HOUSING FOR THE OVER-65 is looming up as a challenging new market for private builders
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NAHB LEADS FIGHT ON SLUMS
Offers organizational program to cities who wish to be rid of slums - - - Pages 88-96

FACTS ABOUT SMALL PIPE WARM-AIR HEATING UNITS
By Prof. Konzo - - Page 124

COMPANY BUILDS FOR FAMILY NEEDS — Page 74
NuTone "DRESS-UPS"
Will Sell Your Homes FASTER in 1954!

You'll get a bigger share of the New Home Market in your area... if you will "DRESS UP" your new 1954 homes with all 3 NuTone products. These modern conveniences make any home more attractive—especially to women. The cost is low... for only $100 or less at list price you can add all 3 NuTone Products... to help sell your homes faster... A NuTone Kitchen Fan, to get rid of cooking odors and grease before they can spread through the entire house. A NuTone Door Chime, for a friendly musical welcome at the front door. A NuTone Ceiling Heater, for a SAFE, "Toasty-Warm" Bathroom.

"CHEERFUL EARRFUL" AT FRONT DOOR
Illustrated at top is NuTone's Model No. K-23 Deluxe Chime. WALNUT Cover, Satin Brass Tubes, 2 notes for front door, 1 rear. $7.95 list.

At bottom is NuTone's newest RECESSED Door Chime and Clock—Model No. K-35. Modern simplicity in a RECESSED Door Chime plus KITCHEN CLOCK... both operate from 16-V Transformer, 2 notes for front door, 1 for rear. $19.95 list. Can be recessed or surface mounted.

Choose from 17 Recessed or Surface Mounted NuTone Door Chimes. Styled for Modern, Ranch-type, and Colonial homes. $4.95 to $89.95 list.

CLEAN, FRESH AIR IN THE KITCHEN
Illustrated at top is NuTone's Model No. 831 Kitchen Fan—for ceiling or wall installation. 8" pressure type blade. "SNAP-IN" motor and blade assembly. One-piece removable grille. $28.50 list.

At bottom is NuTone's Model No. 870 Twin Blower Kitchen Fan... for installation in ceiling or inside kitchen cabinets over stove. Easy to install—SPRING TENSION MOUNTING—avoids costly service problems. Patented grille and "SNAP-IN" assembly. Easy to clean. "PLUG-IN" motor guaranteed 5 years. $38.50 list.

NuTone offers 9 basic Wall and Ceiling kitchen fans, 8" or 10"... in White or Bright mirror finish. $24.50 to $39.50 list.

A "TOASTY-WARM" BATHROOM
Illustrated at top is NuTone's Model No. 903 famous HEAT-A-LITE. The world's SAFEST! No danger of shocks or burns because it's built into the CEILING! It's an Electric Ceiling Heater, and Air Circulator, plus Light. Choice of 4 models in White and Chrome. $49.95 to $67.95 list. 1475 or 1800 watts.

At bottom is NuTone's Model No. 920 RADIANT Electric Ceiling Heater. INSTANT HEAT that warms all around the body—not just one side... makes wall type heaters old-fashioned. U.L. listed because of EXCLUSIVE SAFETY COOLING SYSTEM. $29.95 list.

FREE Send for color catalog and installation data. Write NuTone, Inc., Dept. AB-11, Cincinnati 27, Ohio.
1 NEW Fenestra® RESIDENTIAL PROJECTED WINDOWS

These are "rain-shedding" windows! The projecting vents permit draft-free ventilation in any weather and protect walls and furnishings from rain.

The graceful, horizontal lines of these new Fenestra Projected Steel Windows add to the long, low, streamlined look of your homes. They are easily installed—come complete with casings (all standard Fenestra Casement fittings can be used, such as metal trim, mullions, fins, etc.). And they are available Super Hot-Dip Galvanized so painting is unnecessary! Fenestra Metal Screens go on quickly and easily from inside.

For complete details on these new windows, or on Fenestra Casements, Basement Windows, Swing Doors or Sliding Closet Doors, call your local Fenestra Representative (listed in the yellow pages of principal city phone books). Or write Detroit Steel Products Company, Department AB-11, 2260 East Grand Blvd., Detroit 11, Michigan.

2 NEW Fenestra® WINDOWWALLS

This is a "big-view" window. You get more glass area (more light and view) because the steel frame is strong and rigid without being bulky. You get controlled ventilation through awning-type ventilators even in downpouring rain. Designed so that Fenestra Metal Screens slip on from inside the room. The new Fenestra WindoWall will also take ½" insulating (double-paned) glass.

Fenestra® RESIDENTIAL STEEL WINDOWS

- WINDOWS - HARDWARE - CASINGS - SCREENS - STORM SASH -

NOVEMBER 1953
The 18,000,000 Kwikset Locksets placed in trouble-free service since 1946 are a testimonial to the acceptance of this policy.

KWIKSET sells on a strict one-price basis to all its customers.

KWIKSET continues its established policy of protection to its customers against price changes.

KWIKSET products are supported by vigorous national advertising & merchandising.

KWIKSET sells only to selected, recognized hardware jobbers and contract hardware distributors.

KWIKSET maintains a constant program for the improvement of present products and the development of new ones.

KWIKSET Locksets are precision manufactured and unconditionally guaranteed.
ON THE COVER—Contemporary design versus the conventional ranch-type. Which do buyers prefer? One Chicago firm found their customers chose the conventional four-to-one when given a choice. See story page 42.

Another Chicago firm is finding ready acceptance of their development of contemporary houses (photo upper right) which builders describe as "modern ranch with a California touch, built with Chicago weather in mind." We liked the house so well we made it our Blueprint Feature and show it in color on pages 34-36.

Photo lower right shows the house we were talking about last month in our story "How to Build in Winter." This month we show you the house on pages 74-75. Its design is based on a study of housing likes and dislikes of people who make Michigan's northern peninsula their home.

features

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The KING of them all...

It's the NEW model 5-30

HOMELITE 5.5 Brake hp

One Man Chain Saw

- More Power
- Faster Cutting
- Easy Handling
- Low Maintenance

30 pounds—5.5 Brake horsepower

Here is the saw for the man who wants extra, dependable power for clearing wooded areas or cutting piling and heavy timber. It's the saw that gives you more power per pound than any other one man chain saw on the market.

Pick it up and handle it. You'll be amazed at its light and balanced weight. Pull the starter and see how easily and quickly it starts. But most important, let it get its teeth in a tree and see how lightning fast it cuts. Watch this powerful Homelite purr through a 20-inch trunk in as little as 20 seconds. See how quickly and easily it brings down timber 4 feet or more in diameter.

Designed and built by Homelite ... manufacturers of outstanding gasoline-engine-driven units for more than 30 years ... this new Homelite Model 5-30 has everything you want in a chain saw: Automatic clutch, all angle carburetion, positive chain lubrication, quick starting, weatherproof performance, rugged and simple design and money-saving dependability for which Homelite has been famous for generations.

Manufacturers of Homelite
Carryable Pumps — Generators
Blowers — Chain Saws

Homelite Corporation
511 Riverdale Avenue • Port Chester, N.Y.

Canadian Distributors: Terry Machinery Co., Ltd., Toronto, Montreal, Vancouver, Quebec.
What About Remodeling?

SOME home builders incline to the view that a dollar spent for remodeling is a dollar that never will be spent for a new home. For that reason they see a concerted drive to remodel and rehabilitate older houses as a competitive threat to the sale of their new houses.

We do not share that thinking. On the contrary, we believe that, in the long run, every action taken to improve the general housing standard stimulates a consciousness of the desirability of ever better housing in the public mind, and actually increases the demand for new houses.

Has anyone ever heard of a used automobile owner whose great goal was not the ownership of a new car? There may be a few scattered exceptions, but the answer to that question is overwhelmingly in the negative. The reason is that the automobile industry, far from discouraging the ownership of new cars, has used every possible merchandising device to make it possible for everyone to own some kind of automobile. This is trade-in selling at its best, with retirement and demolition of the worn out car as the ultimate goal, and automatic trade-up, beginning at the bottom, assured as a continuous process.

The basic function of the automobile industry is to manufacture and sell new automobiles, just as the basic function of the home building industry is to build and sell new houses. That being true, why should not stimulation of rehabilitating and selling houses have the same effect on the market for new houses as a parallel policy in the automotive industry has had on the market for new cars? It will be argued that there is a difference—that the home building industry cannot afford to scrap old houses and sacrifice real values in even some of the oldest.

That argument cannot be denied totally. Some of the oldest houses in the country still have high value. But in many parts of this now mature nation great numbers of houses are so obsolescent and so debilitated that the only reason many of them have any value is because the desirability of new and modern housing has not been sold aggressively enough.

The goal of this industry should be to bend every effort to sell every family some kind of habitable house with as much modern livability as the purchaser's pocketbook can stand. Once he gets the thrill of ownership, his desire to graduate finally to the purchase of a new house will parallel his desire with respect to a new automobile, and the hopelessly worn out or obsolete house will liquidate its own value through the same series of mark-downs that the public cheerfully accepts in its automobile ownership.

The only explanation of roadside automobile graveyards for "dead" cars is the policy of selling everybody some kind of car, and thus instilling the desire to own a later model, and finally the latest model. Graveyards for "dead" houses are both economically and socially sound. An aggressive program of remodeling and trade-in selling will hasten the appearance of such graveyards and push the demand for new houses to unprecedented levels.
TRENDS in the Building Field

survey shows increase in construction in 1954

It is probable that 11 per cent more residential units will be built in 1954 than in 1953, according to the preliminary results of a nationwide survey of builders being tabulated by American Builder. Prospects for a continuation of good business in commercial and institutional building and remodeling are also promising. Farm building has slipped from its high volume of previous years and may decrease still further in 1954.

Although the over-all building picture for 1954, as revealed by the survey, is favorable, the comments of builders show the present shortage of mortgage money, the effects of drought in some areas and a shortage of skilled mechanics in others.

A Maryland Builder writes, "The building business started off with a bang in early 1953 but came to a slow walk in June and July when building money became hard to get, but increased again in September. Outlook seems fair for the next few months."

A New York subscriber says, "Banks here lend $9,300 on a $14,000 job. Who has the $4,700 cash? If we could sell houses at $1,000 down and $75 monthly, we would sell one hundred tomorrow."

A Texas subscriber says, "Building as a whole has dropped at least 60 per cent here due to a shortage of loans. GI loans have cut out 100 per cent last six months. FHA about 75 per cent. Most homes being built are for middle class home owners who require about a 50 per cent loan and are good risks."

A New Jersey builder says, "We could do a lot of work but due to a terrific shortage of good mechanics and with no apprentices to learn the trades, the amount of work that can be done is limited."

A subscriber from California writes, "Financing market poor which reacts on sales. General opinion here is that costs are due for a downward adjustment. But how—with wages still on the increase?"

A Connecticut builder proposes a solution: "We need the low down payment plus a thirty year or longer mortgage. Public reaction to our houses has been wonderful, however, financing is the difference between maintaining present volume and decreasing it."

From West Texas, "This area has been hit very hard by the drought. Farmers and ranch men are broke. Even if we get good rains this fall and winter, it will be two years before business will return to normal."

NON-RESIDENTIAL BUILDING: The survey also revealed a wide range of non-residential building being done by American Builder readers—from chicken houses to service stations to public buildings, schools and churches. More than half of the subscribers put up some non-residential structures. This year such special service buildings as a college dormitory, an airplane hangar and a Salvation Army house were reported.

REMODELING: Five out of eight subscribers remodeling. For some of them, remodeling accounts for 100 per cent of their business. These builders specialized in remodeling kitchens and baths; attic flats and additions, and stores. Others find remodeling between new house jobs keeps their crews busy.

POWER EQUIPMENT is one of the principal factors that has reduced man-hours of labor on new construction and has thus reduced the relative cost of a new house. (See New House Costs Less Than in 1913, American Builder, page 6, August, 1953).

The survey shows that a group of fifty builders, whose names were selected at random, own 125 portable electric saws, 32 radial saws, 6 masonry saws, and 6 chain saws; 65 sanders, 29 routers and groovers, 43 jointers, and 30 concrete mixers. Three of the builders own concrete forms, three own plaster mixers. Vibrators are owned by three, tampers by three, stud drivers by five, and portable electric generators by four.

They own 19 pumps, 3 compressors, 11 asbestos shingle cutters, 9 hoists and elevators, and 54 trucks. Two own tractors-crawler and four own tractors-wheel. Tractor shovels attachments owned include three bulldozer blades, two lift forks, one trench hoe and one crane hook. One of the fifty owns a motor scraper.

THE OPTIMISTIC PREDICTION of more residential building in 1954 than in 1953 is in the face of a slight decline in the last few months in new, non-farm dwelling units started in the United States as estimated by the Bureau of Labor Statistics. Since April, the decrease has amounted to 33,000 dwelling units. The shortage of mortgage money is no doubt responsible.

Builders are presently being assured that the mortgage money situation will be eased shortly. The market should thereafter expand to make 1954 another banner building year.
Every day millions of Acme wheels slide over millions of feet of Acme track.

Satisfied homeowners put Acme sliding door hardware to this rigid mileage test each day—a true test of the highest quality, competitively priced hardware on the market today. Unconditionally guaranteed for the life of the building.
Covered-up pipes and built-in telephone raceways are two concessions to people's ideas about how rooms should look. More and more clients want their telephone wires kept behind the scenes.

You can protect the beauty of carefully finished interiors by making telephone outlets and raceways standard parts of the homes you build. Doing it during construction saves misunderstanding and expense later on. And it adds an important selling point—built-in telephone facilities.

Your Bell Telephone Company will be glad to help you in planning economical raceway installations. Just call your nearest Business Office.
A good "Turn" for your customers and for you

The NEW Russwin "Homegard" Economy Line of Locks and Latches offers several constructional features of higher-priced lines, including concealed screws under roses; temper-proof outside rose; Russwin ball bearing, five pin tumbler cylinder. Available in brass, bronze, and aluminum... five functions.

...specify Russwin "All-Star" Builders' Hardware throughout

You know... but your customers may not... how much good builders' hardware means to a well-run home. When you install or recommend Russwin "All-Star" Builders' Hardware throughout... you're doing a good turn for your customers. It offers them lasting style, security, and service that they often take for granted.

You're doing yourself a good turn, too, if you consider all the angles of builders' hardware. With the Russwin "All-Star" Line, here's what you get... a choice of two new lock lines to meet varying budgets... easiest type of locks to install, attractive-looking locks, finishing hardware that is uniform in quality, size, finish, packaging, and price. Get all the details from your Russwin dealer. Russell & Erwin Division, The American Hardware Corp., New Britain, Conn.

FOR EVERY TYPE AND SIZE OF HOME

A choice of two lock lines

The "Stilemanor"... offering twenty advance-design features, eight of which are exclusive including a ball bearing latch retractor. Available in brass, bronze, and aluminum. All popular functions.

The "Homegard"... in a class by itself for an economy line. It carries the Russwin name... a symbol of high quality standards for more than a century.

*Patents Applied for

Precision-built screen-storm doorware. Popular-priced, air-controlled screen door closer... easy to install. Made of wrought tubing with wrought brackets... adjustable tension. Liquid type surface door closer... a real feature for fine homes. Easy-operating, long-wearing screen door catches, mortise and rim type.

Pressure-Cast Aluminum Trim Hardware. Rust-proof... smooth finish... lightweight... low-cost. Seven popular items. Two finishes.

Miscellaneous Shelf Hardware. A complete simplified line including night latches, floor-hinges, and casement sash hardware.
ON and OFF the RECORD

HAROLD MORIARTY, popular and efficient secretary of the St. Paul Home Builders Association, recently celebrated his first anniversary as the helmsman of the St. Paul chapter. The occasion was the first monthly meeting of the season, and the kick-off for National Home Week in the city.

MORIARTY has, to say the least, breathed new life into the association. The National Home Week celebration this year will stand up with the best, and local newspaper cooperation in the event has reached a level not before approached. Hats off to Moriarty for a great first year, and best wishes for many more in the same spot.

IT'S HEARTENING to see men like Moriarty come into the industry with the intention of staying and making a career of association work. His appearance gives the Twin Cities of Minnesota two of the best association men in the country.

THE REDOUTABLE Larry Nelson of Minneapolis, of course, is the other.

A BIT OF HOLLYWOOD was borrowed by the St. Paul association to promote NHL. On the day of the kick-off meeting a cavalcade of automobiles led by a motorcycle escort toured downtown St. Paul, then visited the houses to be demonstrated.

THE FOUR LEAD CARS in the cavalcade carried large photographs of American Builder's Ed Gavin, and, in large letters, proclaimed him "Father of National Home Week." Gavin, who addressed the evening meeting, was a passenger in the car.

SPEAKING OF TWIN cities, Kenosha and Racine, Wisconsin, although separated by about 12 miles, are twins in the sense that their home builders are members of the Racine-Kenosha Home Builders Association.

THEIR RECENT NHL kick-off meeting, addressed by Manny Spiegel and John Dickerman, was a triumph in two-city cooperation. A packed hall heard two of the best speeches of the year. A lot of credit is due Dick Hansen and other builders from both cities for the health of this unique association.

UNDER THE HEAD of thrilling experiences should come a day recently spent in Grand Rapids judging entries in the city's remodeling contest, a big feature of the NHL program.

A L L E D CONSTRUCTION COUNCIL of Grand Rapids, of which the local NAHB chapter is a member, held its second annual remodeling contest this year.

FIRST AWARD IS $500; second is $250, and there were five $50 awards.

MORE THAN 60 entries were received. They ranged all the way from installing a central heating plant in an old house to enlarging and refacing a 40-year-old house.

ONE ENTRY consisted of adding a large general purpose room, and a new bathroom with tub, lavatory, and stool. Prior to remodeling, only facilities were a basement shower, the kitchen sink for a lavatory, and a stool located in the entryway to the kitchen. Family is living in a new world now, and the incentive was the contest.

ANOTHER ENTRY was a beautifully planned and executed basement recreation room. This was a do-it-yourself.

IMPROVED REAL ESTATE value was dramatically pointed up through the remodeling of an old house in a block of declining, but easily salvageable houses. Incentive was two other remodeling jobs done in the same block last year. Neighbors were curious and envious. Undoubtedly every house in the block will be remodeled.

(Continued on page 12)
Screen and combination door locks*

Exterior trim solid brass. Interior parts steel. Locking Rose inside. Installation is simple...in a few minutes your job is done.

**New Safety Strike** has well in lip to keep door latched even though not fully closed.

A complete line of Dexter locks is available to you—and each carries the famous Dexter Lifetime Guarantee.

- Entrance Locks
- Grade and Rear Door Locks
- Auxiliary Locks
- Screen and Combination Door Locks
- Bathroom and Bedroom Locks
- Passage Sets
- Closet Sets

DEXTER LOCK COMPANY
GRAND RAPIDS, MICHIGAN

A SUBSIDIARY OF NATIONAL BRASS COMPANY

In Canada: Dexter Lock Canada Ltd., Guelph, Ontario
In Mexico: Dexter Locks, Plata Elegante, S.A. de C.V.
Manterrey, Nuevo Leon

*WORLD'S LARGEST MANUFACTURER OF LOCKS FOR WOOD AND METAL COMBINATION DOOR*
Home Buyers Are Keenly Interested In

CAST IRON PIPE

Durability For House Sewers And Waste Pipe Lines

Home buyers dread the risk of a plumbing drainage failure. To avoid this obnoxious inconvenience and unnecessary expense, they equip their houses with service-proven Cast Iron waste pipe lines and house sewers.

Cast Iron Pipe lasts for centuries. Authentic records show Cast Iron Pipe to be in good condition after centuries of service —over 100 years in this country, over 300 years in Europe. The durability, dependability and economy of Cast Iron is no theory. It's a proven fact.

For new construction or for replacing failed substitute materials, use Cast Iron Soil Pipe — the only time-tested material for plumbing drainage which has the durability that lasts for centuries.

Woodward Iron Company does not manufacture pipe, but we supply leading Cast Iron Pipe foundries with high grade foundry pig iron from which pipe is made.

### BASIC ADVANTAGES OF CAST IRON SOIL PIPE

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<td>RUGGED METALLIC STRENGTH</td>
<td>ZERO MOISTURE ABSORPTION</td>
<td>NO COMPLICATED TRENCHING</td>
<td>APPROVED Cast Iron is the only plumbing drainage material approved by ALL national, state, and city building codes for use from “street to roof.”</td>
<td>LEAKPROOF JOINTS Cast Iron gives permanent tightness of joints with flexibility. Eliminates wall damage and clogging by tree roots.</td>
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Woodward Iron Company

WOODWARD, ALABAMA

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On and Off the Record

(Continued from page 10)

DO-IT-YOURSELF is not all it is cracked up to be. Left to his own devices, many a home owner of an old property, even though he may be an expert craftsman, can spend a lot of time and a lot of money, only to find when he finishes his job that he should have done something else.

THIS WAS OBVIOUS in some entries in the Grand Rapids contest.

FOR INSTANCE, one owner re-sided his own house. The workmanship was professional. No craftsman could have done it better. But, he should not have re-sided the house first. There were dilapidated front and side porches and defective chimneys.

THE OWNER should have sought professional guidance before he did anything. A builder, a service department in the builders' association or a retail lumber dealer could have set up a program for the owner to follow over a period of months or years.

WHEN THE PORCHES fall off, as they will in a few years, the siding will have to be patched. And the chimneys should have been repaired first.

SUGGESTION: A remodeling advisor in every home builders' association and in every retail lumber yard. Advertise. “Don't remodel until you consult us. It costs you nothing, can save you dollars and heartaches, and preserve your property value. Get professional advice before you begin, particularly if you are going to do the work yourself.”

THEN THERE IS the fellow who knows nothing about the use of tools, thinks that because his neighbor did a good job he can do as well.

EXAMPLE: The amateur craftsman who purchased materials for remodeling his kitchen. He got good materials and good tools, but knew nothing about either.

RESULT: A botched job, and a waste of time, material and money. Nothing added to the value of the house. A purchaser would have to rip out all of the work and have it done over.

(Continued on page 14)
DON'T INSTALL ANY MORE LOCKS!

UNTIL YOU'VE SEEN THE GREAT NEW LOW COST CORBIN Guardian

NO MATTER WHAT lockset you're installing now, you owe it to yourself and your customers to see the new Corbin Guardian locks. These locks are unbeatable for economy and ease of installation... unmatched in their price class for beauty, for trouble-free operation.

We know your time is valuable. But... it's worth your while to visit your Corbin dealer and see these new Corbin Guardian locks. We firmly believe they are the best value in the low price class... and we back up that statement with a guarantee of our workmanship.

NO OTHER LOW-COST LOCK offers so many QUALITY features!

- Solid Brass, Bronze or Aluminum trim
- Handsome from either side... no screws on knobs or roses
- Fully reversible to fit any door
- Fool-proof, self-aligning two-hole installation
- Can be keyed alike or master-keyed
- Fits all doors 1¼" to 1¾" thick

© Corbin also makes DEFENDER standard duty cylindrical locks, heavy duty cylindrical locks, unit locks, mortise locks and a complete line of builders' hardware

NOVEMBER 1953

P. & F. CORBIN Division
The American Hardware Corporation
New Britain, Connecticut
CURE: With an advisory service, talk the complete amateur out of the idea of doing it himself. Cost of professional labor will be much less than added value of the property.

GENERALLY, the entries in the Grand Rapids contest revealed on first glance those which were done professionally and those which were “do-it-yourself.”

OUTSTANDING exception was the basement recreation room by a do-it-yourself owner who is not a professional craftsman.

GRAND RAPIDS contest is doing more to stimulate pride in improved houses than any action this magazine knows of.

AND, IN ADDITION to the remodeling contest, Grand Rapids home builders showed some 90 new houses during National Home Week. Local newspaper ran largest special home section in its history.


THE BOOK shows how many businessmen and concerns have used tax losses to acquire profitable businesses.

ALBERT M. COLE, HHFA’s new administrator, made a six-city survey to get grass-roots ideas and suggestions for a program of housing legislation he intends to propose. He sought the views of both the public and home builders.

KOHLER CO. was vindicated in U.S. District Court in a suit charging violation of anti-trust laws. Judge in the case said, “The government has failed to prove its case. The evidence fails to establish the fact that Kohler at any time or on any occasion has refused to sell any of the fourteen types of fixtures in issue without fittings, if so ordered by a distributor. I conclude that the defendant has not violated either Section 1 of the Sherman Act or Section 3 of the Clayton Act and judgment may be entered in favor of the defendant.”
If your local dealer can't supply you, send us his name and address together with your request for free literature.

Lockwood is even-textured, fine grained oak grown in the Ozark Mountains. This handsome flooring is kiln-dried in compartment, cross circulation, fan-type kilns, the same as used by manufacturers of fine furniture, where gluing is necessary. Careful tempering and precision milling further assure Lockwood's lasting beauty.

"I have personally selected Lockwood Oak Flooring for more than 3,000 homes, for we have found that Lockwood's nail-groove feature, precision-milling, and many other fine qualities enable us to save as high as 25% in laying and finishing costs. And Lockwood's beauty helps sell homes ON SIGHT!"

Virgil Hendricks, Pres.
MIDWEST FLOORING CO.
ST. LOUIS, MO.
Now a Single source for plumbing fixtures fills all your needs

1 Choice of all materials!  
2 Full color flexibility!  
3 One source for all!

Now, with Eljer, you can get highest quality formed steel or cast-iron bathtubs ... laundry tubs ... kitchen sinks! You can choose cast-iron, steel or china lavatories! You get a complete line of fine vitreous-china toilets.

All Eljer bathroom fixtures are color-matched. For example, you can use steel lavatory, cast-iron bathtub and china toilet, all in the same bathroom—and have all three match perfectly in any Eljer color!

Now you can turn plumbing fixtures into a powerful sales and merchandising feature. Use the theme, “ELJER quality plumbing fixtures throughout!” Eljer quality is well known, nationally advertised. It can work for you.

CAST IRON · FORMED STEEL · VITREOUS CHINA · BRASS GOODS

The only name you need to know in plumbing fixtures

Ask your plumbing contractor for the profitable details on the great new Eljer opportunity for builders!
Cole Warns Lenders: Provide Credit or Else

The nation's bankers were handed a "very serious reminder" recently from HHFA Administrator Albert M. Cole: Either provide mortgage credit to support a "reasonably high" volume of home construction in 1954 or the government will take "direct action" to get houses built.

Cole's warning came in a speech which he delivered at the annual convention of the American Bankers Association in Washington, D.C. His remarks reflected new concern over the shortage of mortgage funds.

"On this somewhat sober note," Cole said, "I suggest in sincere can-..." The text is cut off after "dor that the bankers weigh carefully..."

The housing administrator called on homebuilders and bankers to exercise "real statesmanship" to maintain a sound and stable housing economy.

HHFA is in "full accord" with the "sound money" policy of the government, Cole declared. He said the housing agency has acted to bring its programs in line with this policy—FHA and VA interest rates have been increased, and discounts have been permitted to bring yields into a "better competitive position." In addition, FNMA has discontinued over-the-counter purchases.

"It was hoped that actions of this type would enable the mortgage market to operate more freely and with less government intervention," he continued. "A readjustment period was expected, but frankly it has been more of a readjustment than was contemplated either in or out of government."

Cole noted that "many housers and many bankers" are expressing concern about the present situation. Among the things causing adverse comment, he said, have been the decline in housing starts and the "marked decline" in applications for FHA insurance.

"The basic problem," he continued, "is probably this—will there be an adequate supply of funds from all sources to support a sound building program next year? There are some indications that there may be some difficulty on this score."

This brought the housing administrator to the point where he handed out his warning: "I submit to you the very serious reminder that if we are unable to maintain a reasonably high continuing volume of home production—which means an adequate continuing flow of mortgage credit—we may be required to resort to some means of assistance to avoid unnecessary wrenches to our entire economy."

Cole's speech to the bankers was delivered September 21, and it promptly drew praise from the National Association of Home Builders. NAHB interpreted the speech as a "clear statement of the government's intention to maintain a reasonably high continuing volume of home production." The association commended Cole for his "frank appraisal of this serious situation."

Spiegel Cites "Hopeful" Signs in Credit Picture

Builders caught short on mortgage money in recent months are beginning to take new hope: There are signs of easier days ahead.

Emanuel M. Spiegel, president of the National Association of Home Builders, has advised his organization of three developments he considers "hopeful."

Most important of these, according to Spiegel, is the "public acknowledgment" by HHFA Administrator Cole that a strong home building industry is essential, and that the government has a responsibility for its continued vigor.

Elsewhere, Spiegel pointed to "re-..." The text is cut off after "good start."

NOVEMBER 1953
MODERN homes need MODERN windows

Good contemporary homes must be both beautiful and functional. The primary functions of windows are to let in light and to permit a free choice between ventilation or weather protection. No windows are more beautiful or more functional than R-O-Ws. Only R-O-Ws have the patented R-O-W feature.

See your local lumber dealer or write

R·O·W SALES COMPANY 1342-66 ACADEMY AVENUE + FERNDALE 20, MICHIGAN
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<th>State</th>
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<td>Binghamton, New York</td>
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<td>THE WHITMER-JACKSON CO., INC.</td>
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<td>Calgary, Alberta, Canada</td>
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Nothing is more precious to a quality builder than his reputation. Community respect is earned by good workmanship and quality materials—products like R-O-Ws Removable Wood Windows. R-O-Ws have the charm of carefully milled wood, plus the lift-out feature and pressure-fit construction.

See your local lumber dealer or write

R-O-W SALES COMPANY
1342 - 66 ACADEMY AVENUE • FERNDALE 20, MICHIGAN

NOVEMBER 1953
Black & Decker Utility Saws

"increase job efficiency up to 20%"

Says Mr. Milford M. Ward, of Clarence Ward Construction Co., Fresno, California

THIS Fresno builder uses fifteen Black & Decker Utility Saws on as many as ten projects at once. How do they like them? Listen to Mr. Ward: "The B&D Saw is a lighter, faster saw with more power ... increases job efficiency up to 20%. The automatic telescopic guard makes it a safer tool to use. Our B&D Saws have been used for three years and they stand up under constant steady use every working day of the year."

Mr. Ward's remarks are typical of Black & Decker users. That's not surprising! Because B&D Saws do stand up under heavy work loads, they do a better job ... because they're powered by a B&D-built universal motor. And Black & Decker Utility Saws feature light weight and perfect balance to cut operator fatigue; telescoping blade guard and instant-release switch for maximum safety; ball-bearings, heat-treated alloy steel gears and strong, aluminum housings for long life.

See for yourself. For a free demonstration, visit your favorite B&D Utility dealer. Write today for a free catalog to: The Black & Decker Mfg. Co., Dept H663, Towson 4, Md.

B&D Utility 8" Saw cuts to 2\(\frac{1}{2}\)" deep, bevel cuts to 45°

Choose from complete line—sizes 6" to 9"

Black & Decker

PORTABLE ELECTRIC TOOLS
President Eisenhower has appointed a 22-man advisory committee on housing "to advise the President what role the federal government should take in meeting the nation's housing needs."

Housing Administrator Albert M. Cole heads the committee, which is designated the "Advisory Committee on Government Housing Policies and Programs." At its first meeting on September 30, the committee set a January 1 deadline for making its first report to the President.

The 22-man group has divided into five subcommittees, and each subcommittee will devote its time to a particular "study area."

While the committee may later see fit to broaden its activity, the present "study areas" are as follows: (1) Housing Credit Facilities; (2) Federal Housing Administration and Veterans Administration Housing Programs and Operations; (3) Urban Redevelopment, Rehabilitation and Conservation; (4) Housing for Low-Income Families, and (5) Organization of Federal Housing Activities in the Federal Government.

When the President appointed the new committee he said he expected the group to develop a series of recommendations "which will clearly identify the proper role of the federal government in this field and outline more economical and effective means of improving the housing conditions of our people."

Findings of the committee are expected to see light in the form of legislative recommendations to Congress early next year.

Following the initial meeting of the committee on September 30, Cole reported that material gathered during his summer-long "shirt-sleeve" conferences would be made available to the new group. He said the fact that most members of the advisory committee are "well versed and knowledgeable in the fields to be re-
Numetal Weather Strip
for Windows and Doors

FOR WINDOWS
Packaged for all standard 28", 30", 32" and 36" double hung windows, complete with nails and instructions. Quickly and easily installed by anyone. Makes a complete weather-tight seal.

FOR DOORS
Numetal Weather Strip comes in handy sets for almost all standard doors. Available in stainless steel and felt door bottom strip—or with threshold and exposed hook. Sets come complete, ready for easy installation.

MACKLANBURG-DUNCAN CO.
OKLAHOMA CITY, OKLAHOMA
dependable...
Macklanburg-Duncan products!

**Nu-GARD Automatic**
DOOR BOTTOM & DRAFT ELIMINATOR

The perfect answer to draughty doors—inside or outside. Nu-GARD is beautiful with smart, silvery-satin finish—and easily installed, too. Packed in individual cartons in lengths 28", 32", 36", 42" and 48". May be shortened approximately 2". Year-round value stops draft-loss of heating or air conditioning.

**Nu-WAY WEATHER STRIP**

Easiest in the world to put on. Carton contains one 18-ft. roll, with nails and instructions for easy installing. Made of moth-proof, pre-shrunk colorfast wool felt and white metal. Works perfectly on most any type window, storm sash or door.

**Nu-CALK CALKING COMPOUND**
The "standard of quality" in the calking field, available in ½-pint, pint, quart, gallon, 5-gallon cans. Also in 55-gallon drums.

**Nu-Glaze GLAZING COMPOUND**
Use Nu-Glaze instead of putty—it's not oily, needs no working up, will not dry out, harden, crack or peel. Packed in cans—½-pint, pint, quart, 5 pounds, and in drums from 50 pounds to 880 pounds.

**Nu-Phalt PLASTIC ASPHALT CEMENT**
Used for sticking down shingles, setting loose floor tiles and dozens of other jobs! Comes in handy load form or in 2½ lb., 10 lb., 50 lb., and 55 gal. containers.

**CALKING SPEED LOAD COMPOUND**
The world's best calking compound in a ready-for-action load. Non-staining, always pliable, smooth even flow.

**Macklanburg-Duncan**
Products of quality—always dependable. Sold at all Hardware, Lumber and Building Supply Dealers.

**Builders**
Order now! Your order will be shipped the same day it is received. Macklanburg-Duncan products are fast sellers, nationally advertised.

**Dealers**

Macklanburg Duncan Co., Makers of Quality Building Specialties.
Cole Says Rehabilitation Can Help Take Up Slack

Rehabilitation of existing houses can take up any slack caused by a drop in new home demand, provided builders go out after the business, Albert M. Cole, HIIFA administrator, declared in a speech at the Producers Council's annual convention in Pittsburgh, Pa.

"Slum clearance and rehabilitation of existing properties has captured the imagination of virtually everyone, and it represents a good and profitable challenge to the construction industry," Cole said.

With family formations slowed, there may be "less pressure" for new houses, he continued. He said it seems like "ordinary good sense" at this time to focus on rehabilitation.

"The stage is set for an undertaking which will combine sound economic opportunities for American businessmen with sound and desirable improvement in the living standards of large numbers of our city dwellers," Cole said.

The HIIFA official said the government must help do this job. To do so, he added, some changes will be needed in FHA, including more liberal forms of mortgage insurance as well as "positive cooperative endeavors" with local communities.

Commenting on the new home market, Cole said he could see no "serious" lessening in total home production. He said young families growing up, the minority market, new family formations and an upgrading of slum areas will all contribute to the "high level of new home building."

Mayo's Life Not Always So Rough

Dorothy Shay, singing star, named "Miss National Home Week—1953" by the National Association of Home Builders, and Dottie Elder, "Miss Home Week" of Los Angeles, watch Mayor Norris Poulson signing his proclamation declaring the week of September 20-27 as National Home Week in the city of Los Angeles. (L. to r.) Dorothy Shay; Leonard A. Hardie, general chairman, National Home Week; E. Sande Sennens, president, Home Builders Institute of Los Angeles; Dottie Elder; Mayor Poulson, seated.

GI Home Loans Show Gradual Increase

Late government figures indicate an upward trend in the number of GI home loans. According to Clifford P. Allen, III, Philadelphia, president of the National Savings and Loan League, "All factors considered," Allen said, "it appears the interest rate increase to 4 1/2 per cent on GI home loans last May is beginning to take effect and to show up in the lending market tabulations."

Compilations of the Veterans Administration show August home loans exceeded 31,000, an increase of more than 5,000 over June and July. Because of the length of time required to close a loan following approval of an application before such loans are listed as loans reported closed, the increase in VA home loans has been slow in showing up on the book.

The recent increase may be attributed in part to veterans wishing to obtain the VA gratuity payment which terminated on September 1 and was granted only on loans approved and committed prior to that date.

Gavin Sparks St. Paul Builders Group Meeting

Edward G. Gavin, editor of American Builder, addressed the fall All-Industry Meeting of the St. Paul Home Builders Association in that city on September 16. Gavin was honored at an informal luncheon at the Commodore Hotel, following which a delegation of Association officers and members of the local National Home Week Committee then accompanied him for a brief inspection of the St. Paul "Parade of Homes."

The American Builder editor commented on the excellent quality of architectural design and home construction which he found in the St. Paul area. He issued a timely challenge to the home building industry to continue to be progressive in its planning and constructive in its thinking toward the attainment of the varied objectives of the local association.
Officials Hold Meeting
The 31st annual business meeting of the Pacific Coast Building Officials Conference was held in Pasadena, California, October 5-9. The conference was headed by A. C. Hoeter, building inspector of Spokane, Washington, also president. Walter Zustell, Pasadena superintendent of building, was general chairman, with Hal Colling, also of Pasadena, as co-host. Both Zustell and Colling served in a dual capacity since the former is also chairman of the Code Changes Committee and Colling the managing secretary of the Conference.

The major business of the meeting consisted of the processing of 120 suggestions for revisions to the Uniform Building Code, as used in 680 municipalities, counties and states. Conference representatives determined the acceptability of the proposed revisions.

Highlighting the program was a review of the Los Angeles method of “up-grading a City” through elimination of slums, presented by Gilbert E. Dickerman, Los Angeles superintendent of building and the first vice president of the conference.

Home Building Rate in 1953 Keeps Pace with Last Year
The rate of home building this year continues to make favorable comparison with 1952, even though new starts have been slipping slowly since last April.

In the first eight months of the year, private starts totaled 740,100, as compared with 720,200 in the same period a year ago. Public starts, meanwhile, have dropped off—from 47,300 in the first eight months of 1952, to 29,700 this year.

On a seasonally adjusted basis, private housing starts are now running below 1,000,000 a year. The August rate was 970,000.

Housing starts are calculated by the Bureau of Labor Statistics. Another yardstick of construction activity is the estimate of expenditures, prepared jointly by B.L.S. and the Department of Commerce.

Latest figures on expenditures, for September, show a slight increase over last year. For the first nine months of this year, outlays for new residential units amounted to $7.7 billion, 8 per cent more than in 1952.

Commercial construction continues to show gains. Expenditures for new stores, restaurants and garages in September were double those of September a year ago. For the first nine months as a whole the increase was 71 per cent.

Dickerman’s Column
John M. Dickerman, Executive Director, National Association of Home Builders of the United States

FHA Reorganization Spells Good News to NAHB
The impending reorganization of the Federal Housing agencies offers a real opportunity for development of a new, long-range national housing program that will sustain the tremendous growth of the home building industry. It is expected that a detailed reorganization plan will be ready by the first of the year for submission to Congress by Albert M. Cole, Administrator of the Housing and Home Finance Agency.

The reorganization conferences now underway in Washington between Cole and a Presidential Advisory Committee of 21 private citizens are of paramount importance to the entire industry. The recommendations emerging from them will have far-reaching effects upon both builders and the home-buying public.

It is obvious that Cole’s recommendations must be accompanied by proposals to Congress for an overhaul of existing federal housing laws. For this reason, in the home building industry believe now is the ideal time to develop a comprehensive housing program, one sufficiently broad to assure the continuation and volume of new home production plus a more effective means of eradicating slums and rehabilitating the nation’s huge inventory of old but structurally sound homes. Indeed, it is difficult to see how a meaningful reorganization could be undertaken except on this basis.

However, the National Association of Home Builders is firmly opposed to “change for the sake of change” in either the housing statutes or the operating setup of our Federal Housing agencies. Any attempt to revamp the operations of government in the field of housing and home finance should recognize that the remarkable development of home building during the past 15 years into a modern, mass production industry would have been impossible without “mass market” mortgage credit facilities made possible by federal legislation. It would be a tragic mistake were these fundamental accomplishments to be sacrificed in the name of “reorganization.”

Any revisions in governmental policy or in the structure and functions of the federal agencies must be examined carefully with reference to the complex nature of the home building industry and the housing needs of the public. For example, the reorganization plan should not overlook the fact that an insurance fund such as that operated by the Federal Housing Administration is essential to the modern housing industry. It enables a sound method of providing large-scale consumer financing at low downpayments and low monthly charges, without which the average man, although a sound credit risk, would have difficulty in acquiring a home.

Home builders are also hopeful that the Housing and Home Finance Agency will be streamlined and cut free from many of the operating activities thrust upon it in recent years, some of which had little to do with housing. This would enable FHA to function in its original role as the top policy-making authority over all federal housing and related financing activities.

