sales a Casualty

Building site and acreage salesmen must be having a tough time these days. With the uncertainties caused by governmental controls, home builders are not buying land for 1951 development.

A recent survey made by the National Association of Home Builders of 2,330 builders in every section of the nation has revealed that 1,431 don't expect to purchase land in the near future; land sales are a casualty of controls.
AT LAST!

A Shingle that's really Different, Distinctive...and Better

When you sell Barrett EVER-FAST† Shingles, you've got something you can really get behind and push with complete confidence and enthusiasm. They're exclusive to Barrett! And everybody likes 'em. Home-owners because they're super-looking and give super-protection; roofers because they apply easily and quickly; dealers because they turn over fast and at good profit. What other shingle offers all these advantages?

1. Only 111 shingles per square, and only two nails per shingle. That means real application economy.

2. A deep head-lap of 3½" and a side-lap of 6".

3. Locking tabs are a full 3½" in depth, and are cut straight, for added strength. They really hold the shingles in place on the roof.

4. Cut-outs (2½" x 1") wide enough to provide adequate clearance for the sides of adjacent shingles to slide through and to allow for expansion and contraction on the roof.

5. Alignment slots to permit quick checking with the sides of overlapping shingles.

6. Attractive balanced design that gives double coverage over 100% of the roof and triple coverage over 50% of the roof.

7. A shingle that's backed by Barrett..."the greatest name in roofing."

Wherever you are—and especially if you're located in areas where wind storms are common (and who isn't?)—you'll want to get complete information about Barrett "EVER-FAST" Shingles. Phone, wire or write today!

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.
36th St. & Gray's Ferry Ave., Philadelphia 46, Pa.
1327 Erie Street, Birmingham 2, Alabama
205 W. Wacker Drive, Chicago 6, Ill.

SPECIFICATIONS

Size 20" x 20"  Blue Black  Greengrain
Head-lap 3½"  Deep Green  Redgrain
Shingles per Square 111  Deep Red  Bluegrain
Bundles per Square 3  Slategrain
Approx. Weight per Square 235 lbs.  Browngrain
Underwriters' Label Class "C"

FEBRUARY 1951
Here's the sink frame that really clamps coverings into place to stay—seals out moisture—hugs the sink with a tight, permanent fit. Coverings can't work loose or curl up!

Easier to install, too! Sink-Lok frames overlap edges of the covering a full quarter-inch. No close scribing, cutting or fitting of materials. No special tools needed. No mortising or rabbeting of the sink-well hole—just cut a straight-walled opening for the sink. The frame anchors in place from underneath the sink top—supports the sink itself in addition to sealing the joint between the covering and the sink. No bolts or screws through the counter top.

Sink-Lok Frames are available for flat-rim sinks of any size, with either round or square corners, for installation on wood or plywood sink-cabinet tops from $\frac{3}{8}$" to 1" thick, covered with any material up to $\frac{3}{4}$-inch thick. Also available for most vitreous china sinks.

Write for complete information.

No. A-725 Frame and Lug, for standard flat-rim sinks installed on $\frac{3}{4}$" to $\frac{3}{8}$" plywood tops covered with material up to $\frac{3}{4}$". Also available in Model No. B-725 for $\frac{3}{4}$" to 1" plywood tops, and in Model No. C-726 for vitreous china sinks.

**RANCH HOUSE** on city lot provides maximum living facilities

**Ranch House with Minimum Frontage**

Peter Johnson and Son, builders, Park Ridge, Ill., who confine most of their building operations to scattered lots in established communities, often are confronted with the following question when preparing to build. “Can a ranch type house be successfully placed on a limited city lot where the adjoining houses are often two stories in height?” The house shown above is a good example of a design that has been successfully used in a number of such cases. The plan is arranged for a limited frontage with the greatest portion of the house extending back into the depth of the lot. This arrangement permits adequate clearance on both sides of house to lot line without crowding the adjoining houses.
DELCO-HEAT Units

give home buyers the value, dependability and features they want

Check the specifications of these outstanding General Motors products!

