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Publisher's Page

Middle Class Can Still Dominate

HAT has occurred in the 81st Congress has proved that the liquidation of the middle class by socialistic policies can be stopped and indicated that it probably will be. The Truman branch of the Democratic party credited the labor unions with its success at the last election. Truman in his campaign promised the labor union leaders for their support the repeal of the Taft-Hartley Act, socialized housing, socialized medicine and numerous other socialistic policies which would have had the purpose and effect of "robbing selected Peter (the middle class) to pay for collective Paul" (manual workers).

The issue presented by the Taft-Hartley Act was especially important because, first, its repeal would have shown that the labor union leaders were dominant in the federal government, and, second, it would have restored to the labor union leaders the power to intimidate and coerce business and the people that they had under the Wagner Act which the Taft-Hartley Act repealed. And the nation had reason to fear not only the labor union vote and the socialistic legislation that might be adopted by politicians elected by it, but also the nation-wide strikes and violence to which labor union leaders had shown that, unless restrained by law, they would resort to destroy efficient business management and business profits. And every means of whatever kind used to destroy efficient private management of business and to prevent the earning of the profits necessary to financing the expansion of private enterprise is a promoter of socialism.

Well, the drive of the labor union leaders and the Truman branch of the Democratic party to repeal the Taft-Hartley Act has proved a complete failure. It has been defeated by a coalition in Congress of Republicans and conservative (principally Southern) Democrats. But why has such a coalition been formed and made effective? Because those who have formed and made it effective have been hearing from the great middle class back home. The labor unions have perhaps 16 million members. This gives them and their leaders great organized driving force. But there are about 60 million gainfully employed (or employable) persons in this country. Hence, the membership of labor unions is a minority of only about one-fourth of those who work, whether with hands or brains. And many members of labor unions are middle class in their ambitions, principles and sympathies toward the desire of their union leaders to dominate the government and substitute socialism for private enterprise and private property.

The three-fourths of the nation's workers with hand or brain who do not belong to unions plus many members of unions have shown so plainly that they do not want the "welfare (i.e., charity) state" offered them by the Truman socialist-democrats that virtually no organization, can exert so much more influence in Washington than the highly organized bloc promoting socialistic policies, what could not the middle class accomplish in protecting itself if it were as well organized for economic and political action against socialist leadership as are those who are striving to liquidate it?
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June 23, 1949

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2. LEVEL UP
3. DRIVE 12 NAILS

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

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

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

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

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

NAME_____________________________________________________
BUSINESS ADDRESS_________________________________________________________________
CITY____________________ ZONE____ STATE_____________________
POSITION_____________ TYPE OF BUSINESS___________________

STEELCRAFT MANUFACTURING COMPANY
9178 Blue Ash Road, Rossmary, Ohio (in Greater Cincinnati)

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

STEELCRAFT MANUFACTURING COMPANY
ROSSMAYNE, OHIO (IN GREATER CINCINNATI)
Drainage installation of Chase Copper Tube in one of the 280 homes built by Levitt & Sons, Strathmore at Roslyn; L. I. Distributor: Gar Supply Corporation, Long Island City, N. Y.

American Builder, August 1949,

CHASE COPPER TUBE
for soil, waste and vent lines is IMMEDIATELY AVAILABLE!

Is YOUR building program bogging down, because pipe for drainage lines is hard to get? Then do as other builders all over the country are doing—switch to Chase Copper Tube. You can get it right away—in all the sizes used for soil, waste and vent lines.

You can install Chase Copper Tube quickly, too. Fewer joints are needed because it comes in 20-foot lengths. The joints you do need are made in a jiffy with solder-type fittings. Pre-assemble if you like—the assemblies are sturdy units that will stand plenty of rough handling.

And... Chase Copper Tube does a better drainage job. Its smooth inner surface offers no obstruction to the flow of wastes—the solder-type fittings eliminate pockets.

Want more details? Write for literature on Chase Copper Tube for drainage lines. Address Dept. AB 89.

Chase
the Nation's Headquarters for
BRASS & COPPER

WATERBURY 20 CONNECTICUT
SUBSIDIARY OF KENNECOTT COPPER CORPORATION
Now...A New Kind of Automatic Heating

The New AUTOMATIC 'blue coal' BURNER

The Lowest-Priced Automatic Hard Coal Boiler-Burner Unit on the Market

... Costs Even Less to Operate Than a Hand-Fired Furnace

Americans by the thousands today are turning to the modern small home to keep living costs down. Yet all too often the operating cost of the automatic heating they demand and expect is too high...heating costs are "out of line" with the rest of the investment. When you recommend the New Automatic 'blue coal' Burner you not only bring the cost of equipment to a level where it fits the small homes picture...you can assure the owner that heating costs will be at rock-bottom because this system uses the low cost, most plentiful sizes of hard coal. It is completely automatic...there is no coal or ash to shovel. It is attractive...clean...quiet...safe. Fully guaranteed. A 'blue coal' representative will gladly call...or, write us for descriptive literature and specifications.

Hot Water Coil Standard Equipment

There are no "extras" to buy for hot water supply. The New Automatic 'blue coal' Burner has a built-in tank-less coil to meet full family requirements for domestic hot water, with quick recovery, on a year round basis at low cost.

New "Top Feed" Principle Is Secret of Simplicity

Moving parts have been kept to a minimum. Coal feeds direct from bin across the TOP of a single, stationary, perforated plate. Burner assembly is mounted from outside of the boiler. Easily removed for service or replacement.
You can plainly see savings of time—labor—costs—in using K&M "Century" No. 5 Roofing Shingles. The 24" width of each unit is just right for handy, swift application, with only two nails per unit. Punched and notched to line up true, almost automatically, these K&M shingles guard your profits by leaving out lost motion.

You sell good work and build your business when you sell the home owner on K&M "Century" No. 5 shingles. Years of rain, snow, sleet and sun will scarcely affect the original rich appearance of K&M "Century" shingles. That's because the mineral color pigments are made an integral part of the shingles, available in either white, black, Spanish red or surf green colors.

Thoroughly satisfactory and economical in use... thoroughly satisfactory and economical to apply... K&M "Century" No. 5 Roofing Shingles mean better roofs—and growing business for you.

You can apply K&M "Century" shingles over wood-shingled or composition roofs. See your K&M Dealer for further particulars, or write us direct.

KEASBEY & MATTISON
COMPANY - AMBLER - PENNSYLVANIA
New Way To Put "Quality" Automatic Heating Into Your Low-Cost Homes:

Not A Mere Radiant—A Powerful Wall Heater That Spreads Warm Air

Set it right in the wall of the room you want to heat. Needs no basement, no utility-room space, no floor installation. These 25,000 BTU automatic gas heaters fit between 16" O. C. studs. AGA approved burner gives amazing fuel efficiency, and Coleman design moves heat for real “warm-floor” comfort that buyers want. Low price, plus low plumbing and installation costs, gives you the savings you’re looking for. So—see your Coleman distributor about this NEW Coleman heating-equipment that gives you clean automatic gas heating with lower building costs.

Let These Specifications Help You Plan:

- **Heating Capacity:** 25,000 BTU per hour input.
- **Width:** Only 14-inches... fits between 16-inch Standard Studs.
- **Depth:** Fits into stud space 35½-inches deep... extends into room 33¾-inches.
- **Height:** 61½-inches overall.
- **Gas Connection At Heater:** ¼-inch.
- **Cu. Ft. Air Flow Per Hour:** 8,000.
- **Vent Pipe Opening:** Oval transite or metalbestos... 4-inch round equivalent.

Yes, This Is The Wall-Heater With Automatic Controls! You have no pits to dig; no duct expense with Coleman Wall Heaters. You have the easiest kind of installing job, with no complicated plumbing. You can install these Coleman Wall-heaters with full automatic controls. Utterly clean—and completely care-free. And note how it saves utility-room space; helps you give more “livable” house for the money.

Write Today... THE COLEMAN COMPANY, INC., Wichita, Kansas

Automatic Gas WALL-HEATER

The Coleman Company, Inc., Builders’ Contract Dept. AB-680, Wichita 1, Kansas
Please send me data and specifications on the Coleman Gas Wall Heaters, with details of your Builders Cooperation Plan.

Name: 
Address: 
Town: 
State: 

Plan your advertising NOW for America's biggest home and home furnishings promotion...

THIRD ANNUAL

Chicagoland Home and Home Furnishings Festival

SEPTEMBER 11—OCTOBER 10

T's not a dream—not an experiment. It's the third year of an industry-wide promotion which has proved itself as a volume and profit producer in America's most intensively pre-sold market for homes and everything that goes into homes!

Nearly 1,000,000 home-minded consumers sent attendance records soaring at last year's Festival, sponsored by the Home and Home Furnishings Council of Chicagoland in cooperation with the Chicago Tribune. Now comes the third big event, planned by the industry for greater attendance, sales and profits.

Here's What the Festival Is

Scores of Festival homes demonstrating the latest designs and equipment are now being rushed to completion throughout Chicago and suburbs. When finished, many of them will be completely furnished and decorated to show 1949's newest appliances, furniture, building materials and equipment, and other products typical of modern home interior and exterior fashions.

Again the Chicago Tribune will launch the promotion with a supplement on Sunday, September 11, announcing the Festival to more than 1,000,000 Sunday Tribune families in Chicago and suburbs and inviting their attendance.

Here will be an ideal setting in which to make a strong bid for your full share of the sales volume to be developed during this community-wide event. You will not be experimenting with your advertising funds. As shown by the chart, the Tribune is Chicago's foremost mover of home merchandise.

A Proved Promotion—A Proved Medium

Every day of the week, the Tribune is read by the people who account for the bulk of the home merchandise sold in Chicago and suburbs. The Tribune's Prize Home and Better Rooms competitions produced designs which, month in and month out, during the past three years have been kept before Tribune readers, making them highly receptive to buying ideas for homes and everything that goes into homes.

Get Ready to Cash In!

Forms for the Festival supplement will close on Wednesday, August 31. Consult with your advertising counsel today, or ask a Tribune representative to give you complete information about the job Chicago's foremost home and home furnishings medium can help you do in the months ahead. Phone Superior 7-0100—or address your nearest Chicago Tribune representative.

Percentage of expenditures for advertising of home furnishings, housing equipment, electrical appliances, radio and television sets, building materials and musical instruments placed in each Chicago newspaper, retail and general combined. Year: 1948

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<th>Newspaper</th>
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<td>Tribune</td>
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<td>Paper B</td>
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To advertise home merchandise, retailers and manufacturers placed in the Chicago Tribune $3,321,567, or 53.1% of their total 1948 promotion funds in Chicago newspapers. This was $3,453,000 more—199.6% more—than they placed in any other Chicago newspaper—and far more than they placed in all other Chicago newspapers combined.

The Industry's Own Promotion!

The Chicagoland Home and Home Furnishings Festival is sponsored by the following 15 trade organizations representing more than 11,000 manufacturers, builders and retailers in every branch of the industry, in cooperation with the Chicago Tribune:

- American Furniture Mart
- Chicago Floor-Covering Association
- Chicago Furniture Manufacturers Association
- Chicago Retail Furniture Association
- Chicago Retail Merchants Association
- Electric Association
- Furniture Fabric Men's Association
- Lamp Manufacturers Association
- Manufacturers Agents Club
- Merchandise Mart
- Metropolitan Home Builders Association
- National Association of Bedding Manufacturers
- National Association of Bedding Manufacturers
- National Retail Furniture Association
- Peoples Gas Light & Coke Co.
- State Street Council

Chicago Tribune

The World's Greatest Newspaper

June average net paid total circulation—
Daily, Over 940,000
Sunday, Over 1,500,000

A. W. Dreier, 810 Tribune Tower, Chicago 11
E. P. Struhsacker, 220 East 42nd St., New York City 17
W. E. Bates, Penobscot Bidg., Detroit 26
Fitzpatrick and Chamberlin, 153 Montgomery St., San Francisco 4, also, 448 S. Hill St., Los Angeles 13

Member: American Newspaper Advertising Network, Inc. First 3 Markets Group, and Metropolitan Sunday Newspapers, Inc.
Add a lot more Quality
...in a few square feet

THE POWDER ROOM PEOPLE WANT

WITH A CASE CAMEL WATER-SAVER. This is an expertly engineered, free-standing combination with an efficient and quiet flushing action that uses far less water than ordinary closets. Owners praise its continuing economy wherever water meters are in use.

AND A CASE LAVATORY, famous for clean styling and fine construction. The Aqua-Chrome has the popular square basin with siphon-jet drain and overflow drain. The Willard (above) is a brand new Case design with supply fittings on a beveled panel. Concealed front overflow, adjustable legs. With or without towel bars.

- Powder rooms have a glamor for the home-seeker and home-owner that over-balances by far the few square feet they occupy. They deserve your most serious consideration not only in the better class of homes but in more modest ones too, for they add to the entire house a convenience and privacy obtainable in no other way. By making sure of Case plumbing fixtures you make sure of advanced design and engineering. Here is the bright, lustrous finish associated for generations with Case vitreous china. Also satisfying design, for Case fixtures are styled to remain in the best of taste throughout the life of their mechanical parts. These fixtures are economical to install, adaptable for unusual layouts. Consult the Classified Telephone Directory for the name of your Case Distributor. W. A. Case & Son Mfg. Co., Buffalo 3, N. Y. Founded 1853.
The Spencer "21" All-Purpose Boiler Offers Your Clients—

The easier way to happier living

Spencer "21" Heater and proposed game room in the beautiful new home of the Zeverino family, Valley Stream, Long Island. Owner and builder: Mr. V. Zeverino. Heating Contractor: Mr. Stephen H. Martin, Rosedale, Long Island.

For the finest in home heating and domestic hot water service, you'll make more clients happy by installing a Spencer "21" All-Purpose Boiler. It means clean, effortless operation all year round, at a surprisingly low cost. If you're not already familiar with the Spencer "21," drop us a line. We'll be glad to send you our illustrated booklet that tells about the features listed below—and many others, too—

- Available in sizes ranging from 340 to 1000 square feet (steam)
- Designed to burn any type of fuel—oil, gas, or coal—whether stoker or hand-fired
- Quickly and easily installed—all section beadings precision-ground to eliminate caulking
- Handsome, colorful jacket, with Pyrex glass observation port
- Available with built-in instantaneous or tank type service-water coils
- Easily accessible firebox and gas passages for instant cleaning

THERE IS A SPENCER for every building . . . for every fuel

COMMERCIAL SERIES:

"A" (steel)—for industry, schools, apartments
"L-2," "L-3" (cast iron, magazine feed)—for large homes, churches, apartments

RESIDENTIAL SERIES:

"C" and "R" (steel)—for homes and small buildings
"F" (cast iron, magazine feed)—for small homes
for faster, easier, lower cost, better construction
inside or out!