Measures to strengthen the Veterans Administration’s housing program and bring it into closer harmony with FHA operations and to insure careful servicing of GI mortgage loans also should be basic to the reorganization plan.

Modernization of FHA Title I and II mortgage insurance provisions, as requested by NAHB in many Congressional hearings, also is expected to be part of the final reorganization recommendations. The expansion of FHA insurance on existing housing represents an unprecedented opportunity to provide quick and effective aid to the widespread slum rehabilitation programs now getting under way.

Creation of a more effective secondary mortgage market facility is, of course, uppermost in the minds of all builders because of the current shortage of mortgage capital. Legislation to restore the Federal National Mortgage Association to its original function as a sound central reserve facility, or to create a successor body that would perform the same service, can and should be enacted to avoid serious disruption of the deli- cate balanced mortgage industry.
make houses sell faster because they give visible evidence of quality construction!

What a difference Ludman Auto-Lok windows make! Houses equipped with Ludman Auto-Lok windows actually bring a higher price and sell easier — yet cost you no more to build!

You save both time and money. No costly time consuming installation adjustments are necessary. And costly call-backs are eliminated because Ludman Auto-Lok windows never need adjustment after installation.

Your houses sell faster because Ludman Auto-Lok windows add extra value home-buyers want, and are willing to pay for. Ludman Auto-Lok windows feature automatic locking . . . Floating-Seal weatherstripping . . . a self-locking device that automatically seals the window like a refrigerator when it's closed . . . Never sticks, never rattles . . . finger-tip control that's so easy to operate, a child can open or close even the largest windows with ease.

Add your savings to the plus features of Ludman Auto-Lok windows and you'll find they are the most economical windows you can use.

Try Ludman Auto-Lok Windows in your next house. See for yourself what a big difference they really will make!

Tightest closing window ever made

Ludman Auto-Lok Windows close ten times tighter than generally accepted standards . . . have the lowest air infiltration of any window model! Many beautiful window arrangements are possible using standard Auto-Lok units.

LUDMAN Corporation  NORTH MIAMI, FLORIDA

LUDMAN LEADS THE WORLD IN WINDOW ENGINEERING
Firm Commitments for Builders Making Repairs on Trade-Ins

Recent changes in Federal Housing Administration procedures now permit the issuance of firm commitments to builders who plan to make major repairs and alterations of existing one- or two-family houses acquired through exchange and after remodeling intended for sale to eligible mortgagees. Builders must furnish evidence that they will actively try to complete the sales transaction so that insurance of a permanent mortgage pursuant to a firm commitment in the builder's favor will not be required on the trade-in property. However, the proposed improvements must be major, not simply repair work resulting from normal usage or deferred maintenance.

Firm commitments will be issued when operative builders are not able to obtain adequate temporary financing with conditional commitments to cover the cost of proposed remodeling, the cost of obtaining the loan and the refinancing of existing indebtedness.

The mortgage will be limited to a maximum term of 20 years and an amount not exceeding the lower of the following:

1. Eighty per cent of the first $7,000 of valuation, plus 60 per cent of the valuation in excess of $7,000, with a maximum mortgage amount not in excess of $10,400 on a single-family dwelling.
2. An amount equal to the existing mortgage on the trade-in property, plus cost of proposed repairs and cost of financing, less any cash received by the builder in the trade.

The recent FHA revisions also provide for a "dual commitment" in which the amount of the loan for the builder-mortgager is indicated, with an additional provision showing the amount of loan available to an eligible owner-occupant.

Hardwood Plywood Institute Adopts Identification Label

A labeling system designed to permit easy identification of hardwood plywood produced by American manufacturers is now in operation, the Hardwood Plywood Institute, Chicago, has announced. Under this plan, plywood panel marketed by participating mills will bear a stamped label attesting to its quality and origin.

The trade mark is a green-black circle on which appear the letters "hpi." Rimming the circumference are the words "Certified American Quality—Hardwood Plywood Institute." Where practical, the trade mark will be carried on the back of a panel, either as a rubber stamp or a pasted-on label. When it is not desirable to mark either face, a narrow stamp will be placed on a panel end.

The labeling device is a step in the Institute's new trade promotion program, calling for the expenditure of half a million dollars in two years to further the uses of American-made hardwood plywood, according to Richard D. Behm, the program's director.

The Hardwood Plywood Institute includes Southern Plywood Manufacturers' Association and Canadian mills.

NRLDA Merchandising Plan Gets Manufacturers' Support

Manufacturers of building products have shown "gratifying interest" in a proposal for coordinating their advertising and promotion with that of local lumber dealers.

The National Retail Lumber Dealers Association is backing such a plan. The association has revealed that several manufacturers already have agreed to participate, and others have expressed "keen interest."

The plan calls for dealer-manufacturer coordination four times a year—February, May, August and October. A basic theme has been adopted for each of these months. Both local advertising by dealers, and national advertising by manufacturers will emphasize this theme.

February will feature the idea of "Build a new home"; in May it will be "Get your home and garden ready for summer"; in August, "Add a room," and in October, "Get your home ready for winter."

Purpose of this coordinated advertising-promotion plan is to boost business by hitting the consumer from several sources. As NRLDA expressed it, "the full force of repetition will be brought to bear from many sides."

Governor Proclaims National Home Week In Ohio

Governor Frank J. Lausche adds to his building tool collection as a high-grade steel saw is presented to him by Clinton R. Miller, Akron, president of the Ohio Home Builders Association. The presentation was made following a ceremony at which the governor officially proclaimed September 20-27 as National Home Week in Ohio. In his left hand, Governor Lausche holds a chrome-plated hammer, given to him last year by the builders' group. Looking on are (l. to r.): A. H. Falace, Columbus, OHBA executive vice president; Charles L. Prior, Columbus, OHBA secretary, and W. Alex Simms, Dayton, regional vice president of the National Association of Home Builders.
Woodwork Jobbers Name Costello President


Clarence M. Kimball, Detroit, was named vice president, and Philip S. Hill, Chicago, was re-elected as treasurer. Adolph Pfund was reappointed as secretary, with Carl W. Nagle, a recent addition to the staff, as assistant secretary. New directors chosen included Thomas Marquart, Oshkosh, Wis.; L. C. Croft, Syracuse, N.Y.; T. E. Weil, Cleveland, and Jordan.

Los Angeles Home Builders Appoint George O. Prussell

Newly appointed executive vice president of the Home Builders Institute, Los Angeles, is George O. Prussell, Monterey Park, Calif., it was announced by K. Sande Enness, Institute president. Prussell, who assumed his post on October 1, served as secretary of the Los Angeles Chamber of Commerce construction industries committee and manager of the construction industries department.

His first assignment was attendance at the National Association of Home Builders school for executive officers at Biloxi, Miss., in October, followed by the NAHB fall board of directors meeting, October 10-15, in New Orleans. Prussell succeeds Ray V. Carey, who resigned to become city manger of a nearby California community.

Portland Builders Use Novel Promotion

An advertising promotion scheme known as the “New Home of the Week” has been arranged by the Portland, Oregon, Home Builders Association and the Portland Realty Board in conjunction with the Oregon Journal. The newspaper runs a weekly Sunday feature showing a picture, floor plan and description of a new home open for inspection. There is no cost to the builder and the publicity is not contingent upon advertising.

The association furnishes the material to the newspaper, which in turn selects the builder. Each builder-member of the association is given an opportunity to participate. The builder is notified three weeks in advance that his house must be ready for photography by a specific date, and he must guarantee that the house will be open for inspection upon the agreed Sunday.

Connolly Elected Head of National Tax Assn.

The National Tax Association, at its 46th annual conference held in Louisville, Ky., has elected John L. Connolly, St. Paul attorney, president for the coming year. He succeeds H. Clyde Reeves, vice president of Bankers Life and Casualty Co., Chicago.

Connolly, secretary and general counsel of Minnesota Mining and Manufacturing Co., is a nationally recognized tax authority. He has been vice president of NTA for the past year. The association also named Dr. Robert S. Ford, University of Michigan economics professor, vice president for the coming year.
thank you, Mr. Cortright

Sir: I will appreciate it if you will have your circulation department enter my subscription for two years and bill me for the same.

Now that I have become a builder, I have a greatly increased sense of appreciation of the American Builder as an essential part of the builder's tools. I am learning first-hand the tremendous importance of a powerful organization, both local and national, as well as the essentiality of up-to-the-minute information on house design, construction, methods and land planning.

Frank W. Cortright, Berkeley, Calif.

American Builder in favor in occupied Germany

Sir: Enclosed is money order for one year's subscription to your magazine. I am at present working as a construction inspector in the Air Force, and your magazine is indeed enlightening and a great help in my work.

The German contractors with whom I am working also enjoy looking at the advertisements. On several occasions I've had to separate small groups having a heated discussion over a "beat-up" 1951 issue that somehow found its way here.

Ralph W. Seiff, 85th Air Installations Sq. Depot, APO 207, c/o Postmaster, New York, N.Y.

have potential home buyers lost the thrift habit?

Sir: For some time I have read articles in American Builder by NAHB representatives advocating smaller down payments under FHA. A $2,400 required payment on a $12,000 house has been mentioned in particular. So far, the only excuse I have seen advanced for a smaller down payment is that the people don't have the money. One could well ask, "Why haven't they?" This could readily be answered by stating that the habit of saving and thrift, which was a common one two generations ago, no longer exists, or at least, only in a small proportion.

Ten dollars invested monthly in a building association in serial stock returns $2,000 in 11 to 12 years, but one does not see the same number of young people putting away that $10 monthly, as was done 40 and 50 years ago. Today, almost every young man must have a car (purchased on installments, and seldom paid for before turning it in on another), a television set and other electric innovations (also on installments). The answer as to why so many don't have $2,400 to pay down is found in the above.

High taxes and living costs are no excuse—the higher wages not only offset them, but induce them. These are economic facts—while the arguments for heavier mortgages and smaller down payments are not based on sound reasoning or solid business judgment.

Builders formerly accepted notes or second mortgages from buyers who were short. They had confidence in their properties and their customers. Let those who advocate heavier loans accept junior liens, and everyone will be happy.


trade-in article convinces home buyers

Sir: We were much impressed with the article in the July issue regarding trade-ins. It was well written and of great interest to us because we had heard of this plan but had not had it presented in such a clear manner.

Our firm builds homes in the $20,000 to $30,000 bracket and four out of five of our purchasers are home owners who have a considerable equity in their present homes, which must be sold in order for them to purchase a new home. Recently many of them have been fearful that they will have difficulty selling their old homes, and therefore hesitate to contract for a new one. Your plan affords these prospective purchasers the protection they need.

We have made a trial run of the plan and have signed up three purchasers the first week who had previously refused to enter into a contract until their homes were sold.


(Continued on page 30)

PRACTICAL & BEAUTIFUL

BECO TUBE ENCLOSURES
AND SHOWER DOORS

ONLY BECO OFFERS
INEXPENSIVE LUXURY

Fiberglas enclosed in a full extruded aluminum frame fits snugly in an aluminum jamb.

The aluminum is buff polished and anodized to avert water spots.

Five pastel colors: White, Rose, Blue, Green, Yellow.

Installed in a matter of minutes packaged complete for self-installation.

Doors interchangeable have full aluminum piano hinge.

Standard enclosures for 5' recessed tub.

Standard doors for 24" opening. Custom sizes available.

DISTRIBUTED NATIONALLY BY
CRANE CO. AND OTHER LEADING DISTRIBUTORS

FOR INFORMATION CONTACT YOUR DISTRIBUTOR OR

BECO CORPORATION
3035-37 Canton Street DALLAS 1, TEXAS
letters ...
(Continued from page 29)

Transite is a trade name

Sir: Some of our people, who are interested readers of your publication, have called to our attention the article Making Garage Exterior Conform to House, appearing on page 104 of the July, 1953, issue of American Builder. The article includes an illustration of an interesting application of Transite. Since this is one of our products, we are, of course, pleased to note the reference to it, but we note that in the paragraph beneath the illustration, reference is made to "Transite material" without the use of capital letters and quotation marks, or otherwise indicating the trade-mark status of the word "Transite.

We would appreciate your cooperation in indicating the trade-mark status of the name "Transite" in any future references you may make to our product.

Johns-Manville Research Center.
Manville, N.J.

"all-climate home" gets more blueprint requests

Sir: We refer to the article Here's an All-Climate Home on pages 34-41 in the August issue of American Builder. There has been much interest in this area in the "all-climate" house featured in this issue. We have already sent through an order for some blueprints and expect more very soon.

Is it possible for you to send us two extra August issues?

E. W. Harper.
Merritt Lumber Co.,
Allentown, Pa.

Two extra copies of the August issue were sent to this firm.

The Editor

reprint permission requested for September remodeling story

Sir: In your September, 1953, issue, on pages 216-218, you ran an article In Remodeling . . . Profit Is a Matter of Fighting Hidden Costs. May we have permission to reprint this article in one of our services? A credit line will, of course, be given to American Builder.

V. Plesscher.
Editorial Director.
National Research Bureau, Inc.,
Chicago 10, Ill.
Exclusive tongue and groove joint eliminates mouldings and adhesive!

Yes, it's easy to install new Marlite Plank and Block! And you offer your building and remodeling clients new beauty, new economy, faster installation . . . plus the same high quality that has made Marlite panels famous.

**Easy installation**—New Marlite with exclusive tongue and groove joint is installed over old walls or furring strips with concealed nails or clips.

**Easy to handle**—Planks are 16' x 8'. Blocks are 16' square. Both 3/16" thick. In cartons for convenient handling.

**Beautiful new colors**—Ten new companion colors styled by Raymond Loewy Associates, plus four distinctive wood patterns, are sure to please every customer.

**Baked Marlite finish**—Planks and Blocks feature the same durable, easy-to-clean Marlite finish used on all other Marlite panels.

See your building materials dealer for full details on new Marlite Plank and Block, or write Marsh Wall Products, Inc., Dept. 1103, Dover, Ohio. Subsidiary of Masonite Corporation.
KENFLEX provides every VINYL TILE for today's homes, offices, stores.

New as it is, KenFlex has been thoroughly proven in actual use! One example of this exhaustive research is the test installation that was placed in a major, heavy-trafficked New York office building. Here, over 13,000,000 people have walked on a KenFlex Floor in the past 13 years...yet it shows no signs of wear...is attractive as if it had been installed yesterday.

KenFlex is truly a superior floor...combining the best qualities of vinyl and asbestos. It's rugged for long, hard service...colorfully beautiful but never needs waxing except to make the glowing colors shine a bit more. And, KenFlex sets a new standard in grease resistance...it's impervious to cooking and petroleum oils, alkalis, alcohols, most acids and reagents. Still, it cleans without scrubbing and colors never wear off...they go clear through the tough tile.

Specifications and Technical Data

INSTALLATION
KenFlex can be installed over any smooth, firm interior surface...wood, plywood, radiant heated concrete slabs, even over concrete in contact with the earth...on or below grade.

THICKNESSES
Laboratory and on-floor usage tests have proven that vinyl has great durability and wear resistance. Therefore, standard gauge (1/16") is recommended for normal residential and commercial uses. If exceptionally heavy traffic is expected, 1/8" gauge is recommended.

INSTALLED PRICES
Prices range from 10¢ per sq. ft. to 65¢ per sq. ft. depending on which of the thicknesses is chosen—for minimum area of 1000 square feet over cement underfloor.

SIZE
Standard tile size is 9" x 9". Also available are 9" x 9" decorative ThemeTile and 1" x 24" Feature Strip.

THE KENTILE, INC. FLOORING CONTRACTOR is a trained and experienced flooring expert...fully qualified to give you whatever assistance you might require. Call on him whenever you must specify flooring for new construction or remodeling of any type or extent. Find his name and address by looking under FLOORS in the classified pages of your Phone Book.
modern flooring advantage

institutions

In this drug store, the colorful KenFlex Floor is both beautiful and functional. And its grease-resistant properties save time, work and money...especially at the counter section. KenFlex colors shown are Marigold, Egret White and Ivy ThemeTile.

This kitchen-dining area owes much of its charm and efficiency to the modern KenFlex Floor that's so easy to clean with just a damp mop...needs waxing only to give the lustrous surface a brighter gleam. KenFlex colors shown are Desert Sand, Antique Coral, Bird ThemeTile and White Feature Strip.
**AMERICAN BUILDER BLUEPRINT HOUSE**

**BUILDER:**
James C. Moreland & Son, Chicago, Illinois

**ARCHITECT:**
A. J. Del Bianco, Chicago, Illinois

**SQUARE FOOT AREA, including carport, planter and entry** 1,103
**COST PER SQUARE FOOT** $14.35

---

**a project house with**

*It breaks with precedent and*

**THIS HOUSE,** which is one of the models of Monterey Villa in Chicago, presents a somewhat different approach to both exterior design and the construction methods normally used to build a house. It is part of a project of 144 units, of which 90 are completed or are in the process of construction.

This is one of the first attempts made in Chicago to reproduce in volume a house that follows contemporary lines, both in the exterior and interior treatment. This creative effort is the result of close collaborative work on the part of the builder, architect and the lending institution who labored together as a team.

One of the important changes from the
a fresh new look
is practical for any area

standard ranch-type style with its 5-12 pitch gable or hip roof that employs trusses or normal framing is the simplified method used in framing the five-degree pitched roof. Members are spaced four feet o.c. with purlins six to eight feet apart at right angles to ceiling beams. Cemesto panels 1\(\frac{3}{16}\) inches thick are secured to upper side of these members. The underside of panel ceiling is painted.

The builders refer to this house as a modern ranch home with a California touch, but built with Chicago weather in mind.

All exposed areas of the house are insulated. The ground surface of the crawl space is covered with pea gravel, and two inches of blanket insulation is secured to the underside of the floor joists. Walls are covered with insulating sheathing and roof with Cemesto.

Exterior walls are frame and brick veneer which are placed on 9-inch concrete walls and footings to frost line. Exterior facing is a combination of face brick and redwood siding on all four walls with Lannon stone used as trim around the entrance and planter on front wall.

The plan includes a combination living and dining room, kitchen, four bedrooms, bath and a carport which is included within the periphery of the house. The Monterey room located ad-

Exterior of house features a minimum pitch gable with a wide wood fascia along the rake of roof. Stone, brick and redwood siding are well distributed.

Rear view shows how face brick and redwood siding were carried around to the back.
Adjacent to the kitchen and at the rear of the carport can be used as a bedroom, a workshop, a utility room or a playroom. Walls of carport are finished in knotty pine paneling. This is done to add to the appearance so the area can be used effectively as a summer patio.

The house is placed on an 85-foot lot so that 21 feet are available on the garage side for future expansion. To accomplish this the present carport can be enclosed and the area converted to a bedroom and bath: a future garage can be erected at the side of the carport.

For complete one-quarter-inch working plans of this house, write American Builder Home Plan Service, 79 West Monroe Street, Chicago 3, Ill.

A custom-look is given to bathroom by leaving the window area free and placing the tub alongside wall. Dual medicine cabinet has fluorescent tubes above mirror.

BRAND NAME PRODUCTS USED

Aricrest plastic wall tile
Brandes hot air baseboard
Brazil glazed brick
Celotex sheathing and Cemesto board
Chamberlin weatherstrips
Crane plumbing fixtures
Danley vents
Fasco kitchen fan
Fiberglass insulating blanket
Flor-Ever vinyl floor tile
Ferrico counters
Frost-free self-draining hose outlets
Horban kitchen cabinets
Hess dual cabinet vanity
Kennco-track sliding doors
Lennox outdoor gas meter box
Libby-Owens Thermopane glass
Luxaire gas-fired furnace
Minnepolis-Honeywell controls
NuTone chime clock
Paine "Rezo" birch doors
Rheem hot water heater
Ruberoid roofing
Sanitas wall covering
Schlage hardware
Schlage aluminum screens
Sherwin-Williams paints
Sierra triple electric outlets
Spear bracket lights
Standard-Thompson window operators
Stanley hinges
Tremco glazing compound
US Gypsum drywall

The wall of glass in living room is comprised of fixed- and awning-type double-glazed units. Exposed wood beams frame the Cemesto ceiling panels.

See Gatefold Blueprint for complete working drawings—quantity list of materials
# Quantity List of Materials

## For American Builder Blueprint House No. AB 196

A. J. Del Bianco, Architect

### General Information

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>House — Type</td>
<td>brick veneer</td>
</tr>
<tr>
<td>Area (including planter, carport and entry)</td>
<td>1,103 sq. ft.</td>
</tr>
<tr>
<td>Cube (including planter, carport and entry)</td>
<td>10,488 cu. ft.</td>
</tr>
<tr>
<td>Height taken for house and carport cube was 10 feet</td>
<td></td>
</tr>
<tr>
<td>Height taken for planter and entry cube was 4 feet</td>
<td></td>
</tr>
<tr>
<td>Carport — Area (included in house)</td>
<td>294 sq. ft.</td>
</tr>
<tr>
<td>Entry porch — Area (included in house)</td>
<td>50 sq. ft.</td>
</tr>
</tbody>
</table>

### Excavating

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trench for footing</td>
<td>180 lin. ft.</td>
</tr>
<tr>
<td>Chimney and column footings</td>
<td>5 sq. ft.</td>
</tr>
<tr>
<td>Excavation for crawl space</td>
<td>113 yds.</td>
</tr>
</tbody>
</table>

### Cement Work

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations</td>
<td>688 cu. ft.</td>
</tr>
<tr>
<td>Concrete work</td>
<td>50 sq. ft.</td>
</tr>
<tr>
<td>Thickness</td>
<td>4 in.</td>
</tr>
<tr>
<td>Anchor bolts</td>
<td>40 — 1/2&quot; x 12&quot;</td>
</tr>
<tr>
<td>Foundation vents</td>
<td>4</td>
</tr>
<tr>
<td>Miscellaneous Crushed stone floor in crawl space</td>
<td>959 sq. ft.</td>
</tr>
</tbody>
</table>

### Masonry

<table>
<thead>
<tr>
<th>Description</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walls — Brick</td>
<td>800 sq. ft.</td>
</tr>
<tr>
<td>Stone</td>
<td>132 sq. ft.</td>
</tr>
<tr>
<td>Windows, door and planter sills</td>
<td>103.8 sq. ft.</td>
</tr>
<tr>
<td>Glass block</td>
<td>18 — 8&quot;x8&quot;</td>
</tr>
<tr>
<td>Chimney</td>
<td>brick and stone</td>
</tr>
</tbody>
</table>

### Iron Work

<table>
<thead>
<tr>
<th>Description</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lintel</td>
<td>4&quot;x3 1/2&quot;x5/16&quot; — 3 8</td>
</tr>
</tbody>
</table>

### Millwork

<table>
<thead>
<tr>
<th>Description</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows — Type</td>
<td>fixed and awning</td>
</tr>
<tr>
<td>Windows, glazed including trim</td>
<td>wood</td>
</tr>
<tr>
<td>3 — 42&quot;x22&quot; awning over 45&quot;x22&quot;fixed</td>
<td></td>
</tr>
<tr>
<td>2 — 42&quot;x22&quot; awning</td>
<td></td>
</tr>
<tr>
<td>1 — 45&quot;x25&quot; fixed (with louver glass)</td>
<td></td>
</tr>
<tr>
<td>2 — 42&quot;x22&quot; awning and 45&quot;x25&quot; fixed</td>
<td></td>
</tr>
<tr>
<td>Triple window — 3 — 42&quot;x22&quot; awning over 6 — 45&quot;x22&quot; fixed</td>
<td></td>
</tr>
<tr>
<td>1 — 42&quot;x22&quot; fixed over 40&quot;x19&quot; awning</td>
<td></td>
</tr>
<tr>
<td>Exterior doors — Material</td>
<td>wood</td>
</tr>
<tr>
<td>1 — 30&quot;x6&quot;6&quot;8&quot;</td>
<td></td>
</tr>
<tr>
<td>1 — 28&quot;x6&quot;6&quot;8&quot;</td>
<td></td>
</tr>
<tr>
<td>Interior doors, including jambs and trim</td>
<td>1 — 1&quot; 4&quot;x6&quot;8&quot;</td>
</tr>
<tr>
<td>1 — 1&quot; 6&quot;x6&quot;8&quot;</td>
<td></td>
</tr>
<tr>
<td>1 — 2&quot; 2&quot;x6&quot;8&quot;</td>
<td></td>
</tr>
<tr>
<td>1 — 2&quot; 2&quot;x6&quot;6&quot;</td>
<td></td>
</tr>
<tr>
<td>1 — 2&quot; 2&quot;x6&quot;8&quot;</td>
<td></td>
</tr>
<tr>
<td>1 — 2&quot; 2&quot;x6&quot;8&quot;</td>
<td></td>
</tr>
<tr>
<td>Special interior doors</td>
<td>6 of above are sliding doors</td>
</tr>
</tbody>
</table>

### Special interior millwork: kitchen cabinets lattice at entry

### Carpentry

<table>
<thead>
<tr>
<th>Description</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beams and girders</td>
<td>9 — 2&quot;x8&quot; — 16'0&quot;</td>
</tr>
<tr>
<td>3 — 2&quot;x8&quot; — 8'0&quot;</td>
<td></td>
</tr>
<tr>
<td>Foundation plates</td>
<td>2&quot;x4&quot; — 100 lin. ft.</td>
</tr>
<tr>
<td>Joists</td>
<td>31 — 2&quot;x8&quot; — 24'0&quot;</td>
</tr>
<tr>
<td>3 — 2&quot;x8&quot; — 18'0&quot;</td>
<td></td>
</tr>
<tr>
<td>Bridging</td>
<td>2&quot;x4&quot; — 500 lin. ft.</td>
</tr>
<tr>
<td>Studs and plates</td>
<td>64 — 2&quot;x4&quot; — 8&quot;0</td>
</tr>
<tr>
<td>49 — 2&quot;x4&quot; — 12'0&quot;</td>
<td></td>
</tr>
<tr>
<td>44 — 2&quot;x4&quot; — 16'0&quot;</td>
<td></td>
</tr>
<tr>
<td>Ceiling joists</td>
<td>17 — 4&quot;x8&quot; — 18'0&quot;</td>
</tr>
<tr>
<td>8 — 4&quot;x8&quot; — 28'0&quot;</td>
<td></td>
</tr>
<tr>
<td>Roof rafters</td>
<td>4&quot;x4&quot; bridging — 124 lin. ft.</td>
</tr>
<tr>
<td>Framing timbers</td>
<td>3 — 2&quot;x12&quot; — 10'0&quot;</td>
</tr>
<tr>
<td>6 — 2&quot;x8&quot; — 10'0&quot;</td>
<td></td>
</tr>
<tr>
<td>10 — 2&quot;x6&quot; — 10'0&quot;</td>
<td></td>
</tr>
<tr>
<td>Subfloor</td>
<td>5/8&quot; Plycore — 1,100 sq. ft.</td>
</tr>
<tr>
<td>Roof sheathing (see insulation below)</td>
<td>1 9/16&quot; insulation</td>
</tr>
<tr>
<td>Side wall sheathing (material unspecified)</td>
<td>1,450 sq. ft.</td>
</tr>
<tr>
<td>Side wall materials</td>
<td>30' Redwood panelling — 425 sq. ft.</td>
</tr>
<tr>
<td>Flooring — Hardwood</td>
<td>700 sq. ft.</td>
</tr>
<tr>
<td>Linoleum</td>
<td>375 sq. ft.</td>
</tr>
<tr>
<td>Exterior material</td>
<td>Fascia, interior and exterior</td>
</tr>
<tr>
<td>1&quot;x 8&quot; — 650 lin. ft.</td>
<td></td>
</tr>
<tr>
<td>2&quot;x10&quot; — 200 lin. ft.</td>
<td></td>
</tr>
<tr>
<td>Insulation — Roof</td>
<td>1 9/16&quot; — 19 squares</td>
</tr>
<tr>
<td>Floor</td>
<td>Blanket — 1,130 sq. ft.</td>
</tr>
</tbody>
</table>

### Sheet Metal

<table>
<thead>
<tr>
<th>Description</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashing</td>
<td>chimney</td>
</tr>
<tr>
<td>Miscellaneous Metal lap strip at edge of roof</td>
<td>200 lin. ft.</td>
</tr>
</tbody>
</table>

### Roofing

<table>
<thead>
<tr>
<th>Description</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>asphalt</td>
</tr>
<tr>
<td>Area</td>
<td>19 squares</td>
</tr>
</tbody>
</table>

### Interior Walls

<table>
<thead>
<tr>
<th>Description</th>
<th>Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area to be covered</td>
<td>½&quot; Drywall — 3,175 sq. ft.</td>
</tr>
</tbody>
</table>

### Note:

- This quantity list will be subject to variation depending on the common practices in various sections and municipalities of the country, the techniques of individual builders, the types of materials available locally and cost factors. The list published here is a suggested one, complete enough so that it can be used in arriving at a reasonably accurate estimate of the quantities and cost of materials that will be required to complete the structure. It was prepared by experts at the Edward Hines Lumber Co., Chicago.
This contemporary house," states the builder, "is one of the best exterior elevations we ever built." House has plank and beamed ceiling, low-pitched, built-up roof and adequate interior storage.

To test public reaction to a contemporary design, Mills and Sons, Chicago builders, built two models, one a contemporary and the other a conventional. The houses have the same square footage, the same type and number of windows, doors and closets. Hardware and finishing items are alike. Yet the public voted four to one in favor of the conventional model.

Features of the contemporary house include plank and beamed ceilings, a pass-through between the kitchen and the dining room, a utility room which houses the furnace and water heater and adds additional storage space that is lost in the low-pitched roof. The conventional design boasts a convertible third bedroom with a folding wall adjacent to the living room. Dining space is provided in a dinette adjacent to the kitchen, and this house also features a pass-through between these two rooms. Utilities are housed in a closet.

More house for the money is obtainable in the conventional design. The house is brick veneer with stone trim, while the contemporary house is stone and frame. The difference in cost between the two models is $400, which can be attributed to the plank and beamed ceiling in the more expensive, the contemporary. Material alone adds $110.36. Labor for sheathing the roof, building irregular partitions and the complicated fitting of the fascia adds 46 hours to the construction time.

In the next group of 40 houses, the builder will build only five contemporary houses. These will be interspersed to add interest to the street.
Conventional plan has three bedrooms, one of which can be converted to a study or added to the living area. Dinette adjacent to both the kitchen and entry way proved popular in this plan. Disappearing stairway provides access to attic storage space.

The convertible bedroom adjacent to the living room (left) was another feature that added sales for the conventional model. Bathrooms in both houses have the same appointments (center). The tub in the contemporary house, however, is not under the window. Dinette and pass-through to kitchen of conventional house (right) were favored by housewives.
HOW TRADE-IN SELLING kicked off this new development

The older house was appraised at $8,800. Owner received $8,000 and house sold for $9,100. Owner's equity in old house was $3,700 which was applied to new house costing $15,000. Older house was resold on contract by builder.

Older house, located on a good street, sold fast at $10,500. A realtor closed the deal and made the commission. Leverett sold the new house at $15,000. Equity in the older property was $4,600 which was used as downpayment on the new house. A conventional savings and loan mortgage covers the balance of $10,400. Older house has conventional loan.
Trade-ins, thought to be the impetus needed to move sluggish sales, can work in a new way. Trading can help solve one of the most difficult problems in the business—starting a new subdivision. At least James R. Leverett, Des Moines builder, believes trading is the answer for moving people into a new neighborhood.

Leverett decided trading would hasten the sales which would fill up his first block. Then the builder could start a concentrated selling campaign with something more tangible to offer. Location was another reason why “trading” seemed feasible to the builder. In Des Moines most selling activity has been in the western part of the town. Leverett, located in eastern Des Moines, had to sell a new location.

Of the first 15 houses purchased in the new development, Leverett made five trades. Now that the second street has been started, sales pace construction and trades are no longer needed.

Leverett’s method of trading is much the same as that used by other builders engaged in this new selling technique. He uses the trade-in guarantee by which he guarantees the owner a specified amount for his older house if it is not sold before the new house is completed. Two of the five trades, however, were “remodeled trades” whereby Leverett had to do some remodeling before older property was sold.

Leverett has had long experience in the appraisal of older real estate.

Older house was redecorated for $200 and sold for $9,100. Owner received $8,200 and had $3,000 equity. New home cost $13,500. Balance of $10,500 is conventional savings and loan mortgage. Buyer needed only $1,000 cash. Balance on older house is $8,100 FHA mortgage.
TRADE-IN SELLING

Buyer of new house asked $3,450 for the three-room unit—owed $1,440. Equity of $2,000 was placed on new house selling at $13,500; balance of $11,500 carried by builder on contract. Old house will need remodeling and can then be sold for $4,400 with $300 to $500 down. Balance on contract of $40 a month.

At one time he was appraiser in 17 Iowa counties for HOLC. Even with this background he often calls in a realtor to appraise the older property and sell it. Because of the speed with which Leverett works to close these deals, unless he actually has to take in the older property, he is satisfied with a 5 to 10 per cent mark-up. When he sold the older property on contract he did take 15 per cent. Leverett concurs with the American Builder's original trade-in story, (The Truth about Trade-Ins, July, 1953), that builders should offer 85 per cent of the appraisal. The 15 per cent cushion is needed to cover declining markets, builder's profit and some work that will be needed before the house can be resold.

Concerning the future of trading Leverett stated, "Trading is a natural thing. When things get tough, the boys will be trading."

Older house sold at $10,500. Owner received $9,200. Had $2,750 equity which was put down on $11,750 new house.

Balance of $9,000 is in savings and loan mortgage. Older house sold on contract with $2,000 down. No trouble was experienced in selling the older house as owner had remodeled the bathroom and kitchen, had house completely repainted.
MOMES EVERY DAY!

First it's up—then it's down. Up again, down again—on the move every day. That's the life of an overhead type door, and it all adds up to plenty of "mileage."

To be able to take it—with smooth, easy up-and-down operation year after year—the door's got to be better than good. In design, materials, construction and features.

Every Ro-Way overhead type door is designed, engineered and built for a longer life of owner satisfaction. Mortise and tenon joints are not only glued, but steel doweled as well. Muntins, rails and stiles are precision squared . . . sections rabbeted to assure weather-tight joints. Heavy gauge steel hardware is fabricated on special machines in the Ro-Way plant—Parkerized and painted after fabrication for extra protection.

What's more, Ro-Way exclusive features mean greater operating ease and efficiency: smooth-running, ball bearing Double-Thick Tread rollers—built to glide smoothly and quietly; Taper-Tite track and graduated Seal-A-Matic hinges that assure snug, weather-proof closing; famous Power-Metered springs individually matched to the weight of each door.

These are the reasons why Ro-Way doors work better longer—and keep on the move year after year.

ROWE MANUFACTURING COMPANY, 734 Holton St., Galesburg, Ill.
PROOF AGAIN!

Tens of thousands of homebuyers recently flocked to see the feature-packed homes of Heslop Builders of Akron, from the very first day.

Heslop used radio, newspaper and television to announce the news of this great advance in housing and to tell of the most wanted features—and eager homebuyers swarmed to his site.

These homes, in the $12,000 price range, included all the features proved by actual survey to be the ones homebuyers preferred and wanted . . . features like sturdy steel Youngstown Kitchens, Youngstown Kitchens Jet-Tower* Dishwasher and Food Waste Disposer and many, many more timesaving, work-saving features.

Heslop backed these features with sound merchandising methods—thorough advertising and promotion—provided space at the homesite for national manufacturers to demonstrate the equipment furnished—and guaranteed these homes unconditionally for one full year.

Heslop proved that giving homes the brand-name features homebuyers know and want . . . and promoting them with hard-hitting merchandising methods—get attention . . . get action!

For further information on how famous Youngstown Kitchens can play a vital part in helping you get active response with homes you build, write Builder Sales Department, Mullins Manufacturing Corporation, Dept. AB-1133, Warren, Ohio.

Most-wanted features help sell
$12,000 HOMES!

**Youngstown Kitchens Food Waste Disposer** in every kitchen, banishes garbage forever—proof that Heslop’s developments were garbageless communities.

**Youngstown Kitchens Electric Sink**, featuring Jet-Tower Dishwasher, was installed in Heslop kitchens—proof that these homes would stay modern for years to come.

Another advanced feature was the handy storage space outside for lawn mower, bicycles and other items—proof of plenty of storage for basementless homes.

And every Heslop home carried this unconditional guarantee for a full year—proof of the top-quality materials and workmanship in each home.

**Youngstown Kitchens**

MULLINS MANUFACTURING CORPORATION • WARREN, OHIO

World’s Largest Makers of Steel Kitchens

NOVEMBER 1953
Pittsburgh Glass

can help you cut costs...sell homes faster
...get more remodeling jobs

A WALL OF GLASS compares very favorably, cost-wise, with masonry, or other construction. But it adds importantly to the buy-appeal of a home, because it opens the home to the greatest possible enjoyment of the outdoors from indoors. Such walls can be of single-pane Pittsburgh Plate Glass, Twindow—"the window with built-in insulation"—Solex Heat-Absorbing Glass, or Solex-Twindow—combining the heat and sun-reduction properties of Solex, with the insulating value of Twindow. The illustration below shows a sectional view of these units. Architect: Carl A. Strauss, Cincinnati, Ohio.

STRUCTURAL WALL MIRRORS of Pittsburgh Plate Glass are easily handled—whether you're building a new home or remodeling. They are one of the most desirable features you can possibly add to a room. For wall mirrors give the impression of greater room size. And they reflect all the color and movement, giving the room an airy, cheerful atmosphere. Homemakers are readily sold, when a home has wall mirrors, so make sure that you include several—in the living room, dining room and bedroom, particularly. Each custom-made mirror you order is supplied with labor-saving, cost-reducing brackets. Get details on these brackets and the "Decorator Bathroom" from your local Pittsburgh Glass distributor.

Every nickel you spend on glass shows.
And the results far outweigh the cost.
THE NEW CARRARA GLASS "Decorator Bathroom" marks an important advance in bathroom decoration, putting this high quality material within the reach of the most modest type of home. Here Carrara Glass is limited to those places in the bathroom where its permanence, resistance to steam and water and easily cleaned surface make it most applicable. That means in the tub recess, behind the lavatory and in the 14" base. The rest of the wall and ceiling are painted or wallpapered, giving striking contrasts. Besides its cost-cutting feature, installation is easy. Just three simple steps are necessary prior to ordering the glass—measure the back wall along the tub length; measure the various lengths of base; make cardboard patterns of the locations of the plumbing outlets. Carrera Glass with its gleaming, polished surface is ideal for modern bathroom design.

Build it better with Pittsburgh Glass

See Sweet's Builders Catalog for detailed information on Pittsburgh Plate Glass Company products.

PAINTS - GLASS - CHEMICALS - BRUSHES - PLASTICS - FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

NOVEMBER 1953
THESE RIPPLEWOOD SELLING POINTS HAVE MELTED SALES RESISTANCE

IT'S GENUINE WOOD WALL PANELING
Nothing matches the charm of fine wood, recognized for centuries as the ultimate in interior wall luxury and elegance. Ripplewood is mellow... it's magnificent... it's real wood.

IT'S TEXTURED
Ripplewood's exciting pattern of swirling grain accentuates the rustic appeal of natural growth characteristics.

IT SELLS ON SIGHT
Wherever Ripplewood has been seen, it has won friends, admirers and buyers, who have been sold on sight!

IT'S LOW IN COST
No other wall paneling offers such outstanding beauty at such low cost.

IT INCREASES PROPERTY VALUE
Realtors automatically up-grade homes with extra features like Ripplewood paneled rooms.

IT IS EASY TO INSTALL
Ripplewood 4 by 8 foot panels go up fast and easy, speed work and save labor. Also available in full-sized squares, 12 by 12 inches and 16 by 16 inches. It is packed in cartons protected as fine wood should be.
They came... they saw... they bought! In model homes from coast to coast, thousands of home shoppers exclaimed, “That’s what we want,” when they saw this luxurious wall paneling. Ripplewood can make the difference between “No Sale” and “Down Payment Received.” Its rich sculptured texture creates a warm, friendly atmosphere that says, “Move in and make yourself comfortable,” to every type of prospect. Whether building one home or a project, you can cash in on this proven home buyer appeal. See your Georgia-Pacific dealer now before you complete your plans.

IT IS EASY TO FINISH
Factory primed... one coat covers... dramatic two-tone effects result from accenting the texture with a second color.

IT FITS WITH MODERN OR TRADITIONAL
Ripplewood creates a background of beauty that flatters any style of furnishings.

See Your
Georgia-Pacific Dealer
Today

Georguia-Pacufic
PLYWOOD COMPANY
Dept. AB-11, 270 Park Avenue, New York 17, N. Y.
3 sash operations from just one window!

1. HOPPER-VENT—Sash swing inward with Flexivent in this position. Screen on outside means easiest operation. Note ample ventilation, yet no interference with drapes. Good protection during rains. Use hopper position for very low or very high ventilating windows.

2. AWNING-VENT—Highly popular new sash operation is highly practical too. Excellent ventilation and protection during rain. Inside screen hinged for easy sash operation. Friction hardware allows sash to open nearly 90 degrees. Flexivent is an unusually weathertight awning window.