"GA" series Gas-fired Conditionairs.
These forced warm air furnaces feature multi-section heat transfer systems, with electrically welded Multi-Head radiators that completely enclose the flames of double ribbon-type burners...insuring the extraction of maximum heat from the fuel. Delco Rigidframe motors on blowers. AGA-approved for all gases and for high altitude installations.

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>Blower</th>
<th>AGA-Approved Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Height</td>
<td>Width</td>
<td>Depth</td>
</tr>
<tr>
<td></td>
<td>Inches</td>
<td>Inches</td>
<td>Inches</td>
</tr>
<tr>
<td>GA 65</td>
<td>55</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>GA 95</td>
<td>55</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>GA 120</td>
<td>55</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>GA 150</td>
<td>55</td>
<td>35</td>
<td>26</td>
</tr>
<tr>
<td>GA 210</td>
<td>55</td>
<td>48</td>
<td>26</td>
</tr>
</tbody>
</table>

"S" series Steel Oil-fired Boilers.
Here are the perfect units for radiant heating systems in small homes—and for conventional steam and hot water systems, too. Have famous Delco-Heat pressure atomizing burner, powered by Rigidframe motor. Provide year-round hot water for household use. Available in both deluxe and round-jacket models. Also larger capacity, cast iron boilers.

<table>
<thead>
<tr>
<th>Capacity Oil Burner</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Btu per Hour Output</td>
<td>E.D.R.</td>
</tr>
<tr>
<td>Steam</td>
<td>95,200</td>
</tr>
<tr>
<td>Hot Water</td>
<td>95,200</td>
</tr>
<tr>
<td>nozzle GPH</td>
<td>300</td>
</tr>
<tr>
<td>Round Jacket</td>
<td>49%</td>
</tr>
<tr>
<td>Deluxe Cabinet</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>38%</td>
</tr>
</tbody>
</table>

"OPC" series Oil-fired Conditionairs. Value priced! Blower-filter unit may be mounted beneath or behind furnace. For basement, utility room or alcove installations. Features Delco-Heat pressure atomizing burner and Rigidframe motors. Deluxe model, with matching furnace and blower units, also available.

<table>
<thead>
<tr>
<th>Capacity Btu per Hour Output* (Plenum)</th>
<th>Firing Rate GPH</th>
<th>Blower RPM</th>
<th>Motor HP</th>
<th>Watts</th>
<th>Filter Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>75,000</td>
<td>400-700</td>
<td>400</td>
<td>1</td>
<td>385</td>
<td>20 x 25 x 1</td>
</tr>
</tbody>
</table>

*On basement installations add 15% duct loss to net heat loss—compensate for unusual conditions.

†Maximum watts allowable on motor.

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

Delco-Heat manufactures a complete line of automatic home heating products—for all fuels, all heating systems, and all sizes of homes. And our engineering and sales departments will be glad to serve you in any way possible. Also manufacturers of electric water systems for domestic water supply. For information about Delco-Heat products, write to Delco Appliance Division, Dept. AB-21, General Motors Corporation, Rochester 1, New York.
To give your jobs extra value that's "see-able"...

TWINDOW is made up of two or more panes of Pittsburgh Plate Glass. A layer of air is trapped between these panes, hermetically sealed to keep out dirt and moisture. The entire assembly is enclosed in a stainless steel frame. This protects the seal and glass edges, makes handling safer and easier, saves time on the job.

Pittsburgh

YOU CAN GIVE ANY HOME a lot of "buy-appeal" when you install Twindow, Pittsburgh's window with built-in insulation. For you give homeowners or prospective buyers all the advantages of large windows, without sacrificing heating and air-conditioning economy. And a Twindow unit is as easy to install as a single pane of glass. Architects: Stanhope B. Ficke & Grieshaber & Neillan, New London, Conn.
Glass can help you!