Where low cost, sturdy, enduring walls, are desirable, more and more leading architects and designers are specifying and planning in terms of STEEL.

One of the big reasons for this trend is GALVANITE, a rust and corrosion resisting, high quality, zinc coated steel.

Wall tile, doors and door frames, decking, exterior walls—in fact, entire buildings are being fabricated of this inexpensive steel.

See for yourself the many advantages found in products made of Galvanite.

GALVANITE—inexpensive, rust resistant, zinc coated steel manufactured by the SHARON STEEL CORPORATION.
AT LOW COST
WITH GOLD BOND
GYPSUM GRAINBOARD

WANT to do a smart, expensive-looking remodeling job... at rock bottom cost? Then use Gold Bond Gypsum Grain Board. It gives you the warmth and beauty of fine wood paneling at wallboard prices! It's standard gypsum wallboard with simulated wood grain surface. You can't tell it from real wood without close, careful inspection. Saws like lumber, can be nailed without splitting. Will not expand, contract, warp or peel. Installations made years ago show not the slightest tendency toward fading. Ideal for homes, recreation rooms, summer homes, offices, restaurants, stores and window backgrounds. In bleached walnut, dark walnut or knotty pine finish. Every job that you do serves as an advertisement that will bring you more jobs!

BIG, STURDY PANELS of Gold Bond Grainboard are easy to nail to the wood framing or right over the old material. Made with a protective lacquer finish, they can easily be cleaned with a damp cloth. No further decorative treatment is necessary.

You'll build or remodel better with
Gold Bond

NATIONAL GYPSUM COMPANY, BUFFALO 2, N. Y.
Over 150 Gold Bond Products, including gypsum lath, plaster, lime, wallboards, gypsum sheathing, rock wool insulation, metal lath products and partition systems, wall paint and acoustical materials.
Every day more and more builders tell this "profit story"

Quality Approved

ALUMINUM WINDOWS

build houses better, sell them faster!

You've probably been hearing this story yourself...

More and more builders are saying that these windows help them build better—sell faster. They say the Quality-Approved Seal means windows with minimum air infiltration, strong sections, good construction and quality materials. They say they can install these aluminum windows in less time and at lower cost. And they're right!

Home-buyers go for these good-looking windows that always operate easily and never rust or need painting. Prospects figure that Quality-Approved windows are a good sign that the whole house is well built.

Use Quality-Approved aluminum windows on your next job and you'll soon be telling a "profit story" yourself. Available in all standard types, double-hung, casement and projected. For the names of Quality-Approved manufacturers, write Dept. A.

Aluminum Window Manufacturers Association
209 Cedar Avenue, Takoma Park, Washington 12, D.C.
BUILDERS SAY

Brick ranks first
FOR RE-SALE VALUE

Whatever you build, your work will have the greatest lasting value when it's brick!

That, in effect, is what you builders said in a recent nation-wide survey.

You chose brick "first for re-sale value" in all types of building.

More often than all other materials combined!

You can count on brick to increase original sales values, too—to bring quicker sales at better prices.

That also is what you builders said. "Brick first"? for customer preference, for beauty, for permanence, for fire safety and low cost maintenance. First ten times on a list of 12 such qualities!

Remember "brick first"! It's that simple to build for top values—today, or many years from today.

CUT COSTS, SAVE LABOR WITH THIS NEW HOME PLANBOOK!

You'll find a wealth of valuable builder's information in MODERN BRICK HOMES, our new 56-page planbook. Economy engineered plans for 20 houses are included. Also interesting discussions to help you with location of site, selection of plans, financing, exterior beautification, interior arrangements. Just send 50¢ with your name and address to the address below, Dept. AB-3.
GLEN OAKS VILLAGE
(Initial Group)

...576 families kept comfortable with
B & G Hydro-Flo HEATING

Here is a striking example of modern, large-scale housing. Glen Oaks Village, at 149th Street and Union Turnpike, Queens, New York, houses 576 families and is the forerunner of an even larger development.

The heating system is a B & G Hydro-Flo System with single main piping equipped with B & G Monoflo Fittings. 24-hour circulation is provided by quiet operating B & G Universal Pumps, controlled by indoor-outdoor bulbs. Sixteen boilers, located in eight boiler rooms are required to handle the 95,000 sq. ft. of cast iron, free-standing radiation.

Hot water for domestic use is furnished by B & G Unitem Heaters in semi-tankless type installations, equipped with bronze-bodied B & G Boosters to assure temperature control and proper circulation of hot water to the fixtures.

Equipped throughout with B & G Hydro-Flo Products

The following B & G Hydro-Flo products were required to make the heating installation in Glen Oaks Village:
35 Universal Pumps • 2850 Monoflo Fittings • 32 Compression Tanks • 32 Airtrol Tank Fittings • 8 Airtrol Boiler Fittings • 16 No. 12 Reducing Valves • 16 Relief Valves • 80 Automatic Air Vents • 14 Bronze-bodied Boosters • 28 Flo-Control Valves • 32 Unitem Water Heaters.

Bell & Gossett
Dept. BC-11, Morton Grove, Ill.

BELL & GOSSETT
You can depend on

CLAY PIPE fittings

VITRIFIED Clay Pipe Fittings handle your complete sewer-
age and drainage pipe requirements. Clay Pipe's wide
variety of fittings — "Y" and "T" branches, curves, elbows,
slants, saddles, traps — handle your toughest "twist and
turn" installation problems, save money on installations.
Clay Pipe Fittings, like all Clay Products, are absolutely
resistant to the deteriorating action of acids, alkalies, chem-
icals, rust and other corrosive elements — insure long life
that protects builder and owner.
It will pay you to use Clay Pipe and Clay Pipe Fittings for
your complete building requirements.

See your local building supplies dealer, or send
your specific questions to the office nearest you.

NATIONAL CLAY PIPE MANUFACTURERS, INC.
100 N. LaSalle St., Rm. 2100, Chicago 2, Ill.
703 Ninth and Hill Bldg., Los Angeles 15, Calif.
1105 Huntington Bank Bldg., Columbus 15, Ohio

Vitrified CLAY PIPE

CLAY BUILDING PRODUCTS: VITRIFIED CLAY PIPE, FITTINGS, CHIMNEY TOPS, FLUE LINING, WALL COPING, SEPTIC TANKS,
PERFORATED PIPE, THIMBLES, STOVE PIPE, WELL LINING
Resuile 1. fa

123 APARTMENTS at Drexelbrook are equipped with Bryant personalized heating systems. Shown are the Bryant Model VS-304 Air Conditioner and Bryant Red Seal Automatic Gas Heater in closet installation. 50 community laundries are equipped with Bryant Water Heaters.

New evidence of the ever-increasing acceptance of Personalized Heating for apartments comes from Drexelbrook, where the Bryant name plate appears more than two thousand times.

This 137-acre wonderland of garden-style apartments is one of the largest and most modern developments of its kind in the world. It is a product of far-sighted planning that provides unsurpassed comforts and conveniences for its occupants.

Bryant Personalized Heating stands high on the list of tenant advantages at Drexelbrook. Each family enjoys independent, automatic control of all heating in its own home. Living areas are never overheated, never underheated. There is always plenty of hot water on tap—at the temperature desired by the user; for each family has its own individual hot water service. Aside from its advantages for occupants of multi-family housing, Bryant Personalized Heating also provides these advantages for management:

Personalized Heating is maintained at low cost; large staffs of janitor-firemen or heating maintenance men are unnecessary and, in most cases, a single custodian is master of all equipment. Service or repair, if necessary, is entirely local, handled within a period of minutes and at minimum cost. Waste heat is virtually eliminated, and there are few, if any, tenant complaints.

These advantages of Bryant Personalized Heating benefit all who finance, invest in, build or manage multi-family housing. Ask the Bryant Distributor nearest you to tell you the complete story.
CONCRETE BUILDING KNOW-HOW
MEANS INCREASED VALUE

WELL-DESIGNED concrete homes, monolithic or masonry, sell faster because they give owners the best value... help pay for themselves out of upkeep they save... assure the peace of mind that comes from living in a house that can't burn or decay.

A little ingenuity means a lot of economy. In this application of the tilt-up principle, Brauer Engineering Company, of Corpus Christi, Texas, casts wall sections in forms laid flat on the floor, then jacks the wall into position. Steel tie-plates join the wall sections, all joints are grouted. The Builder

says this 3-bedroom, 2-bathroom house, 1,800 sq. ft. area, built in reasonable quantity, can be sold at a profit for $8,000.

In this house Lone Star Cement was used. For a number of houses, similar in design, use 'Incor' 24-Hour Cement to cut form costs through 24-hour stripping and faster re-use. For masonry construction, use Lone Star Masonry Cement... makes a rich, smooth-spreading mortar that helps assure moisture-proof, weather-resistant walls. Remember, there's a Lone Star Cement for every construction need... quality for best results at low cost.


LONE STAR CEMENT CORPORATION
Offices: ALBANY + BETHLEHEM, PA. + BIRMINGHAM + BOSTON + CHICAGO + DALLAS + HOUSTON + INDIANAPOLIS + JACKSON, MISS. + KANSAS CITY, MO. + NEW ORLEANS + NEW YORK + NORFOLK + PHILADELPHIA + ST. LOUIS + WASHINGTON, D.C.

LONE STAR CEMENT, WITH ITS SUBSIDIARIES, IS ONE OF THE WORLD'S LARGEST CEMENT PRODUCERS: 15 MODERN MILLS, 27,000,000 BARRELS ANNUAL CAPACITY
THE PUBLIC housing program enacted by Congress last month is more of a menace as a reaffirmation of a public policy begun in the 1930's than it is a menace to the operations of individual builders. Building material dealers by and large should benefit.

The principal provision will enable the 670 local housing authorities in the country, and any more that may be set up, to build 810,000 public housing units over a six year period. That's an average of 135,000 units per year. They will be rented to families with incomes below limits established by local authorities at an average rent of under $30 a month. Local agencies will build and operate the projects and get an estimated $6.9 billion to $8.3 billion in Federal subsidies in the next 30 years.

The reason that the Act is not a serious threat to builders is that these low income families would not be in the market for new homes anyway. The average income of families living in existing public housing units is about $1,800. The 35,000 units expected to be started annually represent about 15 per cent of the total of 930,000 units started by builders last year. The Federal program could cause a shortage of building labor in some communities if private starts continue at the high level of this year and last year. The Federal program could cause a shortage of building labor in some communities if private starts continue at the high level of this year and last year. There is probably a sufficient supply of materials for private activity at a peak level plus the Federal program.

A drastic decline in starts by private builders could be the signal for the enactment of a far reaching bill aimed at two or three times the number of units provided for in the present Act. It will be recalled that from a peak of 937,000 residential starts in 1925 the industry produced only 83,000 units in 1933. This is believed by many government officials to be one of the major causes of the depression, and something that the Administration will avoid at all costs. Thus the present Act is alleged to be the entering wedge of a program to counteract an overall depression.

The best insurance that a builder can have against this kind of government competition is the production of houses that the average manufacturing worker can buy for about $54.00 per month. That is the present average weekly wage of manufacturing workers. An industrious worker will not be attracted to these government rental units when he considers that he is making an investment as well as enjoying modern living quarters in a new house built by private industry.

Easier financing, one of the present big hurdles of the building industry, is to be provided for private projects under the new legislation. Mortgage insurance is to be increased for many classes of loans. More liberal rules are to be written governing loans for improvements and major alterations. A better secondary market for loans on veterans' houses and FHA insured mortgages on rentals are assured.

Builders who operate in farm areas can benefit through that part of the new housing program which provides aid for farmers. The Department of Agriculture is being given $250 million for loans to farmers unable to get other credit who want to improve a house or barn or other building. These loans bear four per cent interest and run for as long as 33 years.

Building material dealers will benefit if the Act is successful in stabilizing new construction to some extent. The ups and downs of the building cycle have often been disastrous to dealers.

The healthy condition of the building industry at this time should have operated to prevent enactment of the public housing provisions of the bill. There was great apprehension early in the year of a drastic decrease in housing starts. The decline has been only moderate. Builders started 95,000 units in May, within five per cent of the record 103,000 units put under construction in May, 1948, according to the Bureau of Labor Statistics. Complete reports for February boosted the figure for that month to 50,400, a gain of 4,000 over the Bureau's original estimate.
THIS TIME...
build every room faster
and for less ... with
AETNA FRAMES

Aetna Frames help cut the cost and construction
time of every room for any type of house, large or
small. The more houses built, the more impressive
the savings because:

Aetna Frames come completely-built, in a one
day welded steel unit. Field tests show 7 times
as many of these frames can be set up in the same
time required to erect one Multiple Unit Frame.
Aetna consequently saves you as much as $5.00
per "inside opening".

Aetna Frames are tough—lasting! Won't warp
or crack! No chance of their mitres ever opening.
Weather-resistant, too—their size can't change be-
cause they will not absorb moisture or swell.

Ask your materials dealer for the quan-
tity and standard sizes you require. Or
write for the name of your nearest rep-
resentative.

AETNA STEEL PRODUCTS CORPORATION
EXECUTIVE OFFICES: 61 BROADWAY, NEW YORK 6, N. Y.
MANUFACTURERS OF STANDARDIZED STEEL DOORS AND FRAMES FOR HOUSING UNITS.
FABRICATORS OF QUALITY HOLLOW METAL PRODUCTS FOR SCHOOLS, HOSPITALS, OFFICE BUILDINGS, ETC.
JOE LOUIS—The retired heavy-weight champion is entering a new field of free enterprise and rugged competition. With Truman K. Gibson, Jr., and Theodore A. Jones of Chicago, and Paul W. Trousdale, Charles H. Church and Lewis W. Stimson of Los Angeles, the former champ has filed articles of incorporation to establish “Joe Louis Homes, Inc.” to cover all phases of real estate and home construction. Head offices will be in Los Angeles.

FRANKLIN L. BURNS—This well known and progressive Denver builder has just issued a pamphlet entitled “Buckboards and Bungalows.” It traces the development of Denver —its industry, commerce, transportation and homes during the half century the company Burns heads has been in business. It is an excellent public relations piece.