3. CASEMENT—Install Flexivent on end and you have an economical casement. Outswinging sash only. Choice of 3 sash operations or fixed sash is entirely up to you. So is the combination of Flexivents into ribbons, stacks or groups for a wide range of window effects.

Look! Use new Andersen FLEXIVENTS
Here are 6 quality design features...

3 reasons for FLEXIVENT's economy

Here's why Flexivent is a superior ventilating window:
1. Wood parts of clear pine are accurately milled by Andersen. Toxic treated with preservative and water repellent solution.
2. Frame engineered for easy installation in three different positions. Gives three different sash operations.
4. Sash contact with weatherstrip and frame on four sides gives remarkable weather-tightness.
5. Choice of wood or aluminum screen.
6. Double glazing panel in aluminum frame always fits on outside.

Here's why Flexivent is an economy window:
7. Simple hardware, including sliding hinge-adjusters, gives excellent operation at low cost.
8. Complete unit easy to assemble into groups, economical to install and trim out.
9. Note clean design and engineering which simplify manufacture and assembly. No stops, no complicated hardware. It all means savings which are passed on to the Flexivent customer!

Andersen Corporation • BAYPORT, MINNESOTA
WINDOW SPECIALISTS FOR 50 YEARS

For specification data see your lumber and millwork dealer, Sweet's Light Construction Files or write Andersen Corporation.

hundreds of ways—at low cost, too!

WINDOW BEAUTY with Andersen Gliding Window Units and transoms of Andersen Flexivents. Hundreds of combinations are possible!
DELTA Tools on the job save us

BUYS ROUGH LUMBER, DOES ALL FINISHING AND DELTA CIRCULAR SAW AND JOINTER. Savings

Look inside this luxury home costing roughly $75,000, and you'll find a Delta Circular Saw and Jointer turning rough lumber into accurately sized finished stock, cabinet work, mill work and special items.
MILL-WORK WITH
Passed Along To Owner

In building custom-designed homes ranging in price up to $75,000, we put our Delta Tools right into the house, move them from room to room, and fabricate the whole job from the inside,” says Sheldon.

“To keep our costs in line, in building these fine homes, we employ a handful of highly skilled carpenters and turn out a tremendous amount of precision work fast—all the finishing, many cabinets, all mill-work, numerous complicated details. Our method cuts the carpentry cost by at least one-third; and enables us to pass a substantial saving to the owner. We have used Delta Tools for years—and couldn’t get along without them.”

This is the non-secret “trade secret” of lower costs being achieved today by leading contractors in growing numbers—a cost-cutting, job-improving secret that can be yours!

Look into it, as a matter of basic “good business.” Talk to your Delta dealer, listed in the Classified Phone Directory under “Tools” or “Machinery.” Also use the coupon to get the new Delta Catalog.

DELTA QUALITY POWER TOOLS
Another Product of Rockwell

Delivered by the
DELTA POWER TOOL DIVISION
Rockwell Manufacturing Company
6461 N. Lexington Ave., Pittsburgh 8, Pa.

[Please send me the latest Delta Catalog]

Name
Address
City Zone State
The over-65 market is looming up as the newest challenge to the private builder's skill in solving a specific housing need. To bring you the facts about this need we called on Dr. Wilma Donahue of the Division of Gerontology, University of Michigan, who is considered to be the country's outstanding authority on the subject. Admitting she is no economist, and recognizing that financing is the obstacle private industry must hurdle to serve this market, she nonetheless feels that "a group as powerful as the builders' association must have a more important role in the affairs of the country than just meeting the needs of people who can afford to buy houses." Who these over-65 people are, what their housing problem is, and how it might be solved as outlined by Dr. Donahue is the basis for this article.

The problem of providing housing specifically planned to meet the needs of the 13,000,000 Americans who are 65 years of age or over is a highly contemporary one. So contemporary that in seeking data for this article from members of the building industry or persons in allied fields, we ran into a series of dead-end streets, with one exception. That was the heartening fact that the American Community Builders have reached the drawing-board stage with plans to incorporate a block of rental units for older people in their Park Forest development near Chicago. Other than that the production of this type of housing has been under the auspices of some benevolent or civic organization (see page 60); or private promoters who have established retirement villages of detached homes, mainly in the warmer climates (see page 62); or individual couples who have had their homes custom-designed to meet specific needs (pages 63-64).

Yet the problem is one which should concern the building industry. Not alone from the standpoint of developing a new market, but to help conserve neighborhoods while at the same time resolving a social ill. As Dr. Wilma Donahue, of the Division of Gerontology, University of Michigan, said when we talked to her, "It would seem that a group as powerful as the builders' association can be motivated to see ways of serving the social end of this problem and at the same time keeping themselves afloat. I feel that they must have a more important role in the affairs of the country than just meeting the needs of people who can afford to buy houses."

Dr. Donahue's desire to stimulate builders to act is based on her knowledge of the housing needs of the able-bodied 65-year-old, who comprises the largest segment of the 13,000,000. And who is this 65-year-old?

Profile of a 65-Year-Older

He is a human being who has arrived at an age where industry says, "You are too old to work" and releases him on subsistence pay. Science says, "You are too young to die," and extends his life ten to twenty years. Society, meantime, holds him responsible for both states of being and gives him no quarter. Nor is he asking any.

His primary need, study reveals, is to remain independent and respectable. He does not wish to become a public charge: to exchange his private residence for a place in the old people's home; to live with his children; to pull up roots and migrate to a faraway place where living is cheaper. He does not wish to move to communities for retired persons situated in isolated areas, away from everything that is active and living. As one person put it, "Older people want to live where they can see baby carriages as well as hearses."

He wants to be within walking distance of shops, churches, libraries, recreation centers. He wants public transportation readily accessible so he can keep in touch with friends. In brief, he wants to remain as he has lived, an integral part of his community, enjoying the privacy and privileges accorded all private citizens.

The No. 1 Problem

His number one problem is individual private housing. Not only the kind he can afford, but a type which takes into consideration the physical decline that comes with age. Currently, he is either living in his own home (and 65 per cent of the group own their own homes) which is overlarge and becoming a dilapidated community eyesore because of his inability to maintain it. Or he is living with relatives because he cannot find suitable rental quarters. Or he is paying exorbitant rents for menial quarters in substandard housing units on the fringe of slum areas. This in the richest country in the world whose over-65 population has increased twice as fast as the total population since 1900, and is increasing annually by 400,000!

One reason for these straightened circumstances, as advanced by Henry S. Churchill, FAIA, in a speech on housing the aged, is that there is not enough housing in variety of kind, of location, and of equipment so that all except the truly indigent can have a choice. His solution is a "revision of the statistical approach to housing." He be-
help them

lieves that if more publicity were given to the fact that contrary to the statisticians there are many families of more than one and three-tenths children; that there are many families of more than two children, many families of no children, and many one person families; then a considerably greater variety of housing types might result, which would not only provide better housing for older people but for all age groups.

Dr. Donahue offers an entirely different approach to the situation. She divides the able-bodied group (and that is the group we are dealing with in this article) into two categories: (1) the individual who has enough money to have a house built; and (2) those who must seek rental units.

Building Houses For Sale

The first group comprise the 65 per cent who already own their own houses. (Sixty per cent of the over-65 population have assets of $5,000 or more, and 85 per cent are practically debt free.) But a large number are either overhoused or live in substandard dwellings. The problem is to liquidate these homes and put their occupants into more suitable ones. This would tend to keep the house which now decays and becomes an undesirable part of the community in good repair. There is, however, a psychological problem involved. Many older people cling to old, overlarge, dilapidated homes for sentimental reasons, or because they fear that a possible financial loss in selling the home may make them feel less secure. The first step, then, Dr. Donahue suggests, is to educate people to accept a change of residence as a normal part of the life pattern of the later years.

One way this might be accomplished would be for enterprising home builders to offer this over-65 market, through advertisements, new homes which have many obvious advantages not found in the older house.

Design-wise a few of these advantages are the elimination of stairs; placement of cabinets and other storage space at easy-to-reach levels; the placement of equipment, such as stoves, at levels which obviate the necessity for stooping and lifting; the provision of non-skid floors in all rooms as well as the bathtub; a heating system which eliminates drafts and provides room temperatures above normal; and living rooms situated to catch the sun the maximum number of hours. Features which, as some wag pointed out, make good living for young people, too.

Facts About the Rental Group

The second group—the group seeking rental units—because their need is more desperate is also harder to serve. Percentagewise this group is relatively small. Numerically, it represents a lot of people. It includes that large segment of single persons over-65 struggling to exist on incomes under $1,000 a year.

It was revealed in 1952 at a conference on housing the aged at the University of Michigan, that 51 1/4 per cent of all families whose heads were over 65 years of age had incomes of less than $2,000, and over 30 1/2 per cent of them had incomes of less than $1,000. Persons of this age group living alone or with non-relatives fared even worse. Over 89 per cent had incomes of less than $2,000, and more than three-fourths of them had less than $1,000. Obviously, their need is for low-rental units. And the question that has to be answered is "What is low rent in today's high-cost world?"

It has been estimated that currently about 19 per cent of the over-65 families renting in urban areas pay $30 to $39 per month; 15 per cent pay $40 to $49; 11 per cent pay $50 to $59; 7 per cent pay $60 to $74; and 6 to 7 per cent pay more than $75 per month.

Can private industry serve this market and still show a profit?

The American Women's Volunteer Service (AWVS) of Santa Barbara, California, says "Yes" and point to their "pilot" project of rowhouse rental units (see pages 60-61), designed and built exclusively for people 65 or over. At a monthly rental of $30 per unit, including utilities, these units are netting AWVS a profit of 3 to 4 per cent. Mrs. W. Nelson Whittemore, leader of the program, points out that a strictly private investor could realize greater profits by charging $40 per month, collecting his own rents, not paying for the utilities, and eliminating one or two frills.

Converting older homes into multiple dwellings restricted to older people is another solution to the problem suggested at the Michigan conference on housing the aged. Where the dwelling is owned by an older person, this would provide income as well as companionship. It was also suggested that new dwellings, purposely designed on occasion for later conversion to two-family homes would help alleviate the situation. Here, again, the idea is to provide shelter and income for later years. But here, too, zoning laws join forces with the finance problem to create an obstacle to the project.

Key to the successful development of this market and/or the elimination of a social ill lies finally in financing. The consensus is that such rental properties should be privately financed. If government funds are used, the projects become subsidies and carry the taint of being semi-charity.

The $64 question is "How can such units be built to show a realistic net profit, meet the specifications of FHA and still reach the pocketbooks of the low-income pensioner?" This is one of the most pressing problems which now confront the building industry in its efforts to house all sections of the population adequately. That it can and will be solved by private builders is inevitable. To quote Victor Hugo, "Nothing in the world is so powerful as an idea whose time has come," and the community's responsibility for the aging is truly an idea whose time has come.

For examples of how a small segment of this market is being served, see pages 60 thru 64.
This "pilot" project of rental units demonstrates a type of housing that would suit many over-65 citizens.

**rowhouse rentals on a city street**

A rowhouse project of rental units, built exclusively for the over-65 citizen of Santa Barbara, California, would indicate that low rent housing by private funds is not beyond the realm of possibility. The project consists of 14 individual units, each of which has a living room, bedroom, bath and kitchenette.

The project was financed and built by the American Women's Volunteer Service (AWVS) to demonstrate that such units could be produced by private investors and still show a profit. Charging only $30 per month, including utilities, the AWVS is realizing a 3 to 4 per cent profit on their investment. Over-all cost of building...
Situated on a city street, handy to shopping, these low-rent units provide clean, healthy surroundings to fourteen single persons over-65, who would otherwise be living in substandard housing on the fringe of slums.

The houses was $57,638; cost per unit was $4,177. Land and grading cost another $6,000. After six months operation annual expenses are estimated to be:

<table>
<thead>
<tr>
<th>Outlay</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes</td>
<td>$764.89</td>
</tr>
<tr>
<td>Replacement and</td>
<td>$30 each</td>
</tr>
<tr>
<td>Upkeep</td>
<td>$420 times</td>
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<tr>
<td>Gardener</td>
<td>$600.00</td>
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<tr>
<td>Rent Collector</td>
<td>$5,040 less</td>
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<td>Utilities</td>
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<td>$1,200.00</td>
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<td>$420 monthly</td>
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<td>$12</td>
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<td></td>
<td>$5,040 a year</td>
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<tr>
<td></td>
<td>$1,050.11 net</td>
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</tbody>
</table>

A strictly private investor could increase the net profit by (1) charging a monthly rental of $40; (2) not paying for the utilities; and (3) collecting the rents.

The houses are frame with stucco exteriors topped with cedar shake roofs. Walls are plastered; floors, cement; bathrooms have tile shower stalls in lieu of bathtubs. A stove and refrigerator are furnished in the kitchen. Elmer Whittaker of Perdido was the builder.

Santa Barbara considers these units as not only an answer to the problem of housing their over-65 population, but also as a possible way of providing shelter for persons made homeless in the city’s war on slums.

Data courtesy American Women’s Volunteer Service

**near the center of town**

Left, a 2-bedroom house. Entrance shown leads to second bedroom. Front entrance faces avenue. To right is a triplex comprised of three separate apartments. End units have single bedrooms; center unit has large living room, kitchen-dinette, and both

and like to eat in a common dining hall. There is also a rest home for those who require physical care.

Ownership varies. Some houses are privately built on a life-lease plan; others belong to Pilgrim Place and are rented. Because Pilgrim Place is a non-profit organization, rental charges are kept somewhere between one-half and two-thirds of commensurate commercial values.

All houses are built to general specifications set up by Pilgrim Place. Principally they are basementless, one-story structures with frame stucco, brick or cement block exteriors, and poured concrete foundations. Subflooring is 2-inch, tongued, or 1-inch with metalized underlaid paper. Walls are plaster. Flooring, oak, except in kitchen and bathroom where linoleum is used. Gas wall or floor furnaces in individual rooms, or a central gas furnace with ducts are used for heating. Grab bars over tubs and showers, low cupboards, and display shelves for books and curios collected over the years are features purposely included for the over-65 occupant.

The grounds of Pilgrim Place are maintained by an employed staff of men who mow and water the lawns, and trim the trees and shrubbery.
housing the over-65

This 6-room, 2-bath house is easily converted from a single to a double dwelling, or from a double to a single dwelling—a design idea that merits consideration when planning a home for a family which includes elderly parents.

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**these houses reach incomes as low as $140 a month**

Florida, more than any other state, offers the widest selection of homes and/or communities purposely planned to attract the person or couple over-65. The houses range from the low-cost to the luxury mansion with swimming pools in the backyard. Typical of the low-cost dwellings are the two shown here.

House, upper right, is the basic model offered in Leisure City by the Florida Sun Deck Homes. It is a one-bedroom, all concrete and steel house on a 75x105 foot minimum lot, which sells for $5,280 plus closing costs. Financed under FHA, down payment is $530; monthly payments $31. Features include kitchen cabinets, aluminum jalousie windows, hot water heater and asphalt tile floors.

Builder-owners Frank Vellanti and Thomas F. Palmer, report banks are willing to underwrite mortgages for buyers 60 to 65 years of age.

The two-bedroom house lower left sells for $6,380 in a community for retired persons near Ormond Beach, Florida. These homes are built and financed without benefit of FHA by the Universal Contractors Inc., of Miami and New York.

Low down payment of $780 requires a second mortgage be taken by the sellers. First mortgages have been handled by a building and loan association in amounts of $4,200 and $4,300. Monthly payments are $56.

The houses are of concrete block and masonry construction. They have poured tie beams, furred walls, tile bathrooms with colored fixtures, asphalt tile floors, built-in kitchen cabinets, automatic electric hot water heater and a wall heater.

Here's a house with an income apartment

Here's a house with an efficiency apartment as part of the basic plan. It could be built for the over-65 person who wants to be near yet independent of his family, or who wants a home with an income unit.

The house was designed by Perkins & Will. Chicago architects, for the Des Plaines Veterans Homes, Inc., Des Plaines, Illinois. The two-room apartment was purposely included as a rental unit. It has a Purcaire kitchen, a private bathroom, and its own private entrance. The house can be built as a single family dwelling and later converted for two-family occupancy.

Original selling price of the house was $13,500. It qualified for an FHA-insured mortgage up to $9,600, Smith & Hill, Inc., were the builders.

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This Sun Deck house has 360 square feet. sells for $5,280

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Retirement village near Ormond Beach offers this two-bedroom concrete block house for $6,380. Houses are financed without benefit of FHA.

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AMERICAN BUILDER
custom-designed for a moderate retirement income

Using a four-foot module to eliminate waste in building, William P. Lindhout, Detroit architect, was able to produce this compact one-bedroom house which cost $9,000 to build in Plymouth, Michigan. The house was custom designed for a couple approaching retirement who found their old house too large and too costly to maintain. Sale of their older home paid for the cost of the new. In addition, monthly expenses for utilities, insurance and taxes dropped to about $32.

Many of Lindhout's cost-saving ideas are also work-saving ideas. The open floor plan eliminates partitions that would have cost money to build; required additional upkeep, and reduced living space. Doors are the space-saving folding type. The plywood exterior weathers well, and the plywood interior walls are easy to maintain. The living room window wall requires no storms or screens. The butterfly roof eliminated the need of gutters, and the absence of stairs not only saved money but accidents, too.

Photos and data courtesy Detroit Free Press

Left. L-shaped storage cabinet houses precious mementoes: hobby collections, books, record player, and typewriter. Center, kitchen-laundry are combined for convenience in use. Pass-through saves steps. Right, wide overhang protects glassed-wall living room from summer sun. Room overlooks rear yard. Double 2x8's frame roof construction of 2x6, 16g boards

N O V E M B E R 1 9 5 3
custom-designed for the well-to-do person over 65

Here is a retirement house custom-designed by Caleb Hornbostel, residential architect, for a couple who could pay $16,000 to $20,000 to have it built in a New Jersey suburb. Designed for an 80x120-foot lot, the house contains 12,200 cubic feet of living space excluding the garage and breezeway. Living space includes a living-dining room, kitchen with a breakfast area, and a 15x25-foot bedroom. To provide a guest bedroom or a study, a sliding partition was installed in the bedroom.

The house is expandable. In the breakfast alcove space has been allotted for a washer-dryer unit. The storage closet adjoining the lavatory can become a shower stall or tub to create a second bathroom. Extra rooms, if needed, could be added at side or rear of the living room.

The house is basementless. To assure complete insulation it will be built with a double concrete slab. All walls will have the equivalent of four-inch insulation. Fire-preventative shingling will be used on the roof.

Compact efficient kitchen is 9x8-feet. Has eye-level oven, raised refrigerator, burners on stove in horizontal row, nonskid flooring, and easy-to-reach cabinets. Bathroom has nonskid floor, step-in tub with grab-bars, ample medicine chest and a vanity with storage space below.
PRESENTING

THE NEW ADVANCE STYLE LAUNDRY TUB

Here's the answer to every home owner's prayer for something fashionably new and different in laundry tubs! Ideal for utility room, laundry room, basement or kitchen. Nothing else can compare with it for sales volume and profit as well as for home satisfaction. Don't delay, order today! Look at these advantages:

- POLISHED STAINLESS STEEL TOP TRIM (WITH 2 EMBOSSED SOAP DISHES)
- FIBERGLAS TUB WON'T CRACK OR MAR*
- MATCHING FIBERGLAS COVER FOR ADDED STYLE**
- IMMACULATE WHITE ENAMEL STEEL CABINET
- FULL SIZE DOOR FOR EASY STORAGE AND REMOVABLE FOR PLUMBING INSTALLATION
- RECESSED BASE FOR TOE ROOM—IN RICH BLACK
- LEVELING SCREWS HIDDEN IN BASE ADJUST FOR HEIGHT AND UNEVEN FLOORS
- LIGHT WEIGHT SIMPLIFIES DELIVERY AND SET UP
- CHROMED BRASS OVERFLOW PIPE SAVES EXTRA WORK, HOT WATER AND SOAP**

*(Trade-mark O.C.F. Corp.)

WITH THE FABULOUS FIBERGLAS TUB!

MADE BY THE

WESSELS CO.

1625 E. EUCLID AVENUE, DETROIT 11, MICH.

PLANTS IN: DETROIT, MICH.; CLEVELAND, OHIO; KANSAS CITY, KAN.; NEW ORLEANS, LA.
Notice how easily Keymesh is lathed to the ceiling. Joints are lapped two inches.

Engineered for true, solid corners, Keybead, goes up easily—is easy to plaster.

Lathers easily strip joints and corners with preformed Keycorner.

For many years, plaster has been accepted as a superior and highly adaptable material for finishing interiors of buildings. However, with today's trend toward larger ceiling areas and large picture windows, architects, builders and craftsmen are insisting on greater plaster strength.

One of the most practical and economical ways to get this strength...to stop plaster cracks before they start...is to reinforce it with the Keystone System of Plaster Reinforcement, called "3 Keys to Stronger Plaster."

You'll be surprised at how little it costs to get this quality feature. You'll be pleased at the valuable benefits it gives to buildings...lasting plaster beauty...greater client satisfaction...maximum fire resistance.

Your plastering contractor will be glad to figure your jobs with the "3 Keys to Stronger Plaster."

KEYSTONE STEEL & WIRE COMPANY
PEORIA 7, ILLINOIS

KEYMESH - KEYBEAD - KEYCORNER - KEYSTONE NAILS - KEYSTONE TIE WIRE
KEYSTONE WELDED WIRE FABRIC - KEYSTONE NON-CLIMBABLE AND ORNAMENTAL FENCE
3 KEYS TO STRONGER PLASTER

1. KEYMESH
Keystone's woven wire galvanized reinforcing lath—applied directly over the gypsum or insulating lath on the entire ceiling. This network of multidirectional reinforcing increases the strength of ceilings. It assures a uniform thickness of plaster and guards against cracks. Where ceiling radiant heat is installed, Keymesh accelerates uniform heat distribution as well as reinforcing the plaster.

2. KEYBEAD
Keystone's woven wire galvanized reinforcing lath with the precision-formed bead—applied at all outside corners. The open mesh of Keybead wings permits plaster to completely embed the steel wires, adding strength. Full, solid corners result. Keybead is available in standard lengths; is easy to splice when required.

3. KEYCORNER
Keystone's preformed-for-corners, convenient width, woven wire galvanized reinforcing lath—applied at cornes, joints and ceiling-wall junctures. It fits snugly in corners when you flex it. It lies flat, too, for stripping wherever required. It has the same multidirectional reinforcing as Keymesh for maximum crack resistance. It doesn't rust... and eliminates waste.
Adverse climatic conditions and weathering have no effect on rustfree, rotproof aluminum combination storm-screen doors. These durable doors last longer, stay attractive, require absolutely minimum maintenance and permit fast, convenient interchanges of screen and storm panels. These doors fit right in with popular aluminum storm windows and screens—offer another important aid to faster, easier sales because home buyers quickly recognize that they are getting more for their money.

Put aluminum's advantages, both in special designs and standard products, to work for you. Attractive appearance, long life, low cost, availability, ease of fabrication with regular carpenter tools—these and many other aluminum advantages help you build better, sell quicker.

Remember—for help on your building material problems, call your nearby Reynolds Architectural Distributor listed under "Aluminum" in the classified telephone directory. For more information, on the many uses and advantages of architectural aluminum in home construction, write Reynolds Metals Company, 2530 South Third Street, Louisville 1, Kentucky.

Send for free Architectural Aluminum catalog. For quick reference, see catalog Re in Sweet's Architectural File.

SEE "Mister Peepers" Sundays NBC-TV. Consult local listings for time and station.
Here’s why...

“4 out of 5” Buy Clipper®

Cut Faster  
Last Longer  
At Lower Cost

Clipper Superior Blades are guaranteed to...

“Provide the Fastest Cut... at the Lowest Cost”

Model C-130
One of 5 models gas or electric powered

Clipper Superior Blades are manufactured under rigid control... assuring consistent quality. You are guaranteed peak performance... at the lowest possible cost with every blade.

Clipper Blades to fit every make and model.

Concrete - Hand Power Saw

Your guarantee of the finest, fastest, most economical masonry and concrete cutting is the familiar Clipper Trade Mark on a Wet Abrasive - Dry Abrasive — “CBR” - Break-Resistant — or a Diamond Blade.

Nearly 20 Years Experience Behind Genuine Clipper Products

The unqualified Clipper guarantee of satisfaction is backed by nearly 20 years of world-wide experience, the ability to select the finest materials and the “know-how” to put them together.

Try a Clipper Masonry Saw or Con-Saw on Free Trial

Clipper Manufacturing Co.
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Send Free Literature and Prices on:
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- Clipper Diamond Blades - Masonry
- Clipper Diamond Blades - Concrete

Company  
Address

City  State

Nov. 1953
More profit margin for you . . . more sales appeal to buyers . . . even when you're building larger 6, 7 and 8 room houses!

New DELCO-HEAT oil-fired Conditionairs offer bigger comfort capacity for all size homes!

No matter what size homes you build here's the one heating line engineered by General Motors for absolute comfort, easy installation, and sensible pricing. And because of extensive national advertising the very name Delco-Heat adds a real sales plus to your homes.

Two new high units, 80,000 and 100,000 BTU output are Underwriters' approved for close-clearance installation. Ideal for closet or utility room application . . . cold air return can be installed at either side or bottom of unit to meet various types of home construction.

And there are four new basement models at 80,000, 100,000, 125,000 and 150,000 BTU output. Smartly styled for deluxe installation and economy-priced for sales appeal. All models insulated with aluminum foil-backed fiber glass. Delco-Heat oil burner, Multi-Rad heat transfer unit, and Delco-built coordinated controls assure real cold-weather comfort and outstanding operating economy.


For a good deal -
DEAL WITH DELCO

General Motors Engineering
Delco Production Skill

...your keys to Sales Success

... a complete line of automatic oil- and gas-fired conversion burners, Conditionair forced warm air furnaces, boilers, and electric water systems.
CUT
COSTS!

STAPLES BEAT
NAILS 3 TO 1

Bostitch H4 Stapling Hammer

Fasten asphalt shingles to new roofs. Fasten underflooring, latticework, etc.—three times faster than hammer and nails. Less tiring. One-hand, one-blow operation usually cuts over-all costs about a third. Longer reach cuts down on scaffolding needs. 50 telling blows without reloading. Heavy, \( \frac{3}{4}\)" galvanized staples diverge inside wood—give extra holding power.

Bostitch H2B Stapling Hammer

For lighter work—installing batt and reflective insulation, attaching metal lath and cornerite, holding underfelt and sheathing paper and countless other high-speed tacking and light-nailing jobs. Less tiring. One-hand, one-blow operation cuts over-all costs 20-30\%. Staple lengths: \( \frac{1}{4}\)", \( \frac{3}{8}\)", or \( \frac{1}{2}\)".

‘FASTEN IT BETTER AND FASTER WITH

BOSTITCH

STAPLERS AND STAPLES

SEND NOW

BOSTITCH, 831 Mechanic St., Westerly, R. I.

Yes, I would like the detailed bulletin and prices on Bostitch stapling hammers.

Name__________________________

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State___________________________

NOVEMBER 1953

71
What every contractor should know about PG’s

(Anaconda’s PRE-FORMED Panel Grids)

PG’s — “Panel Grids”
They are accurately pre-formed, compactly packaged radiant heating coils ready to be installed. PG’s® are supplied in one standard size and contain 50 linear feet of % in. Type L Anaconda Copper Tube. PG’s weigh about 10 pounds and are packed 4 to a carton for easy handling or storing.

PG’s save installation time
They do away with the time-consuming operations of forming coils on the job or in the shop. There’s no more awkward “stringing-up” of coiled tubing or the extra care required in maintaining the design spacing and avoiding sags.

PG’s make estimating and layouts easier
Because each PG has a rated Btu output at various spacings—4½ in., 6 in., 7½ in., 9 in, and 12 in., it is a simple matter, following the heat loss calculations, to determine the number of grids needed and to space and position them according to the heating requirements of each room or area.

PG’s are easy to install
When a single PG is to be installed at various spacings it may be laid out on a simple wooden frame or cradle at convenient working height. Small wire nails tacked alongside the tube maintain the spacing as measured.

The frame and PG are lifted to position and held by a single prop while the straight and trim grid is quickly and securely fastened to the ceiling construction.

The grids, with one tube-end expanded, are easily soldered or brazed in series without fittings. When only part of a PG is required the remaining loops can easily be handstraightened and used as runouts to the supply or return risers or as connecting lines to other grids.

You can adapt PG’s to any room size or plan arrangement
PG’s can be easily contracted or extended by hand so that the tube spacing will meet all design requirements. The spacing may be varied from 4½ in. c-c to 12 in. c-c. Thus a single PG may serve ceiling areas ranging from 22½ to 60 square feet to obtain uniformity of heat distribution.

Want more information about PG’s?
Nationwide distribution isn’t complete as yet. We are increasing production and getting PG’s to Anaconda Distributors just as fast as possible. You will want to know more about this new product; so send for Publication C-6, which shows why it is easier to design and faster to install a panel system with PG’s. Write today to: The American Brass Company, Waterbury 20, Connecticut.

*Patent Applied For

For Radiant Panel Heating

ANAOCODA
50-gallon water heater...24" wide

New Westinghouse Table-Top Model permits better space planning for basementless homes

To meet two trends in modern living—one-floor homes and increased use of hot water—Westinghouse has added this newsworthy 50-gallon size to its line of table-top water heaters. Only 24 inches wide, it is standard base-cabinet height—36 inches from floor to counter top—and has a 4-inch backsplasher. When installed in utility room or kitchen, the porcelain enamel top adds desirable extra work surface. When supplied without top, the heater can be installed under continuous work surfaces.

This model, like all Westinghouse Table-Top and Round Model Water Heaters, carries the liberal Westinghouse 10-Year Protection Policy.

For further information, contact your Westinghouse Distributor or write direct.

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division · Mansfield, Ohio


YOU CAN BE SURE...IF IT'S Westinghouse
Ask the average home buying prospect what he wants in a new house and he'll quickly tell you..."a house that's modern and up-to-date in every respect—a house that's designed for comfortable living and easy, inexpensive maintenance." Yes, LOW-COST MAINTENANCE is a mighty important factor with today's home buyers.

Because they cannot rust or rot, never need painting or costly repairs, "Quality-Approved" aluminum windows have unusual sales appeal.

Why not cash in on this growing demand for aluminum windows on the part of home buyers? As you plan and build new houses, install "Quality-Approved" aluminum windows, and see for yourself how they help stimulate sales. Once you try them, you'll also appreciate their many other advantages, such as: ease of handling, ease of installation, and freedom from profit-eating "trouble-calls."

"Quality-Approved" aluminum windows are available for immediate delivery, through many manufacturers, in sizes and styles (double-hung, casement, projected, and awning types) that fit any building plans. All are tested against rigid performance standards. All are approved for quality of materials, for strength of sections, for sound construction, and for low air infiltration.

For additional information and names of approved manufacturers, consult Sweet's Builders File (Section 3c/ALU) or write us direct at Dept. AB-11.

Aluminum Window Manufacturers Association

74 Trinity Place, New York 6, N. Y.
Quality Approved

ALUMINUM WINDOWS

Look for this seal when buying aluminum windows

QUALITY APPROVED

A.W.W.A. Quality Specifications - Materials, Construction, Strength of sections and Air infiltration requirements - confirmed by Pittsburgh Testing Laboratory.

Members - Aluminum Window Manufacturers Association

For quality materials
For sound construction
For strength of sections
For low air infiltration
The look that sells remodeling

new Gold Bond
16 in. Gypsum Wall Plank

Everyone likes the distinctive appearance of fine wood paneling...on a wall, in a complete room, or throughout the house. And now, with this new Gold Bond Gypsum Wallboard product, you can provide this "luxury-look"...at a fraction of the cost of wood.

One man can quickly and easily cement these lightweight, fireproof planks right over old walls, or over regular gypsum board in new construction. No nails to conceal, no joints to treat. No further decoration needed.

WALL PLANKS, with rounded edges, are available in pre-finished Knotty Pine and Bleached Walnut in 8', 9' and 10' lengths, 3/8" thick, 4 planks per bundle. Also available in unfinished Standard plank which can be painted, textured or wallpapered.

Your Gold Bond dealer will gladly show you how WALL PLANK pays for itself in faster, more profitable remodeling jobs. See him today!

NATIONAL GYPSUM COMPANY • BUFFALO 2, N. Y.


Apply Gold Bond Laminating Adhesive to planks with this handy 3-notch spreader supplied by your Gold Bond dealer. Simply slide spreader along, leaving three straight ridges of cement.

Apply first plank at a corner. Press firmly against wall to insure even adhesion and use carpenter's level to plumb. Install three planks, re-check plumb and continue across wall.
Contractors use ten Stud Drivers for fastening in steel and concrete

Contractors for University of Minnesota's new Mayo Memorial Medical Center gave the Remington Stud Driver a real workout. They used 10 of these powerful tools to install ventilating ductwork and to anchor 2,500 metal door bucks to concrete. Door bucks were set separately, walls finished later. This meant plenty of open space for moving in equipment and other material.

For fastening 900 window frames, Remington Stud Drivers again proved fast and convenient. Workmen found the rugged 5½-lb. tools easy to handle, simple to operate. They liked the fact that there were no wires or hose to get in the way as they worked from frame to frame. And every stud was driven arrow-straight—thanks to the precision power supplied by 32 caliber cartridges.

Can the Stud Driver help you?

Your local distributor will be glad to show you the Remington Stud Driver in action — on concrete, brick or steel. Find out how you can cut construction costs and speed fastening jobs. For the name of the distributor nearest you and for full information about this modern fastening system, send in the coupon below.

MAIL THIS COUPON TODAY

Industrial Sales Division, Dept. AB-11
Remington Arms Company, Inc.
939 Barnum Ave., Bridgeport 2, Connecticut

Please send me free copies of the new booklets showing how I can cut my fastening costs — and the name of the distributor nearest me.

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'nplifiag construction factoning
Se Innew meaieal Centor
Contractors use ten Stud Drivers
for fastening in steel and concrete

Simplifies construction fastening
in new medical center

'If It's Remington—It's Right!'
company surveys family needs
— then builds houses to fit

The likes and dislikes in housing of families who make Michigan's northern peninsula their home were tabulated and studied by the architect before planning the low-cost unit shown here. The house was designed by Pace Associates, Chicago architects, for the White Pine Copper Company's new townsite near Ontonagon, Michigan. (How to Build in Winter, American Builder, October '33). Herman Gundlach, Inc., of Houghton, Michigan, is the builder. The general contractor is the Turner Construction Company of New York City.

Dining and Entertaining
Dining in the kitchen was preferred by most of the families interviewed. Eighty-six per cent served all their meals in the kitchen. The survey showed that of those who entertained, 50 per cent used the kitchen, 32 per cent the dinette or dining room and 18 per cent the living room. Kitchens in 70 per cent of the houses surveyed were 30 to 144 square feet. These results showed a need for a larger than average kitchen.

Single Entrance
The survey showed that most families use only one entrance. This led to provision of a single entrance. Most people (95 per cent) used either
Living room has 210 square feet of floor area. Ceiling follows angle of roof. Ceiling is plasterboard. Floors are linoleum tile

Entry hall affords good circulation. To the left is the kitchen and to the right is a hall leading to bedrooms and bath

a side or a kitchen door. The front door, if it was completed, was used only in the summer and then only by guests.

**Basement Usage**

The survey showed that 96 per cent of the houses had basements, but only a small percentage used them. Forty-four per cent used the basements as workshops, 36 per cent for laundry purposes, and 26 per cent for a playroom. These figures deter-

mined the slab design. Extra storage space is provided inside the house and in the oversize garage.

**Room Size**

Living rooms in existing structures ran from 100 to 352 square feet. The largest segment (52 per cent) was between 180 to 240 square feet. The White Pine houses were designed with living rooms of 210 square feet to comply with the average size in the area.

Bedrooms were found to be small in the existing structures surveyed. Sixty-four per cent of the houses had bedrooms of 90 to 120 square feet. Those in the low-cost house run between 90 and 145 square feet.

**Planned for Cold Weather**

These houses were planned for long, cold winters. In the upper peninsula of Michigan tempera-

Two-bedroom house uses same basic layout in the kitchen and living room area. This house is 208 square feet smaller than the 3-bedroom model. The same circulation features are in the 2-bedroom plan as in the larger house.
Heating coils are 1/2-inch I.D. copper pipe 18 inches o.c. Boiler is designed for 145-degree water temperature. Wide spacing of coils cut cost. Temperatures drop to 30 or 40 degrees below zero. Snow can accumulate to a height of three or four feet.

Extra precautions were taken by the builder and architect in the planning and construction of the house. Roof overhangs are minimum so that the snow would work its way off and not build up. Special insulation procedures were taken to minimize heat loss in the slab. A waterproof membrane skirts the bottom half of the structure so that melting snow will not work back of the siding and into the structure. The membrane was placed over the sheathing and under the siding. Also considered in the development of this house was its orientation on the lot.

One inch of spun glass insulation was placed around the outside perimeter of the slab and covered with cement board. Under the slab, rigid insulation was carried back to bearing wall foundation. Ventilation of roof is a one-inch opening between side of building and soffit. Opening is protected with a screen cloth.

Small roof overhang minimizes snow load

Orientation of the house is important in the northern climate. Winter winds range from northwest to southwest 72 per cent of the time, so entrances are placed southeast or south to prevent snows drifting in entry.
PG GLASS BLOCKS over Kitchen Counters

mean - a lighter, brighter kitchen
- a more modern, salable house

See how the light streams in on this counter work surface through that long panel of PC Glass Blocks. That's a convenience every homemaker appreciates... one that will help to sell her on this house.

And it's an added feature that you can't afford to omit in the homes you build. More and more homeowners are becoming familiar with the advantages of PC Glass Blocks. They know that glass blocks have nothing to rust, rot or require frequent repainting or repair—that, because of their sealed-in dead-air insulating spaces, heat gain in summer, heat loss in winter, and unpleasant condensation are reduced. And glass block panels can be easily wiped clean with a damp cloth.

There are dozens of ways PC Glass Blocks can be used to give homes and other buildings greater appeal. For suggestions on where and how to install them just send in the convenient coupon.

Pittsburgh Corning Corporation

Only PC Glass Blocks give you all these advantages

- KEY-LOCK MORTAR JOINT exclusive edge contour creates double wedge-shaped mortar joint—locks each block in place.
- DISTINCTIVE MARKINGS on top edge of functional block make pattern identification easy, assure proper setting.
- FINGER-FEEL RIDGES along top edge of functional blocks are an added guide to setting blocks correctly.
- PLASTIC BOND COATING with heavy grit application provides tight bond between glass and mortar.
- "CLEAN-EASY" FACE FINISH—special factory-applied coating protects block face from mortar and dirt. Gives neater installation. Available in certain styles.

Pittsburgh Corning Corporation
Dept. AO-113
One Gateway Center
Pittsburgh 22, Pa.

Please send me more information on PC Glass Blocks.

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November 1953
"Complete satisfaction with LEHIGH MORTAR CEMENT!"

Ever think how difficult it is to satisfy everyone when building a public school? Mason, contractor, architect, general public, all have worthwhile opinions, and each must be pleased with the finished job. When commenting on the clean, weathertight walls of these recently completed school projects, the contractors, C. Iber & Sons, had this to say about Lehigh Mortar Cement:

“Our mason foremen on each job were very well satisfied with the workability of the mortar. We were sure that we had watertight walls and since completion, actual experience has proven this. On the Henry job, interior block walls received no finish whatsoever, and our firm, the architects and the public were very well pleased with the clean appearance of the unfinished surfaces. We assure you of our complete satisfaction with Lehigh Mortar Cement.”

Try Lehigh Mortar Cement on your next job and note the difference. Your Lehigh Dealer will explain how it will save you time and money.

LEHIGH PORTLAND CEMENT COMPANY
ALLENTOWN, PA. - CHICAGO, ILL. - SPOKANE, WASH.
Exquisitely styled in satin aluminum, NATIONAL LOCKsets bring new charm to the modern home. Knobs, roses, face plates and strikes are made of selected aluminum material. • Anodizing produces an extremely hard surface that will not stain, discolor or easily scratch. This surface, which is not an applied finish, is corrosion-resistant in any climate. • Those who have seen these NATIONAL LOCKsets agree they are destined to become a best seller in today’s growing market for aluminum trim. Buy it from your wholesaler.

Sell National Lock rust-resistant, button tip butts with every aluminum lockset. Comparable in appearance, they make an attractive installation.
Sometime soon, pick up a Porter-Cable tool. We can tell you what to expect—but we’d rather you formed your own opinion.

Be as critical as you like when examining it. Rap the housing with your knuckles... does it sound solid and substantial? Get the feel of it... is it balanced and “right” in your grip? Now try it out on a piece of lumber. How’s its smoothness of operation? Its speed? Its accuracy? Its handling ease?

You decide. We won’t say another word—except to send you the name of your nearest dealer if you want us to.