WHEN YOU USE CARRARA GLASS, the outstanding value you offer your clients is immediately underscored. Carrara Glass lasts indefinitely. It will not fade, stain, or change color with age. It won't absorb odors or moisture. It's impervious to grease, water, acids, pencil marks. And a damp cloth is all that's needed to keep it clean and sparkling. Ten attractive Carrara colors are available to satisfy any decorative scheme.

WANT TO GIVE your homes that "extra-value" look? Then install several full-length door mirrors — bedrooms and entrance halls are logical places. Homeowners want them and the slight additional cost entailed will make your selling job easier, help to sell your homes faster.

PITTSBURGH PRODUCTS, including Polished Plate Glass, Pittsburgh Doorway, and Pitco De Luxe and Premier Metal, are effectively combined in this store front of a men's wear shop. The result is an attractive, sales-inviting front, featuring a high degree of open vision. Pittsburgh Plate Glass Company can supply you with a complete line of products for store modernization. You will be wise to use Pittsburgh Products in all your store remodelling work. They're recognized by merchants everywhere as high quality, dependable materials. Architects: The Thayer Co., New Castle, Pa.

Build it better with Pittsburgh Glass

See the complete listing and descriptions of Pittsburgh Plate Glass Company products in Sweet's Catalog Files.
"Bilt-Well Nu-Style Cabinets Add Beauty and Convenience to Mercury Homes"

—Says Mr. Walter Steves
President, MERCURY BUILDING CO.
San Antonio, Texas

Today, essential storage space is uppermost in every prospective homeowner's mind. Add to this a desire for the beauty, convenience and utility of these cabinets and your possibilities for increased profits are twofold. Then, add the economy of assembling, installing and painting cabinets at the job and you will achieve the utmost value obtainable.

Yes, Bilt-Well K.D. packaged cabinets are "today's big value"...designed in accordance with the Builder's proven skill and craftsmanship. If you are not using Bilt-Well Nu-Style Cabinets as an added sales feature in your homes, you're missing a good bet.

Manufactured of thoroughly seasoned, kiln-dried Ponderosa Pine.

For over 84 years leading Builders have installed Bilt-Well Woodwork

THE BILT-WELL LINE: Mantels & Telephone Cabinets • Multiple-Use & Linen Cabinets • Stair Parts • Nu-Style Cabinets • Superior Unit Wood Windows • Exterior & Interior Doors • Entrances • Shutters • Closetite Casements • Carr-dor Garage Doors • Basement Unit Windows • Louvers & Gable Sash • Breakfast Nooks • Combination Doors • Screens & Storm Sash • Corner (China) Cabinets • Gli-dor Cabinets • Ironing Board Cabinets.
Treat Plywood With

CUPRINOL®

You know how wood absorbs moisture even under paint, varnish or stain, and in plywood it is this moisture absorption that causes grain raising and separation checks to spoil the smooth finish that a good job demands.

**Cuprinol is Water Repellent**

Treat plywood with “Clear Cuprinol” to protect against this moisture absorption, for Cuprinol is a water repellent wood preservative. After a coat of Cuprinol, grain raising and separation checks will be minimized, and prominent grain patterns subdued, so that paint will lie evenly and smooth and the natural beauty of the wood be retained under varnish or stain.

Cuprinol is easily applied on-the-job by brush, spray or dip and is completely harmless to the skin when handling. It also reduces the warping and swelling of any lumber and protects against rot and insect attack. It is widely sold through lumber yards and building supply dealers.

See Sweet’s File for Builders 2b/CU or write for information on types of Cuprinol for specific use.

CUPRINOL Division, Darworth Incorporated
56 Maple Street Simsbury, Conn.

WILLIAM L. BONNELL, vice-president and general manager of Trimedge, Inc., who points with pride to his many years of highly specialized experience in the field of decorative mouldings.