BETTER HOUSING—Consistent with its editorial policy of promoting better housing, American Builder, itself, went in for better housing early in June. After more than 20 years at 105 W. Adams St., American Builder and other Simmons-Boardman properties based in Chicago, moved to 79 W. Monroe St. where they occupy the entire 13th floor and part of the floor above.

INVITATION—Stop in and see us at the new location. The move was made to permit higher efficiency in operation, and it is working. With less square foot area, both the business and editorial staffs of American Builder actually have more working space.

YOUR RECORDS—Incidentally, if one of our change-of-address cards has not reached you, please change your records so that mail will reach us promptly. Make it American Builder 79 West Monroe St., Chicago 3, III.

SENATOR WHERRY—Speaking against socialization, regimentation, cheap money, deficit spending and the myth of free government services, the Nebraska champion of freedom and opportunity for the individual recently told the National Retail Lumber Dealers Association, “I plead with you and I beg of you, see to it that those who are in your employ, your neighbors across the street, and those with whom you associate in your civic organizations, in your churches and wherever you go, get the story that there is a real battle on here in the United States, and it is as to whether socialism will take over free enterprise or whether free enterprise will continue to operate as it has for more than 160 years.” The fact that socialized housing is here should signal the real beginning of the battle, and not the end of it.

REPAIRS AND REMODELING—In the rush to catch up with housing shortages, an enormous backlog of repair and remodeling work has accumulated. Indicative of the market is the condition of the heating systems of the nation’s homes. According to National Warm Air Heating and Air Conditioning Association, the odds are 7 to 10 that the average heating system five or more years old is costing its owner at least 10 per cent more to operate than necessary. This is because the heating systems are in need of cleaning and repairs.

20-YEAR-OLDS—What about the bulk of the nation’s homes which are more than 20 years old? Practically all of them are in need of major repairs or remodeling, long deferred during the war years and post-war years because of labor and material shortages.

NO BUILDING RECESSION—With new building going ahead at near the 1948 volume, and enough repair and remodeling work to keep everyone busy for several years, nothing short of general economic collapse can cause a recession in the market for building materials.
You can really be “proud as a peacock” of the houses you design and build—and so will the customers who buy them—if you include the kind of cooking equipment more people want—modern Electric Ranges!

The trend to Electric Cooking is proved by the fact that another million American families switched to it last year. Conservative estimates indicate that the same thing will happen again this year.

So build houses that are modern today and will stay modern for years to come. During construction, include wiring for an Electric Range, leading to a range outlet in the kitchen. An Electric Range, like electricity itself, is now a “must” in every modern home!
W. L. DODDS of Star City, Ark., submitted a short article on "How to Build a Concrete Septic tank," which was published on page 130 of the June issue. In reply to the article came a letter from E. W. Foss, extension agricultural engineer, State of Maine. Says Mr. Dodds, "According to the opinions of most agricultural engineers this septic tank would be unsatisfactory on two counts. In the first place the volume is not sufficient to comply with many state regulations. In this state, for instance, no septic tank is satisfactory that holds less than 400 gallons. In the second place, the depth of the tank is not sufficient to prevent sludge building up quickly to the inlet pipe and requiring frequent cleaning. We have had a great many cases of unsatisfactory septic tank operation due to insufficient size of tank come to our attention. In many cases rural builders do get by with a minimum for purchased tanks sold as grease traps and holding only 200 gallons, but these frequently require cleaning every six months. Builders not familiar with the rural sewage problem should be encouraged to use tanks of a sufficient size." Sounds reasonable. Are there any other comments?

ANOTHER COMPLAINT about an article in the May issue referred to "Wood Flooring Developed to Use with Radiant Heat," which appeared on pages 106 and 107. It came from R. L. Maher, Chase Brass & Copper Co., Waterbury, Conn. Says Mr. Maher, "The article contains a description of a type of floor construction which is not good practice. Paragraph four says in part that radiant copper tubing is installed in a 4½-inch concrete block slab placed over a 4-inch fill of sand or cinders. The use of cinders in such construction is hazardous because of its corrosive effect upon metals, and hence its use is seldom recommended. Proper fill is, of course, sand or gravel as you have indicated in the cut which shows the floor slab in section."

THE MAY ISSUE apparently was read with a fine-tooth comb. Lawrence M. Gilman, vice president of The Gilman Brothers Company, Gilman, Conn., found an error in (Continued on page 49)
SO SIMPLE TO INSTALL

You use just 2 tools and save 9 steps...

Do this:
1. Bolt the strong steel frame together.
2. Attach frame to floor and anchor to walls;
3. Screw on template locks and hinges;
4. Hang the door.

Avoid this:
1. Cut and fit jambs.
2. Cut and fit stops.
3. Cut and fit trims;
4. Mortise frame and door for hinges.
5. Mortise frame and door for locks and strikes.
6. Cut and fit door.
7. Countersink holes.
8. Putty holes.

When you buy a suit you don't have to cut out the buttonholes. Or trim the cuffs. Why should you have to fiddle with the doors you buy—using your time and your money?

Fenestra® Stock Hollow Metal Doors come complete with frames and hardware machined to fit. Mortising, drilling, tapping, prime-painting are all done at the factory.

These low-cost, high-quality doors are packed with insulation and individually wrapped to protect their good looks. Doors, including those with the Underwriters' B Label, are immediately available from local stocks.

Call the nearest Fenestra office or write Detroit Steel Products Company, Dept. AB-8, 2260 East Grand Boulevard, Detroit 11, Michigan.

Fenestra

STOCK HOLLOW METAL
SWING AND SLIDE DOORS
EDITORS' ROUND TABLE
(Continued from page 47)

the story about the Del Webb operation in Arizona. The story said that wool batts were used for insulation. Mr. Gilman says definitely no. Reflective cotton insulation was used. He says he knows because the insulation was the product of his own company. We are glad to make the correction, but we have to take issue with Mr. Gilman when he says we "missed the boat" on this particular project. We didn't. It was a pretty good story, even though our correspondent did slip up on the insulation. He knows better now, however.

WRONG ADDRESS of W. A. Wollander was given in a June story about Albert Balch's Parkwood Addition. C. J. Kramer of the Wollander organization wrote about it. "On pages 74 and 75," says Mr. Kramer, "you have Mr. Wollander listed as being from Seattle. Although we do quite a bit of our business in Seattle, Mr. Wollander is from Tacoma, and all of his business interests are here." We are glad to give Tacoma proper credit for Mr. Wollander. It is enough for Seattle to have its A. Balch, and if Seattle will continue to produce more like A., and Tacoma to produce more like Wollander, and all of them continue working together, home building in Washington will maintain its high standards.

ONE MORE PROTEST against the May issue. It came from Sigfred Bech of Paterson, N.J. Says Mr. Bech, "I read the item on page 61 about underpaid doctors. I want to comment on that. Recently I had an operation in one of our local hospitals, and the doctor who performed the same charged me $750, for just his services. Everything else was extra. Do you call that underpaid? I call it robbery—1½ hours work. I have been informed that this surgeon performs three and four of this type each day."

WITHOUT condoning or condemning Mr. Bech's surgeon, we do know a case in which a man was charged $2,000 for an operation, while a second paid $500 and a third, $50 for the same operation by the same surgeon. Most surgeons try to strike an average, charging (Continued on page 51)
WHO SAYS JANITROL IS HIGH PRICED?

We hate to admit it, but it's true that many misinformed builders think Janitrol is a high priced line.

Our competition can't criticize Janitrol's advanced designs, our thorough workmanship and our established reputation for proven, quality products. But, the words have gone around, "Sure, Janitrol is fine equipment but their prices are high."

You may have been told this... you may have believed it without actually checking not only list prices but installed costs.

We believe it is important to you, for you to know the real facts... that you should know how other builders are capitalizing on the great sales appeal of gas heating with the nationally known and advertised Janitrol Gravity Furnace... without paying a price premium.

Janitrol Gravity Furnaces are competitively priced, installation work is simplified, so that your "ready-to-heat" costs are in line... you gain the advantage of offering a famous name product and assurance of customer satisfaction, which as you know full well is your best asset for your continued success.

Ask your Janitrol dealer for new, revised Gravity Furnace prices and typical costs of installation work, or if you prefer write us direct and we'll see that you get full information promptly.

SURFACE COMBUSTION CORPORATION, TOLEDO, OHIO.

A MILE OF JANITROL GRAVITY HEATED HOMES

These homes, built on Bernhardt Drive, Snyder, N. Y., under the Veterans Housing program, are typical of the many projects using Janitrol Gravity Furnaces exclusively to provide automatic low-cost heating comfort.

Typical economy installation in recent building project. Note Control Cover (optional equipment) is not used in these installations to further reduce costs.

Typical JANITROL QUALITY

PLATINUM AND TOP FRAME ASSEMBLY—Offers simplified means for attaching warm air outlets. Designed to fit S-hook assembly connections. (Optional equipment)

FLUE COLLAR, DRAFT HOOD—Assures proper draft control for safe and efficient operation.

ALL WELDED COMBUSTION CHAMBER—18 gauge, steel design assures high heat transfer, gas-tight joints, and positive, even heat distribution.

RADIATOR ASSEMBLY—Seam-welded construction. Internal baffling insures maximum gas travel for economical operation.

FRONT CASING PANEL WITH CONTROL COVER SUPPORT BRACKET—Positions over burner duct. Interlocking design speeds correct assembly, no bolts or screws are used.

CONTROL COVER ASSEMBLY—Provides attractive, easily removable, tamper-proof housing for controls and burner. (Optional)

FAMOUS JANITROL FLAME RETENTION BURNER AND CONTROL MANIFOLD—Quiet, efficient, with wide adjustment range. Completely automatic—maintains even temperatures. Interlocking Pilot Support Bracket correctly positions pilot for proper ignition.
a maximum fee to those who can afford to pay, and a minimum fee to those who cannot. It's a better system for everyone than socialized medicine. At least, there is incentive for a surgeon to do his best, and you can get him when you want him, not when the government says you can have his services.

THAT TAKES CARE of all of the complaints, or at least it gets them answered until the counter-complaints arrive. We are thankful that the roses outnumbered the thorns. And while none of the pat-on-the-back letters are commented upon here, we got them, and hope that they continue to arrive in large numbers. It would be a little depressing if the mail contained nothing but objections, particularly during a summer as hot and oppressive as this one.

INCREASING encroachment upon the business of the contractor by the “owner-builder” calls for TO STOP the practice, says Gordon, the contractor must, in some way, obtain a preferential discount on all materials of at least 15 to 20 per cent, and a 10 per cent discount on all sub-contracts. The general contractor organizations, he continues, are strong enough to form their own buyer’s guilds, and have the knowledge to hire direct and leave the sub-contractor out of the picture if necessary. He says, however, that this procedure will not be necessary if the material dealers will cooperate.

HE URGES that beneficial results to everyone, including home buyers, can be obtained if contractors will advertise the value of their services to the owner, and if material dealers will cooperate to the end that contractors can buy at a right price and thus sell at a price the public can afford to pay.
How to make this time-saving cope-joint

Cut one length of Milcor Steel Casing with lathers' snips as indicated by dotted line in Figure A. Cut the other length square. Slip the first length over the second as shown in Figure B. That forms a perfect, permanent, tight joint.

Easy way to make a better, tighter steel-casing joint — faster

Here's a simplified cope-joint for Milcor Steel Casing. It saves expensive construction time on every job — because it's easier, faster — and permanently tight. (See the diagram illustration at the left.)

Milcor Steel Casing offers additional savings on overall building costs. It cuts time and costs amazingly on erection, plastering, and finishing. And that's just the initial saving. The permanence of Milcor Steel Casing keeps on saving — on maintenance, refinishing, and decorating — for years and years.

Why not give every job the extra appeal of these outstanding advantages? Build a reputation for the finest modern construction with Milcor Steel Casing — and the other steel building products in the complete Milcor line. See the Milcor Catalog in your Sweets File for complete details.
Turn the conversation to insulated sidings, and your Flintkote Representative is likely to use the expression, “You ain't seen nothin' yet!”

Then he'll tell you the Tapertex story. And quite a story it is. For the first time in years, you're able to offer customers something really new in insulated sidings.

Tapertex Sidings are a massive, heavy weight, heavy duty exclusive product. The heavier tapered coating assures a realistic tapered effect similar to the famous Flintkote Tapered Strip Asphalt Shingles.

Appearance is greatly improved, too. Tapertex Sidings, with their modern embossing and narrow courses, make a truly beautiful sidewall. And the Base Board lies flat against the sidewall so that any possibility of sagging is completely eliminated.

Like all Flintkote Insulated Sidings, Tapertex enables you to offer bonus value in reduced fuel, painting and maintenance expense.

Next time your Flintkote Sales Representative calls, he'll tell you all about Tapertex. Or why not get in touch with us. We'll rush full details to you. Write today. THE FLINTKOTE COMPANY, Building Materials Division, 30 Rockefeller Plaza, New York 20, N. Y.
J. E. Merrion Chooses Asphalt Shingles for His 542 Home Merrionette Manor

The fact that J. E. Merrion and Co. know that exactly 11,382 squares of asphalt shingles were used in roofing their homes in Merrionette Manor indicates how carefully they operate. The fact that they chose asphalt shingles indicates how carefully they plan. Because asphalt roofing is construction's biggest dollar's worth.

In deciding upon asphalt roofing, Merrion measured each basic advantage—one of which is the ability of asphalt shingles to provide a harmonious variety of roof colors and patterns. Colorful, clean-lined, fire-resistant asphalt shingles fitted perfectly into the plan to create a community of homes with individuality, yet in complete harmony with each other.

Match your requirements against the advantages of asphalt shingles—beauty, low cost application, weather resistance, fire resistance, durability—and you'll find they're your best buy.

WRITE FOR THIS NEW FREE BOOKLET

"Good Application Makes a Good Roof Better" is the message of the 24-page booklet now available. For everyone interested in roofing, it's a helpful guide—or a reminder. Contains step-by-step information about good application practices—with diagrams. Get free copy from a member company or write direct.
America's Leading Portable Electric Saw!
America's Best Value Feature for Feature!
America's Biggest Value Dollar for Dollar!

SKIL Saw... the better buy at any price... is today's best buy at these new low prices. You get famous SKIL Saw features! Famous SKIL Saw quality! Famous SKIL Saw power and performance... stamina and speed... at prices you'd expect to pay for ordinary saws. Order SKIL Saw from your SKIL Tools Distributor today!