Model 511 Router — Illustrated — $125

Porter-Cable Tools are equipped with highest grade portable tool precision ball bearings—individually matched to millionths of an inch—to provide exceptionally smooth running at high speed.
Alert builders and architects are giving modern homes more "face value" by making the garage door an important part of exterior design. Barcol OVERdoors in a wide variety of individual "stylized" designs have proved convincingly that they add "buy appeal" to any home. And their beauty is more than skin deep—it is backed up by quality workmanship and durable hardware of heavy-gauge quality. Barcol's patented cam-closing action assures a weather-tight fit without sticking or jamming. Twin torsion springs give perfect counterbalancing—and ball-bearing rollers help door open and close easily. Two price lines fit every home requirement. Sold, installed and guaranteed by your factory-trained Barcol distributor.

Add "electronic" sales appeal with Barcol Radio Control

Headline your home values with electric operation for garage doors, radio-controlled direct from the dashboard of owner's car. Once they try it, 90% buy it. This feature upgrades buyers' standards of home value several hundred dollars—yet cost averages under $350.00 for 2-car operation (freight and installation cause a variation). Try it yourself—your Barcol distributor has a special proposition for builder's own residence or office installations. Phone him today!
Builders...Here it is...

Starting with January 1954, you’ll get

Your own Regional Edition

Manufacturers—

Here’s how you, too, can benefit

‘Custom-editing’ for the builder-reader MEANS EVEN GREATER READERSHIP. This in turn means greater productivity for your advertising . . . which will share in this increased enthusiasm of the readers. It’s your opportunity to reap the benefits from the New AMERICAN BUILDER’S regional editorial program . . . designed to make your advertising even more profitable.

And now you can eliminate all hunches and guesswork in your copy testing with the New AMERICAN BUILDER’S split-run editions. It offers you an ideal opportunity to test three different advertisements . . . at one time! And for only a slight additional cost.

Another step in AMERICAN BUILDER’S Editorial Program
This is what you asked for...

Custom-Edited for your own Building Area

NOW... for the FIRST time in the light construction industry... beginning with the January issue... AMERICAN BUILDER will publish three separate regional editions. Each edition will be sent to the respective reader in that area... NORTHERN... SOUTHERN... and WESTERN EDITION.

This is new... different... important to you! It means now you can have the type magazine you've always wanted. It's another AMERICAN BUILDER innovation... a forward step in the great expansion program designed to make the New AMERICAN BUILDER the most useful magazine in the light construction industry.

You asked for it... and here it is... a 'custom-edition' of the New AMERICAN BUILDER for your very own building area. It will give you your own regional news... NAHB chapter news... personal items... specific regional weather forecast... six to eight homes... architectural designs... photographs... block plans and details. To make sure the news is presented the way you WANT it... each regional issue will have its own editor... who KNOWS the area... KNOWS the builders... KNOWS your problems.

We think you'll be pleased with the substantial amount of 'home-made'... 'back-yard' features in your own regional issue of the New AMERICAN BUILDER. Now you won't have to wish for architectural plans designed for your own building climate... YOU'LL HAVE THEM... plus many other 'customized' features you'll find in every issue. Be sure to look for the regional symbol on the front cover of AMERICAN BUILDER... N for Northern... S for Southern... and W for Western. It's the symbol of a 'customized' magazine... presenting the type of reading you ASKED for!

Here's what you'll get in your own Regional Edition

- Three pages of regional news... news of the NAHB chapters... outstanding builder news... personal items.
- A full page of the specific regional weather forecast... written by a national weather forecasting expert.
- Six to eight homes of each region... architectural designs... photographs... and complete block plans.
- Each regional edition will have its own editor.
- A magazine 'custom-edited' for the builders... giving the builder-reader news from his own back yard.
- Front cover identification... N for Northern... S for Southern... W for Western.

To make it the Most Useful Magazine for Builders!

Seven big Pacific Boilers go into largest heating installation!

Columbia Point Housing Project installation is the biggest single heating unit in New England . . . a further indication that Pacific Boilers with Jet-action Circulation are becoming standard equipment for multiple dwellings, too.

The seven Pacific Boilers on the flatcars shown above are on their way to the Columbia Point Housing Project in South Boston, Massachusetts. They will be part of the largest heating installation in New England.

This scene is being repeated more and more often as the Pacific Jet-action story comes to the attention of heating contractors, builders, engineers and architects, everywhere.

**Here's what Jet-action Circulation means:**
The special design of Pacific Circulating Connections causes a jet-like increase in the speed at which steam and hot water flow from the water leg.

These high-velocity streams are trained directly on the heating tubes. They sweep away the insulating steam bubbles on the tubes and keep them in motion. The result: maximum heat transfer.

This modern heating principle is the most effective method for obtaining the greatest amount of heat from the fuel consumed.

If your installations should have the best, they deserve Pacific Boilers with Jet-action Circulation. For catalogs, engineering data or any other information you need, call your local Pacific representative, today.

**OTHER PROMINENT PACIFIC INSTALLATIONS**

Grafton Housing Project, Newark, N. J.

1350 Lake Shore Drive, Chicago, Ill.

Cross Country Manor Apartments, Baltimore, Md.
KOHLER
TRITON SHOWER AND BATH FITTING
with Niedecken Mixer

Easy to install . . . adjusts to wall variations
. . . low maintenance cost . . . easy to operate
. . . saves time . . . saves water . . . low cost

This efficient, economical fitting offers advantages at all three points of operation, costs less than many two-valve fittings.

The shower head, of water-saving design, 2" in diameter, has a volume regulator for quick, easy control of shower spray. Ball swivel joint holds head at desired angle.

The Niedecken mixer is inexpensive to install, requiring but one wall opening—important where ceramic tile or glass is used. Single escutcheon makes wall cleaning easier. All parts subject to wear can be removed readily from the front. Single handle affords quick "tuning-in" of properly tempered stream, eliminating waste of water. Adjustable hot water stop can be set in advance for maximum temperature desired.

The bath spout has a diverter control knob to direct flow from shower or spout. When mixer handle is turned water flows into tub and may be safely tested. Lifting knob diverts flow to shower head. When shower is turned off, knob drops to original position, preventing sudden drenching of next user.
With sawing head fully retracted, maximum room is available for setting up work... positioning material.

There's no ducking or bending to see layout marks with this convenient retractable arm.

Plunger pin locks provide rapid adjustments of sawing head. Tapered design holds settings rigidly, allows wear without developing play.

Retractable elevator handle in front permits fast adjustments in full view of work, and without leaving work station.

One-piece saw guard can be removed, or replaced, in seconds without any tools. No loose parts to lose in sawdust.

CALL—OR SEE—YOUR SKIL DISTRIBUTOR FOR COMPLETE INFORMATION OR CONTACT
"SKIL Radial Saw with retractable arm cuts set-up time, speeds concrete form production"

says Arthur B. Fowler,
superintendent,
Jos. L. Muscarelle, Inc.,
Hackensack, N. J.

"We have tight production schedules on this $3 million building," says Art Fowler, "and every hour counts. That's where our SKIL Radial is a big help! It's a real production tool—a 'must' when you're building forms to place about 15,000 cubic yards of concrete. The retractable arm feature of the SKIL Radial Saw speeds the work and makes it a whole lot easier.

"We bought our SKIL Radial because we have always had such dependable performance with SKIL tools. They are abused to extremes in this type of work—yet we have had a minimum of maintenance. By giving us the best possible results," Fowler concludes, "SKIL tools are a big factor in helping us maintain our strict production schedule!"

SKIL Radial Saws
New design features make a complete construction workshop to set up for all cuts. Easily operated with speed and precision by one man. All mechanical and electrical controls are accessible from front. Plenty of set-up room provided by retractable arm.

SKIL Radial Saws are available in 2, 3, 5 and 7½ h.p., with 14" and 16" blades, 1 or 3 phase, all voltages, manual or magnetic control.

YOUR NEARBY SKIL FACTORY BRANCH

SKIL Tools
NAHB LEADS FIGHT ON

holds first school for "Cities Organized Reconstruction"

Dickerman outlines NAHB's stand on slum redevelopment

"Business has a responsibility for the use of its product no matter if it be new or used. The bulk of our country is housed in used housing and it must be preserved," stated John Dickerman, executive vice president of the NAHB. Dickerman went on to show that, at our present rate of construction of just over one million units a year, it would be physically impossible to replace all of the country's housing.

"The 1950 census showed that 43 million dwelling units, worth $300 billion, equaled 25 per cent of the nation's wealth. The census also pointed out that 16 million of these houses were sub-standard in one way or another.

"Private enterprise is in this redevelopment picture because for years we have been bringing pressure to bear to get government out of business. Now," stated Dickerman, "private enterprise must come up with an answer to counter Public Housing and Redevelopment.

"The slum rehabilitation program is important today because it is timely. the White House is interested in it, and in the next 10 years we have the opportunity to do the job."

The NAHB official praised Alan Brockbank, 1952 president of the National Association of Home Builders. "In his term of office, Brockbank instituted the 'New Face for America' program. Today Brockbank heads the important housing rehabilitation committee that was instrumental in bringing G. Yates Cook to the NAHB and starting this important civic service.

"We want no profit, all we want is the job done. We welcome all other organizations who are interested in helping with the program," stated Dickerman.

C.O.R. school has 3-day course

The purpose of the "Cities Organized Reconstruction" school sponsored by the NAHB is to give concrete facts and specific procedures to cities wishing to rid themselves of slums. The school's director, G. Yates Cook, set up the first session in New Orleans, in September. Other sessions are planned for other regional areas.

SIX CITIES SEND REPRESENTATIVES

San Antonio delegation. Left to right, Roy Baines, Robert L. Wagner, Eugene Willette

Forth Worth delegation. Back row, left to right, W. B. Henderson, C. W. Horan, Ralph Hardy, Alvin E. Soniat. Front row, left to right, J. C. Llewelly, R. B. Billings, Lee Larson, V. C. McNamee, Joe Driskell
Many months ago NAHB officials realized that one man could not stump the country spreading the "Slum Rehabilitation gospel." The thought occurred that it would be best to send a man (G. Yates Cook) into regional areas to set up schools for instructing individuals on procedures so they could start programs in their own cities.

Instructors will be men who are currently involved in starting a program locally. In New Orleans, chairman of the Rehabilitation Commission, sub-chairman, and city officials lectured and led the discussion programs. To supplement local planning, national figures in the slum rehabilitation program were brought to New Orleans to help with the instruction.

Subjects covering all phases of starting a rehabilitation program were discussed in the three-day session. The course of instruction ended with a tour of New Orleans' slum areas.
New Orleans' Mayor opens C.O.R. school

"If you keep slums, you pay for them two or three times over," stated New Orleans' Mayor, deLesseps S. Morrison.

New Orleans' Mayor Morrison told the students of the C.O.R. school that he abandoned the government-sponsored urban redevelopment program and public housing in favor of this private enterprise slum rehabilitation plan.

The rehabilitation program had the backing of real estate owners, real estate board, home builders, Chamber of Commerce and many neighborhood groups.

New Orleans, he pointed out, is a 235-year-old city, and surveys showed that 40 per cent of the housing was not standard. "New Orleans needed action immediately," Morrison said.

"The program was passed by the city council faster than any other measure that has come before it," stated the mayor.

citizen's committee head relates birth of program

Clifford F. Favrot, chairman of the New Orleans' citizen's committee for housing improvement and slum prevention, the first step after Favrot's appointment by the mayor was to study the various methods by which slums could be eliminated.

A special committee of the Chamber of Commerce and city officials recognized that urban redevelopment, public housing, and rehabilitation through proper housing by enforcement were the answers to the question.

Favrot and the committee recommended to the mayor that this approach to rehabilitation be adopted.

They asked the mayor to appoint a citizen's committee from all segments of the community. They proposed to study the following four problems:
1. Define responsibility and authority to avoid conflicts so the job could be done.
2. Study and prepare minimum housing standards.
3. Collect statistical information relative to blight areas so as to plan field enforcement.
4. Review present housing laws to determine if a separate court is needed.

Inasmuch as this program should continue over the years, Favrot's committee raised $3,500 by subscription in order to finance the first 120-day study period. To eliminate any political influence, the committee did not accept city money. The $3,500 was used largely in preparing a survey showing the conditions that exist.

Walter M. Barnett (second from left), chairman of Legislative Subcommittee, explains the operation of his group in the study period. Left to right at discussion table are Louis C. Bisso, director, New Orleans Planning and Zoning Commission, Barnett, G. Yates Cook, and William C. Brooks, zoning enforcement engineer of Baltimore plan.
Slum landlords can profit by repairing their properties,” stated Label A. Katz (left), owner of blighted properties in New Orleans. Katz showed that a 3-apartment dwelling which had no kitchen or bath facilities cost $6,500 to renovate. He formerly received $50 to $60 a month. Today the structure brings $125 a month in rentals. Katz is presently working on renovation of another 2-apartment structure which will cost $6,000. Rent increase will be about $70 a month more than he previously received. Students of the C.O.R. school visited one of Katz’s renovated structures.

how to start a program in your city

It’s as simple as this. Arouse business, professional, and civic groups to bring pressure on the city fathers. If the pressure from these groups is too weak to be heard at top political echelons then publicize the need for action. The press, radio and TV will most likely be willing to cooperate. Sooner or later the political powers will ask that you drop in to discuss the furor that you have created.

Then is the time to have a detailed “plan of action” ready for the mayor. The plan, as suggested by the rehabilitation committee of the NAHR, is as simple and workable as any yet formulated. They suggest that the mayor set up a study committee of 12 persons to recommend a housing rehabilitation program. The committee should consist of representatives of social workers, women’s clubs, negro organizations, mortgage bankers, real estate brokers and home builders, but not city officials.

An advisory committee of city agency staffs should assist the citizen’s committee. They include the city agencies for city planning, health, buildings, fire, welfare, recreation, police and education. The report on conditions in your city should be in the hands of the mayor in 120 days.

No field activity is recommended until the program is properly set up.

what approximates an answer for rehabilitation programs

Let it be clearly understood that any approximation of an answer is one only in general terms. Each city will have to tailor the major plan as set up in the C.O.R. school to fit its general needs.

A single agency responsible for maintaining minimum standards of housing will bring slum structures back to habitable dwellings and prevent other slum areas from further decay. Cities where the agency has been part of an existing department ran headlong into red tape, indifferent department heads and lack of power.

The mayor of the town will set up a rehabilitation commission consisting of a citizen’s advisory council, city officials’ advisory committee and a five-man policy board of citizens.

The citizens advisory committee, similar to the study group, would have members from all segments of the community. This committee acts as a buffer in co-ordinating the program with neighborhood groups. The city official advisory committee will keep the policy commission informed of policy in departments connected with housing welfare.

The policy commission heads the rehabilitation program and is responsible only to the mayor.
One of ten softwoods from member mills of the Western Pine Association. All are manufactured, seasoned and graded to exacting Association standards. Lumber dealers, builders, architects and wood users have found them dependable and best for many construction uses.

These are the Western Pines:
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- Incense Cedar
- Red Cedar
- Lodgepole Pine

Write for free illustrated book about White Fir.
Address: Western Pine Association, Yeon Building, Portland 4, Oregon.

NAHB FIGHTS SLUMS
(Continued from page 91)

The mayor appoints a housing director who is responsible to the policy commission, also a permanent staff of two assistants, secretarial help and experienced inspectors. The NAHB suggests 10 inspectors per 100,000 people.

In addition to physical and financial structure of this plan, other things are needed. Laws governing health, sanitation, and building standards must be grouped into one ordinance. Also needed is a minimum housing standard for the rehabilitation work. It is also suggested that a separate housing court of the municipal court be appointed to hear violations of the ordinances.

An education committee is also an important part of the program. This committee can stimulate the interest and participation of neighborhood groups.

G. Yates Cook, director of the department of rehabilitation of the NAHB, believes that legal proceedings should not be imposed unless other methods fail. He believes that proper education will result in the cooperation of sub-standard housing owners and landlords.

The education committee is also valuable in maintaining the new standard after an area has been rehabilitated. There must be a continuing paint-up, clean-up, fix-up program.

Questions and Answers

How do you finance repair work?

Many vehicles are available for financing the work. Local institutions will open avenues of money when they are certain areas are to be improved.

FHA Title II loans are available when refinancing seems the answer.

FHA Title I loans presently offer $2,500 credit for three years at 5 per cent discount and up to $10,000 at 4 per cent discount with seven years to pay when the loan is for two or more units. Much speculation is being given the Title IA and IB loans. It is felt that they will be liberalized early in 1954 to make them more workable.

"Fight Blight Fund" or a public subscription fund has the power to help hardship cases either by loan or grant. Only 2 per cent of the owners in Baltimore used this fund; 98 per cent were able to work out other methods of financing.

Will slum landlords fix their property?

Experience shows that slum landlords will repair their properties. Baltimore and Charlotte, North Carolina, show that renters are willing to pay additional rent for better housing. Landlords are quick to learn that the rent increases are higher with than without rehabilitation.

Does the city's planning commission enter into program?

Yes. Close co-ordination of the rehabilitation committee with the city planners is important. It would not be wise to start work in an area that is destined for other uses a few years hence.

Why is another department needed? Can it be handled by existing city departments?

No. Existing city departments will inspect properties only for violators that they are interested in. Therefore, using city departments, it is possible to have 6 or 8 city

(Continued on page 94)
Let Insulux Glass Block help you sell your homes faster by adding visible evidence of extra value

What prospective homeowner's eye wouldn't be caught with a "see through" wall as attractive as this one? You can build such a desired feature into your homes by including panels of Insulux Glass Block.

Insulux panels are as practical as they are beautiful. They have the insulating efficiency of an 8-inch brick wall . . . won't frost or sweat in winter. Patterns are available in a wide variety—from the clear block shown above to those that restrict sight completely.

Give the homes you build the benefits that Insulux Glass Blocks bring. Applications are practically limitless. Stairwell, kitchen, utility room and basement, to name just a few places—can use glass block panels to advantage. Start to plan now to use this versatile, practical building material to help you sell your homes, faster.

For information about these uses of Insulux or for help with a specific problem, just write Insulux Glass Block Division, Kimble Glass Company, Dept. AB11, Box 1035, Toledo 1, Ohio.

KIMBLE GLASS COMPANY
Toledo 1, Ohio—Subsidiary of Owens-Illinois Glass Company

NOVEMBER 1953
NAHB will celebrate its 10th Annual Convention and Exposition with a vast presentation of the latest developments in home building. Far bigger, far more complete, far better than ever before!

This industry-wide gathering will cover practically every subject you can think of that will help you in your business . . . improved construction methods, design, research, selling, financing and scores of others. There will be special emphasis on "shop talk" sessions, demonstrations and "how-to-do-it-better" features.

GIGANTIC EXPOSITION

See the greatest array of building products ever shown! Nearly 300 nationally known makers of building materials and equipment will display hundreds of new and improved products. Packed with new, useful ideas. The only show of its kind—the showcase of the industry.

WHO CAN ATTEND

Everyone connected with home building is invited to attend this fabulous 10th Anniversary show, whether or not you are a member of the NAHB. Builders, contractors, architects, engineers, mortgage men, manufacturers, jobbers, building supply dealers—come one, come all!

HOW TO REGISTER

NAHB members should register through their local NAHB Chapters. All others may register in advance and make hotel reservations through Convention Headquarters. Advance registration ($15 for men, $10 for women) must be sent with hotel reservation request. Confirmation and registration certificate sent to you at once. Make checks payable to National Association of Home Builders. Please show name, address, business classification and date of arrival for each person included in your request. Write today!

NAHB FIGHTS SLUMS

(Continued from page 92)

inspectors inspecting the same home in 6 or 3 different days at different times. This practice drives the people crazy. One inspector from one department is the best. The single department cuts across lines of responsibility and makes it easier to get the job done.

What happens after the inspector has found violation?

If the violation is noted and not corrected, a notice goes out requesting the landlord or tenant to attend a hearing in not less than 10, nor more than 30 days. At the conclusion of the hearing, findings showing the violations will be issued in writing to the violators requesting that repairs be made in a certain length of time. If, after the proposed length of time the violations are not corrected, two avenues are open to the Director.

1. He can make the repairs and place a lien against the property up to 50 per cent of the valuation.
2. Placard the building as unfit for human habitation and if dangerous, tear it down. He can impose against the landlord any cost over and above the salvage value. If salvage value is greater, the owner receives the money.

Is there a way to help hardship cases who are willing to do their own work?

Yes. Demolition of aged structures can give the city a stock pile of material. The material can be given to those charity and hardship cases who wish to do their own work.

Does the study committee need a full time assistant?

Yes. New Orleans' study committee had a man from the Chamber of Commerce for their 120-day study period. This man sent out notices of meetings, did all the correspondence, took minutes of the meetings and handled other details. It is believed by the New Orleans committee that such an individual is important because many of the business men on the committee could not devote full time to the job. They needed this assistance.

What are the specific jobs of the three subcommittees in the planning stage?

I PROGRAM SCOPE AND RESEARCH SUBCOMMITTEE

1. To determine what the housing condition is in your city and what factors are necessary to determine this condition.
2. To determine what existing agencies and organizations have all or parts of the data required.
3. To obtain the services of an organization to collect, compile and interpret this data statistically so that factual information will be in a form on which to base the recommendations of the entire committee and usable later for educational and public relations purposes.
4. To obtain the funds necessary to secure the services of a competent group or organization to do this work.

II LEGISLATIVE SUBCOMMITTEE

1. To investigate and determine if any state law exists which provides adequate enabling provisions for housing improvement and slum prevention.
2. To draw a suitable state statute if none exists and have it passed. If the existing law is inadequate to have
Here's a NEW "line" for women—to put "woman appeal" in your homes!

A NEW KITCHEN LINE
by Universal - Rundle

NEW STEEL WALL CABINETS!
Quality features galore! Heavy gauge furniture steel... easily removable, completely adjustable shelves... sizes for every kitchen!

NEW STEEL BASE CABINETS!
Choice of cabinet tops... U/R quality features... cabinets match Easy Living cabinet sinks... full range of sizes... easy operating doors and drawers... smart styling!

NEW CABINET SINKS!
Choice of vitreous enameled cast iron or steel! Famous U/R sink quality, with top quality cabinets that match new Universal-Rundle Easy Living base and wall cabinets. There is a broad choice of models for every budget and kitchen.

NEW DISPOSER!
Revolutionary "Undercut" action reduces noise, gives speedy grinding action. Disposes of a pound of ordinary food waste in just 30 seconds! The Universal-Rundle is the most quiet disposer ever made—and it's by far the easiest to install!

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UNIVERSAL-RUNDLE CORPORATION
184 River Road, New Castle, Pennsylvania
Send me complete facts on U/R "Easy Living Kitchen"

"CABINETS OF STEEL FOR LASTING APPEAL"

"Easy Living" KITCHENS
by UNIVERSAL - RUNDLE

Maker of the World's Finest Bathroom Fixtures and Kitchen Equipment

NOVEMBER 1953
(Continued from page 94)

it amended to meet requirements.

(3) To investigate and tabulate all city laws and ordinances relating to health, sanitation, plumbing, building construction, fire prevention and electrical installation.

(4) To investigate laws regarding city structural organization (i.e., City Charter) to determine how to set up a new, independent, single Department of Rehabilitation or Blight Commission.

(5) To investigate city rules and regulations on how to obtain personnel, budget appropriation, etc.

(6) To investigate city regulations and procedure on submitting and passage of local laws and ordinances to City Council.

(7) To establish, if it becomes necessary, a Housing Court. Is it possible under existing law and if so how can it be established?

III ADMINISTRATIVE SUBCOMMITTEE

(1) To obtain the understanding and cooperation of all city officials concerned with aspects of housing, especially department heads of health, sanitation, plumbing, building, utilities, fire prevention and planning and zoning.

(2) To obtain an understanding of the duties and functions of each department concerned with housing and welfare.

(3) To study the need for a new single agency and determine the ideal administrative requirements needed to establish this Department or Commission under the existing city administrative organization.

(4) To determine the duties and functions of this new Department or Commission in relation to duties and functions of existing departments concerned with housing and welfare.

(5) To determine the positions and qualifications necessary to carry out the functions of new department.

(6) To determine the general duties or responsibilities of all personnel.

(7) To determine which positions should have Civil Service status.

(8) To determine procedure for selecting personnel.

(9) To determine budget requirements for:

(a) Salaries
(b) Office Supplies
(c) Office Equipment

(10) To study the establishing of a Citizen’s Advisory Committee with an Executive Committee to work closely with the Director to develop program planning. Determine subcommittees required to assist in operation of program.

(11) To determine what type of personnel will constitute this Citizen’s Advisory Committee.

(12) To study the establishing of a City Officials’ Advisory Council to establish a better understanding and spirit of cooperation among all agencies operating in the area of housing and welfare.

(13) To determine space where new department will be located.

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NAHB FIGHTS SLUMS

Chart for Administrative Organization of Housing Rehabilitation Program

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<tr>
<th>MAYOR</th>
<th>REHABILITATION COMMISSION</th>
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<td></td>
<td>Policy head of Department, Five-man, non-paid Board appointed by Mayor. (Lay citizens)</td>
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<tr>
<th>CITIZEN’S ADVISORY COUNCIL</th>
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<td>Gives Commission support of community groups.</td>
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<tr>
<th>CITY OFFICIALS’ ADVISORY COMMITTEE</th>
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<tr>
<td>Keeps Commission informed of policy in departments concerned with phases of housing and welfare.</td>
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<tr>
<th>HOUSING DIRECTOR</th>
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<tr>
<td>Responsible to Commission for administration of Department.</td>
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<tr>
<th>EDUCATIONAL DIRECTOR</th>
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<tr>
<td>Slum neighborhood educational program.</td>
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<tr>
<th>PUBLIC INFORMATION ASSISTANT</th>
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<td>Develops community-wide awareness and support for rehabilitation.</td>
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<tr>
<th>ADMINISTRATIVE COORDINATOR</th>
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<tr>
<td>Develops new methods and procedures between various departments concerned with housing controls.</td>
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<tr>
<th>STATISTICIAN</th>
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<td>Constant check on cost, progress, and results.</td>
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<th>ASSISTANT DIRECTOR</th>
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<tr>
<td>Responsible for law enforcement field activities.</td>
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</table>
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**NEW CHRYSLER AIRTEMP HEATING FOR EVERY NEW HOME**

**IMPORTANT TO YOU BECAUSE...**

- Amazing compactness of all-new Chrysler Airtemp Furnaces and front location of flue outlet combine to permit easier, faster installation in less space.
- For lowest installation cost — all models shipped completely assembled, wiring in place, burners in place. Crated units can be moved through standard doors.
- People know the Chrysler Airtemp name...have confidence in the quality of its products.
- Chrysler Airtemp Air Conditioner air-cooled or water-cooled, can be easily installed with the furnace to give you the big selling plus of Year 'Round Air Conditioning, most glamorous symbol of the truly modern home.

**IMPORTANT TO YOUR CUSTOMERS BECAUSE...**

- More efficient, more economical heating is provided by many exclusive engineering features of the all-new Chrysler Airtemp Furnaces.
- New, corrugated design heat exchanger is so durable it is backed by an 8-year warranty.
- Smart, modern styling and handsome spatter finish make each model an attractive part of any home.
- Chrysler Airtemp summer air conditioning can be added when Chrysler Airtemp heating is installed, or at any later date, using the same ducts to give the home owner all of the benefits of Year 'Round Air Conditioning.

---

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for HOMES, BUSINESS, INDUSTRY

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<tr>
<th>Airstemp Division, Chrysler Corporation</th>
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<td>P.O. Box 1037, Dayton 1, Ohio</td>
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City ____________________________ Zone ____________________________ State ____________________________
NEW SPENCER SUBURBAN

THE OIL-FIRED BOILER BURNER UNIT

with the beauty and convenience of a kitchen appliance!
COMPLETE NEW HEATING UNIT

combines "kitchen appliance" beauty with "code boiler" dependability . . . offers easier installation and servicing

Spencer now offers a new ready-to-install oil-fired heating unit called the Suburban. This unit combines time-tested Spencer efficiency and durability with a new kind of beauty and ease of installation. It's equipped to supply year-round hot water, conforms to ASME and SBI codes, offers several unique advantages.

FITS IN ANYWHERE—the Spencer Suburban actually rivals modern kitchen appliances in adding beauty to kitchens or utility rooms. All parts are completely enclosed in a gleaming white enamel beauty jacket. Connections are easily concealed. And because the Suburban is completely insulated, it can be placed flush against metal appliances or wooden cabinets, or even set directly on a wooden floor. No special base is necessary.

EASIER TO INSTALL—just hook up electrical connections, oil and water lines, and smoke pipe. That's all.

EASIER TO SERVICE AND CLEAN—readily removed plate on top makes all fire tubes easily accessible. No need to disturb jacket or smoke pipe when cleaning this unit. Controls and all working parts can be reached from front for easier servicing.

This is the newest member of Spencer's Complete Line.

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LYCOMING-SPENCER DIVISION

Spencer Heaters, Dept. AB-113, Lycoming-Spencer Division
AVCO Manufacturing Corp., Williamsport, Pennsylvania
Dear Sirs: Please send additional information, including full specifications, on the new Spencer Suburban to:

Name __________________________ Position __________________________
Company __________________________
Address __________________________
City __________________________ Zone State __________________________
A series of "Wonder Homes" designed to show the buying public how electrical progress is improving the standards of home comfort is now under way in several sections of the country.

This five-room contemporary house, finished in redwood plywood, is the second of the series, which is sponsored by the General Electric Company. It was built by Huntley Estates in the Hartsdale-Ardsley area, a Westchester County suburb of New York City. The first of the "Wonder Homes" was erected by Edward M. Ryan in Mount Lebanon, Pennsylvania, near Pittsburgh.

The general public is invited to inspect each home in this program as soon as it is completed and furnished.

The Hartsdale model has 1,200 square feet of livable floor area, plus a full basement. Although its low-pitch roof forms a rectangle, the house is L-shaped with living-working area in one wing, bedrooms in the other. There is a spacious court in front with main center hall entry at one side and service entry at the other behind a carport. A large square opening in the roof adjoins the carport. Through this rises a tree planted in a rectangular paved area below. Sliding door closets for garden tools line the other side of the carport.

G-E equipment in the house includes year-round air conditioning, light conditioning and remote control wiring. In addition to a full complement of kitchen and laundry appliances, the house also has the company's new line of steel storage cabinets, its Textolite plastic surfacing material on counters and vanitories, and an electric load panel equipped by Trumbull Electric, a subsidiary of General Electric.

Designed for air conditioning, the house is so oriented to its wooded site and protected by wide overhangs that summer sun will not strike the window areas. Only one room, the kitchen-gallery, has more than one exposure. While extensive, most of the glass area is "fixed." The roof is white to reflect the sun. Walls and roof are insulated with mineral wool. The ceiling of the living area follows the roof line, rising from 7 feet at the eaves to 11 at the ridge.

Light conditioning involves extensive use of fluorescent strip lighting, particularly in a 25-foot valance on one living room window wall. Adjustable hanging fixtures and wall brackets, plus ceiling spots, contribute to lighting which virtually eliminates any need the occupant might have for lamps. Fixtures recessed in the roof illuminate the front court. Rear terrace and driveway are floodlighted.

Most of the lights can be operated from several locations because of the remote control wiring system. A selector switch in the master bedroom controls outdoor lights as well as those in living room, entry, kitchen and basement.

With all equipment and appliances installed, excepting a specially-built music center in the living-dining area, the Huntley Estates "Wonder House" can be duplicated to sell at $23,950, exclusive of land, according to Edward Tobin of the building firm.
Hartsdale, New York, house is one in a series of "Wonder Homes" sponsored by General Electric to exemplify a new era of push-button living.

**Builder:** Huntley Estates  
**Architects:** Sherwood, Mills and Smith  
**Location:** Hartsdale, New York

---

Two big appliance centers. Kitchen includes refrigerator, garbage disposer, range, dishwasher and a new line of wall cabinets. Basement laundry has freezer, dryer, washer, sink-cabinet and ironer.

---

Electrical control panel in which circuit breakers take the place of fuses.

---

Electric water heater, oil-fired furnace and three-ton air conditioner fit compactly in space behind basement stair.

---

View from study across house to dining area shows specially installed G-E high fidelity music center in cabinets covered with a white plastic material.
TWO markets mean double-barreled

Heavy-gauge steel construction—long life for customer appeal, customer satisfaction.


Contour styling with smooth, rounded, no-snag corners. Adjustable, refrigerator-type shelves. Sparkling white high-baked-enamel finish—easy to clean, remains beautiful practically forever!

Murray Food Waste Disposer—the "most wanted" feature—sells itself on sight. Superquiet; continuous feed; self-cleaning design.

The sensational Dishmaster, which makes dishwashing as easy as rinsing alone! Easy to install—even easier to sell!

TAP THE PROFITABLE NEW-BUILDING MARKET

There's no doubt that modern, up-to-date kitchens sell homes! And modern kitchens by Murray offer features and value you can't beat.

With Murray's complete line, builders can select kitchen equipment that fits the home...stylewise, pricewise, profitwise.
The rugged, formed-metal construction, contour styling and work-saving features mean customer satisfaction to the nth degree!

Check Murray today. The Builder Department can give complete information and co-operation. Just mail the coupon at the right.

MURRAY  The Murray Corporation of America
for MURRAY

profits for builders!

CASH IN ON THE BOOMING MODERNIZATION MARKET

More and more builders are discovering the lucrative profits in the modernization market. During the off-season building period, especially, this market is ripe for builders who can sell and install modern Murray kitchens.

No matter what size kitchen—or budget—there is a combination of modular-sized cabinets and cabinet sinks that home owners can get excited about! Beauty, utility and long life of Murray kitchens sell themselves on sight.

Investigate now! Mail the coupon at the right to the Murray Builder Department—your partner in profits.

Wall and base cabinets in every size and shape! Corner cabinets, Lazy Susans, condiment shelves, utility cabinets.

FEATURES LIKE THESE ARE SURE TO PLEASE!

Scientific design to save time and work • All-steel, welded construction • One piece, titanium porcelain enamel sink tops • “Lifetime” finish • Easy to clean—no concealed corners to catch dirt • Styled for beauty • Maximum work surface and storage space • Adjustable, refrigerator-type shelves • Sound-deadened drawers and doors

Murray Corporation of America, Home Appliance Division, Builder Department, Detroit, Michigan

Rush me more information about double-barreled profits!

Name

Firm

Address

City

State

Home Appliance Division. Sales Offices, Detroit 11, Michigan
YOU'LL NEVER CRY OVER WEEPING JOINTS AND EFFLORESCENCE

WHEN YOU USE MEDUSA STONESET

- Many a contractor has seen his best work disfigured by weeping joints and efflorescence. Weeping joints—ugly stains originating at the bottom of vertical joints between blocks or facing slabs and extending horizontally across the course—caused by absorbed moisture leaking through from the back, carrying solid ingredients from the mortar or stone, which are deposited when the water evaporates. Efflorescence—that white, powdery, disfiguring deposit on a brick wall—caused by the evaporation of water containing alkali salts. Eliminate both of these evils by using Medusa StoneSet, the white, non-staining mortar cement, for all ornamental stone facing and face brick.

Write for complete information.

THE WHITE NON-STAINING MASONRY CEMENT
"I watch the woman's point of view," says builder Dan Ostrow, "and in my Carroll Knolls development at Silver Spring, Maryland, I made a test. I gave prospective home buyers their choice of either a kitchen equipped with a fuel-type range, or one equipped with an Electric Range. Out of the first 25 buyers, 22 chose electric—and within three weeks the three non-electric buyers had changed their minds."

"We've found that potential home buyers are interested in electrical equipment," says Mr. Oscar Dreisen of Dreisen & Freedman, Silver Spring, Maryland. "We know that because there were traffic jams when we opened our model house, and fifty houses were quickly sold. Naturally we include Electric Ranges in the kitchens, because these are electric homes."

NEIGHBORS OR NOT... they're close together on Electric Ranges!

Kitchen equipment in the Dreisen & Freedman homes includes electric refrigerator, electric dishwasher-sink with food waste disposer, and ventilating fan. And the range? Like all the other equipment—of course, it's ELECTRIC!

New home building is a competitive business, particularly in the same community. So when two builders feature the same equipment—an Electric Range—that means they recognize its importance in clinching the sale. Alert builders everywhere have recognized that a large percentage of home buyers prefer this type of range. Builders use its features to help them sell, because it is both economical and easy to use, and assures a clean, cool kitchen. No matter what type of homes you build, the modern Electric Range can help you sell them better, too!

More builders every day are installing ELECTRIC RANGES

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

ADIRONDACK • BENDIX • COUNTRY • FORD • GENERAL ELECTRIC • GIBSON • HOTPOINT • KELVINATOR • MAGIC CHEF • MONARCH • NORGE • PHILCO • WESTINGHOUSE
THIS HOME, built by L. I. Combs & Sons, typifies the successful use of Thermopane by builders in northern Indiana. It is an $18,000, three-bedroom house with full basement, garage and perimeter gas heat. It's all set for the cold Lake Michigan winds coming over the dunes. It has Thermopane insulating glass in every window.

"This sign packs a wallop for builders"
—says HENRY J. BULZA of GARY, INDIANA

"This is Thermopane* insulating glass." Those words in the window of a new house—or spoken to a home-buying prospect—are powerful selling. Thermopane is known—and wanted.

Henry J. Bulza of the Ambridge Lumber and Supply Company, Inc., Gary, Indiana, can tell you from experience that it works! Builders have bought from him over 1,000 lights of Thermopane in two panel window sizes. They're offering Thermopane in every window of houses ranging from $18,000 to $25,000. They give home buyers insulated windows right at the start, included in the mortgage package. There's no extra selling job for storm sash.

The use of Thermopane in panel windows gives builders an economical way to add the extra value and the sales appeal of Thermopane. Mr. Bulza says: "The panel window eliminates storm sash and cuts the builder's cost. Also, it gives the home owner more glass for less money. We can give him 82 sq. ft. of glass for about $200. The same wall area with conventional windows would cost a lot more."

Write for full information. We'll send you full data on Thermopane sizes, types of windows for Thermopane and details on panel windows. Libbey-Owens-Ford Glass Co., 3113 Nicholas Building, Toledo 3, Ohio.
You can add this note of quality to your homes without paying a price premium!

MORE AND MORE BUILDERS ARE PUTTING Silent Automatic in THEIR PLANS!

Here is a name customers know... priced for builders with an eye to value!

Let your customers know that you build quality homes! Install Silent Automatic—the heating equipment they know and can rely on for dependability!

A handsome Silent Automatic unit in the home you've built is one of your salesman's best talking points. But you don't have to pay extra to add this note of quality! Silent Automatic is priced to compete with other makes that can't offer as much in prestige and resale value.

Look over the complete Silent Automatic line of furnaces, boilers and conversion burners. There are models and sizes to suit your every building need.

Write for the name of your nearest wholesaler!

Put quality heating into all your homes. Write today to National Sales Manager R. E. Loebell in Jackson—he'll rush you the name of your nearest Silent Automatic Heating Equipment Wholesaler.

Silent Automatic HEATING EQUIPMENT

Timken Silent Automatic Division
Rockwell Spring and Axle Company
Jackson, Michigan
Building low-cost houses on widely scattered lots requires a far different business approach from tract building. Vern R. Huck, Los Angeles builder, had to reorganize his business before undertaking this new venture. He spent $25,000 to start the operation. The money was spent on a model, land, house furnishings, a brochure, advertising overhead, salaries and office forms.

Results were slow at first. More than half of the deals made the first month had to be cancelled. Either the buyers were poor financial risks or the lot they owned was unsuitable. Now the business is flourishing. Huck has found his gamble paid off. Low-cost housing on scattered lots is a going business in urban centers since the lots are close to transportation, schools, and places of employment. Huck found that many folks did not move away from the older neighborhoods. Others wanted retirement housing or income-producing rentals on scattered lots that they owned. Multiple dwelling units or a second house on a lot where zoning permitted were found to be another important outlet.

Huck's low-cost house (under $6,000) is not the most inexpensive in his area. His unit includes many luxurious features, such as large double sliding door in the living room leading to the patio, beech kitchen cabinets and tile on walls of tub recess.
features not usually found in low-cost units, such as tile around the tub, slab doors, plaster, birch kitchen cabinets and good design. They add to the sales prices but they do give him a selling edge.

**Financing**

A knowledge of financing is important for scattered real estate, stated Huck. "And we must work with our lending institution." He went on to say that the lenders are willing to make the small loans if they could keep their service costs to a minimum. They want a builder to understand their problems and screen out the undesirables. Huck believes the builder will get better commitments and faster service as a result of this cooperation. Loans for most of Huck's construction are conventional with 10- to 15-year amortization periods. Rates are six per cent. On clear lots in good neighborhoods, first mortgage loans run as high as 90 per cent. On choice locations, the loan can run to 100 per cent.

**Selling**

Selling the low-cost units on scattered lots is a specialized operation. The builder has three "building consultants" (salesmen) and a sales manager. The sales staff operates from a furnished model located on a well known street. The model is built on skids so that it can be sold and replaced with a new design.

Huck also uses field models. He will rent a completed house from a buyer and show it for a few months. Other sales aids include a brochure, and weekly newspaper advertisements. He places a 2-column, 5-inch advertisement in the Sunday paper to keep up the traffic. The advertising costs $110 weekly.

*Selling price of this duplex is $8,450*
Construction Progress Chart is viewed by Huck. The chart shows the present status of any job. To the left of the chart is a large city map which shows where the jobs are located.