“Be assured that we’ll do everything possible to keep you supplied with

**Trimedge DECORATIVE MOULDINGS**

“TRIMEDGE, INC. will cooperate fully and willingly with the nation’s defense efforts. But as long as, and in such quantities as the necessary raw materials are made available to us in the uncertain days ahead, so will Trimedge keep faith with its distributors and their dealers. We have here in Youngstown one of America’s most modern and complete extrusion plants with three modern extrusion presses. We’re producing a complete and practical line of modern decorative mouldings in a continuing process from ingot to finished extrusion. You can depend on us to make every effort possible to maintain an equitable distribution of our product.”

Vice-President and General Manager

Trimedge, Inc. is proud of the progressive leadership of its distributors. Each was carefully selected for his outstanding knowledge of decorative trims and his grasp of the problems in the moulding field. Trimedge Distributors are located in most metropolitan centers throughout the U. S. Consult your local telephone directory for the Trimedge representative in your area.
NEVAMAR not only assures quality construction with enduring, colorful beauty, it also saves time and labor—factors of prime importance in any building or remodeling operation. For NEVAMAR is easy to use and is practically immune to abuse. It is a maintenance-free surface that never needs painting or refinishing. It is suitable for every type of wall surface as well as built-in fixtures. Its versatility, variety of colors and wide range of patterns afford endless possibilities for building distinctive interiors. Its performance has been proven in the home and in commercial applications. Get all the facts that every master builder should have about NEVAMAR.

Write For This Booklet
In actual full-color photographs, you'll see many of the applications to which NEVAMAR is suited. It's yours for the asking.

NEVAMAR high-pressure laminates conform to NEMA specifications.

SOLE DISTRIBUTORS: THE NEVAMAR COMPANY, BALTIMORE, MARYLAND

The NATIONAL Plastic Products Company

Manufacturers of Nevamar High-Pressure Laminates • SARAN FILAMENTS • Wynene Molded Products

ODENTON, MARYLAND • NEW YORK, NEW YORK • LOS ANGELES, CALIFORNIA
It's easier to sell a house that has a heat-circulating Heatilator fireplace!

Says: H. F. Redinger, Prominent Erie, Pa. Builder

A Heatilator® Fireplace circulates heat to every corner of the living room of this charming Erie, Pa. house, built by Mr. Redinger.

Mr. Redinger's a wise builder. He knows people like fireplaces...not just for show, but for comfort! So he gives his customers genuine Heatilator Fireplaces that circulate heat instead of wasting it up the chimney. He's found that the famous Heatilator name helps close house sales faster.

Smokeless...Troublefree. The Heatilator unit is a heavy-gauge steel form, complete from floor to flue, around which any style fireplace can easily be built. It assures correct construction, and eliminates smoking. It draws in air at floor level, heats it and circulates it to every corner of the room. A Heatilator Fireplace gives all the heat necessary on cool spring and fall days, cuts dollars from your customer's heating bill. People know the Heatilator name...it's been nationally advertised for 24 years.

Add little to cost. You can specify genuine Heatilator Fireplace and yet add little to the cost of the completed fireplace. It provides all the vital parts...saves the cost of a separate damper, firebrick, and masonry otherwise required...and on most jobs reduces time and labor expenses.

Write today for complete specifications. Heatilator Fireplaces are sold by all leading building material dealers. Accept no substitute. Look for the name Heatilator on the dome and on the damper handle. Heatilator, Inc., 942 E. Brighton Ave., Syracuse 5, N.Y.

Heatilator is the registered trademark of Heatilator, Inc.

Heatilator American Heating Fireplace

Sells Houses FASTER!

February 1951

Typical of many Heatilator installations throughout the country is this beautiful ranch-style fireplace.
"FLAWLESS, dependable and satisfactory in every way" conservatively describes all National Cabinet Latches and Pulls. EVERY item in the National line of Hardware has some outstanding quality or feature which makes it a favorite with Builders and insures its enduring service to the owner. We invite you to join our many friends who continue to patronize us in our 50th year in business.

National Manufacturing Co.
A NATIONAL HANGER FOR every TYPE OF DOOR