SKIL SAW IS FAST!
Oversize motors supply extra power to handle every job quicker—easier!

SKIL SAW IS EASY TO HANDLE!
Light weight, perfect balance and scientifically placed handles make all cutting easier—with one hand or both.

SKIL SAW STANDS UP!
Extra strong shafts, smooth-running gears, ball bearing construction and die-cast housings mean lasting dependability, unusual ability to take any shock load.

SKIL SAW IS FLEXIBLE!
Quickly adjusts for bevel and depth of cut. Cross-cuts, rips, miters. Handles every sawing job from cellar to roof in far less time.
How to make home-owners sell your services

We all know that a satisfied customer is your best salesman. But home-owners, happy with the oak floors you advised, can be made into a special kind of salesmen—and here's how to do it:

Point out to them one quality of oak possessed by no other flooring material and one they will come to appreciate as their home decoration progresses: the versatility of oak grain.

Then as they discover how perfectly oak grain combines with other materials—with other woods, glass, metals and fabrics—and with any motif from Provincial to Modern, they will gratefully remember your advice.

The realization that you have given them not only the utmost in beauty, durability, and economy, but also flooring that blends with and enhances any decorative scheme they may ever choose—that realization turns happy home-owners into salesmen for you.

To help home-owners visualize the style and color adaptability possessed only by oak flooring, show them the new free 16-page booklet, "Planning and Decorating the most important side of a room." Send for your copies today.
HERE NOW TO HELP YOU NAIL DOWN SALES!

FIRE-CHEX

*Amazing New Asphalt-Asbestos Shingle that Defies Fire

- First and Only Shingle of any kind ever given

Highest Fire-Protective Rating-listed as “CLASS A”

by Underwriters’ Laboratories, Inc.

Now you can offer your customers a shingle giving unequaled protection from roof fires—Carey Fire-Chex! These amazing new shingles—developed and manufactured only by Carey—contain a new miracle asbestos-bitumen compound that resists fire, guards against the hazards of flying sparks, embers and flaming wood brands. Carey Fire-Chex are extra-heavy, too, for extra weather protection. They weigh 325 pounds per square; provide a lasting barrier against the elements.

Make more sales, more profits... put yourself ahead of competition with Carey Fire-Chex. No other shingle offers so much in protection, durability and distinctive beauty!

It’s new! It’s different! It’s exclusive!

REMEMBER! IT’S EASIER TO SELL FIRE-CHEX THAN ANY OTHER SHINGLE!

WRITE-WIRE

for complete profit-making information!

THE PHILIP CAREY MANUFACTURING CO.,
LOCKLAND, OHIO

Copyrighted 1949, Co. Available in red, green, blue or gray; this new shadow blend design cannot be duplicated by any other shingle!
You may have wondered why Revere went to the expense and trouble of developing a special valley and flashing package with special size copper sheets. There are 3 very sound reasons:

1. Each of the 10 sheets contained in the Revere Home Flashing Package is 18" wide by 48" long. This width is the ideal size for valleys, while the flat lengths of 48" not only are more convenient to handle and use, but are just the right length for flashing doors and windows. In addition, when the 4 ft. flats are properly installed buckling of valleys can be avoided. This size is also more economical as it makes it possible to cut the smaller-dimension pieces, used for chimney and shingle flashing, with the least amount of scrap. Sheets are of a special gauge and temper best suited to the valley and flashing requirements of low-cost homes.

2. The second reason is the nails used. Each package contains 200 bronze Strong-Hold Nails. These nails are made with annular barbs so that they get an extra strong grip in the wood which prevents their working loose. Builders who have used them consider them the best holding nail on the market. And, being bronze they will last as long as the copper. This in itself is a great protection for builders because if iron nails were used the presence of moisture would set up a galvanic action, causing the nails to rust away in a few years.

3. The third reason is the complete, illustrated instruction book supplied with each package of Revere Flashing. This book shows, step by step, how every kind of valley and joint is made in valleys, around chimneys, doors, windows and at other wall and roof intersections. It is simple to follow and assures builders a job they can be proud of...one that will give complete owner satisfaction for a great many years.

No wonder builders are enthusiastic about Revere Home Flashing. Being copper, it adds an important selling point to the house, because it is visible proof that the builder uses quality materials. See your building supply dealer today about Revere "Packaged" Home Flashing. He'll either supply you from stock or get it for you promptly.

REVERE
COPPER AND BRASS INCORPORATED
Founded by Paul Revere in 1801
230 Park Avenue, New York 17, New York

Builders:

WHEN YOU CHOOSE ELJER PLUMBING FIXTURES

your Home Buyers receive these

GREATER BEAUTY

Eljer Fixtures have a satin-smooth finish with just the right amount of modern in the styling. Vitreous China Lavatories, for example, feature a smooth, unbroken back surface, because the overflow outlet is hidden under the front, antisplash rim. Practical ledge shelf lends beauty to the lavatory design.

BETTER DESIGN

The Legation Bathtub features a low, wide, front rim-seat... easy to step in or out. An end-seat is ideal for bathing children, foot bathing or a sitting shower. The bottom is flat, for safety's sake. The entire tub area is within easy reach for cleaning.

ADVANCED ENGINEERING

In Eljer’s Closet Tanks the integral overflow and ground-in valve seat are a part of the china tank itself... eliminating the need for thin metal parts that are vulnerable to the corrosive action of water. Syphonic jet-action bowls with “Elvortex” whirlpool jet, are quiet and efficient.

Plus:

A wide variety of related, yet distinctive, styles in snowy white or harmoniously matching colors, provides a full choice of fixtures, in Vitreous China or Enameled Cast Iron.

Plus:

Eljer’s Brass Goods... a precision line, standardized and simplified. All working parts are easily renewable. Two units, for exposed and concealed fittings, have interchangeable parts... a new achievement in brass goods engineering.

As advertised in the Post:

In 1949, Eljer advertising in consumer magazines like The SATURDAY EVENING POST will reach 115,000,000 people, many of whom will want Eljer Fixtures. Some of them will be YOUR clients.
ELJER EQUIPPED HOMES DO SELL FASTER BECAUSE
The harmonious design and styling of Eljer Fixtures will provide a smartly modern note in your new bathroom. Furnished in soft, matching colors or immaculate white, these beautiful fixtures will make it easy for you to achieve whatever decorative scheme you want.

The bright, lustrous finish of Eljer Fixtures reflects their superb quality. Eljer Vitreous Lavatories and Closet Combinations are real china . . . they resist stains and are impervious to all ordinary acids. Eljer Bathtubs have a rugged, rigid, cast-iron base that makes possible an extra-thick coating of glass-like enamel that is easy to keep sparkling clean and new-looking. Chrome-plated Eljer Faucets operate smoothly and assure long, trouble-free service. All wearing parts are easily renewable.

For bathroom, powder room, kitchen or laundry, you'll be proud of Eljer Fixtures. Ask your plumbing contractor or builder to help you select the combination you would like and write for our new, free booklet, “Designed for Living”. Eljer Co., Box 192, Ford City, Pennsylvania.

Over 10,000,000 in Use. The superb craftsmanship so evident in Eljer Fixtures is the result of almost a half century of experience in designing and manufacturing plumbing fixtures exclusively.

more and more people are asking for the Extra Features available

Only in Eljer’s Fine Line of Plumbing Fixtures and Brass Trim
The Eljer Sylenta Closet Combination combines quality features that every homeowner would prefer to have.

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

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

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

Quality Features . . . that Cultivate Customers

The Eljer Sylenta Closet Combination combines quality features that every homeowner would prefer to have.

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

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

It pays you, it pays us—because we specialize in Plumbing Fixtures and Brass

ELJER
Start Planning Early for NAHB
Record Breaker 1950 Convention

Paul S. Van Auker, convention director, and E. M. Spiegel, convention committee chairman, began preliminary discussion for the 1950 NAHB Convention to be held in Chicago, February 19 to 23, when they prepared an outline to present to the committee in July.

EMANUEL SPIEGEL

The first meeting of the committee was slated for July 11, too late to permit an account of the meeting to appear in this issue. It had been decided before the meeting, however, that more exhibit space would be available next year than at any NAHB meeting ever held.

In addition to the space in the main exhibit hall of the Stevens Hotel, convention headquarters, and the Normandy Lounge in that hotel, Van Auker will add the exhibit hall of the Congress Hotel, located one block north of the Stevens on Michigan Avenue.

PAUL S. VAN AUKER

"The reason for this," says Van Auker, "is that demand for space makes the additional facilities necessary. Two years ago the Congress Hotel, but not the Normandy Lounge was used. Last year the Congress was dropped, and the Normandy Lounge added. Many prospective exhibitors had to be turned down last year. We want to make sure that we can accommodate everyone in 1950."

To match the increased interest in, and use of, exhibit space expected next February, the convention committee will make special plans to establish new attendance records. A special attendance promotion program will be developed, probably including awards to the chapters with the heaviest mile-member attendance. All plans are aimed at securing the largest assembly of builders ever held.

The convention exhibit prospectus is being prepared, and will be mailed to exhibitors shortly after Labor Day.

'Nights' for Adjacent Cities
Portland Home Show Feature

Nine cities in the Portland, Ore. trading area were honored with special "nights" during the annual Home Show June 18-26 sponsored by the Portland Home Builders Association, Inc., at the Portland Ice Arena. Estimates of attendance at the event ran between 60,000 and 75,000, and there were more than 100 exhibits.

The cities given special recognition were Salem, Beaverton, Vancouver, Oregon City, McMinnville, Hillsboro, Kelso-Longview and Gresham. Mayors and other officials participated in special programs on the nights set aside for their cities.

One of the outstanding attractions at the show was a five-room model home, built in five days and valued at $17,000. The house was attractively furnished and drew large numbers of visitors.

One of the opening night speeches was made by Lawson McCall, administrative assistant to Oregon's Governor Douglas McKay. McCall landed the Portland group on their efforts in arranging the Home Show.

Other speakers included City Commissioner Fred L. Peterson, representing the mayor and city council; County Commissioner Frank L. Shull; Vern Elliot, FHA; Al Bauer, president of the Portland Chamber of Commerce; Herman A. Schmitt, president of the Portland Association; Edwin Sandberg, Home Show committee chairman; H. P. Davidson, president of the Oregon Building Congress; and W. G. McDonald, managing director of the Show.

San Francisco Builders Name Popovich President

Earl Popovich was elected president of the Associated Home Builders of San Francisco at the group's annual meeting June 10. Popovich, secretary of Hansen Homes, Inc., succeeds Carl Gelbert and will serve through the 1949-50 fiscal year.

Henry Doelger was named vice president and Boyd C. Lindsay, secretary.

WASHINGTON GROUP MAKES HOME WEEK PLANS

Appointment of Carl M. Freeman, Prince Georges County builder, as chairman of the Home Builders Association of Metropolitan Washington's 1949 National Home Week committee has been announced by William S. Banks, association president.

Freeman, developer of the "California Cottage" and a leading Washington builder, was formerly sales manager for Fritz Burns in California.

More than 40 houses were exhibited last year by the Washington group, attracting thousands of visitors. It is anticipated that an equally large number of homes will be exhibited during the Home Week period this year.

LEE B. MILLER DIES

**Molnar Honored at Cleveland Banquet**

Nicholas F. Molnar (second from left), NAHB secretary, receives a plaque naming him the man who did the most for the home building industry in 1948 from Maurice Fishman, president of the Home Builders Association of Greater Cleveland, at the Cleveland group's sixth annual banquet, June 4. At left is Rodney M. Lockwood, NAHB president, who was the principal speaker at the banquet, and at right, Jerry Madigan, acting executive director of the Cleveland association. The meeting was attended by approximately 400 builders and guests.

**California Group Names New Officers**

Richard Delucchi of San Bruno was elected president of the Peninsula (Calif.) General Contractors and Builders Association at the group's recent annual meeting in the auditorium of its recently completed building on El Camino Real, San Mateo. More than 60 members were present.

The outgoing president, Ed B. Standish, gave a report on the association's activities during the past year, including legislative work at both federal and state levels, labor relations, apprenticeship training, an economy home program and an increase in chapter membership. Standish was presented a plaque by the association in recognition of his work as president.

**Appoint Home Week Chairmen For Columbus Association**

Russell Fling and Howard Day have been appointed National Home Week chairman and assistant chairman, respectively, of the Columbus, Ohio, Home Builders Association and are making plans for local observance of the national event.

Another activity of the Columbus group is a picnic, scheduled for August 18 at Harbor Hills, Buckeye Lake. J. Alfred Shuman is chairman of the picnic committee, which met June 8 to make arrangements. One of the entertainment features will be a polo exhibition; there will also be music, a nail contest, bingo, horseshoes and other games. A number of prizes will be awarded.

**Installation Dinner Held For Chicago Officers**

Speaking at the installation dinner June 23 for the 1949 officers of the Chicago Metropolitan Home Builders Association, A. O. Aldrich, new president, told members that continued emphasis would be placed on the association's role of "Champions of the Home Seeker."

He said that the organization's physical equipment, territorial coverage and loyalty and enthusiasm of members was now geared to render maximum helpfulness to home seekers, the industry at large and to its own particular membership.

Aldrich succeeds Nathan Manilow, NAHB treasurer. Installed as vice presidents of the Chicago chapter were V. Arthur Olson, E. C. Mahoney, Joseph B. Ford and J. T. Schless. C. E. Blomgren is the new secretary and Morton H. Robbins, treasurer.


**Lockwood, Cortright to Attend Utah Convention**

The 1949 convention of the Utah Home Builders Association has tentatively been set for December 3 at the Hotel Utah, Salt Lake City. It will be attended by Rodney M. Lockwood, NAHB president, and Frank Cortright, executive vice president, who will be featured speakers.

A special women's program for the convention is being arranged by the Association's ladies auxiliary.

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**American Builder, August 1949**

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Aldrich succeeds Nathan Manilow, NAHB treasurer. Installed as vice presidents of the Chicago chapter were V. Arthur Olson, E. C. Mahoney, Joseph B. Ford and J. T. Schless. C. E. Blomgren is the new secretary and Morton H. Robbins, treasurer.


**Lockwood, Cortright to Attend Utah Convention**

The 1949 convention of the Utah Home Builders Association has tentatively been set for December 3 at the Hotel Utah, Salt Lake City. It will be attended by Rodney M. Lockwood, NAHB president, and Frank Cortright, executive vice president, who will be featured speakers.