**Construction Department**

Crew operations and subcontractors who understand low-cost construction enable Huck to maintain his low prices. Four carpentry crews are used in the rough-framing operation, and two trim-out crews finish the houses. In each crew there is a working foreman. A traveling superintendent is responsible for the various crews.

Material, manpower and subs are dispatched to the widely scattered operation by a work coordinator. Huck also has a work control chart so that he quickly can follow the status of each job. The chart has the various building operations across the top and the different jobs down the left-hand margin. As each building operation is completed the square is filled in.

**Office Procedures**

The builder had to set up new office forms to take care of the many problems encountered in this type of business. Designed by Huck, the forms include:

1. **Customer Order and Deposit Receipt Form**

   On this form the customer orders his house and receives a receipt for his $200 deposit. The form, like all others, is made out in four copies which go to the office master file, purchaser, general office and consultant.
Reproduced above and to the left on opposite page are the seven special forms discussed below. In reorganizing his operation to serve owners to scattered lots, Huck invested part of his $25,000 initial outlay in the printing of these forms. He finds them essential for collecting the data necessary to his success in this different type of operation.

2. Loan Commitment Request — On this form the buyer lists information concerning the lot; its value, outstanding indebtedness, property value, and other information that the lending concern will need before it makes a commitment. This information also helps builder screen buyers.

3. Lot Inspection Report — On this form the buyer indicates the lot lines and where he wants the house to be built. Other information concerning the lot is also listed on the form.

4. Lot Survey Authorization — This form authorizes the builder to make a survey if the lot boundaries are not clearly indicated by the owner. The owner agrees to pay the survey charges.

5. Extra List — The buyer lists any extras that he might want. These are priced and added to the Customer Order and Deposit Receipt Form.

6. Receipt for Documents — Important papers such as deed, title, tax receipts, etc., are receipted by the builder on this form.

7. Customer Survey Report — Salesmen fill out this form when interviewing an interested prospect. The form is then filed. If the prospect turns up later as a buyer, the salesman’s commission is protected. The form is also used as a prospect list.
The Capacity to Serve...

For many years, we have been producing Weslock units at a constantly increasing rate to meet the demands of our thousands of customers throughout the world. Our system of rigid quality control plus our high precision engineering standards have established the reputation of Weslock as America's greatest lock value.

*Beautifully designed and finished*  *Millions in use*  *Unconditionally guaranteed for the life of the installation*  *Simple, fast installation*  *Budget priced*  *Expert field sales assistance*

For Economy, Dependability and Beauty, choose Weslock, America's greatest lock value!

**WESTERN LOCK MFG. CO.**  Manufacturers and Sole distributors of Weslock residential locksets

**GENERAL OFFICES:** 211 NORTH MADISON AVE., LOS ANGELES 4, CALIF.  **FACTORY:** HUNTINGTON PARK, CALIF.

**AMERICAN BUILDER**
We proudly present

A NEW DESIGN...

THE 500 Concave SERIES

- Precision Engineered
- Quality Controlled
- Now—WESLOCK offers...
  a choice of two designs...
  at identical budget prices.

The 500 Concave series is a new concept in simplicity of design to harmonize with any contemporary or period architecture. Available in all finishes—for every door in the home and unconditionally guaranteed for the life of the installation.

Distributed through recognized wholesale channels of trade

WESTERN LOCK MFG. CO. Manufacturers and Sole distributors of Weslock residential locksets

GENERAL OFFICES: 211 NORTH MADISON AVE., LOS ANGELES 4, CALIF. • FACTORY: HUNTINGTON PARK, CALIF.
Yes, both houses are identical in appearance. A year ago both would have sold readily. The story is different today. It's the house with the extra value that tips the scale. For today people are demanding more quality in the investment of their lifetime.

Best evidence of quality in your homes is a reputable heating system. Your genuine concern for your prospect's continued comfort is one of your most convincing appeals.

Because Janitrol heating has an unmatched reputation for long-life dependability, some people assume Janitrol costs a lot more. It doesn't. But you get credit for installing the finest without extra cost. So use this prestige of Janitrol equipment to close sales that are becoming harder to make.

**HERE'S WHAT TO DO ABOUT IT!**

Local Janitrol dealers are listed under "Furnaces", yellow pages of your phone book. Find out from them why the finest quality of heating equipment is not more expensive.

**Every month Janitrol advertisements in leading home magazines, part of the Crusade for Better Heating, emphasize the importance of sound heating installations.**
Model Home—sold before it was open

That's the story at Westchester Estates—a new 85 home development on Cleveland's suburban West Side. This new 3 bedroom, L-type Pollman Home was built for a model home showing—a buyer signed the purchase contract two weeks before the doors were open. On opening day, contracts for nine other Pollman Homes were sold.

A wonderful story in today's market? Yes—and Pollman Builders in other areas continue to report similar sales experience. If you are a builder who would like to learn more about this salable line of factory assembled homes, write us. We will be glad to have a factory representative call.

Pollman Homes are designed by noted American house designer, Richard B. Pollman. The popular L-type plan features 3 bedrooms, plenty of closet space and a floor plan that eliminates family traffic problems. If you are located in the Southern or Gulf Coast States, we suggest the Southerner Line of Pollman Homes, designed for warmer climates and manufactured in Collins, Mississippi.
THOMASON Flush Doors

Give You a Choice of

(or more)

Beautiful Face Veneers

...but only ONE high quality!

In residential, institutional, industrial or commercial structures... interior or exterior door design is important.

THOMASON Flush Doors add more eye-appeal and blend pleasingly with architectural features.

Make THOMASON Flush Doors a part of your planning. From the finest quality of foreign and domestic woods, you can choose a face veneer to suit your needs.

JUST LOOK AT THIS

CHOICE OF FACE VENEERS

Philippine Mahogany, African Mahogany, Genuine Honduras Mahogany, Walnut, Oak, Birch, Knotty Pine, Gum, or any face veneer desired. In addition, THOMASON plastic-faced flush doors are available in all domestic and foreign wood grain plastics, as well as in decorative plastics.

Remember: keep design in mind... buy from the THOMASON line.

THOMASON FLUSH DOORS

THOMASON PLYWOOD CORPORATION

Fayetteville * North Carolina
Tips on Selling Homes...remember—
Mothers are Worry-Warts

They're always looking for trouble, for some danger or discomfort that might befall their home and family. You can end this worry when you show that your home is equipped with a Rheem Gas Furnace and Water Heater.

Rheem builds home appliances with worrying mothers in mind, using the highest quality production methods, the most painstaking testing methods. Every Rheem Furnace is Fire-Tested at the factory, every Rheem Water Heater Pressure-Proved to assure dependable, trouble-free service all the time.

Learn more about how Rheem helps you win buyer confidence in your homes. See your Rheem contractors today. They can prove to you that Rheem is the best buy for builders.
To the builder who is building 15 homes or less in 1953...

Chances are, you could be building more homes, or building homes more profitably, or both. That is, if you build P & H prefabricated homes for the $8,000 to $15,000 price range. Here's why.

P & H Homes sell easier and faster than any others in their price range. They are more attractively designed, have a higher grade of materials, better construction, and more “extras” than any homes in their class. The handsome design, open planning, broad window areas, and ample storage space give you plenty to talk about when you sell P & H Homes. And they're nationally advertised. Many builders have doubled, even tripled their sales by switching to P & H.

The architect-designed 2 and 3 bedroom P & H Homes meet all code and financing requirements.

You'll cut your costs, too. You can have a P & H Home under roof in a day. No delays, no waiting for materials to arrive. Homes arrive, complete with hardware, glazing, millwork, and trim, ready for erection. You can gear construction to sales, and schedule sub-contractors without worrying about costly delays. Your buyers get their homes faster, always on time.

And because you build and sell all year around, you can get more favorable sub-contracts.

There's extra financing help available, too, when you build P & H Homes. You can get construction loans from the Builders Acceptance Company, a P & H subsidiary, when local sources are limited.

Risk, for P & H builders, is about as low as it can be in home building. You can break ground for each home after the buyer makes his down payment, order the P & H Home after his credit has been approved. A P & H construction loan can be opened before you make any big layouts for labor or sub-contracts. You are ready for final payout 30 to 45 days after you start.

How else could you operate with less risk?

You'll have plenty of help in your P & H Home building operation . . . land planning, supervising construction, holding open houses, advertising, selling, financing.

Start building and profiting the P & H way now! Write or wire for complete details on P & H Home building today.

P & H HOMES
HARNISCHFEGGER CORPORATION
111 Spring St., Port Washington, Wis.
Phone Port Washington 611

The P&H Line
Here's why MATICO CORK TILE Flooring will have your best customers WALKING ON AIR

MATICO CORK is made with a 50% air-cushion structure that insures outstanding resiliency. It's this quality that enables MATICO Cork to "give" under abrasion, thus assuring remarkable durability. A wonderful sound-proofer, MATICO Cork puts spring in the step... brings precious quiet to the home or office.

Cork is always in style. That's why it's used in so many exclusive installations... the lovely shades blend so well with every type of decor. Available in an exceptionally easy-to-clean factory finish—MATICO CORK saves on maintenance... is unusually economical.

Remember... you can't afford to overlook MATICO Cork Tile Flooring when only the best will do. Size: 9" x 9"—Thicknesses: 1/8" and 3/16". Colors: Light and medium-random. Send for Installation data today.

Dept. 5-11
MASTIC TILE CORPORATION OF AMERICA
Confetti • Aristoflex • Parquetry • Asphalt Tile • Cork Tile • Plastic Wall Tile
Joliet, Ill. Long Beach, Calif. Newburgh, N.Y.
FOR GREATER STRENGTH...EASIER HANDLING
LONGER LIFE...AT NO PREMIUM COST:

Gypsum Wallboard reinforced with

OWENS-CORNING FIBERGLAS Yarns!
Now you can offer gypsum board construction that’s protected by Fiberglas® reinforcements mixed right into the board itself! Stronger, quicker built, better-looking wall and ceiling constructions—jobs that save money and boost customer satisfaction.

It’s the Fiberglas reinforcements that make the big difference. Countless thousands of strands of thin, exceptionally strong fibers of glass are mixed right in with the gypsum plaster at the time the board is made. They form a lasting, rot-proof, incombustible network that strengthens the gypsum core and adds to the board’s resilience—provides important advantages like these:

- **Greater Impact Resistance.** Tests show up to 80% greater resistance against shock. Means less damage to board during transit... on the job...
- **Easier to Erect.** It’s less brittle, easier to nail because the Fiberglas reinforcements hold the gypsum core together. Cutouts come clean, edges don’t crumble. Board’s more resilient, too, withstands handling better, minimizes losses.
- **Customer Satisfaction.** Walls and ceilings of Fiberglas reinforced gypsum board give your customers many years of trouble-free service because they are more resistant to the knocks and blows of ordinary usage. This “plus” makes your selling job easier.

If you haven’t already checked into this new and important contribution to better construction, be sure to ask your supplier today—or write direct to Owens-Corning Fiberglas Corporation, Dept. 62, 16 East 56th Street, New York 22, N. Y.

*Fiberglas is the trade mark (Reg. U.S. Pat. Off.) of Owens-Corning Fiberglas Corporation for a variety of products made of or with fibers of glass.
Biggest Man and Time Saver in the 10-in. Saw Field!

Quickly converts to Mas 50 Rig.

Cuts Flue Liners

Cuts Heavy-Gauge Metal

Scores Concrete

Contractors report big, increased output on mass production using two MAXAW 1000's instead of a radial saw. Two men working on saw horses with MAXAWS quickly make top cut and heel and tail cuts on each piece.

For heavy construction industry

Dual-center, balanced to give perfect balance in your hand in any position.

Extra heavy duty
— All ball bearing

Look at this Superiority!

<table>
<thead>
<tr>
<th>MAKE</th>
<th>BLADE DIA</th>
<th>WEIGHT</th>
<th>CUT AT 45°</th>
<th>*PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAXAW 1000</td>
<td>9-5/8&quot;</td>
<td>22 lbs.</td>
<td>2-12/16&quot;</td>
<td>$175.00</td>
</tr>
<tr>
<td>Saw A</td>
<td>9-1/4&quot;</td>
<td>21-1/4 lbs.</td>
<td>2-1/8&quot;</td>
<td>185.00</td>
</tr>
<tr>
<td>Saw B</td>
<td>9-1/4&quot;</td>
<td>24 lbs.</td>
<td>2-1/16&quot;</td>
<td>185.00</td>
</tr>
<tr>
<td>Saw C</td>
<td>9-3/8&quot;</td>
<td>25 lbs.</td>
<td>2-5/8&quot;</td>
<td>195.00</td>
</tr>
</tbody>
</table>

*Competitive prices quoted as of Jan. 1, 1953. Saws listed as A, B, C are those made by leading manufacturers of industrial saws.

See the Sensational Cummins do-it Shop

7 power tools in 1—lathe, bench saw, horizontal drill, disc sander, shaper, portable electric drill—on a tabletop! At better hardware dealers everywhere.

The miracle of magic pivot puts MAXAW 1000 so far ahead of all competition in every kind of performance that you can decide it is the one to buy without ever seeing it!

Look at the table at left—with magic pivot, MAXAW 1000 cuts far deeper at 45° with a 9%-in. blade than any competitive saw with a 10-inch blade! Then, besides, it gives you a great big 3 1/2-in. straight cut—weighs only 22 lbs., against as much as 35 lbs. for others—has dual-center-balance handle so it always hangs parallel to floors, saw tables, when you pick it up—front does not nose down! You get this only with the miracle of magic pivot—exclusive in all MAXAWS!

Remember—the MAXAW 1000 with magic pivot engineering, 100% all ball bearing, extra heavy-duty industrial construction, hardened worm-wheel gearing will slough through even wet, soggy, slug-laden wood. Cut costs—speed up biggest production jobs with it!

FREE!—We will be glad to send you a Lumber and Plywood Footage Gauge. Just write Dept. AB-113 on your company letterhead.

Cummins
Cummins-Chicago Corp., Chicago 40, Illinois
334 Lauder Ave., Toronto 10, Canada

AMERICAN BUILDER
Sales-minded contractors are looking at

**OAK FLOORING'S** New 4th Dimension

Oak's 4th Dimension is something new we know about Oak Flooring...something known about no other building material, let alone other floorings.

From a nation-wide study, we know now that 80% of all architects, 88% of all contractors, 96% of all real estate agents and 83% of all future homeowners prefer Oak Flooring over all other flooring materials.

What does this 4th Dimension—Oak's overwhelming preference—mean to you?

**As an operative builder,** you are concerned with selling as well as building. With the knowledge that 83% of all future homeowners want Oak Flooring in their homes, you know that your homes will have a big sales advantage. 88% of all contractors agree that nothing helps to sell a house faster than a good Oak Floor.

**As a custom builder,** your counsel on building materials is valued by your customers. More persons every day are becoming sold on beautiful, durable Oak. They know that Oak gives walking comfort...insulating qualities, too. These facts are proved by 96% of all real estate agents, who agree that houses with Oak sell faster.

So, you see, Oak's 4th Dimension means more than the attractiveness and structural worth you have always provided with Oak Flooring.

National Oak Flooring Manufacturers' Assn., Sterick Building, Memphis 3, Tenn.

NOVEMBER 1953

NOFMA National Oak Flooring Manufacturers' Assn., Sterick Building, Memphis 3, Tenn.

This mark on Oak Flooring is your assurance that it meets NOFMA standards.
WHAT WAS GOOD ENOUGH for grandfather’s time is not good enough for today and certainly is quaintly obsolete for tomorrow. Those of us who have had the opportunity of watching the growth and development of warm-air heating systems are impressed with the unrelenting pressure towards the use of smaller and more compact equipment. This trend applies to furnaces, registers, blowers, and even the space allotted for the furnace. It is certainly true that duct sizes also have greatly diminished with the years. With the older gravity warm-air heating system, the sizes of the leader pipes in the basement were commonly 8, 9, 10, and 12 inches in diameter. The introduction of forced warm-air heating brought about the use of standard sizes of branch pipes which were 6, 7, and 9 inches in diameter.

Some twenty years ago a firm in Ohio introduced warm-air pipes which were about 4 inches in diameter. Some of the systems using this pipe proved to be fairly successful; on the other hand, others resulted in hot ceilings, cold floors, and poorly controlled installations. Consequently, this pioneering effort was dropped by the company concerned, and was considered as an object lesson to every engineer who dreamed of using smaller ducts. At the time, since the system was proprietary in nature and was not revolutionizing the industry, no research work of any scale was proposed by the industry to find out the basic reasons why the system did not do better. And so matters stood until a few years ago when the idea was again proposed for consideration. At the present time a number of companies have developed small pipe systems and the results obtained have been much more promising.

The problem is far from simple. It involves more than changing every 6-, 7-, or 8-inch-diameter duct into a 4-inch pipe. It involves such a question as whether the use of small pipes is consistent with the growing demand for summer cooling, where large-size ducts may be required. The purpose of this article is to point out some of the problems involved and some of the present trends. In the opinion of the author, the use of small pipes was long overdue and their merits more than counter-balance their limitations.

Pipe Sizes Can Be Reduced If—

One of the first steps taken by a heating contractor is determining the design heat loss for any given space that is to be maintained at a temperature higher than that outdoors. This heat loss does not depend on pipe size, and is proportionally just as great for a 7-inch diameter system as for a 4-inch diameter installation.

Any number of combinations of temperatures, velocities, and air flow rates is possible which will satisfy the heat loss requirements. For the purpose of reducing the size of the duct to carry the warm air to the room, one or more of the following methods can be used:

1. To reduce the quantity of air to be delivered to a given room.
2. To reduce the velocity of the air in the ducts.
3. To use a larger number of small ducts in place of a few large ducts.
FOR A DESIGN HEAT LOSS OF 10,000 Btu's PER HOUR

<table>
<thead>
<tr>
<th>Register Air</th>
<th>Then the c.f.m. to be delivered</th>
</tr>
</thead>
<tbody>
<tr>
<td>120°F</td>
<td>184</td>
</tr>
<tr>
<td>140°F</td>
<td>139</td>
</tr>
<tr>
<td>160°F</td>
<td>114</td>
</tr>
<tr>
<td>180°F</td>
<td>97</td>
</tr>
</tbody>
</table>

Note that a low air flow rate requires a high temperature of the register air. For example, almost twice the rate is required for a register air temperature of 120 degrees F as that for a system in which the register temperature is 130 degrees F. In this connection, register air temperatures for ordinary forced-air systems range from 120 degrees F to 150 degrees F.

The argument might be raised: "If 130 degrees F gives a small c.f.m., would not 250 or 300 degrees F at the register given even smaller c.f.m. values?" The answers of 64 and 57 c.f.m. respectively show that the flow rate is reduced but not as much as might be expected considering the increases in temperature. It is true that one commercial system that has been under development for a number of years has utilized temperatures of 300 degrees F and even higher. To do so requires specially insulated ducts and approval from those responsible for local and national codes and regulations. In general, a register air temperature of about 130 degrees F is the maximum that should be given serious consideration for the type of small duct system we are discussing here.

The reason for the ceiling value of 130 degrees F for register air temperature becomes apparent when one recognizes that maximum allowable temperatures are specified in such codes as those issued by the National Fire Protection Association. In the case of warm-air furnace systems, the maximum air temperature permitted is 200 degrees F. Since the maximum temperature will occur at the bonnet of the furnace, and since a large temperature drop will occur between the bonnet and register, a value of about 130 degrees F for the register temperature is about as high as can be expected in any practical installation. Hence, for our example let us consider the air flow rate of about 100 c.f.m. in place of the 150 c.f.m. that is common with the conventional forced-air heating system. In other words, a one-third reduction in air flow rate is possible if a register air temperature of the order of 130 degrees F could be used.

Introducing High Temperature Air into Rooms

Research and experience have shown that if air at relatively high temperatures is permitted to "ooze" into...
Increasing the Velocity of Air in Ducts

We have seen that increasing the register air temperature would bring about a reduction in the air flow rate to be handled. Now if we can use the same velocity of air in the duct that is commonly used for conventional forced-air systems, the maximum reduction in pipe areas would be only of the order of 33 per cent.

Let us examine the effect of using higher duct velocities than the values of 300 to 500 feet per minute in common use. In order to give some factual comparisons, suppose that we consider a duct velocity of 450 feet per minute as an average value for conventional practice, and that we are planning to handle the 100 c.f.m. established in the previous example. The exact duct diameters that are needed for various duct velocities will be as follows:

<table>
<thead>
<tr>
<th>Duct Velocity (feet per minute)</th>
<th>Exact Duct Diameter (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>450</td>
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<td>1,200</td>
<td>3.9</td>
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At first glance it appears that we should be able to handle 100 c.f.m. with a 4-inch diameter duct, and thereby handle a room having a heat loss of 10,000 (Continued on page 128)
Here's your BIGGEST VALUE in power saws today...a portable, big-capacity DEVALT for only $229 delivered!

**2 New Models for Small Builders**

**VALUE NO. 1**
Model MBC DE WALT 9” Saw
Only $229 Delivered

**VALUE NO. 2**
Model GWF DE WALT 10” Saw
Only $348 Delivered

Today... your best bet to reduce job costs and make bigger profits is a new portable DE WALT®...especially designed for small builders... priced low enough to pay for itself on the first house it helps build with savings these ways:

**Big Capacity**...new 9” saw cuts 2 1/2” deep, 10” saw cuts 3” deep; both rip to center of 48” wide panels to give you ample capacity for house jobs.

**Save Handling**...put DE WALT alongside the lumber pile and pre-cut all your framing from a planned cutting list.

**Save Marking**...lay out one piece, set up your DE WALT and easily duplicate all cuts from ONE marking.

**Save Fitting**...DE WALT pre-cuts perfectly the first time, saves the added cost of fitting.

**Save Material**...DE WALT cuts from above, easily follows line marks for perfect work and eliminates spoilage; re-works odd sizes into usable pieces.

**Save Millwork Cost**...DE WALT shapes, dadoes, etc., turns out millwork on the job... no more mill costs.

**Save Repair Costs**...direct drive DE WALT motor is grease-sealed for life...no brushes, no repairs to worry about.

**Double Use**...after framing carry DE WALT inside to “build in” those cozy extras that help sell houses.

Visit your nearby DE WALT dealer and pick up a low-cost DE WALT for your next job. It’s easy to operate...easy to move around. And you get low-cost DE WALT PERFORMANCE that produces a better house for less money...more profit to you! Write for complete DE WALT catalog.

Please send me full details on the BIGGEST VALUE in power saws today

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ADDRESS ________________________
CITY _______ ZONE _____ STATE _____

N O V E M B E R 1 9 5 3
small pipe warm-air heating systems

Continued from page 126)

Btu's per hour. In order to do so, a duct air velocity of 1,200 feet per minute is needed. For residential service this involves two new problems:

1. For residential service where quietness of operation is essential, high air velocities result in higher noise levels unless ducts are carefully streamlined and sound absorbing material is used in strategic places. In the branch ducts it may be difficult to use velocities much in excess of 700 feet per minute.

2. High air velocities cause large friction pressure drops in the pipes. For example a duct velocity of 600 feet per minute gives twice the friction drop of the ordinary duct, and at 500 feet per minute the friction is over four times as great.

It becomes apparent that if we use high duct velocities and smaller ducts, it might become necessary to have blowers specially designed for small ducts.

Increasing the Number of Ducts to a Room

A simple solution exists that may enable us to use a reasonably high register temperature and a reasonably high duct velocity, and that is to use more ducts. For example, instead of trying to handle 100 c.f.m. in a single duct, suppose that we used two ducts, each of which is to handle 50 c.f.m. We would not have to increase duct velocities too much and still obtain small duct sizes.

Present Practice and Trends in Development

The preceding discussion is somewhat more complicated than was intended for the readers of this magazine, but was deliberately done to point out the many problems involved in the introduction of any new method of heating. The several manufacturers that are actively promoting small duct systems have also issued specific instructions concerning the manner in which the systems should be installed. Both the building contractor and the heating contractor should realize that these instructions are based upon arguments similar to those presented in this article. Hence, if a small duct system is under consideration, these instructions should be followed.

Small duct systems may not be cheaper to install than conventional forced-air systems; nor will they be less costly to operate. However, they may offer the advantage of a less obtrusive system and one which is better adapted for a remodelling of an existing building. If diffusers are located below windows and a large number of diffusers are used, the comfort performance obtained may be most satisfactory. We can expect to see even further developments in the future and a greater acceptance of the system by the public.

---

**When there's more than one floor...**

**Sedgwick**

**EQUIPMENT is needed**

Many new jobs, as well as alterations, can benefit by the inclusion of dependable Sedgwick Elevators, Dumb Waiters and Dumb Waiter Doors. Standard sizes. Prompt shipment. Nationwide representation. Contact:

**Sedgwick**
Machine Works
154 West 15th St., New York 11, N. Y.
Specialists in Vertical Transportation Since 1893

**LevelAll**

I CAN DO THE WORK OF TWO MEN AND A TRANSIT!

Any workman can handle any leveling job with 100% accuracy ... and do it speedily and easily, all by himself.

For LevelAll is a 75' transparent plastic tube with shut-off valves, mounting brackets and filled with a special anti-freeze liquid. And here's how it works: fasten tube brackets to forms, batter-boards, etc., snap open the valves and the liquid gives two accurately level points. The job is level ... no doubt about it.

LevelAll is an investment, a time-saving, cost-saving precision instrument at the extraordinarily low cost of only $12.95.

Start leveling your costs by sending for "On the Level," a free booklet aimed to help solve your leveling headaches ... or ask us to send your LevelAll postpaid immediately.

Money-back satisfaction guaranteed. Dealer inquiries welcome.

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Richmond Sinks in Rugged Enameled Cast Iron!
Durable cast-iron base with easy-to-clean, acid-resisting enamel for lasting beauty.

Richmond sinks in "whiter-white" or decorator colors!
Your choice of "whiter-white" or four modern pastel colors for cheerful, colorful kitchens.

Richmond sinks that are sure to satisfy!
Richmond quality kitchen sinks assure customer satisfaction. Specify plumbing fixtures that carry the Richmond guarantee.

see your wholesaler or mail coupon today!
Your Selling Points are

**Exclusive FEATURES and REAL FACTS with ABC JALOUSIE WINDOWS!**

**Exclusive PATENTED SPRING-CLIP**

Makes installation easy, foolproof, chip-proof...glass is held firmly in "knee-action" assembly that cannot rattle!

**ALL BALANCED CONTROL**

Perfectly suspended jalousies are smooth-operating...never a strain on moving parts...you can eliminate unnecessary operators because there is no weight to lift!

**FULL NATIONAL ADVERTISING SUPPORT and COMPLETE SALES HELPS!**

ABC Jalousies have acceptance...national advertising makes sales for you...and full sales aids and installation manuals make your job easy!

...and remember, Adams Engineering Company manufactures just one grade of jalousies!

**WRITE NOW FOR FULL INFORMATION about the jalousie window that gives FACTS and FEATURES to sell with!**

(There will be some wonderful news and surprises soon for dealers on our mailing lists — be sure we have your name and address.)

**ADAMS ENGINEERING CO., Inc.**

P. O. Box 936, Little River Branch, Miami 38, Florida

Name ____________________________
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Adams Engineering Co., Inc.
MIAMI, Florida  HACKENSACK, New Jersey
Here's how to make
QUALITY CONCRETE

Your reputation as a builder or contractor hinges on the kind of concrete work you do because concrete is an essential part of practically all jobs. You can build and maintain a good reputation by producing quality concrete on every job. The principles of making quality concrete are simple. The recommended procedure, step-by-step through placing concrete in the forms, is illustrated here.

1. Always protect your portland cement from moisture. Store it on raised planks and keep well covered with a waterproof tarpaulin.

2. Aggregates must be hard, clean, durable, free of foreign matter and well graded up to the largest size practicable for the job.

3. Design the mix for the job. These 3 (stiff, medium and wet) all are suitable, depending on where and how they are used.

4. Measure amount of moisture in sand by weighing, drying and reweighing sample. Consider this as part of the mixing water.

5. According to the conditions to which the concrete will be exposed and the strength desired, set mixer gauge for needed water.

6. Measure aggregates carefully. A platform scale makes for quick and accurate measuring and more uniformity from batch to batch.

7. Place the dry materials in the skip. Transfer them to the drum while the water is being added. Then mix for at least one minute.

8. Use of rubber-tired buggies reduces chance of segregation. Spade or vibrate mix enough to settle and work it against forms.

Write for free copy of "Concrete Facts for Concrete Contractors." Distributed only in the U.S. and Canada. Address Dept. A11-3

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33 W. Grand Ave. A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work

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PREVENT SLAM...
PREVENT
PINCHED FINGERS

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FOR ALL
BY-PASSING
SLIDING DOORS

Sterling Door Cushions prevent slamming...
keep flush pulls accessible...
eliminate pinched fingers by limiting sliding action.

Another Sterling example of
Better Hardware thru Better Design.

Equip all by-passing doors with
new Sterling No. 865 Door Cushions
for smoother, quieter, safer operation.

STERLING HARDWARE MFG. CO.
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Sterling means Quality

NEW IDEAS... NEW PRODUCTS

It's so much Better with Permalite...
Better in many ways!
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Concrete, using Permalite as the aggregate, may
be designed from 20 to 50 lbs/cu/ft (as against
the 150 lbs/cu/ft of ordinary concrete), with the
highest strength-to-weight ratio of any light-
weight aggregate concrete.

Plaster, with Permalite aggregate, weighs only
1/3 as much as ordinary sand plaster, providing
the lightest, most economical material for gain-
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structural steel beams, columns, etc.

But light weight isn't all! Permalite also gives
you, in both concrete and plaster, much higher
insulating value, improved fire-resistance and
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Easier for the architect, who gains design advan-
tages with the high-strength-to-weight of Perma-
lite concrete and plaster. Easier for the owner,
who can save on structural steel costs. Easier for
the builder, who saves handling time and costs.
Easier for the workman, because Permalite's
light weight and excellent workability make it
easier for him to do the best work he knows how!

To get the full story on Perma-
lite's many advantages, send
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perlite aggregate in the world.
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poration, Dept. K-1111—612
So. Flower St., Los Angeles 17.

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DEPENDABLE GREAT LAKES
PERMALITE
THE LARGEST-SELLING PERLITE AGGREGATE IN THE WORLD

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132. AMERICAN BUILDER
FINISHED BASEMENTS MEAN FASTER SALES...

add them economically with Armstrong's Temlok

Extra living space always increases a home's market value, makes it easier to sell. So give your homes the profitable extra of a finished basement room. Armstrong's Temlok Interior Finish helps you do the job quickly and at surprisingly low cost.

Made of tough pine fibers, Temlok interior finishes build, decorate, and insulate in one operation. Temlok comes in three easy-to-handle forms: tile, plank, and board. All are attractive, factory-finished materials that need no further painting or treatment. Temlok helps insulate, too... adds year-round comfort to the basement and helps save on fuel bills.

Temlok goes up fast, cuts your labor costs.

This attractive material is simply nailed or stapled to wood furring strips. A special Lok-Bevel joint on both the tile and plank speeds application and insures even, neat-looking joint lines. It also conceals the nailing flange so that no staples or nailheads are visible. Although light in weight, Temlok is structurally strong. It can be worked like wood but will not split or crack. There's practically no waste with Temlok.

Armstrong's Temlok is the easy way to finish basements and get more profit out of every home you build. Ask your lumber dealer about Armstrong's Temlok interior finishes or write Armstrong Cork Company, 3511 Rider Avenue, Lancaster, Pennsylvania.
Super-Ex Corner Bead, with its exclusive design, offers three big advantages to plasterer and owner:

**Improved design** permits a greater depth of plaster adjacent to the bead area — this means less danger of chipping, longer lasting plaster beauty.

**Wings of Super-Ex** are formed at an angle of 60° to 70° for a spring fit on a 90° corner — adjusting readily to any specified plaster grounds, whether ¾", ½", or ½".

Exclusive Super-Ex design combines the rigidity of a solid wing with the added plaster reinforcement of expanded metal. Straight, true-edge plaster corners are protected against cracking and chipping.

Milcor Super-Ex goes on fast — reduces erection costs. It requires little or no aligning. It can be wired, stapled, or nailed — no clips are necessary.

To be sure of longer plaster life and lasting beauty, standardize on Milcor Super-Ex Corner Bead. Write today for complete information.

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Corner Beauty and Protection at Its Best!

A. Milcor Super-Ex Corner Bead. Provides strong, straight nose held true by two semi-solid flanges.

B. Milcor Metal Lath. Always specify — Metal Lath for Strength — Plaster for Beauty.

C. Milcor Clip-on Metal Base No. 677-S. Base snaps over clips fastened to wood grounds — no exposed screw heads in base.

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the design tells why...

"IT'S AMERICA'S FASTEST GROWING LINE"

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**LOK-TAB**

SLIDING DOOR HARDWARE

**GET BETTER DESIGN**
The sliding door hardware that pleases the architect, builder and client must offer neat appearance, fast installation and long, trouble-free operation... and Leigh Sliding Door Hardware is designed to give you that!

**GET BETTER DESIGN**
Leigh Sliding Door Hardware is compactly designed of the very best materials. There are no unsightly gaps or wasted space because head clearance is held to a minimum. And the optional facia strip completely encloses the space from door to casing, providing a streamlined appearance that eliminates the need for costly, time-consuming trim.

**GET EASY INSTALLATION**
In a matter of minutes, the complete Leigh installation is done! Track, hangers, guides and door pulls are all designed to go into place right out of the carton. Just assemble the door and be sure of perfect performance, every time.

**GET QUIET, SMOOTH OPERATION**
Leigh Sliding Door Hardware puts an end to noise. The exclusive Sturdico wheels glide along the edges of the track, won't jam with dust, won't break down from oil or grease. And the door-mounted guide strips leave the doorway open for cleaning... a feature that the housewife will love.

**GET TROUBLE-FREE SERVICE**
LEIGH Sliding Door Hardware will take the hardest day-to-day use of commercial or residential installations. When the door is in place and you twist the LOK-TAB, you're done with service calls for good. Leigh Sliding Door Hardware needs no attention and it can't jump the track.

SETS COMPLETE IN ONE HANDY TUBE... FOR 2, 3 or 4 BY-PASSING DOORS

You get all of the parts, all of the screws and detailed instructions with each set of Leigh Sliding Door Hardware. Using only a screw driver, the installation is finished in minutes.

CALL YOUR JOBBER or WRITE for BULLETIN 87-L

**LEIGH BUILDING PRODUCTS**
A DIVISION OF AIR CONTROL PRODUCTS, INC.
GLASS STREET, COOPERSVILLE, MICHIGAN

**PAT. PEND.**
ANNOUNCING...

UPSON All Weather PANELS

A NEW KIND OF LAMINATED FIBRE PANEL UNEQUALLED FOR SIDING, SHEATHING AND INTERIORS OF SERVICE BUILDINGS

Waterproofed. Upson All Weather Panels are water-proofed through every fibre. Official tests show water absorption, LLLF-321 B- 2.4°, by volume. Toxic treated to resist mold, fungi, termites.

Strong. Upson All Weather Panels' 6-ply laminated construction adds structural stability, enables them to resist exceptional shock and strain.

Thick. Upson All Weather Panels are 3/8-in. thick for heavy duty use, greater insulation value.

Store Them Outside. Upson All Weather Panels can be exposed to the roughest weather without damage.

Easy to Apply. Upson All Weather Panels are applied direct to framing. Left natural or painted.

Seven Sizes. 4-ft. wide x 8, 10, 12-ft. long; 8-ft. wide x 12, 14, 16, 18-ft. long.

. . for complete details mail the coupon . .

THE UPSON COMPANY, 91 11. UPSON POINT, LOCKPORT, N. Y.
Please send me booklet and information on Upson All Weather Panels.

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FARM USES: brooder houses + tool sheds + storage bins + utility rooms + grain bins + livestock shelters + dairy barns + machinery sheds + milk houses + garages

FACTORY USES: gatehouses + watchmen's sheds + storage buildings + garages + utility buildings + construction sheds + loading platform shelters + tool cribs

HOME USES: garages + playhouses + utility sheds + plus a multitude of summer cottage uses

MANY OTHER USES: motels + resort buildings + roadside stands + carnival buildings + exhibits + signs + summer camps + construction companies + wherever rugged duty is required
NEW!

Pella WOOD FOLDING DOORS

... a builder’s dream come true

At last, Pella Folding Doors in Natural Wood! Solidly-built folding doors with all the stability and lasting value of conventional swing doors. Paint to match or harmonize with walls or woodwork. Varnish finish to blend with wood paneling or trim.

LAMINATED CONSTRUCTION — Individual wood panels (3/8” thick and 3/8” wide) joined by continuous spring hinging, fold to only 6” in the average opening. Built-up wood block cores are laminated with matching sliced veneers to assure vertical alignment.

STOCK SIZES Pella Wood Folding Doors in Pine — Paint Grade or Varnish Grade, Finished or Unfinished. Easily painted or finished to match or blend with surrounding woodwork. 2’4”, 2’6”, 2’8” and 3’0” widths; all 6’8” height.

CUSTOM sizes available in three grades: (1) Varnish Grade Pine; (2) Paint Grade Pine; (3) Hardwood Veneer (Red Oak, Unselected Birch, or Philippine Mahogany).

Substantial savings on inside wall construction can be effected by installing Pella Doors as movable partitions, ceiling to floor and across entire closet fronts. Costly double wall construction for recessed sliding doors can be eliminated. Pella Doors may also be used for kitchen cupboards, snack bars, broom closets — wherever space is at a premium. Be first in your area to realize their extra savings and sales appeal. Investigate today.

PELLA DISTRIBUTORS CONVENIENTLY LOCATED THROUGHOUT THE COUNTRY

Add extra sales appeal with Pella

WOOD FOLDING DOORS • WOOD CASEMENTS
ROLScreens • MULTI-PURPOSE WINDOWS
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GENTLEMEN: Please send FREE literature on Pella Wood Folding Doors, together with name of nearest Pella distributor.

NAME
ADDRESS
CITY
STATE

NOVEMBER 1953
Any jalousie window, regardless of its construction, can be expected to control ventilation, but the problem of making it weather-tight calls for fine engineering of the frame, the pivot clips which hold the glass louvers in place and the operating mechanisms. To achieve this result, manufacturers of glass jalousies have developed many variations in design.

Frame

Nearly all makes use heavy-gauge extruded aluminum. The extrusion process, where the aluminum has been softened before being shaped, results in a harder, more durable alloy which resists bending, warping and corrosion. Frame weights vary considerably: from 7 to about 17 pounds, around one-third the weight of the glass to be held.

About half of the jalousies are delivered as completed units, the balance being shipped knockdown. Some of the former windows have heliarc-welded corners while others are treated with a joint-sealing compound and riveted.

Knockdown frames can be assembled in two minutes. Only tool needed is a screw driver to insert eight self-tapping screws into preformed grooves. Members can go together only the right way, otherwise screw holes will not line up. Care must be taken to screw frames up tight so no water will leak through joints. One big advantage of this type is that it can be made to fit a special size window opening by anyone who can make a straight saw cut through head and sill. Grooves for the screws extend through the entire length of these members.

Knockdown units store compactly: 100 No. 24 windows (37 inches by 50% inches) fit into 50 cubic feet.

Window frames are easily grouped together with several types of mullions. Most common is a one-piece T-shaped section. Also in use are separate mull bars for each side of the frame. Some windows use no connectors but are mullioned directly together.

Almost all jalousie frames are grooved and equipped with four to six clips, depending on frame size, to hold aluminum screens on the inside. Windows to be installed in colder climates are also equipped with storm sash. Screen or storm sash can usually be installed in 15 seconds. Several of the latter have hopper vents to allow air circulation during warmer winter days.

Louver Glass

Supplied in either 1/8-inch heavy sheet or 1/4-inch plate, louver glass comes in four types: clear, obscure, heat-resisting (solex) and a combination of the latter two, “Obscure” is a cloudy glass which affords privacy, yet when opened completely, has the same visibility as clear glass. The heat-resisting variety, tinted blue-green, resists 35 per cent of the sun’s heat and most rays which cause furniture fabrics to fade. Less (Continued on page 140)
**INSERTING GLASS LOUVERS**

**END-TAB TYPE:** Insert fixed header glass into clip while in horizontal position (1). Rotate slat to vertical and raise glass into head section recess (2). Bend tabs to retain glass. Adjust self-tapping screws to proper tension. Place clips in horizontal position (3) and start inserting glass in approximate center of window. Force glass in evenly (4) on both sides of window. After all glass is inserted (5), bend clip tabs down.

**SPRING-CLIP TYPE:** Start at bottom and work up. Open jalousie to at least 60 degrees to place bottom slat into position. Then close to about 30 degrees and insert rubber or wood block between sill and glass to hold glass in place while spring-clips are installed as illustrated. As each slat is positioned in pivot clip, insert block between that slat and the one previously installed; then repeat installation of spring-clips.

**LOCATION OF WEATHERSTRIPS**

**IN SOLID BRICK**

**IN CONCRETE JAMB BLOCK**

**IN PRECAST SUB-FRAME**
common, but available, is one-way glass (you can see through it; outsiders can't see in).

Vanes range from 3½ to 4½ inches wide in most cases. Some manufacturers make a heavier line of jalousies calling for glass as wide as 8½ inches. A window of this type has fewer runs of glass and is said to be more rigid, but its cost is up to 30 per cent higher.

Makers generally agree that windows should not exceed 37 inches in length, due to the natural bending quality of glass. Under pressure of severe hurricane winds, a wider louver of ¾-inch glass will "belly-in" a quarter inch. Wider openings are covered by two or more jalousies mullioned together.

Many producers do not ship glass because of weight and breakage problems. Dealers or the ultimate consumer get it directly from a local glass shop. Makers who do ship glass say they wish to be sure the buyer gets the right quality, thickness and length.

**Pivot Clips**

Several types of stainless steel springs have been designed for the dual purpose of holding the louvers tightly in the clips and making the glass installation an easy matter. One is riveted to the side of the clip. Another style is a retainer spring which holds a locked position when once pushed into place. Still another is a two-piece wedge clip which holds glass vanes flush instead of shingled.

Many pivot clips have a tab on the end which is bent to hold the glass in proper position.

**Operating Mechanism**

Various mechanisms called operating bars or travelers extend along the jambs and are attached to the pivot clips to set the angle of opening for the glass, and also to effect tight lockup. One type works with a toggle link and set screw arrangement which allows individual clips to be moved forward or backward as needed for tightest closure. With this arrangement, the maker claims no weatherstripping is necessary.

Another bar is riveted to clips in such a manner that it sets up a "knee action." In case a bug or other obstruction gets lodged between two panels, all other glass will normally remain open to the same degree as panel with obstruction. This mechanism is said to close the other louvers tightly.

Some clips are riveted directly to the hangers and also to a bar or a gear track. Tubular hollow rivets with bearing shoulders are used to assure a never-binding action. One mechanism has a torque bar in the assembly, which evens pressure on (Continued on page 142)
These are the Columbia-matic features home buyers go for:

**Save time** — Easy to put up and take down from inside. Anyone can do it in seconds.

**Save work** — No more struggling with clumsy wooden frames or ladders. Columbia-matics have top and bottom rails only. Roll up for compact storage.

**Save money** — All rustproof aluminum. No drip stains on house. No painting, maintenance. Full-length aluminum mesh gives complete insect protection.

with **Columbia-matic TENSION SCREENS**

Give your homes the plus sales advantages of Columbia-matic Tension Screens. Columbia-matics are the only screens on the market offering automatic tension. Wherever they have been introduced, Columbia-matics have made a hit with both builders and buyers. They are the perfect way to screen a double-hung window . . . the perfect complement to modern double-glazed windows.

**Precut to your specifications.** Perfect fit assured. No fitting. Can't swell, stick, warp.

**Easily installed.** Ready to mount from inside. Only 7 screws. No template.

**Cost less than ordinary, full-length screens.** Installation time is cut to a fraction of that required for wooden screens. Takes an inexperienced man less than 5 minutes. No painting.

Only Columbia-matic gives **AUTOMATIC TENSION**

Patented bottom rail is spring-loaded . . . automatically puts right amount of tension on screening. Keeps it drum-tight at all times . . . automatically compensates for unevenness in sill; temperature changes. Screen can't sag or ripple. Easy-open tension locks anchor screen firmly, flip up to open. Side-mounted, no hardware on sill to snag clothing. Another Columbia-matic exclusive.
Door Canopies

the sensational new CANOPY made of sturdy rustproofed STEEL!

- STRONGEST BY FAR!
- HARMONIOUS IN DESIGN—THEY LOOK LIKE AN INTEGRAL PART OF THE HOUSE
- LOWEST IN PRICE—BECAUSE OF QUANTITY PRODUCTION

Write at once or just clip this advertisement to your letterhead.

Prices, liberal discounts and complete merchandising suggestions will be sent promptly.

THE TROY SUNSHADE CO., TROY, OHIO

THE OLDEST AND LARGEST MANUFACTURERS OF SUN CONTROL PRODUCTS

(Continued from page 140)

JALOUSIES

A popular use—jalousies on each side of a picture window

both sides of the window. The gear track moves the glass through connection with gear teeth on each clip.

Most mechanisms are adjusted to prevent louvers from opening more than 90 degrees as a safeguard against water's entering a room during an unexpected shower.

Operators

Among many styles of operators to activate the mechanisms along the jambs, the most common are crank or T handles mounted on either jamb at or near the sill. Some windows offer knob or lever operation. Most have a worm gear arrangement, enabling window to be locked in any position.

Several mechanisms permit location of the operator almost anywhere on the jamb. This is desirable for floor-to-ceiling installations. Another advantage of this type is that two operators can be used for one window, one operating upper louvers, the other the lower section. In this situation, two kinds of glass can be used—such as obscure below and clear above—and operated independently.

In a recent development toward improved appearance, some operators are recessed into the jamb.

Torque bar operators, which transmit equal power to left-hand and right-hand operating mechanisms, are often centered on sill.

Properly installed, all operators and their connecting mechanisms

(Continued on page 144)
For every door that SWINGS SLIDES FOLDS ROLLS or LIFTS

STANLEY makes the hardware.
The Stanley Works,
New Britain, Connecticut.

STANLEY HARDWARE
Latest "Trade Secrets" Success!

48,000 pounding feet failed to mar this floor
——that's the beauty of Higgins Block*

After the first three exhibit days, visitors to the LIFE-NAHB "Trade Secrets" House built by L. P. Smith in New Orleans found it hard to believe that the immaculate, gleaming floors of richly grained Higgins Block had already been walked on by 24,000 people—equal to years of average wear! Visitors were further impressed by this list of Higgins advantages:

*SPECIFICATIONS:

9" x 9" net face hardwood blocks—easy to install
3-ply cross-grain construction—when properly installed will not warp, buckle, cup or crack
Selected oak face—comes with final finish
Pressure bonded with marine-type glue—water-repellant, climate-proof

Deep-impregnated with famous new "Penta"—rot-proof, termite-proof
Grooved back anchors into adhesive—quiet and comfortable
Can be laid directly on concrete slab—without special preparation
Blocks fit flush—without large, visible V-grooves

Higgins BONDED HARDWOOD BLOCK FLOORING
THE WORLD-FAMOUS BOAT BUILDERS

Use this coupon for free sample block and literature


Firm Name: 

Address: 

City: Zone: State: 

JALOUSIES

(Continued from page 142)

are designed to operate freely, without noticeable friction.

Weather-tight Problem

Tightness of closure to prevent water leakage during stormy weather is a major design problem. Weather-tightness depends on maximum closure at four critical points: the crackage line between jambs and pivot clips, the head, sill and between louvers.

Tight closure along jambs is obtained through the operating mechanisms, with help from retainer springs in the clips. Some windows also have baffles built into the extrusion to catch any water that may work through and drain it off at the bottom through weep holes. A type designed for the wider glass slats has an overlap extending from

(Continued on page 146)
Now, home lighting keeps pace with the modern design of better living. No longer must lighting be the complete darkness or blinding brilliance offered by the ordinary "on-off" wallswitch. A new concept in light control, the Powerstat WALLBOX Dimmer replaces the wallswitch to permit the selection of light just right for any occasion and activity. Simply by turning a knob, light is brightened or softened silently and smoothly to reflect every mood, to provide the right amount of light for every seeing task. Here is lighting as it should be, controlled from darkness to full brightness to suit the needs of modern living. Plan for the Powerstat WALLBOX Dimmer in the home you build.

Complete technical information is offered in Bulletin D653WBT. And for your customers, a simple, non-technical Bulletin D253WBC.

Write to:
THE SUPERIOR ELECTRIC CO.
11113 Demers Avenue, Bristol, Conn.

NAME______________________________
POSITION__________________________
COMPANY__________________________
CO. ADDRESS________________________
CITY________________ZONE____STATE__

NOVEMBER 1953
For Fast, Smooth Performance

YOUCAN'T BEAT MALL
PRECISION-BUILT SAWS

a size for every need

Model 72
MALLSAW

$64.50

This precision-built MallSaw is but one example of that unbeatable combination of TOP quality and LOW price found in the hundreds of Mall tools for builders. This model is equipped with 7-inch blade, power-packed motor, automatic telescoping blade guard, heat treated gears, ball and needle bearings, and many other features. Has a cutting capacity of 2 3/4" - cuts 2 x 4's at 45°. SEE YOUR MALL DEALER! Write for complete details.

Get More Facts NOW!

MALL TOOL COMPANY
7732 S. Chicago Ave., Chicago 19, Illinois
FREE! Send me more information about MALLSAWS □ MALLDRILLS □ Send name of nearest dealers

Name: ........................................ Company: ........................................ Address: ........................................

Here's the fireplace form that YOU designed...

for a better fireplace at lowest cost

JALOUSIES

(Continued from page 144)

Roadside taverns and restaurants find controlled ventilation of the windows an attractive feature

the outside of each clip which closes over the front of the jambs.

Weatherstripping, generally a vinyl plastic material highly resistant to effects of heat, cold and moisture, is common across the head and sill, and is often placed around all four sides of the frame. This allows for tolerance deviations in the extrusions which could prevent a tight closure between top glass and head, bottom glass and sill, or both. Even with a perfect fit, many manufacturers feel weatherstripping is a more ideal seal than glass against aluminum.

Some heads have a drip cap arrangement to direct rain and roof drainage away from louvers. Most sills are sloped downward so water will drain off with a minimum of splashing.

Since there is also a slight tolerance deviation in the manufacture of glass, the louvers will not always permit a perfect closure all the way along their length. However, one louver overlaps the next by a half an inch or more, and if the frame is carefully leveled on installation so there is no bending or warping, a reasonably tight fit will result. Force of wind and water sets up a capillary action to hold water between overlaps and thus prevent further water or air from passing. Glass strips, being of the same width, bend together as a single piece under air pressure during a storm and thus maintain the seal.

Albritton Engines

Roadside taverns and restaurants find controlled ventilation of the windows an attractive feature

Albritton-Allbritton Engineering Corp.

You—and the thousands of other architects and builders—set the specifications for this Benefire Fireplace Unit! And Bennett has built it exactly the way you want it—to save time, construction costs and assure a perfect, smokefree fireplace every time. Simplified, standardized—this modern recirculating unit includes scientifically designed firebox, throat, damper, downdraft shelf, heating chambers and smoke dome—all combined into one fool-proof unit! Guaranteed not to smoke.

Lays Up Faster . . . Cheaper

The Benefire form places no restrictions upon exterior fireplace design—lays up easily with standard brick, with no costly cutting or fitting. Heavy boiler plate construction, with graduated weights for even heat distribution. All-around sealing flange holds insulation securely—eliminates mortar joint, 6 sizes available . . .

See your BENNETT representative . . .

He'll give you all the facts and figures you need on Benefire—and the complete BENNETT line of dampers, grilles, grates, cleanouts, ash dumps, etc., designed to build a better fireplace. See him soon—or write for catalog.

Write Dept. C for catalog

BENNETT-IRELAND INC.

NORWICH, NEW YORK

AMERICAN BUILDER
Announcing New Dodge Trucks

Brilliant new design opens new era in trucking!

- Compare their new comfort!
- Test their new handling ease!
- See their new low work-saving design!

2 Great Engine Line-ups! In addition to cost-cutting 6’s, Dodge now offers the most powerful V-8 engines of all leading trucks! Available in 1 1/2-, 2-, and 2 1/2-ton models... standard in 2 1/2-, 3-, 3 1/2-ton! Revolutionary hemispherical combustion chamber for high efficiency! Get free book on engine efficiency and its importance to you at your Dodge dealer's!

Over 75 New Features! Spectacular low-built lines! New increases in G.C.W.! New cab sealing against dust, drafts! Nonskid running boards!

Plus famous Dodge features like... completely rustproofed sheet metal... moistureproof ignition! Truck-o-matic transmission with gyrol Fluid Drive, available!

New! Even greater values... yet still priced with the lowest!

New! Sharper Turning! New steering system for the shortest turning of all leading trucks! New shorter conventional tractors! New, one-piece windshield! More total vision area than any other popular make!


New! Lower Lines! Pick-up and panel floors knee-high for loading ease! Lower running board for easier entry! Lower hood for greater visibility! New, low center of gravity for road-hugging stability!

See Your Friendly Dodge Dealer!

November 1953
many license laws affect our daily lives. Our business, professions and automobiles, and even our pets, often are subject to regulation and the payment of fees. Sometimes a trade group seeks to license its members as a means of regulation and of promotion of better standards for protection of the public. In some instances a group wants a license to limit the number who may engage in the particular business and, in effect, to create or continue a monopoly and perpetuate control.

The courts sustain these regulatory laws if they are for the protection of public health, morals, safety or welfare and further if they are reasonably adapted toward attainment of those objectives. On the other hand, the courts invalidate these acts where they constitute an arbitrary interference with private business or impose unusual or unnecessary restrictions on lawful occupations. An instructive specific application of these general rules is found in the recent decision of the Illinois Supreme Court holding unconstitutional the Illinois Plumbing License Law. See the recent case of Schroeder v. Binks, 113 N.E. 2d 169 and the earlier case of People v. Brown, 95 N.E. 2d 888.

The Illinois Plumbing License Law provided for licensed master plumbers and plumber apprentices. It required all plumbing work to be performed by or under the supervision of a licensed master plumber. All apprentices must have worked under the supervision of a master or a journeyman. The Law required the issuance of a license as a journeyman to an individual who had had certain defined plumbing experience. It further provided for the issuance of a license as a master who had had certain defined plumbing experience or, in the alternative, a license as a journeyman.

It thus is clear that the master plumber was the key to the whole situation created by the Act. He was required to supervise all plumbing work. No one might work as an apprentice or a journeyman and gain the necessary experience to become a master except under a master's supervision. Accordingly, masters held the power to determine how many apprentices and journeymen there might be, who they should be and eventually the number and identity of the masters.

The Court admitted that the State had the power to regulate plumbing as a matter of public health and welfare. It was of the opinion, however, that the particular exercise of that power as set forth in the Act was invalid. The judges emphasized that the provisions of the Law in placing ultimate control in the master plumbers, a private group, did not bear a reasonable relation to the promotion of the public welfare. The Court suggested that, on the contrary, they were an unnecessary limitation on a lawful occupation tending to restrict those who might enter or engage in the plumbing business. The Court observed that seemingly the principal purpose of the Act was to perpetuate control of the plumbing trade. The judges, in concluding, said that, "... the ultimate control of the situation remains in the hands of the private group of master plumbers. . . . The master plumber is under no duty to supervise. . . . The master supervises, if at all, upon his own terms, and to the extent that he sees fit."
Johns-Manville

ASBESTOS SHINGLES

The J-M American Colonial Shingle gives you a permanent type of roof, economically priced, that will add character and distinction to any home!

These Johns-Manville Asbestos Shingles have the same rich graining as weathered wood shingles, cast the same interesting shadow line. You have a choice of beautiful colors and blends.

Made of asbestos and cement they are as permanent as stone. They give lasting protection against fire, and weather.

In most areas the applied cost of an American Colonial roof is lower than any other permanent type roof the homeowner can buy.

For full details and a free brochure showing the full color range of American Colonial Shingles write Johns-Manville, Box 60, New York 16, New York.
Correct roof framing is of perennial interest. Therefore the table on *Instructions in Roof Framing* by John T. Neufeld, published in the March, 1925, issue of the *American Builder* is reprinted here for the benefit of our readers.

In reference to the framing table, the pitch shown is the same for a hip as for a gable roof. The pitch is always based on the slant of a common rafter and not on the hip rafter.

### 14. Length per Foot Run:
This column gives the length of the hip rafter per foot run of common rafter, for each pitch given in the table. For example: The length per foot run of a hip rafter for a 1 3-pitch or 3-inch rise per foot run of a common rafter is 18.76 inches. To find the length of a hip rafter for a 1 3-pitch, assuming that the building is 16 feet wide, proceed as follows: For a 16-foot span the run is 8 feet. The length of hip rafter per foot run of common rafter is 18.76 inches. The total length of this rafter therefore is 18.76 times 8 equals 150.08 inches: 12 feet 6 1/16 inches.

### 15. Subtract for a 1 3-Inch Ridge:
For example: The rafter figured in the previous problem was 12 feet 6 1/16 inches. If a ridge board of 1 3-inch thickness is used, then deduct 1 3 inches (as given in this column) from the length of the rafter. This leaves the net length as 12 feet 4 1/16 inches.

### 16. Top and Bottom Cut by Square:
The first number, which is always 17, is taken as the base or run, and the second number is the rise. Illustration No. 16 shows how the square is applied to the rafter for marking. By using the same roof pitch the numbers to be used on the square are 17 and 8. For the top cut mark along the arm of the square on which the 8 is taken, and for the bottom cut mark along the arm of the square on which the 17 is taken.

### 17. Top Cut by Degrees:
This indicates another way of obtaining the top cut. There is less chance for error if degrees are used. However, a roof pitch is not generally given in degrees.

### 18. Bottom Cut by Degrees:
This column is similar to No. 17 except that it gives the bottom or seat cut of the rafters.

If the bevels given for the top and bottom cuts are added together they will total 90 degrees. Therefore, if either cut is given, the other can be obtained by subtracting from 90 degrees.

### 19. Side Cut by Square:
This column gives the numbers to be used on the square to obtain the level, as illustrated in Figure 20. For a 1 3-pitch, the numbers used on the square to obtain the bevel are 19 and 17, marking along the arm of the square on which the 19 is taken. This column is based on the rule that the side cut of the hip rafter is obtained by taking the length of hip rafter per foot run on one arm of the square and the run of hip rafter per foot run of common rafter on the other arm of the square.

### 20. Side Cut by Degrees:
The angle is laid off on the back of the rafter. See Figure 20.

### 21. Backing Hip by Square:
Take the numbers given in this column and apply the square to the back of the hip rafter as in Figure 21. The angle that the square makes with the edge of the rafter gives the angle of backing.

### 22. Backing Hip by Degrees:
The angle of backing for each pitch is given by degrees. Note that the angle is taken on a section straight across the rafter.

### 23. Vertical Drop of Hip If Unbacked:
Often the hip rafter is

(Continued on page 152)
Aluminum

An Empty Roof Space Would Be The Best Insulation Against Summer Sun, Were It Not For Radiation

Convection is not a problem—there is no Convection downward. The only summer heat flow through empty roof space is Radiation, except slight Conduction. Heat flow by Conduction through any building space is about 7%.

Ordinary material may retard heat for a time, but builds up a large heat storage as compared to empty space. More dense, it is a much better conductor of heat than just air and so more heat passes through it by conduction. Its surfaces have a heat ray absorptivity and emissivity of over 90% and radiate heat into the building through the day, and sometimes into the night.

The solution is to use a material which has little substance and whose surfaces will absorb and emit little radiation. Gold or silver foil would be excellent, but tough multiple accordion aluminum, which weighs but 1/4 oz. per sq. ft., is inexpensive and almost as good, with a heat ray absorptivity and emissivity of only 3%.

The metal sheets of multiple accordion aluminum are impervious to water vapor and are continuous, 500 ft. to 750 ft. long. Infiltration under their flat stapled flanges is slight. The scientific construction of multiple layers of aluminum, fiber, and air spaces minimizes condensation formation on or within this type of insulation. Its slight mass is capable of little heat storage.

The National Bureau of Standards Booklet BMS52, "Effect of Ceiling Insulation Upon Summer Comfort" lists on Page 10 the relative effectiveness of the insulations tested in protecting ceilings against summer heat. First in effectiveness was two layers of aluminum foil (both sides of each layer reflecting). Second was full thick (3%-inch) ordinary insulation. (Use coupon to get the booklet FREE!)

Try this test: Tack or scotch-tape 3 sq. ft. of multiple accordion aluminum (we will send it free on request) to the underside of a hot roof or ceiling, whether uninsulated, or insulated with ordinary material. Step in and out of the protected area beneath. The difference will be so marked you will need no thermometer.

A new* multiple accordion aluminum, Infra Types 6-Si and 4-Si, forms a continuous "blanket" of uniform depth between joists, giving the entire area maximum protection against heat loss and condensation.

*COST OF INFRA INSULATION INSTALLED
in new construction between wood joists, material with labor,

Type 6-S; under 9½¢ sq. ft.
Type 4-S; under 7½¢ sq. ft.
Type 4-S Jr. under 7½¢ sq. ft.

Infra Insulation, Inc.
525 Broadway, New York, N. Y.
Telephone: Worth 4-2241
not backed. In such cases the seat should be cut out further so that the rafter is lowered, thereby bringing the edges of the hip rafter in the same plane with the common rafter. The dotted lines in Figure 23 show where the cut should be made. Two kinds of rafter ends are shown.

**24. DISTANCE FROM EDGE TO LINE OF BACKING:** The figures simplify the method of obtaining the amount of backing. Take the distance given in this column for the desired pitch, and measure on the side of the rafter, from the edge to the line of backing as shown in Figure 24.

### how to use roof framing table

<table>
<thead>
<tr>
<th>Pitch</th>
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<tbody>
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(Continued from page 150)
NEW-DESIGN PLUMBING FIXTURES. Styled to match the trim, horizontal lines of American-Standard cast iron bathtubs, new-design vitreous china lavatories and toilets are more beautiful and more convenient than ever. All embody the same top quality that your customers have come to expect from American-Standard.

AMERICAN-STANDARD DISPOSER. A work-saving partner for famous American-Standard sinks, this quiet-operating disposer is also ideal for modernization as it can be easily fitted in any sink with standard drain opening. Has reversible, double-edged shredders of rustproof chrome steel, and unique safety top control.

HEATRIM PANELS. Specifically designed for forced circulation hot water heating, these baseboard heating panels provide convected warmth throughout each room. The panels take the place of regular wood baseboards, allow use of virtually all the floor area. Panels can be installed free standing or recessed.

CONVERTIBLE KITCHEN CABINETS. American-Standard all-steel cabinets are the only kitchen cabinets with interchangeable drawers and shelves. You can install an economical package kitchen in the homes you build. By adding extra shelves and drawers to the cabinets at any time, buyers can create deluxe kitchens to fit their particular needs.

For further information on American-Standard products see Sweet's Light Construction File.
foundation crack

Our church has a foundation in which there is a crack along one wall. Is there anything that we can do with it?

E. F., Prud'Hommes, Sask., Canada

It would appear, from your letter, that the crack—running horizontally along the whole length of foundation as it does—was caused by ending a day's concrete pour halfway up the foundation and starting a later pour at this point. If this is the case, there is no problem structurally and the foundation should be of service for many years.

If water is seeping into the basement through this crack, a commercial sealing compound can be applied to the interior surface. Your materials dealer will be glad to recommend one.

new use for aluminum

We are building a fertilizer mixing plant which will use a lot of muriate of potash and ammonia sulfate in the mixing. We find these chemicals very detrimental to iron and sheet metal products. What do you think of covering the outside walls with aluminum siding?

D. B. G., Hull, Ill.

We assume that when you refer to siding for building you are speaking of it as an enclosure for a building, and not as an enclosure for bins storing the various chemicals. In siding applications, the chemicals would not be in contact with aluminum directly, except in the form of dust. In this case, moisture would not be retained for long periods of time even if slight condensation were to form on the interior of the siding sheet.

In the event that the chemicals were to be stored along the walls of the interior of the building in direct contact with the aluminum sheet, we would recommend that the aluminum sheet be primed with zinc chromate primer and given two coats of aluminum paint.

Aluminum Company of America

leaking basement

I constructed a basement made of concrete blocks painted on the outside with a tar coating. Even so, water comes in around the floor. I have applied about three or four coats of waterproofing on the inside, but this has not helped. How can I correct this situation?

M. D. G., Big Run, Pa.

Exterior masonry foundation walls should be cement plastered before a tar coating. This probably would have prevented leakage. Further waterproofing on the inside won't help. The trouble is outside. The difficulty may be surface water. If so it might be remedied by regrading so surface water does not drain into the foundation. Check your downspouts. They may be pouring water into the back fill. If these remedies are not successful, you will probably have to excavate around the foundation and install drain tile.
Swing Shelves—Curtis wood cabinets (available in beautiful natural birch) provide this extra storage space in both base and wall units.

Pull-Out Trays—Curtis makes them in nine widths to provide finger-tip convenience in any size kitchen. Used for handy storage of linens or pans.

"Pass-Through" Cabinets—Opening on both sides, these Curtis units increase accessibility and save steps. Note the convenient sliding table.

Sliding Bins—Ideal for fruit and vegetable storage, these modern bins may also be used for pan or other storage. Bins pull out separately.

Special Drawer Unit—This special unit has two shallow, half width drawers and one deep bread drawer above three full width drawers.

No Scrambling—This cabinet has a sliding metal hook rack at the top and a tray with five compartments at the bottom. The dividers are removable.

Some of the 53 news-making features...

in CURTIS Woman-designed Kitchens

GET THE WHOLE STORY IN THIS EXCITING NEW BOOKLET—A COPY IS YOURS FOR THE ASKING.

1866 CURTIS WOODWORK
CURTIS COMPANIES SERVICE BUREAU
Dept. AB-11, Curtis Building
CLINTON, IOWA

NOVEMBER 1953

155
fireplace information

How can I build a double fireplace and an extra-small flue all in one stack? I should like to build one fireplace of concrete block in the basement and the other fireplace of brick on the first floor.

B. M., Beaver Falls, Pa.

Although it has been well demonstrated that a concrete floor with proper edge insulation will provide warm, comfortable service in any type of structure, we know of no recently published material on resiliency which drew a direct comparison between the properties of concrete and wood floor construction.

Portland Cement Association

what size beam?

I am going to build a flat-roofed residence with exposed beams and roofing. Roofing is to be 20-year built-up slag; roofers to be 2x6-inch t&g V-joint cypress. Beams are to be spaced 30 inches or 32 inches C-C. Insulation is to be 25/32 insulating board. The longest beam span is to be 15 feet 6 inches. What size fir beam must be used?

D. R., Wycoff, N.J.

Use of 2x6 t&g decking a built-up roof and insulation would require 3x8-inch beams 15 feet 6 inches long.

building against earthquakes

Is there any special technical or practical literature on earthquake calculation and design required by codes for building construction?

G. J. M., Ogden, Utah

Write to the government office of the State of California, Sacramento, California, and obtain their code. Because of their experience with earthquakes, it is probable that they have a clause in the code that covers this possibility.
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STORAGE DRAWER Ample storage space for pots and pans.

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Every General Chef Unit is guaranteed in writing to give trouble-free service for 5 years!

WRITE for complete information and specifications if you are building, remodeling, designing — you will be interested in the space and money you can save with General Chef units. Several models are available. Fully guaranteed. WRITE TODAY for complete information and specifications on all General Chef units. We will also send you name and address of distributor nearest you.

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Please send me complete information and specifications on General Chef units, and name of nearest distributor.

NAME: ____________________________ STREET & NUMBER: ____________________________

CITY: ____________________________ ZONE: _______ STATE: ___________

158 AMERICAN BUILDER
base for stucco

I have a house built of cinder blocks. It is painted with a cement and water mixture. The pores in the blocks are pretty well sealed. Will anything have to be done before stucco can be applied to this wall?

L. B., Louisburg, Kas.

Masonry walls should have surface textures rough enough to provide good mechanical key and should be free from paint, oil, dust, dirt, soot or any material that might prevent satisfactory bond. Concrete masonry walls, with the pores pretty well closed, do not present this desirable surface texture. We recommend you use a corrosion-resistant metal reinforcement furred out 1/4 inch by galvanized furring nails and three-coat Portland cement stucco applied to this.

new methods of building

Our new home is to have a roof with a 1/2-inch rise to the foot, a built-up roof, western-type frame, etc. Would you please send me any information you have on house construction from foundation to roof, sheathing to finishing?

W. C. K., Tacoma, Wash.

We do not know of a manual that specifically covers the type of construction you describe. The type of house construction set forth in manuals in the past is still the guidepost for all builders. The new methods that you refer to, such as a low-pitch roof, etc., all spring from the fundamental principles that are set forth in standard construction.

The only way you can acquaint yourself with these new methods is to be constantly observant and note the new types of houses that are shown in the various building magazines. Study construction details and make an adjustment between them and the work you desire to do.
NOW! Have the Sales Advantage of a Quality Folding Door yet actually Cut Construction Costs! with "SPACEMASTER" folding door

Now you can be one of the hundreds of builders who spark house sales with folding doors—and actually cut your construction costs at the same time. With "Spacemaster," by the makers of famous "Modernfold" doors, you save on initial cost, because "Spacemaster" usually costs less than wood doors and necessary extras... you save on preparation costs because you can eliminate trim and wood casing...you save on installation time, because "Spacemaster" goes up with 8 screws in 10 minutes...and you save on labor costs, because you can eliminate fitting, mortising, planing, sanding and painting. With "Spacemaster" you get all these advantages—and quality too.

check these SPACEMASTER quality features!

1. Shallow metal track, covered when door is closed, almost invisible when door is open.
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6. Vertical steel rods, two on each hinge, welded, not crimped.
7. Compression Springs at bottom of door to equalize fabric tension.

Sizes: Two heights: 6' 6" and 6' 10½". Three maximum extension widths: 2' 6", 3' 0" and 4' 0". Doors can be used as pairs.

Color: Popular "Decorator Gray," that blends easily with any color scheme.

Find out how you can spark sales with "Spacemaster." See your building supply dealer or local "Modernfold" distributor. Clip coupon for more information.

SPACEMASTER folding doors

NEW CASTLE PRODUCTS
New Castle, Indiana

Framing the roof mathematically

With a hexagon having any length, with an 8-inch rise per foot, my problem is to find the length of the hip, main and jack rafters per foot of run by mathematical deduction. I want to know if I can apply the same formulas to any other polygon, as I want to make other polygon roofs, and make my own calculations for foot of run. Main rafter 8x12 inches per foot of run 14.42 inch—hip rafter 8x12 inches per foot of run 18.76 inch. Difference in length of jack rafter 16-inch center 19.23 inch. Difference in length of jack rafter 24-inch center 28.84 inch. Side cut of jack 10x 12 inches.


In figure 1 (which has a hexagonal base) the distance "o-d" is 12 inches and "o-b" is eight inches. This represents an 8 on 12 or 2 on 3 pitch. "d-b," which represents a main rafter is 14.42 inches which is arrived at by this formula:

\[ d-b = \sqrt{3^2 + 12^2} - 14.42 \]

Figure 2 represents a segment of the base which is an equilateral triangle "a-0-c." In an equilateral triangle the angle "a-0-d" is 30 degrees.

(Continued on page 164)
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Today’s best wood paneling makes the difference—adds the beauty of expensive wood walls at low cost!

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NATIONWIDE WAREHOUSE SERVICE

RODDISCRAFT—RODDIS PLYWOOD CORP.
Marshfield, Wisconsin

Yes, send me full information on Craftwall and other types of RoddisCraft decorative paneling—Panawall, Parquetwall, Cedrela, Plyweave.

Name
Address
City State

NOVEMBER 1953
Both driveways are located in the same city, and subject to the same climate conditions. You would expect that the cracked and broken driveway had been built five years ago, and that the one with unbroken paving had been built recently. Actually the reverse is true. The one on the left was constructed five years ago with American Welded Wire Fabric reinforcement; the one on the right was built a year ago without reinforcement.

Here is dramatic proof in pictures of the value of welded wire fabric. In driveways, foundations, sidewalks, terraces—in any concrete construction which goes into building a house—the proportionately small cost of American Welded Wire Fabric reinforcement pays off big dividends in long-lasting service and good looks. American Welded Wire Fabric's small, evenly-spaced steel members bind foundations, walls and floors into a solid unit... eliminate the common causes of cracked plaster, warped floors, sagging baseboards and other damages which detract from the dollar value of a home.

Now, more than ever, prospective home-buyers are demanding real value for their money. That's why the use of American Welded Wire Fabric can do much to assure quicker sales and satisfied buyers. It is easily handled, quickly laid. You can get U.S.S American Welded Wire Fabric in every locality from jobbers' and dealers' stocks.

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"The Fordomatic Drive in my new Ford gives starting power and traction I never thought possible in a light truck!" says Mr. W. E. Douglass, owner of the Central States Roofing & Insulating Co. of Pueblo, Colorado. "Now, I'm able to save a full hour each day, or make several extra trips.

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SAVE TIME • SAVE MONEY • LAST LONGER
He KNOWS the Grain Won't Raise
When He Finishes...
ARKANSAS SOFT PINE!

Reason—the causes of raised grain are absent in Arkansas Soft Pine Satin-like Interior Trim. There are no extremes of density nor "pull" between winter and summer growth. Winter growth does not shrink and leave summer growth high (raised).

This even texture is due to the almost total absence of pitch, providing evenly balanced soft texture with attendant uniform absorbing qualities imperative to trouble-proof affinity for applied finishes.

Primers deeply penetrate the wood's fiber. Final coats likewise penetrate to become integral with the wood, rather than remain merely superimposed on its surface. Results—woodwork installations of exceptional, craftsman-like decorative beauty with inherent protection against raised grain.

For useful data, including trim and paneling details, how to specify, finishing instructions, illustrated grades, etc., write for your copy of this Free Handbook.

ARKANSAS
Soft Pine
BUREAU
1153 Boyle Building, Little Rock, Arkansas

ask the EXPERTS
(Continued from page 160)
grees. Side "o-a" then is:

\[ o-a = \frac{12}{\cos 30°} = \frac{12}{0.56603} = 13.55 \text{ inches} \]

With "o-a" having been found,

\[ a-b = \sqrt{8^2 + 13.55^2} = 16 \text{ inches} \]

"a-d" which is 13.85 inches or one half of the side 13.85 inches. If "a-d" is considered as the required spacing, say 16 inches o.c., then the difference in length of jack rafter is:

\[ 16 \times \frac{14.42}{6.92} = 33\frac{1}{2} \text{ inches} \]

For a 24 inch spacing:

\[ 24 \times \frac{14.42}{6.92} = 50 \text{ inches} \]

water seeps through brick wall

I have just completed a brick house. After a recent heavy rain the end wall was completely wet on the inside. There was about \(\frac{1}{2}\) inch of water inside. Can anything be done to prevent this?

A. Z., Jamaica, N.Y.

If the mortar joints are tight, and if there are no cracks or leaks around windows, chimneys, roof edges, etc., it would seem that your trouble is due to absorption through the bricks or the mortar. If this is the case, the trouble can usually be corrected by a liberal application of a good penetrating silicone water repellent.

Plan NOW to Attend
NAHB Convention at Chicago
January 17 thru 21st

AMERICAN BUILDER
"We've been using Mosaic Clay Tile for years...

...won't use a substitute, says Arden J. Millisor, Columbus, Ohio builder.

"The goodwill of our long list of satisfied customers was built in part by the fine performance of this quality floor and wall material. "We find that Mosaic Clay Tile is one of the few materials which takes year after year soaking from shower and tub and remains unharmed. That's why we use it in all our bathrooms, from the most moderately priced houses on up. "Believe me, we had to spend many good dollars for repair and replacement before we used Mosaic Clay Tile exclusively. Now, you couldn't sell us anything else. "I've used Mosaic Clay Tile in over 500 homes, since 1924. When anyone asks me what I think about tile, I give them one answer—see our customers, they'll tell you all you want to know. Here's what one of our home owners has to say about Mosaic Clay Tile..."

"I'm delighted with my tile bathroom," says Mrs. Ray H. Long of 1897 Elmwood Avenue, Columbus. "The time I save washing walls really streamlines my housework. And the smart decorator colors add smartness and character to my bathroom. I'm planning a new sinktop. It'll be Mosaic Tile, of course."

Give your customers Mosaic Clay Tile. Tile helps you sell your houses faster, makes your buyers happier.

See Mosaic Clay Tile today at your nearest Mosaic showroom, or at the showroom of your Tile Contractor. For tile-fact literature, write Department 35-14. The Mosaic Tile Company, Zanesville, Ohio.
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drainage lines
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Smooth inside surfaces assure even flow!

Chase Copper Tube with Chase Solder-Joint Fittings for waste, vent and soil lines can be installed rapidly...more economically...do a better drainage job...last longer.

You get a lightweight system that can be easily assembled and handled on the job. Pipe and joints are rugged enough to take hard knocks. 20 foot lengths need fewer joints.

For complete information, see your Chase wholesaler.

CHASE Copper Fittings are water-tight, pressure-tight!
for top-flight plastering...insist on

**one-package**

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**PERLITED GYPSUM BASECOAT PLASTER**

Mill-mixed—with U.S.G.'s own top-grade perlite, quality-controlled all the way.

Uniform performance—assures walls and ceilings of uniform strength and toughness.

Economical—finished cost compares favorably with plaster mixed with sand or lightweight aggregates on the job.

Insulation factor—about three times as effective as sanded plaster.

Lighter weight—half the weight, reduces dead-load.

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Adaptable—as only plaster can be.

For complete information—ask your U.S.G. dealer, or write 300 W. Adams St., Chicago 6, Illinois.

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*the greatest name in building*
69 of these attractive modern one-floor homes featuring Truscon Ranch Windows are being built in Cleveland, Ohio. Called the "Westerner," this picture-windowed three bedroom model is selling mighty fast. More "Westerners" are planned for early starts.

Truscon Ranch Windows are handsomely styled in steel especially for one story ranch types. They are equally adaptable to all residential construction reflecting modern architectural trends.

In larger sizes, they provide attractive living-room picture windows which minimize the "wide open" effect so characteristic of large undivided glass areas. Medium size units conveniently fit window openings for dining rooms, dens, libraries. Smaller units are admirably suited to sleeping rooms.

All Truscon Ranch Window sizes may be fitted with double insulating glass. Vertical sliding wicket screens are available. You'll find more details and specifications on Ranch Windows and other Truscon residential building products in Sweet's; or, write us for latest bulletins.
how would you do it?
ideas for the man on the job


to ventilate your attic

Nail a 1x2 strip around the house at a point level with edge of roof rafter. Use either 1x4 or 2x4 pieces for lookouts. The lookouts should be notched out to fit around the 1x2 strip. Two pieces of 1/2-inch plywood are then nailed to lookouts and 1x2, leaves 4- to 5-inch opening.

Screen wire is secured over opening by tacking to plywood and finished off with screen molding to cover edges. This method can be used only where water pipes and heating ducts do not exist in attic.
—Bob Capps, Lombard, Ill.


to make an expansible C-clamp

You will need a length of 1/2-inch pipe, two 1/2-inch pipe couplings, two 1/2x1/16-inch national coarse nuts, two bolts to fit, and one adjustable C-clamp.

Remove the threads from the pipe couplings so that they can slide over the pipe. Drill a 1/4-inch hole in one side of each of the pipe couplings.

Place the 1/4-inch NC nuts over these holes and weld them onto the pipe couplings. This is done to fit the 1/4-inch NC bolts which will act as set screws to hold the two jaws of the future expansible clamp.

Take the adjustable C-clamp. Cut the 1/2x1-inch slide bar in half and remove, leaving the two jaws. Place the shaft edge of these jaws on the outside edge of the pipe coupling opposite the set screw and weld in place. When the two couplings, complete with clamp jaws, are slipped over the length of the pipe, any width of a clamping job can be handled.—A. R. Tanner, Cold Spring, N.Y.

Porch post? Rail? Coffman Ornamental Iron looks better than wood or brick ... costs less ... and lasts forever. Coffman Ornamental Iron lends itself to any type architecture, has a rapid consumer turnover and makes possible greater profit for both the dealer and contractor. Installation is as simple as ABC.

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The Service-way is one of the most desirable features you can add to a modern home. It simplifies dozens of household jobs. Repairmen and children with muddy feet can go direct to the basement from outdoors.

Rugged! The Service-way is made of heavy-gauge steel, yet the door can be opened with a finger. Snug fit door keeps out rain, snow and wind. Locks securely from inside. Comes fully assembled, ready to install. Made by the makers of famous Heatilator Fireplaces. Mail coupon now!

Service-way saves steps...
Simplifies dozens of household jobs.

How to build a better basement!

Next time you build a basement, provide direct access from outdoors with the new Heatilator Service-way. It's a convenience feature that adds value and sales appeal to any home!

Finger-tip control... Double-action springs counterbalance weight of the heavy-gauge steel door in all positions.

The new Heatilator Service-way makes a basement handy for quick, easy storage of lawn-mowers, bicycles and storm windows. The extra-wide Service-way opening gives plenty of clearance for freezers, ping-pong tables, and hobby shop equipment. Makes homes more livable.

Add value to home — worth many times its moderate cost.

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Please send me folder on Service-way specifications.

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Address

City

Zone

State

How would you do it?

Ideas for the man on the job

To straighten crooked studs—
Cut several V-notches into the 2x4 about half way through as shown. Have someone help you by pushing in on the stud from the cut side while you nail on a short piece of 2x4. This will straighten the stud that has been nailed into place previously.—H. E. Fey, New Braunfels, Texas.

For convenient nail storage—
Use a series of boxes placed on shelves as shown. Make each box about 9 or 10 inches long, about 4 inches wide and about 3\(\frac{1}{2}\) inches deep. Cut box so that upper part of box projects beyond the floor of the container. Mark each container to indicate contents. Slats from lettuce crates might well be used to construct these boxes.—M. J. Hiland, Lansing, Ill.