A special women's program for the convention is being arranged by the Association's ladies auxiliary.
Cortright's Column

By Frank W. Cortright

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

Now that the Federal government has decided it must play an immense role in housing the people of this nation, it will be interesting to see how it performs.

After more than a hundred years of carrying the mail, the best it can do is to move a penny postal card for 25c. It over-spreads its budget at staggering annual figures running into the billions. In the past the best it could do as a home builder was to construct housing at approximately 20 per cent higher cost than the private builder.

As it embarks upon a $15 billion Federal housing joy-ride, it apparently has resolved to start by appearing to be a little more efficient. Just today it was reported that the PHA (formerly Federal Public Housing Authority) is putting the squeeze on the AIA (American Institute of Architects). One would think that PHA would be more considerate of the architects who supported them in perpetuating their jobs and securing such a bonanza. However, it appears that this is not the case since PHA, now having what it wants, turns on AIA and demands that architects work for less than a straight 5 per cent commission because of the "repetitive design" of public projects.

It may be that those money lenders who testified in support of socialized public housing, because of the profitable business it will bring them, will one day be equally unhappy. As more and more direct Federal lending comes about through the passage of such legislation as the Sparkman bill, presently urged by Liberal Democrats and Fair Deal Republicans, more and more bankers will gradually be driven from the mortgage finance field.

Last but not least, the gravy train eagerly expected by those large contractors who specialize in construction of public housing projects may stop rolling one day. As we parallel the progress of socialized public housing in England, these firms will probably find construction being gradually done directly by the local housing authorities.

This is what has happened there. They call it building by "Direct Labour." In the process the contractor is completely eliminated as the Housing Council's staff employs architects, engineers, superintendents and foremen. From there on the Authority negotiates with and employs labor, purchases building materials and does the entire job. What of the contractor? His best alternative is to end up as an underpaid superintendent on these jobs.

This reporter listened with astonishment to the London County Council officials as they described with great pride the elimination of profits by this method. Of course, the costs were absurdly high. As we climbed over the jobs we saw four men doing the work of two. All in all, it was apparent that it was an extremely costly and sluggish operation from start to finish.

The primary reasons for inefficiency and high cost in governmental operations are (1) lack of incentive and (2) assurance of continued employment regardless of efficiency or production. In the Utopian communist state each individual contributes a small share according to his particular assignment and, theoretically, benefits by an exchange of services and products with other inefficient and inadequate producers. Theoretically, it is heaven. In practice, it is poverty and degradation. . . . Organized Scarcity and Equalized Misery!

What an ironical thing it will be if those segments of our industry who fought for socialized housing in this country because of immediate selfish benefits, and those who failed to oppose it, eventually end up by finding themselves driven from their proper field of activity and employed as creatures of a vast governmental housing machine.
Home Week Plans Discussed by Texans

PLANS for state-wide participation in National Home Week was one of the leading topics at a meeting of the Texas Home Builders Association at Amarillo. Among other subjects discussed were the return of keen competition in the industry and reports from most of the large Texas cities indicating that the rental housing market had been satisfied to a large extent. More than 40 delegates attended the session. Shown here are (left to right, standing): Charles Greef, Amarillo, president, Texas Panhandle Home Builders Association; R. G. "Dick" Hughes, Pampa, regional vice president, NAHB; Fred M. Seale, NAHB director at large; Samuel Lemons, Lubbock; Grover Godfrey, Dallas, executive secretary. Texas Association; (seated) Mrs. E. P. Lamberth, Dallas; E. P. Lamberth, Dallas, president Texas Association; G. W. Marquette, Amarillo, president, Texas Panhandle Association; Dow Zabolio, Houston; and A. H. Brown, Amarillo, vice president, Texas Panhandle group.

Chicago Festival to Mark National Home Week

A feature of the third annual Chicago-land Home and Home Furnishings Festival, to be held from September 10 to October 11, will be the public display of approximately 50 and 70 homes in the Chicago area, many of them completely furnished by participating agencies. The annual event is sponsored by the Home and Home Furnishings Council of Chicagoland, composed of 14 groups in industries related to the home, in cooperation with the Chicago Tribune. The Chicago Metropolitan Home Builders Association is taking an active part.

Erie Builders Hear Talk By Gavin

In a speech before members of the Erie, Pa., Home Builders Association June 30, Edward G. Gavin, American Builder editor, expressed strong disapproval of the recently passed Public Housing Bill, terming it an "Economic Dunkerque." Approximately 50 members of the association attended the meeting, the last official session of the 1948-49 year.

Stating that his main objection to public housing was that "it has consistently cost the public more than homes built by private enterprise," Gavin described the results of a similar plan launched under Great Britain's socialistic government in 1919 and indicated that it had led only to "the distribution of increasing poverty."

Gavin praised the city of Erie for preventing the development of a central slum district by timely rebuilding. He said that there was no sure-fire way of alleviating local housing problems, but that large government projects were not the answer.

The meeting was held in the Blue Room of Erie's Moose Club and was preceded by a dinner. Gavin was introduced by Cyril S. Sullivan.
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PORTABLE SAW-SHOP
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This new, low-cost DeWalt is easy to carry from job to job. When you put it to work you actually have a "saw-shop" on the job, because every time you change the cutting tool, you have another machine.

Light in weight (about 200 lbs. net), this DeWalt is nevertheless perfectly balanced. It is equipped with the entirely new and exclusive DeWalt-built, voltage-relay capacitor motor which operates on either 110 or 220 volts—a motor which develops 2½ to 3 times the horsepower it's rated for. It is a motor you can depend on for continuous, trouble-free service.

What's more, this DeWalt can be equipped with legs for inside shop use. With this DeWalt, your men will help you set new standards of performance and quality in building your houses better, faster and at lower costs.

Order one now for immediate delivery. Write for catalog. DeWalt, Inc., 18 Fountain Avenue, Lancaster, Penna.
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Portland 4, Oregon

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Well manufactured—thoroughly seasoned—carefully graded—by all Association member mills

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Clean, cool kitchens sell homes Faster

A clean, attractive, well-ventilated home is easier to sell. The new Westinghouse Home Ventilator Fan, with the amazing Injector Grille, can completely change the air in an average kitchen every TWO MINUTES. Now, alert builders everywhere are including the Westinghouse Home Ventilator in construction and remodeling plans.

LOOK AT THESE FEATURES

- Modern Streamline Design
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WESTINGHOUSE ELECTRIC CORPORATION
Fan Department • Springfield 2, Mass.
Fishman Uses Appliances To Stimulate Sales

Revere Quality House Institute selected M. J. Fishman of Precision Housing Corporation of Cleveland, Ohio, to undertake the first Midwest development under institute approval. A huge 800-home project was launched last October. Many of the houses have since been completed and sold. Interest has been tremendous right from the start.

"We have put Westinghouse Appliances in many of our houses," says Builder Fishman. "It pays. They add sales appeal and the Westinghouse name is familiar to everyone. It helps sell prospects on the quality of our houses since the trademarks of so many of the quality building materials we use are covered over with paint or plaster."

Appliances offered and included in the package mortgage include the Westinghouse Laundromat Automatic Washer, Dryer, Kitchen Ventilating Fan, Refrigerator and Range.

Typical Fishman Economy Kitchen

OFFERS FREE BOOKLET

Westinghouse Electric Appliances can help builders of both large and small house projects to move their properties faster. Reasons are pointed out in a booklet entitled, "Mr. Builder." A copy can be obtained free of charge by filling in and mailing the coupon below to the Westinghouse Electric Corporation, Electric Appliance Division, Mansfield, Ohio.

Westinghouse Electric Corporation
Appliance Division—Mansfield, Ohio

Gentlemen: Please mail me your booklet, "Mr. Builder".

Name
Address
City & State

SHOPPER STOPPER! Turns House Hunters into Buyers

Nine times out of ten it's the "little woman" who gives the nod in a house purchase. You can best influence her by making your kitchens desirable. To accomplish this, install Westinghouse Appliances. Take the refrigerator pictured above—or any one of the many sizes and models Westinghouse makes—it has eye appeal and prestige value. When you explain that on a "package mortgage" these famous appliances add little to the monthly installments—Mister, just show them where to sign. Proof? Read how Builder Fishman uses Westinghouse Appliances to stimulate sales.

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Plants in 25 Cities—Offices Everywhere

APPLIANCE DIVISION • MANSFIELD, OHIO
EXCLUSIVE! New basis for easy, flexible plans...

ONE-WIDTH KELVINATORS!

Your client's choice of 6 new "Space-Saver" Refrigerators, 31¼" wide... 4 new Ranges and Home Freezer, 39" wide

Here's the way to insure yourself against changes in kitchen plans. Your client can choose any Kelvinator model — to suit his budget — and it will fit your floor-plan! This big advantage of designing around one-width Kelvinators is now favored by architects and builders everywhere.

Only Kelvinator offers the flexibility of uniform widths for easier kitchen planning. Simplify and save — by specifying Kelvinator!

Get MORE...

"Space-Saver" Package for apartments and low-cost homes! Get Kelvinator's 1949 "Space-Saver" refrigerator. It is full 6 cu. ft., but only 24 in. wide. Range is only 21 in. wide, with advanced design permitting installation flush against wall. Top-of-the-line quality throughout. For information, write Kelvinator Division, Nash-Kelvinator Corporation, Detroit 32, Michigan.
Selling and Price Cutting

In a recent letter addressed to all of the company’s dealers, J. J. Nance, president of Hotpoint, Inc., advanced a number of sound reasons why the public should be encouraged to purchase appliances now. After pointing out that appliance prices have advanced beyond the 1939 level far less than prices of automobiles or the cost of living in general, Mr. Nance stated that substantial reductions in appliance prices already have been made. They were made by manufacturers anticipating savings in costs of materials, effecting reductions in gross margins, and increasing efficiency in production. Two of the large factors in cost, sheet steel and labor, have not been reduced in price, and probably will not be.

“The point of all this is,” continues Mr. Nance, “that today topgrade appliance manufacturers are offering excellent dollar values in their products. With the battle for sales in full swing for all—dealers, distributors and manufacturers—each of us is laying plans, not only for survival, but to establish himself for leadership and to secure profits over the long term. Sound dealers know that cut prices do not build leadership. Kitchen and laundry appliances are built to last a long time. Even though people dream of owning them, appliances will always require good selling.”

Nearly everything Mr. Nance said about appliances applies to builders and their products—houses. The era of distress buying and premium payments is over. An era of building soundly for a selective buyer attitude is here. It is well known that at the end of 1948 there were many unsold houses, and that it was not uncommon for builders to offer their unsold inventories at distress prices in the early months of 1949. Now, a stable cost level has been reached. Builders have assembled new crews of building mechanics and sub-contractors. It has taken time to train and co-ordinate these forces into efficient production teams. There is high efficiency on almost every home building operation today. Few, if any, material or appliance prices are likely to decline, nor are labor wage scales likely to decrease. The two major factors in the increase of home building costs over 1939 levels are an inflated dollar and high taxes to support the cost of vastly broadened functions of Federal government. There is nothing to indicate that the purchasing power of the dollar will or should increase noticeably or that taxes will be reduced.

Home building costs, therefore, are about as low as they can be expected to go in the predictable future. The only way to effect great reductions in home building costs is to cheapen the product. That is no better business for builders than it is for appliance manufacturers.

Mr. Nance concluded his letter by saying that his company proposed to continue the production of the highest quality of products of which it is capable, and keep its prices competitive but profitable. That is a sound long run policy for builders. Build soundly, price at a reasonable profit, and sell the value of the product at the determined price. There is neither profit, leadership, nor respect in price cutting as a substitute for good merchandising.
Florida builder incorporates in his new home a large number of conveniences that simplify house care and promote comfortable living.
SCREENER porch is made part of living room by sliding doors
to be a smooth finished stucco. Exterior blocks are painted
three coats of waterproof paint. Walls are capped with
a continuous 8x12 inch concrete tie beam reinforced with
rods 4½ inches round. A foundation wall 12 inches thick
placed on reinforced spread footings provides a shell well
able to withstand the ravages of tropical storms. A bright
blue concrete shingle tile roof is supported by trussed
roof rafters and ceiling joists except over the porch where
4 by 6 inch exposed cypress beams 24 inches on centers
are used.
Core of the house is a spacious combination living-
dining room and porch, 34 feet by 33 feet. Sleeping quar-
ters are placed on both sides of the core with the service
units toward the street front. The bar which adjoins the
living room is concealed by a panel which is a part of
the wall. This panel is brought flush with the wall
through an ingenious track arrangement. The outside is
actually brought inside by the use of planting areas sub-
merged in the floor construction and on counter, forming
a separation between entry and living room. Copper pans
are removable for cleaning. The kitchen and utility rooms
are veritable treasure chests of features. The exhaust
vent for stove is placed just above the cooking surface
to capture odors at their source. Cabinets were designed

IDEA NUMBER 1
A simple and effective method is used in sliding the
glass doors across opening that separates porch from
living room. Doors are 1½ inch thick with double
strength glass in each panel. Glass is used to reduce
weight of door. Each door slides on two brass sheaves
mortised into the bottom stile, one at each end. The
sheaves are guided by a heavy brass track which is
rabbeted flush into oak floor. Track and sheaves are
manufactured by the Knapp-Vogt Co. The top of each
door is rabbeted for the hardwood guide which is ap-
pied to the head frame. The head is "step cut" to stop
each door at the end of its run. When shut, the doors
overlap each other 1½ inches with a one-eighth inch
clearance to avoid rubbing. This minimises air leakage.
VIEW of living room. Walls are plaster and knotty pine

IDEA NUMBER 2

Removable copper planting box is recessed into floor construction with a border of Crab Orchard stone extending above finished floor. Drain placed in center of box is connected to sewer. Flower box on cabinet is built in the same manner. Mirror on side wall reflects the planting.

IDEA NUMBER 3

An ingenious method is used in concealing the bar in an area adjoining the living room. The three photographs above (reading from left to right) show the door to bar closed, the door partially open, and the bar completely exposed. An imitation bookcase is recessed into sliding door. Door is 1½ inches thick with one-fourth inch plywood back. Shelves, casing around opening, and imitation books are placed within the thickness of door. Books are held to face of plywood with ⅛ inch brass screws applied from back of plywood. Imitation doors are cut in under shelves. Hardware is applied at proper places. Bottom stile of door is cut out on back side to receive two rubber stem casters. Cutout must be sufficient to allow casters to swing 360 degrees when a reverse in direction is desired. The oak floor is notched out under the center of the bookcase core and a brass pin is inserted at each end in bottom stile of door to guide the panel. Sufficient room is allowed for pin to be removed. Nut is placed at top of pins. Brass pins are placed in top of door and installed in same manner.
A HOUSE FULL OF IDEAS

IDEA NUMBER 4

The large combination sideboard and cabinet shown in the two photos above and at right form a dividing wall between the kitchen and dining room. The top wall cabinets have two-way arrangements so dishes and glassware from the electric dishwasher may be put in on the kitchen side and taken out on the dining room side. Part of the drawer area on dining room side below the counter is divided into compartments for the storage of various pieces of silver. These compartments are lined with green felt cemented to wood. A group of trays that pull out are provided in the cupboard space below the drawers for linens.

IDEA NUMBER 5

The built-in sliding drawer vegetable bin at left can be closed by a plywood door when not in use. Air circulates through it when closed by means of vents placed in the toe kick and counter top. Wood frame of bins is enclosed with small mesh wire on three sides and bottom. In the kitchen, shown above, the exhaust vent for the electric range is placed on the stub wall not more than 13 inches above the cooking surface of the stove and a motor sucks the air down instead of up. The cabinet above the refrigerator, shown at upper right, has vents on the underside and also in the doors. Heat rising from the refrigerator circulates through cabinet and keeps cereals, etc., crisp and dry. The pan cover storage drawer shown at right is next to stove for step saving.

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with the warm and humid climate of Florida in mind. Ventilating grilles are placed in toe space of cupboards and on counters to provide proper circulation of air in these areas when cupboard doors are closed. Grilles are placed in the bottom of cupboards over refrigerator to take advantage of its heat. All cabinets terminate 13 inches below ceiling line. Fluorescent lights are placed on top of cabinets behind heavy cap crown mould.

The laundry island in the utility room is unique. It provides for every condition involved in the washing and storing of clothes. Dryer and storage cabinet are placed on opposite wall.

A metal duct attached to the blower extends to the outside wall where it is capped with a copper louver. A container placed over louver receives the lint from the dryer. Counter adjoining dryer can be used for arranging flowers or folding clothes, while cabinets above allow space for vases, holders, etc.

An additional item of interest in the kitchen includes step shelves that are placed in cabinets devoted to small items such as spices, etc. They are removable for cleaning.

IDEA NUMBER 6

The laundry island shown above separates the utility room from the breakfast nook. On the breakfast nook side shelves are built-in for china. Backs of shelves are vented for the Laundromat motor. At one end of island is the three section sorting hamper. The divisions are of plywood and removable for cleaning.

The front, bottom and back of hamper is ventilated. Soiled clothes are placed on the counter and sorted into hamper. Handy shelves are placed between it and the Laundromat for detergents, scales, iron, etc. The Laundromat is built into the counter. Unsightly hose are hidden from view. These pass through a cutout in the bulkhead under the counter and are connected to the supplies and waste that serve the adjacent sink. A telephone jack at end of counter completes the laundry island.
IDEA NUMBER 7
The attic stairway is simple and sturdy. The top of ladder is secured to wall with hinges. The ladder is short enough so that it will clear the floor. When brought out into climbing position the sides are extended and pegged into position. The two side extensions slide up and down against the outside face of the side rails. Steps are placed at an angle so that they are level when in climbing position. When not in use ladder hangs flat against wall.

IDEA NUMBER 8
Shown in photograph at left is the outside wall of the master bedroom. Adjoining the dressing table is a hanging closet with blanket storage above. The opened vanity top reveals a make-up mirror and light. Underneath the vanity are drawers concealed by semi-circular doors. On either side of the vanity is a group of drawers for miscellaneous storage. The door to the right opens into a dressing room and the bathroom beyond. The mirror on the right permits full length view for dressing.

A warm air grille is combined with the center ceiling fixture in bedrooms and baths. In other rooms they occur in their normal position. Extensive use of mirrors are employed throughout the house both for decorative purposes and utility.

Barbecue in rear yard is constructed so that grate over fire can be moved close or away from fire depending on the type of food being prepared. This is done by laying brick in a 3/4 inch mortar joint and then raking out joints about an inch on two sides of the fire bed. Grate is held in place by inserting it in joints.

Basement contains a two-car garage, heater and maid’s room, and a large office and adjoining toilet directly under the living room. Ample light is provided for this room by windows on two sides. A yard implement storage room is located under the front steps which is accessible to the garage drive.

A great deal of finishing work, such as cabinets, millwork, etc., was done by Clarholm. By acting as his own contractor he saved on fees and was able to cut construction costs. It gave him time to figure out new methods and ways in which to do this job.
TYPICAL kitchen includes top quality cabinets, ventilating fan. Below is one of the Wilmot Woods houses which sold for $25,500

Reputation for Good Community Planning Makes Sales Easy

Builder of luxury houses in New York area has minimum selling expense because of 25-year record for quality and fair dealing with buyers.
TWENTY-FIVE years as community developers and home builders with strict attention to quality, fair pricing and good public relations have established such a good reputation for Haring & Grant of Eastchester, N.Y., that sales costs on their latest 155-house project are at a minimum. Charles F. Haring, vice president and secretary of the company, makes the statement that, "We seldom have a house for sale. Our houses are usually committed to purchasers before they are completed."

Haring's realty and building companies have developed several communities involving the erection of more than 2,000 private homes and apartments. Recent projects are Oakridge Gardens—96 one-family dwellings; Wilmot Woods—134 single-family dwellings, and Hickory Hill—155 houses.

Oakridge Gardens was completed in 1948. Work is still being done in Wilmot Woods although it is well toward completion with only about 30 houses to complete. The newest project—Hickory Hill—was started this spring and 31 of the 155 houses are now being completed.

Prices on Haring & Grant houses range from $18,000 to $35,000. Although some standard plans are used, there is wide variety in styling and finishes used, both inside as well as outside. On the higher priced houses buyers have a choice of interior decoration and color schemes in conformity with a maximum allowance included in the purchase price.

In addition to building many high-priced houses speculatively, Haring & Grant offer a wide variety of plans and elevations for prospective buyers to choose from for houses to be built on contract in their subdivisions. Well-known specialists in Colonial and New England architecture are employed to do the designing. At present practically all designing is done by (Continued on page 160)

AN unusual feature of these houses is a floating basement floor. Before the floor is poured, a drainage system is laid in gravel. When the floor is poured, forms keep the concrete about four inches from the concrete block foundation. The channel around the floor is then filled with gravel so that when condensation forms on the walls and runs down, moisture disappears into the gravel channel and is carried off by the drainage system.
New Economies

In design, construction and distribution inaugurated by Builder Cy Williams make it possible to deliver good partially prefabricated fully-equipped houses to public at lower prices. Plan is to work with other builders in developing subdivisions or communities.

A NEW APPROACH to the manufacture and sale of prefabricated houses has been inaugurated by Cy Williams, well-known home builder of Port Washington on Long Island, N. Y. Under the firm name of Cy Williams Fabricators he has developed a low-cost, small unit which is 40 per cent factory fabricated yet goes together much the same as a conventionally-built home. It embodies many refinements of much more expensive homes. These features make it possible for Williams to work with small conventional builders in developing subdivisions within a 200-mile radius of his plant.

Williams points out that the entire approach to the sale of prefabricated houses has been almost universally predicated on sales of single units in widely scattered locations. He is signing contracts for his houses only with builders who will erect at least 20 or more in a subdivision where production line techniques can be applied to erection work.

Titled the 1949 Cy Williams Sun Ranch home, the basic unit has two bedrooms, bath, living room and kitchen with dining area on the first floor. A built-in stairway leads to an unfinished attic which can be completed later to add two more bedrooms and a bath. There are seven models ranging in price from $10,000 to $12,000, all with garages because Williams believes every house should have one.

Houses are delivered to sites in three separate loads to keep handling at a minimum. Compact, rugged design of the house parts make loading and hauling fast and simple operations.
Truss roof construction transfers the entire load of the roof and expansion attic to outside walls permitting the use of storage walls and light drywall partitions. The two finished bedrooms contain built-in dressers, with mirrors above, sliding storage wall closets and Air-Flo windows to give maximum privacy and wall space. The built-in dressers, storage walls and china closet are all precision precut in the mill and assembled on the site. Lack of the need for bearing partitions permit latitude in placement of these units not only vary room sizes but to also vary floor layout.

The bath is finished in ceramic tile and includes a built-in clothes hamper. The well-planned U-shaped kitchen is completely equipped with all appliances including a vent-
ilating fan. Picture windows in both the kitchen and living room can be placed to best orient the exposure for sunlight and ventilation. A wood-burning fireplace is a feature in the living room.

A special combination forced warm air and radiant heating system was designed by John Dillon, noted heating engineer, for this new house. Under the slab floor a complete duct system is laid with 12x12x4-inch terra cotta wall tile. A steel Auto-Heat furnace, oil-fired, forces warm air through this system of ducts and also out through a register placed on one wall of the living room. The living room duct provides needed circulation of air through the living area of the house in winter and at the same time supplements the radiant heat emanating from the duct system under the slab. Another factor involved is the fast reaction to changes in temperature possible with the combination radiant and forced warm air system. The plant is designed to heat the two additional rooms in the expansion attic after they are completed.

Floors in the house are finished with asphalt tile. Sidewalls and ceilings are insulated and the attached garage has fire-resistant walls and ceiling. Exteriors are finished with sidewall shingles, siding or combinations of both.

The Cy Williams Fabricators are now selling this house to builders in the New York area, who lay the foundations, assemble, erect, landscape and sell the completed houses.

One of the economies effected by this system is in lowered handling costs. No complete house is ever shipped in one truckload. There are three separate deliveries at different times. The first consists of sills and basic structural materials. The second consists of panels and structural materials to go with them. The third load is made up of trim and finishing materials, including paint.

Williams is optimistic over his new development because he can gear his operation to fit any price bracket or...
AT RIGHT is portion of the kitchen in the large Sun Ranch home from which the smaller one was adapted. Below is the hallway showing sliding doors on storage walls in the large house. They are similar in the new low-cost expandable house.

This large Sun Ranch house can be fabricated for builders and delivered for erection.

BRANDED PRODUCTS USED IN 1949 MODEL SUN RANCH HOME

Auto-Heat forced warm air furnace
Bendix washer
Bradford 30-gallon hot water heater
Fasco kitchen ventilating fan
Gilmore aluminum foiled cotton insulation
Kelvinator electric range
Kelvinator refrigerator
Ketcham built-in clothes hamper
Ketcham bathroom cabinet
Kohler plumbing fixtures
Lightolier fixtures
Minneapolis-Honeywell thermostat
Reynolds Type B foil insulation
Schlage hardware
Standard plumbing fixtures
USG gypsum board
White-Rogers furnace controls
Youngstown kitchen cabinets

market condition. That the house has met approval by the public is apparent by the fact that more than 80 units were sold before the model home was opened to the public in May.

The new Sun Ranch home is an adaptation of the larger and more elaborate home of similar design developed by Williams after the war and marketed on Long Island for around $18,000.
A MODERN house of excellent proportions. The varying roof lines of the front add interest and avoid monotony in the design. At left rear of house with its splayed walls of screened porch which conform to splayed columns of car port.

THE Florida home of Mr. and Mrs. Clarence A. Petersen of Orlando is the sum total of a group of ideas that could not find proper expression except in a custom-built house. F. Earl DeLue, A.I.A., has embodied these ideas into a well-planned modern house of generous proportions, at a reasonable cost.

Up until recently the building of custom-built homes has been confined to a relatively small group of builders. The bulk of home building has been carried on by large operators using techniques designed to establish economies on a wide scale. Many of these economies are being introduced into the custom-built home field today, thereby reducing the over-all cost of this type of dwelling.

The home shown has distinct Florida characteristics and yet is adaptable to any climate. Unusual among its features are the car port at front and screened porch at rear with their splayed columns and walls. These are securely imbedded in the...
Concrete slab and beams above. The split position of the vertical supports of both carport and porch adds greater rigidity to the structure.

Another interesting feature is the curved stucco cornice capped with a metal drip and a 1x3 wood strip. This is used around entire house except at entrance. This feature has been used successfully on some of DeLoe's current residential work.

The slightly pitched roof does not present any problem in this area any more than it would in a more northern section. Three inches of mineral wool placed between rafters provides ample barrier from the heat. This type of roof pitch also permits the underside of the rafters to act as the finished ceiling in the various rooms.

The exterior walls of the house are built up of four by eight by sixteen inch concrete blocks except around the entrance. All masonry walls are left exposed in the rooms in which they occur, except bathroom and kitchen. Separating partitions for rooms are lathed and plastered. Entire house is placed upon a concrete mat with exterior walls extending into ground and placed on reinforced concrete footings.

This house containing 1182 square feet exclusive of screened porch and carport was built for $11,000. Work was completed in the spring of 1949. Rooms are all generous in size. The living, dining room and front hall are literally one large room being separated only by a storage cabinet between hall and dining room. The kitchen is a model of efficiency with "Kitchen Maid" cabinets used throughout. An abundance of storage closets are provided both inside and out. An innovation is the storage closets and built-in work bench on the closed wall of the carport.

**MATERIALS AND EQUIPMENT USED**

- USG Rocklath plaster base
- Barrett 20 year bonded built-up roof
- Devoe and Reynolds oil paints
- Standard plumbing fixtures
- Briggs kitchen sink
- Westinghouse hot water heater
- Grote medicine cabinet
- Kitchen Maid cabinets
- Ceramic tile window stools and bathroom floor
- Formica counter tops and backsplash
- Duo-Therm hot air space heater
- Sisalkraft aluminum foil insulation
- Libby-Owens-Ford glass block

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**VIEW in kitchen showing the orderly and efficient layout of cabinets and equipment**

**STORAGE cabinets provide room separation. Walls are of concrete blocks and plaster.**
A ONE- STORY impression is given to this house by the long, low roof lines and cornice directly above head of windows

**Split-Level Offers Economies**

In designing Penn Village in Minneapolis, Minn., of which this house is a part, the architects McEnary & Krafft realized that if the project was to achieve success that economy had to be considered in all phases of its planning.

The split-level or tri-level house appeared to be the answer. In this type of arrangement the greatest amount of livable space in a given square foot area can be obtained. It is the answer to the owner who does not want to sleep on the ground floor and yet does not want a full two-story house. It does away with an excess amount of basement area over and above normal requirements. In addition to providing ideal light and ventilation, it permits greater latitude for the designer in the plan layout.