How to make a nail rake—
Get a small paddle about 10 or 12 inches long. Drive about 15 or 20 nails into the paddle. Use 12 or 16d nails. A nail rake like this one makes it easy to gather up nails from a nail keg.—J. Sherrill, Catawba, N. C.
how would you do it?
ideas for the man on the job

Drill a 1/4-inch hole in the handle at “C” as shown in the accompanying drawing. Saw a slot through the top of the handle like that shown at “D.” Then shape the handle to fit the hammerhead snugly. Use a flat-headed wood screw (number 10 or 12) and screw it in the top of the handle as shown at “E.” The screw will spread the handle end and will hold it tightly in the hammerhead. If the handle dries and becomes loose, just remove the wood screw and replace it with a number 12 or 14 wood screw. This method insures less of a chance that the hammerhead will fly off unexpectedly and injure someone. —M. Axler, Los Angeles, Calif.

PAINT EDGES FIRST

save time painting millwork—

Stack flat all millwork to be paint-primed. Paint all edges first using a 4-inch brush. When edges are dry, sides may then be painted and millwork can easily be handled at the edges. Painting millwork in this manner will save a lot of time.—A. N. Nelson, Kansas City, Mo.

CASH FOR JOB SHORTCUTS—American Builder will pay five dollars ($5) in cash for each shortcut or job pointer accepted for publication. Send all material to the Architectural Editor, American Builder, 79 W. Monroe St., Chicago 3, Ill.
The above figures* show the amount of air infiltration expressed in cu. ft. per min. per ft. of window crack at 25 miles per hour wind velocity. This comparison is proof that Zegers Dura-Seal Combination Metal Weatherstrip & Sash Balance provides more than 4 1/2 times the protection against air infiltration than both the American Wood Window Institute’s and the U. S. Dept. of Commerce commercial Standards.

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No. D-106
an effective way
TO VENT
HEATER ROOM

In a large development of medium-priced ranch homes built by Araco, Inc., in the Los Angeles area, many of the houses are designed with the heater room adjoining the front entrance. This arrangement has a number of advantages.

1. The small area devoted to the heater room is located approximately in the center of the house, thus simplifying the distribution of heat.

2. Access to this room is obtained from the outside through a louvre door which forms a part of the architectural pattern for the front entrance.

3. The louvre door to the heater room provides adequate ventilation for the heater room area.

The combination frame for the louvre and entrance doors, which is shown in detail on the bottom of the adjoining plate, is an interesting feature. The jamb of the entrance door is made an integral part of the jamb of the louvre door with the louvre frame forming an extended portion of the door frame. A 1x4 diagonal member is set into the louvre door to provide for additional rigidity. The two units are placed together in a recessed area of the house, which, with the overhanging roof gable, provides for a measure of protection from bad weather.
NO. D-106 HEATER ROOM VENT

PLAN

ENT. DOOR, LOUVER.
3 1/2" SURROUND.

ELEVATION

1 1/4" DIAG. BRACE
CUT INTO FRAME
SHOWN DOTTED

FLOOR PLAN

4"X4" HEADER.
PLASTER

1"X6" LOUVER

1 1/4" BRACE

STUD WALL

2 1/2" DOOR

SILL

2"X3"

2"X3"
Tilt-a-Door gives you:

- NO SPRINGS! NO TRACKS! NO NOISE!
- Lifetime wear.
- Ease of operation surpassed by none.
- Convenient awning protection from sun or rain.
- One piece ALUMINUM construction. No maintenance — No painting.
- A SINGLE PACKAGED UNIT. COMPLETELY ASSEMBLED, WITH ALL HARDWARE ATTACHED. THE SIMPLEST DOOR TO INSTALL FOR OWNER OR BUILDER.

Inquiries invited from Individuals, Builders or Supply Dealers.

TWIN DOORS OPEN INDEPENDENTLY. NO CENTERPOST

No. G-49
complete facilities
at neighborhood plumbing shop

A sales room, work shop, ample storage facilities and a parking area are to be found at this modern plumbing establishment of J. Turkstra, a Chicago plumber.

The building, situated on a corner lot, was set well back from the side street to provide space for a landscaped parkway. A planter, which skirts the sales room show window, is an integral part of the building.

An exterior feature of the sales room portion of the building is the splayed soffit and jamb which are faced with ceramic tile. This tile is set in 1 1/2 inches of cement plaster on metal lath.

The metal lath of the soffit is secured to wood framing members, which in turn are anchored to the steel framing and the Flexicore roof slabs. The cut stone coping which carries down the jamb at the far end of the sales room, also extends over the top of the roof slab and is securely anchored to it. Raggle is cut into the top side of coping for the insertion of roof flashing.

The brick bulkhead wall below the show windows is kept low, less than 12 inches above sidewalk line. This allows a full view of the interior and permits the use of a baseboard heating unit under the wood sill. Plate glass is held in position by metal store front moldings on top, bottom and sides. Cast iron columns supporting framework above are kept inside the glass line.

The front portion of the building which contains the shop and storage room, is a solid mass of masonry enclosed with a wide projecting coping that extends down one side of the wall to grade. The four small windows and door framed with cut stone are an architectural motif with a practical slant. This solid unit accents the openness of the glass-front sales room.
NO. G-49 CORNER FRONT...

**Elevation**

- 4" CUT STONE COPING PROJECTING 17'
- CUT STONE TRIM
- CERAMIC TILE
- NARROW STILE
- FULL VISION 3'X7' ALUM. DOOR
- 1/4 PLATE GLASS
- 2'/4 CUT STONE
- ROMAN BRICK

**Section**

- CERAMIC TILE SET IN 1/4 CEMENT PLASTER ON METAL LATH
- 1/4 PL. GL. SET IN ALUM. STORE FRONT

**Plan**

- SOFFIT ABOVE
- STEEL ABOVE
- PLANTING

**Details**

- CONTINUOUS SLOT FOR FLASHING
- CADDY BRAND ANCHOR BOLTS
- CUT STONE

**Details by K. Roderick O'Neal, A.I.A. for American Builder**
Catalogs—

and Manufacturers Literature

433—AUTOMATIC HEATING EQUIPMENT—four-page folder on gas and dual-fuel firing for heating, processing and power plants presents detailed information on standard equipment. Emphasis is laid on advantages of zone fire control for low start and modulated firing permitted by vertical gas burners, on features of the “in-shot” type of burner with its radiant heat, on ring-type burners for intermediate and high-pressure gas, and the dual-fuel unit. Iron Fireman Mfg. Co., Dept. AB, 3239 W. 106th St., Cleveland 11, Ohio.

434—AWNING WINDOWS—four-page broadside offers complete data on preservative-treated wood windows. Advantages, including 100 per cent ventilation, modulated ventilation control, protection of interiors from rain, safety factors, etc., are presented. Sketches show several uses of units in various house rooms. Operating hardware is shown to be inconspicuous, yet accessible. Gate City Sash & Door Co., Dept. AB, P.O. Box 901, Fort Lauderdale, Fla.

435—ROOF DECKING—which eliminates the use of sheathing, purlins, joists, insulation and ceiling is described in this four-page folder. Marketed as “Tim-Deck,” the material is made from kiln-dried, western red cedar, in random lengths and 4 x 3 1/2-inch dimensions. Illustrations show various applications. Bulletin explains installation of material and how to calculate area takeoffs and board footage. Timber Structures, Inc., Dept. AB, P.O. Box 3782, Portland 8, Ore.

436—MARBLE FOR THE HOME—is the title of this attractive 16-page bulletin which presents in full color different applications of the use of marble for floors, fireplace mantels and facings, tables and counter tops in living rooms, kitchens or bathrooms. Advantages of marble in functional home use are discussed in detail. Color range of marble is shown to be almost unlimited. Complete membership of association included. Marble Institute of America, Inc., Dept. AB, 108 Forster Ave., Mount Vernon, N. Y.

LET RAYNOR HELP YOU INSTALL THE DOOR THAT FITS THE HOME

Lands itself warmly to modern architecture.

A long-standing favorite with home owners.

For customers who desire predominant horizontal lines.

Added beauty with carved design built in at the factory.

Carved panels available in two shapes to match the architecture of the home.

To assure lasting finger-tip control and complete weather tite seal, all Raynor doors are equipped with patented graduated seal. Write for details on Raynor complete line of Wood Sectional Overhead Doors.

Dealers Listed in Your Telephone Directory

Builders of a complete line of residential, commercial and Wood Sectional Overhead Doors.

RAYNOR MANUFACTURING CO.
HOME OFFICE AND PLANT: Dixon, Illinois

AMERICAN BUILDER
AFTER A SESSION "ON THE GUN"
do you ever notice any eye-strain?
If you do, it's probably because you're using a level-transit with uncoated optics. White Universal Level-Transits feature coated optics. These specially treated lenses permit passage of up to 40% more light. As a result, you get a brighter, clearer "shot," better contrast, and a fast, accurate reading with far less strain on the eyes. For details on the White Universal Level-Transit, write the DAVID WHITE COMPANY, 318 W. Court St., Milwaukee 12, Wisconsin.

NOW YOU CAN MOVE 4 or 5-foot wide scaffolds through 30-inch doors without dismantling and re-erecting the scaffolding. Attached to any standnard Safway scaffold frames, the FD-1 Folding Device permits work towers to be folded to clear narrow openings and then be quickly re-opened for work on the other side. A diagonal tie-rod prevents towers from folding while work is in progress. To fold the work tower you need only to detach one end of the diagonal brace. When the brace is re-attached, the tower is ready for work. To learn more about this practical, time-saving device, write Safway Steel Products, Inc., 6246 W. State Street, Milwaukee 13, Wis.

PAPER HAS COME A LONG WAY.
Paper acts as a moisture and wind barrier under floors and in walls. Under slab, paper prevents the long "fingers" of concrete, up which moisture creeps. Paper cures concrete, protects equipment and material, and as reflective insulation it keeps hot summer air out and winter furnace heat in. And that reminds me, only the Richkraft Company furnishes a complete line, beginning with a heavy-duty, reinforced, waterproof paper and including several grades of reinforced and unreinforced paper. Black sheathing paper and Richflex Reflective Insulation. With Richkraft you use the right paper for the job—one source—one responsibility—the greatest in economy. Ask them—the address is Room 928, 510 N. Dearborn St., Chicago 10, Ill.

IN-SINK-ERATOR has just announced a new model food waste disposer made particularly for builders. It has all the famous, nationally advertised features that have made IN-SINK-ERATOR so popular with the ladies; continuous feed, automatic reversing action, simple self-service and a host of others. The Model 33 has a simple arrangement for installation in new buildings where rough-ins may be controlled. It's a money saving advantage that lets you feature a brand name, house selling product. The women I know really go for the time saving, step saving convenience of the IN-SINK-ERATOR. I've found that it has a magical way of helping builders to sell houses... fast. For complete information write In-Sink-Erator Mfg. Co., Racine, Wisconsin.
GET HIGH EARLY STRENGTH WINTER CONCRETE with Standard Cement plus
Solvay Calcium Chloride

- Permits Positive Control at All Temperatures
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- Avoids the Need for Special Cement
- Includes "Built-in" Curing
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To speed up operations and permit use of concrete in shorter time—especially in cold weather—add Solvay Calcium Chloride to your Portland Cement concrete mixes. Works equally well with all Portland Cements, including standard, high early, air entrained and low heat cements. It helps lengthen the pouring day and cuts costly protection time in half.

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"The Effects of Calcium Chloride on Portland Cement" is filled with important information and answers to your questions about the use of calcium chloride in concrete. For your free copy, mail coupon below.

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Catalogs

437—ALUMINUM SCAFFOLDS—both ladder- and rolling-type sectional scaffolding with portable and safety features are described and illustrated in this four-page folder. Information about both types, pictures of on-the-job applications, specifications and illustrations of some of the structures possible with the various sections are contained, along with safety tips and unusual applications. The Patent Scaffolding Co., Inc., Dept. AB, 38-21 12th St., Long Island City 1, N. Y.

438—NAILS—This new 20-page catalog, "Better Fastenings for the Building Trades," presents the company's complete line of nails for flooring, insulation board, regular construction, roofing, masonry, asbestos siding, shingles and plywood. Special non-ferrous and aluminum types for specialized applications are also listed. Special types of standard nails are available in hardened or regular steel and non-ferrous metals, in plain or galvanized finish. Independent Nail & Packing Co., Dept. AB, Bridgewater, Mass.

439—ALUMINUM DOORS—extruded aluminum doors and entrances are presented in this 12-page catalog, showing large, cutaway line drawings of standard and custom frames, horizontal and vertical details of single- and double-acting doors, as well as full size details of door and frame construction. Complete specifications of all door sizes in single and double types, with frame opening sizes are given; 25 standard entrances are shown. Natcor, Dept. AB, Taunton, Mass.

440—PLASTER AGGREGATE—advantages of this light weight, insulating plaster, offering fire protection, better workability, resistance to cracking, are presented in this six-page folder. Called Permalite, this material is made from perlite, a volcanic rock which when heated, expands to form a non-combustible glass-like material of cellular structure. Official fire ratings of various testing laboratories are included in folder. Great Lakes Carbon-Corp., Perlite Div., Dept. AB, 612 S. Flower St., Los Angeles 17, Calif.
Catalogs

441—STEEL PARTITIONS—Flush and semi-flush-type partitions, panel and industrial-type partitions, steel walls, railings, screens, and wainscots are described for complete steel interiors, with photographs and detailed drawings in an illustrated eight-page brochure. Data on steel-tile acoustic ceiling is included. Drawings illustrate basic types of each of these partitions, giving information on use in offices, factories, and public buildings. Virginia Metal Products Corp., Dept. AB, 1112 First National Bank Bldg., Pittsburgh 22, Pa.

442—TILE FLOORING—called “Vinylized Asphalt” is described in a four-page folder. This is a grease-proof thermoplastic tile with a vinyl additive distributed throughout. Tile's flexibility, smooth surface, resistance to grease are stressed. Available in 9x9, 6x12, and 12x12 standard sizes, in 3/8- and 3/16-inch thicknesses; feature strips are furnished in 1, 1 1/2- and 2-inch widths in all colors and in black or white. Uvalde Rock Asphalt Co., Dept. AB, P.O. Box 531, San Antonio, Texas.

443—ELECTRIC HEATERS—40-page catalog contains full line of wall insert, surface-mounted, portable, and bathroom heaters, as well as floor furnaces, with outstanding features of each. Of considerable value to contractors and builders is the guide for calculations of electric space heating, giving complete data on insulation, condensation, etc., as they affect installation of heaters. Cavalier Corp., Electric Heater Division, Dept. AB, Chattanooga 2, Tenn.

444—GARAGE DOOR OPERATORS—Four-page folder includes complete description of four standard types of electric push-button operator controls for residential and industrial garage doors. These automatic units are controlled by one or more push-button stations located at or away from the door. Units can be installed either at side of door or above opening, if 40 inches of headroom are available. Remote control accessories also included among data. The Howell Mfg. Co., Dept. AB, Hasbrook Ave. and Cottman St., Philadelphia 11, Pa.

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When it's Big Sticks for Big Jobs, call CROSSETT

Crossett pine timbers of dense structural are engineered to specified stress values for timbered mill construction or laminated truss and arch units.

Timber construction costs less. It is flexible, expedites erection, resists combustion. In small timbers and dimension augmented with Teco Ring Connectors and Grids, it provides excess load bearing strength for light commercial and residential roof truss construction.

Prompt deliveries in untreated, WOLMANIZED and Creosoted stock, conforming to SPIB standards, full qualifications for Federal Specifications MM-L-75 lb.

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new products

CEILING HEATER AB115320
Radiant electric ceiling heater, designed primarily for "on the spot" radiant heat in bathrooms, can also be used in other small areas where supplementary heat is needed. This ceiling unit has all the inherent safety features of an overhead installation. Danger of accidental contact resulting in burns or shocks is eliminated. There are no exposed electrical coils or wires and no danger of fumes.

Heat is supplied seconds after the unit is switched on. A 1,000-watt heating element is mounted in a mirror-finished reflector which focuses heat directly on the body. A wire grille protects the heating element and reflector. An air circulating system within the housing keeps the unit cool, preventing dangerous accumulation of heat inside the unit. NuTone, Inc., Dept. AB, Madison & Red Bank Roads, Cincinnati 27, Ohio.

WOOD PANELING FINISH AB115328
"Clear Finish for Wood Paneling" is the name of a pigment-free product in which wood technologists and chemists have collaborated, to produce a finish that is said to maintain and protect the natural coloring and grain characteristics of any wood. The product leaves a rubbed finish effect with only two coats, and is stated not to turn yellow or darken with age; it accentuates the wood's color and grain values. The finish is waterproof, leaves a firm protective surface and is easy to apply, economical to use, according to its makers, Evans Lumber Co., Inc., Dept. AB, 1608 Gene see St., Buffalo 11, N. Y.

ALUMINUM VENTILATING LOUVERS AB115301
Owners of buildings having a sun glare problem are finding the answer in these aluminum louvers which filter daylight without causing glare, bringing diffused light into interiors. They shield the bright sky and direct air flow properly through working areas, helping keep out sun's heat while reflecting visible light into the building.

Constructed from heavy-gauge (.050-inch) aluminum, the louvers are wave-shaped, providing an evenly illuminated interior without distracting light patterns. They can be installed either horizontally or vertically, to meet architect's design. Horizontal projections may be either straight or sloping. The louvers come in stock lengths of 16 and 20 feet to eliminate waste, and to conform to standard construction. Units are easy to install, requiring no special tools. The design provides for expansion and contraction. No rivets are used, and the louvers cannot sag, due to reinforcement at each end. The Kawneer Co., Dept. AB, Niles, Mich.

VINYL ASBESTOS TILE AB115307
Seventeen patterns in vinyl asbestos tile, embodying brilliant colorings in swirl marble, have been added to the manufacturer's Gold Seal line. Known as VinylBest, the tile is recommended for installation over or on below-grade concrete floors in contact with the ground, as well as over suspended wood and concrete floors.

Manufactured in 9x9-inch squares, VinylBest is packaged 54 square feet to the carton. The complete line includes 13 patterns in 36-inch gauge, commercial weight tile and 12 patterns in 120-inch gauge household weight goods. In addition to excellent wearing properties, vinyl asbestos tile's advantages are stated to include high resistance to acids, alkalis, grease and vegetable fats. Congoleum-Nairn, Inc., Dept. AB, 195 Belgrave Drive, Kearny, N. J.

DUAL-CONTROL THERMOSTAT AB115331
This two-way thermostat serves the twofold purpose of controlling air conditioned temperatures in summer as well as warmth in winter. It is provided with a three-position switch with "off," "heat" and "cool" settings. In cold weather, the "heat" position regulates furnace output just as conventional thermostat. In hot weather, the "cool" position and the temperature-regulating dial control room temperatures for air conditioning unit.

In addition to eliminating the need for separate thermostats, wired individually to furnace and air conditioner, the instrument reduces installation costs with a four-wire, low-voltage thermostat cable which connects with both heating and cooling controls in year-round units. General Controls Co., Dept. AB, 801 Allen Ave., Glendale 1, Calif.

* FOR MORE INFORMATION USE COUPON ON PAGE 200
Time studies made by Independent Researchers show that it takes from 2X to 3X hours, on the average, to case and hang a door, that is, to fit and block a set of jambs, trim two sides, fit and hang the door, stop it out and mortise and install the lock — or, for a house with 12 doors, the door casing and hanging takes 33 to 45 hours.

Actual timing by thousands of builders proves that it takes less than 20 minutes to install a Ready Hung Door. You can install 3 Ready Hung Doors per hour, or 12 Ready Hung Doors in half a day. Save 29 to 39 hours' labor per house with Ready Hung Doors!

Ready Hung Door units cost a little more than conventional material, but the tremendous saving in labor always makes the installed cost — labor plus material — up to $50 per house LESS!

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Prefabricators Incorporated
P. O. Box 8888

GRAND RAPIDS, MICH.
Haskelite Manufacturing Corp.
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HOUSTON, TEXAS
Ready Hung Door Mfg. Co.
P. O. Box 124

NEW YORK, N. Y.
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12 Park Ave, W. Orange, N. J.

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Jordan Millwork Co.

TORONTO, CANADA
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P. O. Box 10025
P. O. Box 124
P. O. Box 668, Kirkland, Wash. READY HUNG DOOR CORP., Fort Worth 2, Texas

NOVEMBER 1953

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new products

NAILING DEVICE  AB115322

This device is a small, lightweight portable machine, operating on the principle of a desk stapler. It loads 200 narrow-crown galvanized wire staples in three-cohered sticks. The operator places the machine on the material to be nailed, strikes the plunger with a rubber mallet, driving and countersinking a 7/16-inch staple with one blow. The machine automatically feeds additional staples into the driving chamber for successive nailing as quickly as the operator strikes it.

Legs of the staples are formed to cause them to spread and “fish-hook” into the lower layers of material being nailed, giving them strong holding power.

The tool’s applications in the construction industry include nailing 5/16- or 5/8-inch plywood to subfloor sheathing under linoleum or tile; nailing Masonite underlayment or similar hardboards; attaching base and shoe moldings, door stop and other light moldings; securing various types of roof insulation board where thickness does not exceed 5/8-inch; nailing wood paneling where panels are not more than 5/8-inch thick. Spotnails, Inc., Dept. AB, Evanston, Ill.

WINDOW-DOOR HARDWARE  AB115302

All outside and inside hardware for Slide-View sliding glass doors and windows is now being made of solid builders’ bronze. Its use is stated to upgrade the appearance, wearability and all-around quality of the units. Slide-View inside pulls are also equipped with unlocking night latches for dependable protection. Slide-View Steel Door & Window Co., Dept. AB, 521 La Cienega Blvd., Los Angeles, Calif.

FOR MORE INFORMATION USE COUPON, PAGE 200

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Genuine Sisalkraft offers low cost protection against water, moisture, drafts, dust.

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Builders use MILLIONS of sq. ft. EVERY WEEK—
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- and for other uses

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CERTIGRADE cedar shingles, because of their great strength and rigidity, can be applied on spaced rather than solid sheathing. You can count on saving about half the sheathing materials cost, and much of the cost of sheathing application, when you use cedar shingles. Let us send you a free estimating form so that you can accurately check the comparative cost of roof construction including sheathing. Your own check, in your own area, will prove that cedar shingle roofs are your best buy. Write today, ask for "Roof Cost Estimating Form."

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Almost all concrete or steel anchorages can be made with more savings and greater strength with DRIVE-IT.

**NEW DRIVE-IT 320 FEATURES BREAK-OPEN ACTION FOR FAST, EASY LOADING AND EXTRACTION. OTHER JOB-PROVED DRIVE-IT FEATURES ARE:**

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- **SWIVEL SAFETY PAD.** Swivels 360° to fasten near adjoining surface. Steel and tough Neoprene for protection.
- **SAFE TWO-HAND FIRING.** Tool must be held against work to operate. Two-motion firing action for safety.
- **LOW COST DRIVEPINS.** Prices are lower on wide range of drivepins.

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new products

**RECEPTIONIST’S WINDOW** AB115304

An exclusive patented, germ-proof, draft-proof talk-through window can be used for offices, reception rooms, hospitals, banks and other types of commercial and industrial buildings.

The “Looky-Talky” window consists of a membrane which transmits sound as if no window existed. A frame supports the membrane which is inserted into the outside rims sustaining the complete unit. A metal disc is provided for insertion over the window for after office hours or when not in use. Sun Sash Co., Dept. AB, 38 Park Row, New York 38, N.Y.

**PORTABLE HEATER** AB115332

Higher heat output, lighter weight and economical operation are qualities claimed for these units, marketed under the name Chinook Wind. They are stated to provide instant, safe, controlled, service-free portable heat, conducted through fireproof canvas duct for pinpoint application. The deluxe model, shown, is 2x3x4 feet in size, weighs 170 pounds and comes equipped with single and double duct adaptors. The motor-driven fan throws 3,500 c.f.m. and delivers 375,000 Btu’s at 250 degrees. The unit is an important aid to contractors’ winter heating and thawing problems.

Heavy, fireproof, waterproof canvas duct couples to the deluxe model without the use of tools. International Manufacturing Co., Dept. AB, 2360 S. Delaware St., Denver, Colo.

$ FOR MORE INFORMATION
USE COUPON, PAGE 200

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EVERYTHING HINGES ON HAGER!"*

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**FOOD WASTE DISPOSER**  AB115325

This self-cleaning disposal unit handles all food waste, and with its convenient continuous feed, the user can scrape, peel or core food waste through the sink drain opening directly into the unit. There is no need to minimize loads, or wait for batches of waste to clear the grinding chamber.

The exterior housing is finished in baked-on enamel, with stainless steel trim. Only 10 1/2 inches high, with a diameter of 7 1/2 inches, the disposer weighs 24 1/2 pounds. Distance from sink inlet to disposer outlet is only five inches. With this high rough-in, plus the disposer's compactness, light weight and a bayonet lock mounting device, installation can be made in most sinks in old or new homes, and at lower installation costs, the manufacturer says. The Schaible Co., Dept. AB, 1086 Summer St., Cincinnati 4, Ohio.

**ALUMINUM NAILS**  AB115305

Complete line of aluminum nails for architectural and general use includes all standard sizes and shapes. The "Stain-free" group provides proper selection for shingles and sidings of wood, aluminum, asbestos or any composition material.

Use of these aluminum nails is stated to eliminate the possibility of rust stains on exterior walls, and does away with the necessity of puttying nail holes. Supplied in 50-pound bulk cartons, the line is also packaged by size and number required to do a specific job, adding convenience and economy in buying. Townsend Co., Dept. AB, New Brighton, Pa.
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for modern homes

Crossly "SURSEAL" Jalousies
GLASS LOUVER WINDOW

SPECIAL FEATURE THAT MAKES CROSSLY "SURSEAL" THE INDUSTRY'S TIGHTEST CLOSING HEAVY-DUTY ALUMINUM JALOUSIE:

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  Can't rust — needs no painting
- FRAME IS RECESSED AND GROOVED FOR INTERCHANGEABLE SCREEN OR STORM WINDOW
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- PATENTED LOUVER SPRING CLIP LOCKS GLASS IN PLACE

SPECIAL CROSSLY OPERATOR

Locks jalousie louvers in any position... opens 90° wide with a quarter turn.

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ANOTHER
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new products

COUNTERFLOW FURNACE AB115313

This gas-fired winter-air conditioning counterflow furnace, Model G-811-V, is equipped with the manufacturer’s blower unit, which automatically regulates itself to circulate heat in relation to the amount of heat there is in the furnace. The blower eliminates hot and cold blasts of air, resulting in an even flow of home heat. The furnace has a rated input of 95,000 Btu's per hour. It is designed for basementless homes, and installs in an alcove, closet or utility room, occupying a minimum of floor space.

Safety controls are concealed in the cabinet, yet are readily accessible. The gas burner can be interchanged with an oil burner, specifically designed for this unit. Result is not a converted furnace but an Underwriters' listed oil furnace with same, automatic performance. Perfection Stove Co., Dept. AB, 7609 Platt Ave., Cleveland 4, Ohio.

PLASTIC LAMINATE CEMENT AB115303

"Counter-Top Cement" is a new adhesive which permits the rapid installation of plastic laminates to counters, sinks and other surfaces without the use of presses, clamps, weights or long curing.

The cement is made in two forms: Type A, for professional use, and Type B for the amateur who wants to install his own materials. The professional-type cement is a tan, liquid, air-drying adhesive with a synthetic rubber base. It provides a permanent bond, resistant to both oil and water. It may be used to bond plastic laminate sheets to plywood, steel, aluminum and composition bases. The cement will cover approximately 160 square feet per gallon, and is sold in 55- and 30-gallon drums; one-gallon, one-quart and one-pint cans. Armstrong Cork Co., Dept. AB, 1010 Concord St., Lancaster, Pa.

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Yes, all three are here, the answer to the builder's request for a low cost floor covering and individuality for every room in the house... why not specify all three.

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NOVEMBER 1953
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"There has never been anything to compare with this model home program in the Southwest. Paid admissions to the parade were Sunday 27,000, Monday 11,000, Tuesday 17,000, Wednesday 15,000, Thursday 15,500. Total 152,000. Attendance to the Better Homes and Gardens home between 40- and 50,000. Many waited in line 1½ hours to see home."

Burton W. Duenke, Builder,
Burton W. Duenke Building Co.
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"Your promotion excellent for bringing new housing development to public. Attendance larger than previous display house. Very interested in 1954 Program. Expect to reach 100,000 during September. Amazed by daily pull of Five Star Home stories."

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"First ten days attendance 43,000. Expected total attendance over 100,000. Prospective sales potential encouraging. Participating merchants sales response excellent. Convinced your model home promotion more far-reaching than any previous attempt this area. Definitely interested in participating your 1954 Program. This is the greatest model home promotion ever undertaken in Arizona."

"Very excited about results of BH&G 2309 Home. Had 7200 first Sunday, 25,000 to date. Estimate 35,000 will see home. House sold after 3 weeks for $40,000 including air conditioning and all appliances. Have no doubt that we're going to sell several other 2309 Homes. Public acceptance very good. Supplier reaction excellent. Include me in 1954 Promotion."

Truett A. Bishop, Dallas, Tex.
"House given enthusiastic reception by approximately 12,000 people to date since Sept. 6th. Liked home so much decided to move into it myself. Quality of people looking and interest shown excels other model home promotions in this area. Estimate total attendance to reach 20,000 for three week period. Yes, I would like to join 1954 Program."

John R. Wilson, Builder,
Thomas Wilson & Co., Inc.,
Raleigh, N. Carolina
"Opening successful from standpoint of attendance and interest. Prospective sales possible. We would be interested in 1954 Program. Estimated total attendance 20,000."

Here's more proof that Better Homes and Gardens is America's prime mover
THOUSANDS FLOCK HOME! ADVANCE REPORTS INDICATE BH&G TREMENDOUS NATIONWIDE SUCCESS!

City by city, attendance records are being broken—UP TO 10,000 VISITORS IN A SINGLE DAY!

Clair Siefferman, Siefferman & Miller, St. Petersburg, Florida
"Promotion very successful. 22,000 attendance to date. Have several prospective buyers. Our first adventure in model homes. We feel this is the largest to ever hit this area. We are definitely interested in 1954 Promotion. Suppliers have had excellent sales results."

"The power of Better Homes & Gardens in Albuquerque is unbelievable. Within four days after appearance of September issue our offices received over 1000 telephone inquiries regarding Readers' Choice Home. Home to open Sept. 20. Enthusiasm terrific. Plan to run several pages of newspaper ads on opening day and during period of showing house. Several television and radio programs arranged. 12,000 brochures of miniature BH&G covers being mailed next week. Estimate total attendance will be over 10,000 during showing. This to be greatest open house promotion ever staged in New Mexico."

Floyd R. Kimbrough, President, Kimbrough Homes, Inc., Jackson, Mississippi
"Readers' Choice model home here outstanding success. More than 5,000 people passed through first two days. Crowds continue $250,000 custom-built home sales. Greatest advertising promotion ever experienced by us and we have had many previous model home promotions. We are definitely interested in joining 1954 Program. Expect 25,000 people to pass through this home. People are coming from more than 200 miles."

Michael Stoltz, President, Seneca Construction Company, Spokane, Wash.
"Readers' Choice promotion very successful. Attendance to date 50,000. Potential sales encouraging. Interested in joining next year's promotion."

Better Homes and Gardens will sponsor another major model home promotion in 1954! Watch for announcement!

of homes and everything that goes in them!
Between this hall and a porch, Blue Ridge Satinol Louvre Glass screens the view for privacy, yet useful light comes into a brighter, more decorative entrance room. Architect: James F. Eppenstein, Chicago.

Sparkling Surprise for Home Buyers

...A DECORATIVE WALL THAT LETS LIGHT THROUGH

It's an eye-opener, all right—the kind that marks a home as different, appealing, easier to sell. It's Blue Ridge Patterned Glass. Home buyers get light through a wall that decorates on both sides. And they get privacy.

Economical Blue Ridge Patterned Glass has beauty that's built in—beauty that lasts. Your imagination can team up with many Blue Ridge patterns, in plain, textured and Satinol* finishes.

Ask your L'O F Distributor or Dealer to show you samples. And mail the coupon for our book of 42 ideas on decorating with patterned glass.

BLUE RIDGE

Patterned GLASS

BOOK OF 42 DECORATING IDEAS. New Adventures in Decorating shows how leading architects and decorators have used this lovely glass to add light and distinction to home interiors. Send this coupon for free copy.

Libbey-OWens-Ford Glass Company
Patterned & Wire Glass Sales
B-1113 Nicholas Building, Toledo 3, Ohio
Please send me my free copy of New Adventures in Decorating.

Name (please print)

Address

City State

new products

FOUNDATION VENTILATOR AB115335
The "Terminix" Ventilator is made of cast aluminum with a rust-resistant built-in screen and adjustable glass shutter. Builders have found in this unit a solution to the problem of closet mustiness; it has proved especially acceptable for this purpose on lake front property.

As a foundation ventilator, the unit eliminates the necessity of putting in makeshift ventilators and removing them in the spring. The glass shutter is closed in the winter, helping prevent cold floors and frozen water pipes. The unit meets building code and FHA requirements. It is designed for installation in new buildings, or to replace old ventilators or give more ventilation in old structures. E. L. Bruce Co., Dept. AB, Memphis 1, Tenn.

STANDARDIZED SCAFFOLDS AB115330
Consisting of one basic part, a tubular steel frame weighing only 24 pounds, this unit is stated to cover the full range of scaffolding applications. Four of these sections form a five-foot square section, four feet high; multiples of these sections form towers or long runs of scaffolding. A slip-fit design permits one frame to be inserted into another without the use of nuts, bolts, pins or other fasteners. Sections are load-tested at 100 pounds per square inch. No tools are required for erection.

Standardization of parts simplifies inventory problems and speeds erection. The design permits stacking units in a small space and facilitates transportation. Brainard Steel Division, Sharon Steel Corp., Dept. AB, Warren, Ohio.
NEXT YEAR'S HOMES WILL SELL ON STYLE APPEAL...

Build NATIONALS and you build the SMARTEST!

NATIONAL HOMES have always led in beauty and feminine appeal. But the 1954 Nationals are years ahead in dramatic, trend-setting style!

World famous Charles M. Goodman, AIA, is now architectural counsel for National Homes. Beatrice West is color stylist. This brilliant combination gives National dealer-builders a tremendous advantage.

Imagine being able to offer a sheltered-living home like the National "Ranger" shown here, within easy reach of term buyers! You'll go to town with the 1954 National line. Write, wire or phone for complete details.

NOW—AIR CONDITIONED!
National Homes research makes history! Now you can offer complete air conditioning on any National you build, at unbelievably low cost: as low as $500 extra. Think what this can mean to you in 1954 sales!

Hear GABRIEL HEATTER . "Good News Today" . Mutual Network, every Monday, Wednesday and Friday morning

NOVEMBER 1953

NOW—AIR CONDITIONED!
National Homes prefabricated panels and structural parts as they leave the assembly plant carry the Good Housekeeping guarantee seal and the Parents' Magazine seal of commendation as advertised therein.
When it comes to open-plan kitchens... nothing makes as

This New Freedom Gas Kitchen* features a fully automatic "CP" Gas range, manufactured by Magic Chef Inc.

Cabinets by Lyon Metal Products, Inc.

News: The Servel ice-maker is the most amazing refrigerator development in years! It turns itself on, shuts itself off, even pumps in its own water. And the refrigerator itself is backed by the longest warranty in the business—a full 10 years!
much sense as Gas

When the kitchen becomes part of the living area, Gas definitely makes the most sense. For one thing, it’s cleaner (and cooler); there isn’t a part of a Gas range that can’t be removed for actual scrubbing. Then, too, you find more modern features in the new automatic Gas ranges. Swing-out broilers. Utility shelves. Porthole ovens. Chrome tops. Cover-plate burners. Even separate range units that are built right into the cabinets. The Gas refrigerator also makes more sense in a “living kitchen” area. It’s completely noiseless; the family hardly knows it’s there. Yet it’s a show-off to guests; makes ice cubes without trays and puts them in a basket automatically. Women like the familiarity of Gas. Men like the fact it costs less to install and use. You’ll like the way it sells your homes for you.

The fully automatic Gas appliances shown are a John Wood Penfield water-heater and a Temco clothes-dryer.

It takes only a small unit of space to hold the complete home laundry: washer, dryer, water-heater. Here again Gas proves its value. It’s so much faster than any other all-automatic fuel that it literally makes the laundry three times as efficient. The automatic Gas water-heater (thanks to its speedy recovery) feeds a constant supply of hot water to the washer. The automatic Gas clothes-dryer dries the clothes fast as they come from the washer. The result is a happy home-owner—and that’s the best recommendation in the world for you, and for Gas!

AMERICAN GAS ASSOCIATION

Your local Gas company will be happy to work with you on any problem.

Only Gas gives you so many modern features

GAS—the modern fuel for automatic cooking . . . refrigeration . . . water-heating . . . house-heating . . . air-conditioning . . . clothes-drying . . . incineration.
Every day finds Mr. and Mrs. Home Buyer a little more careful—a little more demanding—about what they want in a house. Extra features count; and bright, beautiful Air-Vue Aluminum Windows sell on sight!

- **HEAVY GAUGE EXTRUDED ALUMINUM CONSTRUCTION**
  Frame section (63S-T5) 2½" deep is one of the heaviest frames on the competitive market.
- **DESIGNED FOR INTER-CHANGEABLE SCREEN AND STORM SASH**
- **QUICK, EASY INSTALLATION**
  Simply tighten 4 screws in ready-made buck holes for quick installation.
- **SHIPPED COMPLETE**
  Operator comes attached ...no extra parts...no adjustments necessary—cuts labor cost.
- **EASY TO GLAZE**
  All vent glass is a standard 11" high ...3 widths cover all 12 stock sizes.

Completely Weatherstripped

DEALERS—EXCLUSIVE TERRITORIES OPEN!

Write, Wire or Phone Dept. AB-11 (Miami 83-2811) for full details

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**new products**

**SURVEYING TRANSIT-LEVEL AB115311**

A new line of surveying instruments has been designed to fill the needs of contractors and builders. Four instruments make up the line: a convertible transit-level (illustrated), a heavy-duty 12-inch dumpy level, service transit-level (farm level) and a hand level. Instruments are constructed of brass and bronze; design has been simplified to combine rugged construction, ease of use in the field and the degree of precision required for builders' applications.

The convertible transit-level is designed for laying out and measuring horizontal and vertical angles, leveling, measuring differences in elevation, setting building lines, plumbing walls and columns. It has a 12-inch erecting-internal focusing, bronze telescope, rack and pinion adjustment, 24-power coated optics and a steel spindle. Verniers read to five minutes. Leveling, clamp and tangent screws are dust protected. C. L. Berger & Sons, Inc., Dept. AB, 37 Williams St., Boston 19, Mass.

**NAIL DRIVER AB115306**

A tool which will attach almost anything to brick, concrete or wood walls in a simple operation is the manufacturer's claim for the "Safe-T-Matic" nail driver. The need for star drill, electric drill, plugs and screws is eliminated by its use. The tool has an Alnico core and an automatic sliding sheath which hold a concrete stub nail and keep it in alignment while it is being driven.

Originally invented as a safety device to attach metal lath, the tool lends itself to a wide variety of uses. Safety Nail Driver Corp., Dept. AB, 70 Rosalie Ave., Clifton, N. J.

FOR MORE INFORMATION USE COUPON, PAGE 200
Construction men everywhere are agreed on the many advantages of air entrainment in the concrete that they mix.

But W. S. Walters, Executive Vice President of Fischer Lime and Cement Company, Memphis, is one of the many concrete experts who know that to get the required results from air entrained concrete you must be careful to mix the required ingredients. He knows that the amount of air actually entrained in concrete is influenced by many factors in addition to the amount of air entraining agent in cement... also, that different jobs often require different degrees of air entrainment. He knows that no air entraining cement, regardless of brand, is perfect for every job, every time.

That's why Mr. Walters says—"Whether they want building materials or ready mixed concrete, our customers always get their orders filled accurately. To insure accuracy in air entrained concrete we always add the agent at the mixer."

On your next concrete job... let the "prescription" technique pay off for you, too.

If you have any problems or questions on the use and mixing of air-entrained concrete, a Marquette Service Engineer will be glad to help and advise you—contact any Marquette office.
Designer-builder Ottomar E. Gaiser tells how he...

**Adds quality to yet saves $194**

With some builders, the deciding factor is price. With others it’s quality. The experience of Ottomar E. Gaiser (and other quality builders like him) proves that Bildrite easily satisfies both requirements. Mr. Gaiser selected Bildrite for these quality reasons: (1) three times the bracing strength of horizontal wood sheathing, (2) builds weatherproofed wall and (3) provides extra insulation value. At the same time, he cut his sheathing costs $194 per job. Pictures on these pages show how.

1 **Bildrite goes up faster, easier.** One carpenter can sheath 1,000 square feet in 8 hours or less with Bildrite. Cuts application time as much as 43% compared with wood. Adds strength. 4' Bildrite has more than three times the bracing strength of horizontal wood sheathing. Eliminates need for corner bracing (F.H.A. accepted).

2 **Easy to cut, reduces waste.** Bildrite cuts cleanly, quickly, easily with power saw or hand saw. Practically eliminates matching loss and waste. Compare Bildrite’s full coverage with the minimum of 12% waste figured on horizontal wood sheathing jobs. What’s more, carpenters like to work with Bildrite. It’s clean.