The exterior lines of this house are extremely simple. Its interest lies in the effective fenestration of the front wall in addition to the low, sweeping roof lines. No attempt was made to treat the sides and rear of the house in any other than a practical manner. The concrete wall extends up to the underside of the bedroom floor with wood shakes laid in irregular pattern covering the balance of frame walls.

The blueprint drawings indicate a trellis extending from the front entrance door over to the end of living room windows, and also a built-in planting box extending up to the kitchen windows. These items were purposely omitted from the subject house for economy sake. If included they would add greatly to the general appearance of the house.

This house consists of four rooms with a basement over half the area. Two bedrooms and bath are located across the rear at the upper level.
RIGHT SIDE ELEVATION

REAR ELEVATION
NEW homes under construction in N. P. Ninneman's Highland Park development of about 1,000 houses near Harrisburg, Pa. Inset is an aerial view showing about 450 houses completed.

"Builders Should Do More Than

Produce to Fill an Emergency"

A HOME builder has a bigger job than just producing something to fill an emergency, is the belief of N. P. Ninneman, home builder and developer of Harrisburg, Pa. "I strive to build good, wholesome houses for everyone I can—something the owner can be proud of the day the purchase is made and for many years to come," says Ninneman, who also insists on a minimum down payment of $1,000, "because anything less than that is dangerous psychologically for the buyer." A good mortgage never hurt anyone, Ninneman believes, but when the equity in a home is too small, the owner is more apt to become discouraged when "rainy days come."

That Ninneman is doing the kind of a job he expresses a desire to accomplish is evidenced by the fact that he lives with his customers in his well-planned, beautifully landscaped Highland Park subdivision on the edge of Harrisburg. At the present time about 450 homes have been completed here and he has land subdivided and improved for about 400 more. Practically all the houses in this development are in the $9,450 to $12,000 price range.

Land was platted by Carl Wild, State College, Pa., an outstanding land planner. Carlton A. Bealor, architect, working with Ninneman, has done most of the designing on the homes. Within a few months plans call for construction work to start on a commercial and recreational center to include a supermarket, restaurant, drug store, service stores, theatre, bowling alley, library, all surrounded with adequate off-street parking space.

Majority of the houses in this development are two-story square brick veneers leaning toward colonial in design. Because Ninneman believes in bringing as much of the outdoors inside a house as possible, he has varied many of the typical two-story square houses with large window areas, especially on the first floor. Large rooms are also a feature of this builder's houses. Many plus items are included because Ninneman believes in putting as much livability inside as possible. "A builder, as well as the jobber and distributor must put something into a house if he is to take anything out," is the thought expressed by him. Small recessed nooks for whatnots and telephones, deep closets, door chimes, and individual attention to the interior decoration of each house are some of the little things "that go to make a livable house." Ninneman retains a qualified professional interior decorator who consults with him on the decoration of every room in each house. For this reason housewives who look at Ninneman houses know they are quarreling with professionals when they dispute.
choices of wallpaper and color schemes.

The first 450 houses in Highland Park are basically brick veneer over concrete blocks for exterior walls. Interiors are furred out and plastered over gypsum board. All floors are hardwood except kitchens and bathrooms where linoleum is used. Bathroom walls are finished with ceramic tile or structural colored glass. Heating systems are gas- or oil-fired forced warm air. Using what is basically one floor plan on most of the two-story houses, good variety in appearance is achieved by clever window treatment plus interesting combinations of brick, stone and siding on the front elevations. There are 34 different types of brick in the houses in Highland Park. Because the builder plans all landscaping and sells the houses with basic shrubs and lawns seeded, more variety can be added to exterior appearance in this manner. Lots vary in size from 55x120 to 75x160.

Ninneman runs his own carpenter, plumbing, masonry, heating, painting, and roofing crews. Gutter work and plastering are sublet. He also operates a power shovel, bulldozer, two heavy trucks and a pre-cutting shop where much of the dimension lumber is cut to size before it is hauled to the building site. Carpenter crews use powered hand saws to cut material on the site. Ninneman is promotion minded and aggressive. He has organized a Highland Park Community Development Club through which he sponsors civic pride, interest in home ownership and good maintenance of property. Each Christmas he stages a Christmas party for children and each summer sponsors a circus. During winter months he supervises style shows for the women and usually has one masquerade for residents of his subdivision.
ANOTHER variation in the large two-story house built from a single basic floor plan.

AT right is a typical basic plan for the large two-story houses. Because the builder plants basic shrubbery and seeds the lawns, this can be used as a means of providing more variety in appearance.

TYPICAL elevation of the new small house on which Ninneman will now concentrate.

SOME floor plans of the new small house. To make it easy for women to visualize placement of furniture in his houses, Ninneman prepared attractive block floor plans with suggested layouts in color.

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<th>BRANDED PRODUCTS USED IN NINNEMAN HOUSES</th>
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<td>Knappe &amp; Vogt metal clothes closet bars</td>
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<td>Lennox forced warm air furnaces</td>
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STRONGLY framed and braced, these Mobilhomes will arrive at their new sites undamaged. Floor joists are 2x12's, ceiling joists are 2x6 throughout.

**HOMES** completed by this Bakersfield, Calif., firm are produced on a 600-foot assembly line at the rate of one per day. There are ten "positions" on the line, and ten houses are under construction at the same time. Beginning with the first step, that of placing and nailing the floor joists, the various positions include all the stages of construction up to the final swish of the painter's brush.

When the tenth house is completely finished it is towed to its destination and set upon a previously prepared foundation. In a few hours the utilities are connected and the house is ready for occupancy. The time consumed—from start to finish—is only ten days. The houses so completed are not prefabricated or different in any way from the conventionally built houses of most tract builders.

At the present time there are in operation or under construction, factories for producing similar houses in San Jose, Palo Alto, Sacramento, Oxnard and San Diego, Calif., one in Phoenix, Ariz., Reno and Las Vegas, Nev., and one in Milwaukee, Wis. All of these factories are licensees of the Mobilhome Corp. of America whose headquarters and parent plant are in Bakersfield.

Hugh Curran, energetic president of the company, believes that the sheer economics of the procedure will bring about its adoption by hundreds of builders, who, realizing that the industry has switched from a seller's market to a buyer's market, are no longer anxious to make a preliminary investment of hundreds of thousands of dollars in land and building operations.

"The average operator gets the cart before the horse," Curran says. "He builds his homes and then puts out his flags, blows his trumpets and hopes he can sell them at a profit. Our procedure is the reverse. We sell them first, and then build them." The economic picture is this, according to Curran:

A $500 deposit is taken from the buyer at the time his contract is signed. The house is completed in ten days and as soon as it is placed on the foundation, 80 per cent of the sales price is paid from funds accumulated on the assembly of the house. The remaining 20 per cent is paid when the buyer moves in. This procedure is advisable for the small contractor who may not have the financial backing to finance the production of a house and the materials for a house of this size. A small contractor may be able to sell a house at a small profit.
TEN homes at a time are under construction on this Mobilhome assembly line, and one home a day is completed. Houses move on rollers, and enough space is left between them for men to work. Materials are kept within easy reach.

sales price is available from the financing company. This means that the house is actually paid for before the material bills come due and that much of the labor can be paid from funds so accumulated.

"We get two turnovers per month, or 24 per year, or 240 houses per year," says Curran. Because the Mobilhome plant is simplicity itself, the cost of building it, including land and a starting inventory, is seldom as much as $100,000.

The houses are then pulled by a motor-powered cable to the next position, and the tenth house is ready to be delivered. The superintendent of the plant, Jim Bird, says that it requires eternal vigilance to keep all ten positions on schedule, but that he has very little trouble. If someone falls behind he gets more men to that spot in a hurry.

In position two the walls go into place. Alongside of the assembly line, in the covered portion, are jig tables and power saws. As the studs are cut to size they are put into the jigs and nailed together; siding is nailed to the exterior walls while they are flat.

(Continued on page 164)
To achieve good quality apartments that can be leased at moderate rentals is a significant problem to most builders of multiple dwelling units. The expense involved in the completion of apartments cannot be out of line with future rental returns, yet must represent an amount sufficient to build attractive units with maximum appeal to tenants. It is desirable, too, that enough money be invested to insure site improvement where the buildings are located, and that the project represent adequate land utilization without overcrowding. It is necessary to achieve this—and still make a reasonable profit.

The Homestead Gardens apartments in La Grange Park, Ill., a suburb west of Chicago, represent a model of how one building firm solved these problems.

The $3,500,000 project nearing completion by William Joern & Sons, consists of 19 two- and three-story buildings, containing 366 four- and five-room units and 176 garages. The buildings occupy 17½ acres and are located in the heart of the small suburb. Designed by Edwin H. Mittlebusher and Howard T. Fisher and Associates, Inc., of Chicago, attractiveness is achieved in the structures through limiting them to simple lines, with emphasis on the entrance motif.

Entranceways of formed concrete extend about 24 inches from the face of the outside wall, and add a pleasing break in what otherwise would be a plain, unbroken wall surface. These entrances are reinforced with steel rods that extend into the main wall. A modern touch is achieved with a splayed surface inside the top and side portions of the extended entrance walls. This modern theme is carried out by the application of glass block above the entranceways.

Apartments are arranged so that large picture windows in living rooms overlook one of five courts around which the 19 buildings are grouped. Each apartment has abundant cross ventilation and sunlight. Four playgrounds are provided. Large parking areas are reached from curvilinear streets. Stoves, refrigerators and steel kitchen cabinets are furnished, and bathrooms are attractively tiled with...
decorative glass. Rents range from $75 to $115 per month. In addition, garages are charged for at the rate of $8 per month.

Floor construction is of 8-inch steel I-beams supported by 3½ to 5-inch Lally columns resting on piers. All steel is welded. Over the beams, reinforcing wire mesh is laid, which becomes a part of a 2½-inch concrete slab. Floor covering is linoleum, asphalt or rubber tile laid in mastic.

Heat is supplied by four boilers with capacities of 100,000 to 150,000 B.T.U's. Wall convectors provided in each room may be manually regulated by tenants.

Exterior walls of brick backed up with lightweight aggregate concrete blocks, are 12 inches thick up to the second floor levels, and 8 inches thick for floors above that. Interior walls are of a sound-resistant 3-inch gypsum partition tile, furred out and finished with three coats of plaster and painted. Ceilings are perforated gypsum lath and plaster, secured to the I-beams by special clips and channels.

Some apartments and storage rooms are semi-basement. To make sure of adequate drainage for these sections of the buildings, a power lift station with two large pumps is installed. Eight-inch tile delivers waste from the semi-basement apartments to the lift station, where pumps raise it to 21-inch sewer pipes. This is in addition to a conventional system of drainage for the entire project.

The apartments are an example of good land utilization. Since the buildings occupy about one-fifth of the area, the result is a ratio of about 20 families per acre.

This project began when Charles
E. Joern, president of the building firm, conducted an extensive land use survey in the Chicago suburb. His survey revealed that more than half of the subdivided parcels zoned for multiple family use in La Grange Park were vacant and tax delinquent. It also showed the need for rental housing for families of average incomes. Before necessary amendments were made to zoning ordinances to permit construction of the apartments, a study was made as to how the best possible utilization of the land could be accomplished. Seward Mott of the Urban Land Institute in Washington acted as consultant.

Referred to as the "rehabilitation of a shop-worn community," the project has caused local businessmen to believe strongly in the future of the village, now referred to as "Tomorrow's Town." Local business has greatly increased, and Charles Joern expects the population to double. With this in mind, he has completed plans for a shopping center adjacent to Homestead Gardens, and work is scheduled to begin on this project in the near future.

**BRANDED PRODUCTS USED**

- Amfico rubber tile
- Armstrong linoleum
- Carey treated brick
- Carrara structural glass
- Crane bathroom fixtures
- Cupples A-200 Series windows
- Cyclotherm boilers
- Detroit jewel stoves
- Frigidaire refrigerators
- Haydite building blocks
- Jones & Laughlin Junior beams
- Miami-Carey medicine cabinets
- St. Charles kitchen cabinets
- Pittsburgh Corning glass blocks
- Pratt & Lambert paint
- Steeltex wire lath
- Tile-Tex asphalt tile
- Tuttle & Bailey convectors
- Van Esso light fixtures
- Johns-Manville asphalt shingles
COMBINATION of brick and siding accents horizontal lines of this conventionally built home. Price, $16,000, without lot.

Quality Homes—
Ready for Occupancy in 60 Days

From the time building permit is given until completion, firm keeps daily running cost and work analysis on each house

WELL-BUILT conventional homes, which have established a good reputation for the 35-year-old Kronenberg construction firm of Hinsdale, Ill., are regularly completed within 60 days after issuance of a building permit. Though increased speed has been added in recent years to meet demand, the quality of the homes has not been sacrificed. A substantial list of people are always waiting to buy the homes—though the firm does not advertise.

Speed is the result of close co-ordination of trades, and not the result of a change of building methods. The Kronenberg firm co-ordinates work through a running cost and work analysis which acts as a progress indicator. The analysis consists of a simplified card file system. Each foreman has a card for every workman responsible to him, and he turns his cards over to the office at the end of the week. The number of hours worked per day on a job is kept on the card. By cross-checking work progress on the homes with the number of hours worked, it can quickly be determined whether or not the work is progressing accord-
KRÖNENBERG firm seldom builds more than six speculative homes on adjacent lots, such as these which sold for about $16,000.

The father-son Kronenberg team prefers to have about 12 to 15 homes under construction at once: half contract jobs, half speculative. This way it is possible to keep regular crews more steadily employed. Last year, they completed 83 homes, and expect to equal that number this year.

Homes built speculatively range in price from $12,000 to $16,000. Footings, 10 x 20 inches, are placed four feet below grade. One-half inch rigid insulation is placed between 4-inch concrete slab floors and foundation walls. Thirty-pound felt is laid between the slab and a 24-inch layer of mill slag.

Two by four sleepers, 16 inches on center, are secured to the slab with metal anchors to provide air space between the slab and subflooring. Subflooring is diagonal.

Conventional 2x4 stud and rafter construction is used in all the homes. Exterior walls of speculative houses are pressed brick veneer; two layers of 3/8-inch dry wall are used on interiors. The first layer is placed horizontally and nailed, and the second layer is secured to the first with mastic. This leaves a clean inside surface free of nail holes. Aluminum foil backing on the first layer of dry wall provides both a vapor barrier and insulation for the walls. Ceilings are insulated with 4 inches of mineral wool.