3 **Eliminates building paper.** Since Bildrite is waterproofed throughout with asphalt, there is no need for felt. It protects against moisture, yet is highly permeable to allow vapor to escape from inner wall areas. It’s the ideal wet weather sheathing. Use it, store it, anywhere in any weather. Won’t warp or buckle.
homes like this, per job with Bildrite!

Save $80 or more on your next job. Write today for Insulite cost-comparison forms, product data and "case histories" of other builders and how they have built better for less with Insulite. Insulite, Minneapolis 2, Minnesota.

BUILD AND INSULATE WITH DOUBLE-DUTY

INSULITE
MADE OF HARDY NORTHERN WOOD

Mr. Gaiser builds luxury homes like this on speculation in exclusive Shaker Heights and Beachwood near Cleveland. Most of his homes are in the $40,000 to $75,000 class.
new products

JALOUSIE WINDOW UNIT AB115309

Chief feature of this new knocked-down unit of interest to builders and contractors in northern climates is the complete vinyl weather-stripping, designed to withstand severe weather conditions. For further weather protection, the aluminum screens are interchangeable with storm sash. Each unit is shipped by carton, with head and sill available in 4-inch increments, and jambs in 3'/2-inch increments. With a hack saw, any window may be cut, then with a screwdriver and eight screws, unit may be assembled on-site.

An adjustable tension-seal louver clip, consisting of a pre-bent tab, plus the adjustable tension tab, are stated to seal four-inch glass louvers to a tighter degree than ever before attained in this type of window. Constant tension of the louvers when closed keeps them from rattling and prevents air and water infiltration. Louvers are operated with a worm gear device; every louser is movable, including top one. Weathermaster Jalousie and Window Mfg. Co., Dept. AR, 1200 N.E. 16th St., North Miami, Fla.

ORNAMENTAL GRILLE AB115336

This metal ornamental grille work has been designed in Macrome metal and hammer-rolled, non-tarnishing qualities. It is made in seven-foot lengths, 16 inches wide, and is finished in silvery-satin. Many decorative purposes around homes are served by this ornamental grille. Builders will find it useful in dressing up residential buildings, giving them a richer appearance at low cost, the manufacturers say. Macklanburg-Duncan Co., Dept. AR, P.O. Box 1197, Oklahoma City, Okla.

CARBIDE-TIPPED SAW BLADES AB115315

These blades, designed especially for use on radial saws, will increase the utility and scope of these saws for contractors and builders, according to the manufacturer. A lower price has been made possible due to the fact that the blades are now mass-produced. Carbide-tipped blades will last almost 100 times as long as standard blades, the maker points out, and are "ideal for reworking grit-covered concrete forms and for other operations on abrasive materials that quickly dull standard blades."

These carbide-tipped blades will cut wood, wood laminates, plastics, metals and other abrasive materials. They cut easily through nails, wires and similar obstructions. Tips are brazed to blades of high-quality tool steel, then diamond-ground to close tolerances. Clearances are precision-ground on the sides of the teeth with diamond wheels, eliminating setting or swaging of the teeth. Blades are offered in 10-, 12- and 14-inch diameters to fit standard arbors. Delta Power Tool Div., Rockwell Manufacturing Co., Dept. AB, 100 N. Lexington Ave., Pittsburgh 8, Pa.

LINTEL MOLDS AB115321

These units are precision-built heavy duty all-steel molds that produce both solid and split one-piece concrete lintels with a fine stone-like finish. The molds can be had for six-, eight-, 10- and 12-inch standard concrete block walls, and in special sizes when desired. The 5%-inch by 7%-inch lintel mold is an all-purpose unit; using end gates of different heights, it will produce a one-piece lintel for a standard six-inch wall and split lintels for 8-, 10- and 12-inch walls.

With the use of manufacturer's adjustable spacers, any length lintel can be made within the maximum mold length. Mold release spreaders are used to assist in releasing the hardened lintel from the mold. Pallets are not needed. When the proper concrete mix is used, excellent results can be obtained without the use of any vibrating mechanism, according to the manufacturer. Concrete Mold & Engineering Co., Dept. AB, P.O. Box 183, Battle Creek, Mich.

CORNERS FOR SHINGLES AB115319

Designed for lasting protection and faster finishing of shingle corners, a striated metal corner for home exteriors has been introduced called the "Jifly Corner." It features a spring clip base which assures a weathertight fit against the adjacent sidewall shingles.

The device is stated to fit perfectly over double-coursed cedar shingles and requires only two nails in pre-drilled holes for finished application. The surface will take a regular shingle stain to match colors if desired. No special tools are needed. The corner offers substantial time-savings over older methods of butting or lacing wood shingle corners, the manufacturers say. The units measure 16 inches long and 1½ inches wide at bottom. The Perma Products Co., Dept. AR, 5455 Broadway, Cleveland 27, Ohio.

USE THIS COUPON FOR MORE INFORMATION ON NEW PRODUCTS AND CATALOGS IN THIS ISSUE

Save Time—Just Insert Key Numbers and Mail To: American Builder, 79 W. Monroe Street, Chicago 3, Illinois

Name ____________________________

Address ____________________________

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Please indicate whether you are Builder ( ) Dealer or Distributor ( ) Other ( )

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When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder Magazine.
NOW

Pella®

MULTI-PURPOSE WINDOWS

available with new UNDERSCREEN OPERATOR

Now, in the low-cost awning window field, an extra sales feature, instantly recognized and appreciated by prospects. Pella's UNDERSCREEN OPERATOR, available at slight extra cost, is just one of many functional advantages which sell prospective home builders and buyers on Pella Multi-Purpose Windows. You'll be sold on their quality, low cost and quick, easy installation.

Pella Multi-Purpose Windows come completely assembled and fitted, projecting in or out or for right or left hand casement opening. Screens, removable from inside, available for all ventilating units. Dual glazing panel optional. Investigate now.

Window is closed by swinging bar-type sash operator against bottom screen rail. Catch holds operator in place and provides powerful locking.

Window is opened by swinging bar-type sash operator to right angle with window and pushing sash out to desired distance.

TABLE OF FRAME SIZES

6 VENTILATING OR FIXED UNITS

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3 FIXED UNITS

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NOVEMBER 1953
New uses of Novoply save

FOR MODERNIZATION OR NEW HOMES...

FOR REMODELING BASEMENTS or attics or for any wall treatment, 1/4″ Novoply is the perfect material. Costs less than $10.00 retail for a 4' by 8' panel. For built-ins, like the ones above, or for sliding doors, 1/4″ Novoply is ideal because it’s easy to work with ordinary tools and will not warp. Here’s custom beauty that sells homes.
money and add sales appeal

Increased demand from builders and home owners permit 65% production increase and sharp price reduction. Consistent consumer advertising builds home buyer interest.

Because of increased demand by builders and home owners for Weldwood Novoply®, production has been stepped up 65%—and prices have been lowered accordingly.

Cost-conscious builders—and are there any who are not?—find that this amazing new wood product—"the flattest panel ever made"—cuts costs because it is easy to install and finish. No taping. No painting. Easy to work. No special tools, Novoply can be left natural in beautiful pine or California redwood. Or it can be stained or waxed as in photograph on the left.

Novoply walls set your homes apart from the crowd. They provide that extra custom touch so important to today's home buyers. Novoply sliding doors won't warp or stick. Novoply built-ins are easy to make.

Note the "textured" look of Novoply. Yet it is smooth and flat because of the special bonding process which builds up layers of wood flakes to form varied patterns. Novoply is warp-free and is good two sides. Sizes 4' by 8', 3 1/2" thick; many economical sizes in 5/8" thickness from 30" by 60" up to 4' by 8'.

National advertising of Novoply and other Weldwood products, month after month to upwards of 14 million home owners, assures you of nationally accepted products.

See your nearest United States Plywood or U.S.-Mengel showrooms... or visit your Weldwood lumber dealer.

All Weldwood products help sell homes—fast!

BECAUSE NOVOPLY is "the flattest panel ever made" it is virtually warp-free. That's why it is so extensively used for sliding doors like this one of redwood Novoply.

PLANKWELD® is an ideal panel for home modernizing. Goes directly over old walls without furring. Beautifully prefinished. Comes in 6 woods. Edge grooves conceal nails.

WANT AN EXCITINGLY different wall treatment for your homes? Use new, 3-dimensional Surfwood® to add an eye-stopping rustic touch that sells! Never needs refinishing.

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DISTRIBUTING UNITS IN 60 PRINCIPAL CITIES

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Weldwood, United States Plywood Corporation AB-11-53
how to mix houses of varying heights in subdivision planning

HEAT inside—spotted where you need it

FUMES outside where they belong

SAFE

HERMAN NELSON
PORTABLE AIR HEATERS

Built like a furnace, safe like a furnace... Herman Nelson Portable Air Heaters give you all the heat you want with none of the dangers of salamander-type units. All products of combustion are kept separate, and vented off—leaving only clean, pure, safe heated air. Absolutely no carbon monoxide, no smoke, no fumes, no sparks.

Use to keep working areas warm, to dry plaster or protect concrete pours, as emergency plant or warehouse heat. Ventilates as it heats. Lick winter slowdowns, keep men on the job in coldest weather. A Herman Nelson Portable Air Heater can pay for itself the very first winter, this winter. Act now. Mail coupon below.

Remember, Herman Nelson has the only complete line of completely safe portable air heaters. Models available from 125,000 to 450,000 BTU. Oil or gasoline fired. Electric or gasoline powered.


F O R E S T H I L L is a 25-year-old tract of 1,000 house sites in the east suburban area of Cleveland, Ohio. In its first 20 years the development achieved only 200 houses. Revived over the past four years by replatting to attract and accommodate builders of luxury ranch-type houses, Forest Hill has taken a new lease on life. The developer's careful control over the mixture of 2-, 1½- and 1-story houses with which he has had to work makes a noteworthy lesson in land development.

Originally, Forest Hill was the home of John D. Rockefeller. In the late twenties, the old Rockefeller mansion was torn down and the Rockefeller estate began development of the land as a planned community of high-priced homes modeled after the well-known Forest Hills on Long Island, New York.

Houses built in the Cleveland tract were rigidly controlled architecturally and otherwise, and were small-windowed, tall, formal two-story creations of English inspiration. Construction had to be and was
This is Brandon Road, in a section of somewhat smaller and less expensive homes. The first house, partly shown, is a 2-story, then comes a 1½-story, the third is a fairly high 1-story and all beyond that are low 1-story houses. Driving by, the transition is hardly noticeable and the total effect very pleasing.

Utilities were underground; planning and protective covenants were considered to be of the best.

But by 1949 only 200 houses had been built and Forest Hill was lost in a doldrum. The building and real estate fraternity had gradually settled into looking on the venture as a dignified flop.

At this point, George A. Roose, an investor from Toledo, acquired the tract from the Rockefellers. Paul A. Dunn, a realtor with a flair for resuscitating ailing real estate, was called in. In four years, Roose and Dunn have stimulated the building of some 500 houses in Forest Hill. Average cost is estimated conservatively at $40,000. Lots vary in width from 75 to 100 feet, average 150 feet in depth. They cost from $3,000 to $4,000.

Roose and Dunn saw that what Forest Hill needed was reinterpretation in terms of a house type that has real market appeal today. Dunn looked around carefully and picked the ranch-type house, luxury model.

(Continued on page 206)
**It's the Backbone of Steel for EVERY Masonry Wall**

Dur-O-wal's plus features solve your reinforcing problems best. High tensile steel is electrically welded in a single plan to assure tight mortar joints and fast laying. Available in widths for all standard wall thicknesses. Dur-O-wal is fabricated in 10 foot lengths for easy storing and handling. Trussed design provides mechanical bond every eight inches; reinforces vertically and horizontally. Write, wire or phone plant nearest you. Dealers and distributors everywhere.

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Hansen also tacks... insulation... building paper... screens... cornerite... metal lath... ceiling tile... masking materials...

Save time... steps... effort... materials... with Hansen

36 models
80 staple sizes

A. L. Hansen MFG. CO.
5059 Ravenswood Ave., Chicago 40, Ill.

---

**how to mix houses of varying heights**

(Continued from page 205)

more or less as used by builders in California. Forest Hill restrictions were revised to permit this type of house. Builders responded quickly and a building boom began in the tract, producing houses at the rate of 3 to 1 in favor of the ranch-type over two-story Colonial designs.

In making this drastic change of direction for the development, one of the major problems that confronted the developer was how to achieve a harmonious blending of roof lines in a given street. Dunn has labored over this one with the ardor of a perfectionist. The result is worth it.

Nowhere in the development will you find a low house built between two high ones, or a high one towering between two low ones. Forest Hill does permit a mixture of 2-story and 1½-story houses. If ridge breaks are kept to within a 4- or 5-foot variation, this mixture will work out all right.

In all sections of two-story houses, Forest Hill tries to bring the corner houses down to 1½-stories. This takes the sharp corner look off the end of each street and thus strengthens the sense of unity between blocks.

The photographs show typical street views of house types as Forest Hill arranges them.

---

**Home Building and our Economy**

Prevailing conditions in the housing market have profound influences throughout the economy. The home building industry employs approximately 900,000 on-the-site construction workers whose annual incomes average $4 billion. Building materials used provide work to countless industries. Producers of home appliances and furnishings are running capacity operations to supply the goods needed to equip new homes. Financing homes has supplied commercial banks with approximately 10 per cent of their total earning assets; insurance companies with over 25 per cent; mutual savings banks with nearly 3 per cent and savings and loan associations with almost 90 per cent.

—from American Builder Market Letter
How do SUB-CONTRACTORS profit by using DODGE REPORTS

By learning daily who is going to build and what jobs are out for bids. They get the contracts they want because they can get their bids in on time—on the jobs they want.

How do SUPPLY MEN profit by using DODGE REPORTS

By learning daily where to go and when to get the business. They get the orders they want because they can get their quotations in on time—on the jobs they want.

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For 63 years leading firms in the construction industry have depended on Dodge Reports to help them do business throughout the 37 Eastern States.

If you are a sub-contractor or dealer write or call nearest office, listed in Classified Telephone Directory, for your free copy of: “Dodge Reports—How to use them effectively.”

DODGE REPORTS

Dept. AB1153, 119 W. 40th St., New York 18, N. Y.
Timely, accurate, comprehensive construction news service
THE FIRST STEP IN EVERY SALE
Builder William Dexter, Jr., has used Masonite 1/4-inch Tempered Presdwood woven around 2x2’s as a screen to fill in one side of the carport in this house in Dunedin Isles, Florida. Top and bottom edges are protected by 2x2 framing.

The material can also be used effectively for interior screen partitions. For Michael’s restaurant in Minneapolis, builder Al Svensson of Sebc, Inc., worked out the divider shown in the second photograph. Seven 8-inch strips of 3/8-inch Presdwood were interwoven and nailed to 3-inch wooden dowels spaced 2 feet o.c. The arc-shaped screen was then painted with a gray texture paint. It separates the main dining area from the cocktail lounge and is a focal point of interest.

A variation of the woven screen idea is using the tempered Presdwood as the material for a woven fence, free standing. Masonite 1/4-inch siding comes in strips 12 feet long and in widths of 12, 16 and 24 inches, other widths being obtained by cutting 4-foot wide panels to the desired dimension.

To build a woven Masonite fence:

(Continued on page 210)
Sells on sight!

Holt NMPL12 Floor Sander

with patented demountable cushion that’s replaceable in minutes right on job—no long, costly delays when nails rip cushion. Designed and built to eliminate vibration and chatter, so you get smooth floors easily. Double, self-adjusting belts, sure-grip clamps, high-speed cutting keeps jobs rolling, enable you to sand more floor daily.

Holt Rotary Edgers for quick, easy sanding of edges, corners, stairs, closets, etc. Two-hand front and back controls permit fast starts and stops, improve control on close work.

Holt Floor Machines put a sheen on floors that wins friends and extra business. Use for waxing, polishing, scrubbing, rug shampooing, steel wooling.

Take the Holt way to more profitable floor jobs—mail coupon TODAY.
GARAGE DOOR HARDWARE

USE YOUR OWN OR ANY STANDARD DOOR
NO MAINTENANCE COSTS
SIMPLIFIED INSTALLATION
ADAPTABLE FOR ANY TYPE GARAGE

ALLITH hardware permits you to use standard stock, or special doors if desired, to harmonize with design of accompanying building. All working parts are simple and sturdy—no springs to stretch or loosen. All hardware parts inside and protected from weather.

Unit shipped complete down to the last screw. Quickly and easily installed. Standard set fits any opening up to 9' wide x 7'6" high when doors do not exceed 275 lbs. Other sets available for openings up to 10' wide x 10' high. Complete details furnished on request.

ALLITH-PROUTY, INC. DANVILLE, ILLINOIS

How to Offer Low Cost Housing!

Build More Saleable Area into Homes with BESSLER Disappearing Stairways

1. The ORIGINAL disappearing stairway—made for over 40 years.
2. A real stairway—not a ladder.
3. Seven well-engineered models—for every need.
4. Safety-designed in every detail for your protection.
5. Suitable for the finest homes—old and new.
6. Operates from above and below.
7. Full width treads—SAFE for everyone.
8. All steps are of equal height.
9. Treads and stringers are made of Sitka Spruce.
10. Full door width provides ample access for large objects.
11. Full length SAFE hand rail.
12. Accurate architectural design assures easy and SAFE ascending and descending.
13. All metal parts are made of strong, SAFE pressed steel.
14. Repairs always available on quick notice for all models—no "orphans."
15. Doors made of White Pine and finished in two-panel and flush types; hard-wood doors in flush type only.
16. Toal of four are all heights—no short or long steps.
17. Proved in performance—hundreds of thousands in constant daily use.
18. IMMEDIATE DELIVERY!
19. Meets all building codes.

MASONITE ¼" TEMPERED PREDWOOD

FREE! New Catalog!

Illustrates and describes complete line of seven Bessler Disappearing Stairway Models to meet all your needs. This new catalog should be in your files for ready reference—write for your copy now!

(Continued from page 208)

Use 4-inch square posts spaced about 3 feet 11½ inches o.c. The exact spacing between posts should be checked with each strip of PREDWOOD. Use a post depth of from 2 feet 6 inches to 3 feet. Slightly round the edges of the PREDWOOD strips with a plane, file or sandpaper and bring to moderate contact at butt joints.

Fasten the PREDWOOD strips to the posts with 5d (1½-inch) galvanized siding nails spaced not more than 4 inches o.c. and not closer than 3½ inch to the edges. Paint the panels as soon as possible after application. Apply a primer-sealer and two finish coats.
TODAY'S "MOST-WANTED" HOMES HAVE ELECTROMODE HEATERS ALL-ELECTRIC

- AUTOMATIC
- MODERN DESIGNS
- CAPACITIES FOR ALL SIZES
- EFFICIENT
- QUIET, FAN-CIRCULATED HEAT
- QUICK, CLEAN, HEALTHFUL
- EASY-TO-INSTALL

Completely SAFE

Only Electromode has the sealed-in CAST-ALUMINUM HEATING ELEMENT. No danger of fire, shock or burn. Automatic safety switch prevents overheating.

MODEL WJA BATHROOM HEATER

For BEAUTIFUL BATHROOMS that add sales-appeal to your houses—install Electromode Automatic Wall Heaters. Choice of gleaming chrome or baked-on white enamel finish to harmonize with other fixtures. Also ideal for nursery or any small room.

ELECTROMODE CORPORATION
45 Crouch St. Dept. AB-153 Rochester 3, N. Y.

For installations that SELL homes FASTER, use the ONE tile designed specifically for the economy field.

AMERCO

PRECISION CONTOUR PLASTIC WALL TILE

Produced under existing laboratory control for color uniformity—assuring perfect color match at all times.

Diagonal corrugated back "locks" tile to wall.

Special technique produces subtle marble blends without unsightly swirls.

Molded absolutely square for quick, easy installation.

Butt edges cut down clean-up time and gets you off the job sooner.

In 17 delightful colors.

Unique "super gloss" finish invites sales.

Endorsed and specified by Architects, Builders, Contractors.

Write, phone or wire for samples and details on this "Profit" line.

AMERCO PLASTICS COMPANY
Dept. AB-11 177 Broadway, New York 7, N. Y., RE 2-5469

CONNER LUMBER & LAND COMPANY
P. O. Box 112-D Marshfield, Wis.
Phone No. 3—Teletype No. 26

Open 35,000,000 Doors to ADJUSTO-SEAL SALES FOR YOU!

ADJUSTO-SEAL is the world's best weatherstrip... whether it's with metal for door bottom use; or with plastic, for around doors and windows. Wool Pile fabric is self-adjusting to uneven surfaces. It forms a snug, draft-tight seal, yet slides smooth and friction-free over any surface...even rugs and carpets. Won't freeze shut in cold, damp weather. Won't swell and stick when wet. Will not form a set.

CLENCH YOUR FIST...YOU'LL CLINCH THE SALE!

This simple test demonstrates graphically how the thousands of vertical fibers in ADJUSTO-SEAL's wool pile hug the most uneven surfaces to form a tight, draft-free seal.

Customers will be quick to recognize the superiority that this unique method of manufacture gives ADJUSTO-SEAL. No other weatherstrip can pass the "clenched-fist" test.

Get full details on this sure-to-sell product from your jobber, or write:

SCHLEGEL MFG. CO., Dept. AB, Rochester, N. Y. • Oakville, Ontario, Canada
Since 1885

NOVEMBER 1953
TRIPLE-STITCHED
PENGUIN
TARPS
STRAIGHT FROM
STOCK!

- 13 stock sizes.
- 3 weights, treated.
- Rustproof grommets on strong canvas reinforcing patches.
- Individually boxed.
- Fast delivery from city nearest you.

DELIVERY FROM
STOCK!

DANCO
OIL
SALAMANDERS

first choice for
economy and
performance in
temporary, portable

SMOKELESS HEAT!
* Inside or outside, for spot or space heating, puts over 175,000 B.T.U., right where you want it on less than a gallon of fuel per hour!
* Burns 20 hrs. without refueling.
* Square bottom prevents tipping.
* Seamess, one-piece folded steel bottom not drawn to shape.
* No thin spots, holes or leakage.
* Danco designed for simple operation — easy maintenance.

C. R. DANIELS, INC.
75 West St., New York 6, N. Y.
549 W. Randolph St., Chicago 6, Ill.
2109 Commerce St., Dallas 1, Tex.

(Continued on page 213)
terne metal gutters

(Continued from page 212)

Wide angle leg of drip-edge for box-type gutter is nailed to fascia board

3/4-inch leg is even with the upper edge of the fascia board. The 1 1/4-inch leg is then nailed directly to the fascia board. Finally the projecting edge of the gutter is bent down, around and under the 3/4-inch leg, and the entire assembly is malleted flat in order to protect nail heads and seal the gutter edge.

Molded (Formed) Gutters

The molded gutter is formed either at the job site with tongs or in the shop using a bending brake. In the latter case, the sections can be joined by means of flat locked soldered seams.

This type of gutter is usually attached to the fascia board by means of a spike-and-ferrule assembly. These ferrules can be made in the shop from terne metal scraps.

Another device for attaching the molded gutter to the fascia board is the hanger, which can be attached with nails although screws are preferred for more secure fastening.

After the molded gutter has been set in place, the roofer trims the lower ends of the roofing pans, finishes the seam ends, and joins the roofing strips to the back end flange of the gutter in order to form a continuous, watertight connection between the floor pans. (Continued on page 214)

Better Floors...Bigger Profits
with American

Make your floors 5 ways better...

...increase profits with up-
to-date American machines
and materials in all five steps
in floor finishing! This assures
finest floors... saves time...
saves labor... on wood,
cork, concrete, terrazzo,
asphalt, rubber, linoleum or
plastic. Send for free catalog.

1. SAND WITH AMERICAN SUPER 8...
   nearly twice as fast as any other 8" machine!

2. DO EDGES WITH AMERICAN SPINNER
   ...also closer, small halls, stairs.
   Saves time!

3. DISC SAND WITH
   AMERICAN DELUXE
   as final cut. Makes finest
   finish—a flatter surface—
   easier to clean.

4. USE QUALITY SEALS.
   American Finishes are fin-
   est quality—complete line
   for all floors...seals, finish-
   es, waxes and cleaners.

5. NEW IMPROVED
   AMERICAN ABRASIVE PAPERS.
   American Black Demon and American
   Combination high quality papers have
   been improved to give longer life and
   faster cutting.

American Floor Surfacing Machine Co., 51050 S. Clair St.,
Toledo, Ohio

Please send latest catalog on the
following, without obligation:

☐ Floor Sanders
☐ Floor Edgers
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Name: _______________________________________
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American Floor Machines - Portable Tools

November 1953

213
Sta-Dri paint will hold a wall of water nine feet high without leakage, even if applied inside a basement. Stays white when wet, no graying out or spotting. Lasts because it's inorganic. Quick and easy to apply. Write today for test results and specifications.

American STA-DRI Co., Brentwood, Md.

THE easy, lasting way to finish MASONRY

Sta-Dri

STOPS WATER DECORATES
- colors
- white

If you build with masonry, a lasting Sta-Dri paint finish will make drab cinder block, concrete block or stucco beautiful, marketable, profitable.

Hanger (inset) attaches molded gutter to fascia board, using nails or screws between the roof and the gutter. For added protection, the edge can also be finished with a drip-edge strip.

Hassall annular threads have greater holding power!

Proven in industries like shoe making, asbestos siding, underlay flooring, linoleum, pallet manufacturing, boat building, etc. The stronger grip of annular threads should solve many a wood fastening problem, maybe yours! Write for samples.

JOHN HASSALL INC.
P.O. BOX 2151
WESTBURY, N. Y.
Conventional eaves trough gutter, fastened to the building at the roof edge

**Hanging Gutters**

*Eave-Troughs*

The hanging gutter consists simply of a metal trough attached to the building at the eaves' line. Before the gutter is installed, the edge of the roof should be finished with a drip-edge strip. The gutter is then installed by means of hangers which may be attached to the roof or to the fascia board, permanently or adjustably. Finished product becomes an integral part of the roof line.

Plan **NOW** to attend NAHB Convention, Chicago, January 17-21, 1954.

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**BOOKS**


The report presents information on floor loads found in various structures, such as office buildings, stores and factories. It includes details concerning a recent survey in which the weight and distribution of goods, equipment and occupants were obtained, floor by floor and area by area.

Since information on the loads affecting buildings is meager and conservation of materials is becoming more urgent, NBS found it advisable to review pertinent data on loads and to summarize them for the use of designers and building code authorities.

To get further information on the live loads in selected areas, NBS arranged to have field work done by the Public Buildings Service. The results of the survey constitute the principal part of this publication.
Try These Power Saws
For Fast Work Easy Handling!

Model 160—6" Saw
(Can be furnished with blade on right or left side)
Vertical depth of cut—2" Bevel cut at 45°—11/16" Net weight—10 lbs. 8 oz.

Here's one way to build good will

There are all sorts of ways for a contractor to build good will and here is one that the Grimmett Building Company used at Oklahoma City after completion of a school construction job. A watchman's shanty used on the job was moved to the curb of the street and set up for use of the school police (something very much appreciated by the youngsters during bad weather) with sign on it saying, "School Police—Compliments of Grimmett Building Company."

Model 180—8" Saw
Vertical depth of cut—2 23/32" Bevel cut at 45°—2 1/16" Net weight—17 lbs. 8 oz.

BRADFORD Metalmaster Electric Saws are fast becoming the power saw that craftsmen prefer. These finely balanced, precision power saws make quick, easy work of the toughest sawing jobs. They handle perfectly in any position. They're better designed, inside and out, for smoother sawing, less fatiguing effort, more accurate work.

Own a new Bradford Electric Saw—the power saw preferred by craftsmen. See them at your Bradford dealers! Write for illustrated literature.

THE BRADFORD MACHINE TOOL CO.
654 Evans St. Cincinnati, O.
Precision Since 1840

LADDER JACKS
• ONE-MAN Ladder Jacks (left) adjust to any pitch on either side of the ladder.
• Weight distributed on three rungs.
• New, rail-type jack (right) uses side rails of ladder for extra safety.

Write for Catalog M: complete information on all "Trouble Saver" Scaffolding Accessories.

NEW POWERNAIL SPEEDS PRODUCTION

Use This Machine to:
• Nail T&G Flooring
• Draw Strips Tight
• Drive all nails 45°
• Expand Production
• Nail & Set One Blow

Hardwood flooring can now be laid better, in a fraction of the time formerly required! The NEW POWERNAIL Model 145 cuts nailing time up to 60%. No more wasted nails or tedious hand setting. The POWERNAIL magazine holds 100 flooring clamps.

POWERNAIL eliminates split tongues, cupping, warping and reduces surface marring and erratic nailing. Can't rust, clog or jam. Built for long dependable service.

POWERNAIL COMPANY
961 MONTANA STREET • CHICAGO 14, ILLINOIS

"TROUBLE SAVERS" save time, too!

LADDER JACKS
• ERECTED AND Dismantled faster than you can build a make-shift wooden scaffold.
• 3 and 3½ ft. lengths—rail carbon steel.
• Nail, studding and bolt-attached types.
• Attachments to convert any one type to any other type.

The Steel Scaffolding Company, Inc.
846 Humboldt Street, Dept. AB, Brooklyn 22, New York
Telephone: EVergreen 3-5510

AMERICAN BUILDER
FHA issues bulletin on loan requirements for air conditioned homes

Delays in processing FHA loans where air conditioning systems have been specified should be eliminated through the authority provided by a recent FHA Mechanical Bulletin ME-10, titled "Cooling Requirements." This bulletin, issued to all FHA and VA field offices, includes recommendations provided as a result of recent NAHB conferences with leading manufacturers and associations concerned. Authority is given to the field offices to accept permanently installed central cooling systems specified for particular dwellings without reference to Washington FHA or VA headquarters. Other satisfactory means of cooling the house may be used subject to favorable determination by the FHA chief underwriter or the VA loan guaranty officer.

Bulletin requirements list the particular items which shall appear in the contract specifications, including a statement that is is the intent to provide a system that is safe, quiet and economical in operation.

Technical data to be listed normally is available from the equipment manufacturer. A warranty also is required from the manufacturer which guarantees the system against defects for a period of one year, stating that any needed replacement parts shall be furnished and installed during that period without charge to the home owner.

Factors relating to economy of operation which will be considered in field office review of the house involve the following:

(a) Insulation of ceiling and walls.
(b) Location of large windows or doors on shady side.
(c) Double glazing.
(d) Planting for shade.
(e) Wide roof overhang.

Copies of this mechanical engineering bulletin are available from local FHA field offices.

Bucyrus-Erie's 3-ton Hydrocrane with hydraulically telescoping boom gives you 8 ft. more boom—right at your fingertips. This special extend-retract action means extra dollars in savings on regular jobs . . . extra dollars in profits on special jobs.

1. ON ERECTION WORK boom reaches between girders, through windows and doors—hoists concrete buckets and planking to upper stories . . . saves hundreds of man-hours.

2. ON CONCRETE POURING, other material handling jobs, telescoping boom reaches under branches, over obstructions, into tunnels—handles dozens of close quarter jobs.

3. ON YARD WORK reaches into box cars . . . over fences . . . between stockpiles to move material, load trucks, etc., in a hurry.

Quick Convertibility to HYDROHOE

By actual stop-watch test, crane has been converted to dragshovel front end by one man in less than one hour! And on trenching, extra telescoping action of Hydrohoe boom cuts lost time moving up by as much as 40 percent.

Get the full story on the all-hydraulic Hydrocrane with its many attachments. Write for interesting new literature.
The noise from utility rooms in basementless houses can be prevented or reduced in two ways, according to engineers of the Acoustical Materials Association. First, attention should be given to the location of the utility room; and second, the use of acoustical materials can reduce the annoyance somewhat.

The association states that inquiries from architects and builders on the question of noise abatement have increased, due to types of construction and materials in modern houses.

"With the coming of the basementless house and the necessity of placing the utility room next to or adjacent to the living room or bedrooms, complaints are made that some heating equipment noise is being heard. The reason for this new noise is evident," according to the acoustical engineers.

The heating unit was formerly located in the basement, surrounded...
from the utility room

by thick cement walls, and covered overhead with wood flooring. Sound was further muffled by rugs and carpeting on the floor over the cellar. In spite of these precautions, some noise could be heard, but it was of such low intensity as not to annoy the occupants of the house. With the development of modern building techniques and increased use of lighter materials, sound transmission through the walls became more prevalent.

The noise problem may be simply the result of placement. In attempting to make rooms compact in order to save space, sometimes the builders place the utility room too close to the living quarters, or actually in the living room, surrounding the unit with a plaster board construction, with louvered doors for ventilation. In such an arrangement, noise is unavoidable when the unit is turned on since the units were not built for use in the living room.

The use of acoustical materials can help to some extent. Since the problem is one of sound transmission, it makes the case more difficult. Sound conditioning materials on the ceiling and walls help absorb some of the sound, enough to bring the noise level down to a point where it is no longer disturbing.
MASTER

For the professional weatherstrip installer, there is no finer weatherstrip equipment than that sold under the 'Master' name.

WEATHERSTRIPS and the "ORIGINAL" MASTER SASH BALANCE

- Thresholds
- Rib Strips
- Interlocking Strips
- Cushion Bronze
- Cushion Aluminum

ZINC - BRASS - BRONZE - ALUMILITE - STAINLESS STEEL

MASTER METAL STRIP SERVICE, INC.
1710 North Kilbourn Avenue
Chicago 39, Illinois

Some Management For Over 30 Years

MAGNESIUM JUMBO LEVEL

Here's the Level especially designed for setting door jambs and window frames. You'll be proud to add such a beauty to your tool kit.

$17.45 Finished in Maroon Lacquer
Plain electroplate finish $15.95

AN EXCELLENT CHRISTMAS GIFT

No other Level like SIMPLEX. 4 Plumbs, 2 Levels. Use either end or edge up. The longest level made, yet weighs only 3 lbs. I-BEAM type. Stronger than aluminum. Patented.

NO FACTORY REPAIRS NEEDED
Spirit tube holder (50c) replaced in a minute with ordinary screwdriver. Send check or money order, or order C.O.D. We prepay express.

MONEY BACK GUARANTEE
If not satisfied, return in 5 days for full refund. References, any bank or Dun & B.

SIMPLEX LEVEL CO., INC.
P.O. Box 23 A

Buy DEFENSE BONDS

MR. BUILDER
THE KOTA

ALL EXTRUDED ALUMINUM HORIZONTAL GLIDE is the perfect high quality window for Low Cost Housing
ASK FOR DETAILS and CATALOG
We make 26 different style Windows for every room—For every home.

KOTA PRODUCTS INC.
ROUTE 25-A
ROCKY POINT, N. Y.
for quicker sales —
sell FLOORING
by the SQUARE YARD

Lumber dealers could win a larger share of the residential flooring market by quoting oak flooring prices on a square yard basis instead of the traditional thousand board feet, according to the National Oak Flooring Manufacturers Association. To aid dealers in converting to this sales technique, the association has prepared a calculator which converts price per thousand board feet into price per square yard.

New merchandising device enables lumber dealers to quote square yard price at once

Dealers who have seen the device demonstrated at clinics have been enthusiastic about its potential aid in clinching sales. A typical comment of one dealer was revealing:

"The average layman," he said, "is confused by the old, established practice of selling oak flooring by the thousand board feet. He has no conception of what area a thousand feet will cover. Moreover, the price in hundreds of dollars per thousand feet seem high to him. When you convert that price to a square yard basis, however, it is readily understood."

Information on the calculators can be obtained by writing the association headquarters, 314 Sterick Bldg., Memphis 3, Tenn.

Put your money into selling features like this...

floors of WRIGHT RUBBER TILE
help you sell houses.

Put your money where it shows
... and what is more eye catching than a floor of Wright Rubber Tile?
Its high quality is instantly recognized and will give the prospective buyer the extra confidence needed to close the sale.

Convince the prospect as soon as possible. When a prospect walks out before he buys, chances are he won't come back. Clinch the sale on the spot by gaining his confidence. Smart buyers are on the lookout for quality details in judging the value of a purchase.

Tell the prospect about the 100-year life of a Wright Rubber Tile floor
... how easy it is to maintain...
how quiet and sanitary. Explain to him that, year after year, Wright Rubber Tile will save him money by needing no replacement.

Just try one house! Put in one of these gleaming Wright Rubber Tile floors in your next house. Point out its quality features... then watch how much quicker your prospect becomes a buyer.

WRIGHT MANUFACTURING COMPANY
5203-A Post Oak Rd., Houston 5, Texas

WRIGHT RUBBER TILE

FLOORS OF DISTINCTION

* WRIGHTTEX — Soft Rubber Tile
* WRIGHTFLOR — Hard Surface Rubber Tile
* WRIGHT-ON-TOP Compression Cove Base
* WRIGHT VINYL TILE
Weatherproof Homasote Roof Decking

1. 2. 3-ply slabs for use on flat, pitched or mono-slope roofs. In one material: sheathing, insulation and interior ceiling finish. Independent tests show these slabs, properly applied, support a live load of 75 lbs. per sq. ft. May be used with shingles, slate, tiles, built-up roofing or 4" of concrete. Mail the coupon for detailed specifications.

Novacrete

A cement-type masonry paint, "Micro-Milled" for deep penetration and smooth finish, fortified with a "backbone" of Novamix to prevent flaking, peeling and blistering. Quickly preserves and beautifies stucco, cinder and cement block, all unpainted masonry surfaces. Use outside above grade or on damp interior walls. Send coupon for full details.

HOMASOTE COMPANY
NOVACRETE

When sales began to slump in Albert Balch's President Park subdivision in Renton, Washington, he tried out a new idea: let buyers work out their own down payment, or part of it, by doing some of the finish work themselves. Sales had slowed because of a local industrial strike.

Strikingly New! No Other Electric Hammer Works Like "Super Slugger" Neoprene "Cushion Snap"—No Kick!

"Super Slugger" has a terrific wallop — yet weighs only 7½ pounds! Its new patented "Cushion-Snap" impact motion eliminates kick, direct vibration and operator fatigue. Plug in this heavy-duty hammer anywhere — use it for drilling, chipping or channeling masonry or concrete, cutting sheet metal, stripping linoleum or plastic flooring, scaling rust and hundreds of other jobs (full line of tools available). "Super Slugger" works fast — multiplies work output. Low in cost, it is simple to maintain — will save you money. Investigate!

Manufactured by Noble & Stanton, Inc., Bedford, Ohio
of down payments

The program Balch started permitted buyers to do any kind of work that they were able to do including finish plumbing, electrical work or carpentry. Most common arrangements were for painting or the laying of tile flooring.

Allowances for work done by buyers were worked out for each job accomplished. Inside and outside painting done by the buyer on a two-bedroom home brought an allowance of $275. Laying of asphalt tile constituted an allowance of $95 against the down payment.

All work had to be completed before the buyer moved into the house and it had to pass FHA inspection. Balch has had little difficulty in this respect since work done by buyers under this plan has been fully up to par. Balch's men gave instructions to those who needed it, but did not actually do any of the work.

Homes in the President Park subdivision have ranged from $7,350 to $7,600 for a two-bedroom home; $9,995 for a three-bedroom home. Down payments on the smaller homes have been $712 to $762 including closing costs. Monthly payments started at $47.

Result of the program: Balch's sales kept going. Ninety per cent of the buyers of his homes have taken advantage of the plan to work out down payments.

2 GREAT CABINET LATCHES!


MAGNETIC LECO-LATCH with built-in permanent Alnico magnet. Never loses its power to hold!

SILENT LECO-FLEX LATCH neoprene cylinder cushions action—lets door close silently!

Write for literature and name of your distributor — TODAY!

LABORATORY EQUIPMENT CORP. St. Joseph 6, Mich.
"CLAY TILE... A WARM, COLORFUL MATERIAL...
FITS INTO MODERN FAMILY LIVING!"

key to clay tile service areas:


Architect Nemeny's "family-living" kitchen shows you how colorful clay tile can spark new decorative and functional ideas for modern living. In new construction or in remodelling, clay tile will give your clients lifetime cleaning convenience and beauty, freedom from waxing and refinishing, and surfaces that resist heat, moisture, scratching and fading practically forever.

In your next project—residential, industrial or institutional—be sure to obtain comparative cost estimates. In some installations, clay tile actually costs less than substitute materials. When designing or building, consider clay tile's qualities and brilliant color range.

Tile Council of America, Room 3401, 10 East 40th Street, New York 16, N. Y. or Room 433, 727 West Seventh Street, Los Angeles, Calif.

The Modern Style in

TROLLEY HANGERS and RAIL

Always a gliding ride

You can depend on a free, rolling glide when sliding doors are equipped with these sturdy hangers. Steel wheels of the hangers are provided with large roller bearings to ease the carrying load.

Friction-free smoothness

No. 50 Trolley Door Hanger illustrated at left has a heavy drop strap, embossed to provide added strength. No. 52 Trolley Door Hanger shown at right has the new and exclusive type of flexible joint to compensate for any extra pressure being exerted against the door.

No. 51 Trolley Rail below provides an even, perfect tread for the swift-gliding hanger wheels. Special brackets serve this rail to assure a rigid installation.

If you do not happen to have a copy of the National Catalog—write for your free copy today!

National MANUFACTURING COMPANY
STERLING · ILLINOIS