OAK floors, and baseboard heating systems are standard in Kronenberg homes.
Reason, say builders: Clients have wider choice of environment

wool. Attractive, continuous baseboard hot water convectors are provided in all the rooms, and heat is supplied by 95,000 to 120,000 B.T.U. gas- or oil-fired hot water units.

The Kronenberg builders attempt to place clients in homes where the environment is best suited to them, and where they are likely to be the most contented. It is partially for this reason that they buy lots, whenever possible, in a radius of 20 miles around Hinsdale. "We feel that we can do much to control the future of a home owner, and that we have a personal obligation to him," Robert Kronenberg states. "And for that reason we give a lot of thought to each family who seeks to buy one of our homes."

Satisfied customers, who are enthusiastic salesmen for Kronenberg homes, prove the value of their policy. Because of their enthusiasm and despite a highly accelerated work program, the Kronenberg firm finds the demand for their homes exceeds the supply.
Small Town Dealer Develops Profitable Farm Trade

Year ‘round market created by high farm income assures retail lumber dealer a steady cash-and-carry business

Henry J. Munnerlyn, Bennettsville, S. C.

HENRY J. MUNNERLYN of the Munnerlyn Lumber Co., Bennettsville, S. C., who classifies himself as a small town lumber dealer, has developed farm trade in his area to the point where 50 per cent of his business is done through or with the farmer.

This dealer has found farm trade not only profitable but also easy to service with assurance of a minimum of complaints. The farmer as a rule drives into the lumber yard, orders and picks up his material in a truck and drives away. Contrast this with other types of service where material has to be delivered to the site. Business with the farmer is continuous because of his constant need for materials for the many repair jobs requiring his attention. The demand on the lumber dealer is greatest after the harvest when much of the repair work is done. There is no need for the dealer to give special discounts to discourage delinquent accounts because with the farmer it is an “over-the-counter” cash deal.

In discussing the status of the farmer, Munnerlyn said that it takes a smaller amount of the farmer’s produce today to obtain the goods and services that he needs than it did in prewar days. He sells fewer pounds of cotton to obtain a new barn; it takes less corn to make the payments on his mortgage. He would buy more in bulk and two thousand bushels of sorghum instead of the fifty bushels of corn he bought before.

The farm implement dealer, the feed and stock man, has increased his business. The farmer is buying more of everything, and the dealer is willing to extend credit. They are keeping pace with the new model.

Munnerlyn has expanded his product line. He has five salesmen covering the entire county of Bennettsville, which has a population of 24,000. In addition to his lumber yard he sells all types of building materials and equipment, from the smallest building tools to the largest. Munnerlyn’s business is turning a profit because he is well set up to service his customers.

In his office, Munnerlyn has a large display of all materials ranging from nails to the largest tractor. The range of merchandise is wide and includes hard-to-get items, such as wide timbers and large timbers. The display room is kept well-lit and is open to the public.

A clipping of an article that appeared in the local newspaper is displayed in his office. The article is about Munnerlyn’s success in running his business and how he has developed a market with the farmer.

LUMBER is prepared through a series of planing operations

DISPLAY room exhibits all building materials and equipment
on his mortgage, and one steer will pay for more building material than it would have done in 1940. Agriculture today has gross assets of one hundred and twenty-two billion dollars, making it America's number-one industry. The farmers have over twenty-two billion dollars in ready cash, bank deposits, currency, government bonds, and like investments. They can spend this without touching current income. They can well afford to build and remodel.

Munnerlyn operates within a 30 mile radius. This includes the town of Bennettsville. He has a potential market which touches approximately 30,000 people, the town of Bennettsville having only 7,000 people. To keep in touch with the market this dealer carries on five minute news broadcasts through the local radio station. Reflector road signs are maintained on the highways and a column in the local newspaper called Timely News, give information about building activities in the area.

In addition to being a lumber dealer, Munnerlyn carries on a good sized building business. Houses are built for sale or are custom-built according to the buyer's plans. Munnerlyn got into building because there were no general contractors in Bennettsville. A one-stop service has been developed as a result. The prospective home owner can make arrangements for the site, plans, financing and building all in one place, and by the same company. Masons, carpenters and plasterers are carried on the payroll; the other trades are sublet. Houses built for sale are kept under $10,000. The demand is concentrated in this bracket.

A reroofing and siding crew of five men are maintained regularly. The bulk of the work is done for the farmer and it constitutes a profitable part of the lumber dealer's business. A ninety day inventory of materials is kept on hand at all times. This includes everything for the building from cement, steel angles and beams, through to finished millwork. Weatherboarding, flooring and sheathing are arranged in packaged units of 1000 foot lots for easy handling. These are moved from stack to truck in one operation by use of an autolader.

A LARGE part of ten acres that comprise the material yard is devoted to the storage of rough and finished lumber. Delivery trucks kept in immaculate condition are a "must" with Munnerlyn. One of the numerous storage sheds where large supply of Sheetrock, siding, etc. are kept. Logs fresh from forests are stored prior to being run through company sawmill
BUILT for comfort, this home offers the convenience of outdoor living in warm months and even-heated rooms when it's cold.

**Demonstration Home**

**Features Radiant Heat**

Basementless ranch style home incorporates practical construction and design features that make it widely acceptable.

LOW, graceful lines of roof makes ranch style highly adaptable to many landscaping treatments. Roof covering is wood shingles.
This home combines certain features including design that are popular and adaptable to any climate in the United States. Designed and built as a demonstration home by Architect Leslie Nichols and the Pasetta Construction Co., San Jose, Calif., the house is well-insulated and incorporates a radiant heating system that would well suffice in severe cold weather. The home was sold before it was completed, but for a while the buyer kept it open to demonstrate to Californians the advantages of a modern radiant heating system and other conveniences available in ranch style dwellings.

Pasetta, who is very enthusiastic about radiant heating, said that in November they made temperature readings in the afternoon when it was 68 degrees F. outside and 70 inside. Later at night, he said, the temperature dropped to 38 degrees outside but the inside temperature did not vary more than two degrees from 70. The heating system installed provides three degrees of hot water: hot for the radiant heating; hotter for the bathroom water supply, and hottest for the laundry.

Eight inches of crushed rock were laid first in constructing the concrete slab floor. A mesh was placed over the rock, then the first portion of concrete was poured. Two layers of membrane, the top layer painted with two coats of aluminum paint, were used above the first thickness of concrete. Copper tubes were installed, then the final portion of the slab was poured. Ceiling of the home was insulated with mineral wool.

The widely popular ranch style design offers simple, graceful lines that make many landscaping treatments possible. Large window areas, plus the spacious patio in the rear makes outdoor living easy.

BRANDED PRODUCTS USED
- Bendix laundry equipment
- Crane bathroom fixtures
- Day & Night hot water heater
- Frigidaire refrigerator
- Frigidaire range
- General Electric dishwasher and disposall
- Janitrol radiant heating system
- Johns-Manville Rock wool insulation
- Libby-Owens-Ford glass and mirrors
- Permutit water softener
- Pryne & Co. fan

FLOOR plan above shows well integrated service area, and an achievement of spaciousness in the living-dining room combination. Right, Janitrol radiant heating unit used in home.
New Metal Window Frame Helps Hold

With the use of new ideas and latest building techniques, private builders make possible proper housing for low income group.

PRODUCING a housing unit that will rent for an amount consistent with the individual's income, regardless of whether he is in the low income bracket or otherwise, is a problem. This situation has been studied by builders at great length and much progress made.

It remained for Sam E. Russell, a realtor-builder of Birmingham, Ala. and his building superintendent, M. R. Christian, to put on the cap stone with a well thought out and executed contribution to low-cost housing. This is in the form of a new type metal window surround called One-Der-Window.

These windows are being used extensively in the construction of a 608 duplex rental project for negroes. This development of 82 buildings (164 living units) called Hudson Park is in the heart of Birmingham. The base rental for each unit, without refrigerator, is $35.00 per month. The sale price of the individual building containing two rental units is $7,850 exclusive of stove or refrigerator. Each building is situated on a lot 60 feet wide by 120 feet deep.

In this project One-Der-Windows are used exclusively in frame walls. They are especially designed to slide into standard stud framing before erection. The rough framing for a window opening can be set up on several saw horses and the metal unit slid into place. The whole unit can be placed in the wall assembly in a matter of minutes. The steel sash window is then quickly fastened in position against the reveal of the metal surround. This metal surround or One-Der-Window, as it is called, eliminates the need of a finished wood frame, stops, sill and casings both inside and out, thus saving from $5.00 to $9.50 per opening. The saving of erection time with this unit more than offsets its additional cost. It is painted at the time of manufacture and will withstand rough handling.

Another economy feature was employed in the exterior wall construction of these units. Steel-Tex reinforcing mesh was applied directly to the studs on the outside with rock lath on inside. Two coats of Jeterete stucco were then applied to the exterior surface. Each coat was applied in the order of stucco, exterior coat, and interior coat.

One-Der-Window frames fitted into rough bucks preparatory to placing in wall.
American Builder, August 1949.

Costs Down

Stucco 7/8 inch thick are applied to the exterior with a pressure gun. One coat of 1/4 inch thick Jetcrete is applied to the Rocklath.

Houses are placed on a 4 inch thick concrete slab, reinforced around the perimeter and under bearing partitions. The 12 inch high basement wall is placed upon a 16x18 inch concrete footing. Exterior walls are framed on the ground and tilted in position. Roof is conventional framing.

While the houses were produced for a minimum cost, there was no skimping in the character of the materials used. Nationally advertised products such as Carey asphalt shingles, Standard plumbing fixtures, Rheems hot water heaters and 50,000 B.T.U. console space heaters, together with Fenestra steel sash and Lawson steel medicine cabinets are included. The concrete floor slab is exposed and the top surface is finished with Truscon floor sealer.

The plan of a rental unit contains living room, bedroom, bathroom and kitchen, together with three closets and a small pantry.

A STREET of completed homes shown above. Variations in the houses occur in the color of stucco and roof shingles. Construction of concrete mat in foreground. Plumbing assembly is in a direct line with fixtures of each unit placed back-to-back.

FLOOR plan of two unit duplex shown at right. Warehouse below shows large stock pile of new metal "One-Der-Window" frames ready for national distribution.
Homes find ready sale when builder offers good design, sound construction and the inducement of easy payments for fully equipped PACKAGED KITCHENS

WITH all due credit to male home buyers, it is an established truism that most homes are actually purchased or rejected by the housewife. Her discerning inspection tabulates the appointments of each room when she visits a home for sale; she weighs all the points, and delivers a final ultimatum that usually means sale or no sale.

It is also true that a well-arranged kitchen with much eye-appeal can more quickly add up the score in favor of a home sale than any other room in the house. And for this reason, many builders, sensing a growing buyer's market, are placing increasing emphasis on the kitchen to make it as attractive as possible.

Currently, one of the more popular ways to accent this room is through equipping it with nationally known appliances, as this firm in South Bend, Ind., is doing. The firm, The Russell Stapp Co., first offers good design and sound construction in their homes in all price ranges. Then they make the kitchen the focal point of interest by including a dishwasher, garbage disposer, kitchen exhaust fan, range, refrigerator, steel kitchen cabinets—all offered on a plan which enables home buyers to spread payments for the appliances over a period of several years. The total cost, which amounts to no more than a few cents a day to the home buyer, is included with the regular mortgage. The kitchens, as well as all other rooms in the Stapp homes, are painted according to colors selected by the owner.

H. Russell Stapp, architect, and president of the firm, together with his son-in-law, Wilbur M. Allison, secretary, build about 25 large and four small homes a year. All are equipped with packaged kitchens, and Allison reports that they are one of the outstanding selling features of the dwellings. The homes range in price from $14,000 to $25,000.

Other attractive features included in the price of the homes are electric water heaters, built-in bathroom heaters and fans, and service on the completed home for one year after occupancy. All one and one-half story houses have expandable attics and full basements with seven feet six inches headroom.

Foundations (10-inch for masonry or 8-inch for frame walls) are poured reinforced concrete. Conventional framing, 16 inches on center, is used throughout. Roof covering is 210-pound thick butt asphalt shingles and 15-pound felt.

No two homes are alike, and exterior materials as well as design vary. Walls on most Stapp houses are
LOWER priced Stapp home has expandable attic, full basement. GARAGE of $16,000 home has extra storage space.

First Floor Plan:
- BED RM 12' x 11' 3"
- BED RM 10' 0" x 11' 3"
- LIVING RM 15' 0" x 15' 5"
- KITCHEN 12' 0" x 10' 0"
- DINING 16' 0" x 12' 0"
- BREEZE WAY 15' 0" x 18' 0"
- CEM. APRON 16" x 36"
insulated with double foil insulation and a vaporized sheathing. Three-inch cotton batts are used in the ceilings. Interior walls and ceilings are given three coats of plaster. Heat is supplied by oil-fired, forced warm air units. Exhaust fans are provided in attics as well as in kitchens.

Stapp started taking advantage of the packaged kitchen plan more than two years ago. Last year, according to Allison, the firm's Blanding's Dream House incorporating the packaged kitchen plan proved to be their largest promotion.

GLASS block is effectively used at entrance of this Stapp low-cost home to provide natural lighting in vestibule.
NEW SYSTEM

Of Forced Warm Air Heating

A COMPACT forced warm air heating unit just placed on the market supplies "blended" heat in each room by mixing room air with incoming warm air from the furnace.

Fan driven warm air, supplied at high velocity through 3½-inch, round pipes, passes into air chambers installed vertically in the walls. The larger chambers, 51 to 86 inches long and about 12 inches wide, have one grille located just above the baseboard and one about two feet below the ceiling level. As warm air is forced into the chamber, it passes behind the first grille, drawing in air from the room. Warm air from the furnace and air from the room are mixed and then forced into the room through the outlet grille. The same principle applies for smaller blenders.

One blender unit, 28 inches high, can be recessed in a wall. Another, designed for use in existing homes, is in an all-metal cabinet 32 inches in height. It sets against the wall. No wall cutting is required. Each blender unit may be adjusted to control the amount of mixed air entering the room, and adjustments will not unbalance the system, which is operated by automatic room temperature controls.

Heated air from the furnace is forced through the pipes at temperatures up to 195 degrees. Blended air has a temperature of 135 degrees and a velocity of 300 feet per minute. Each hot air run will deliver up to 10,000 B.T.U.'s per hour.

In a house where the furnace is on the first floor, the blender is installed upside-down. In this case the small pipes run above the ceiling, then down through the wall to the blender. Room air is taken from around the ceiling level, forced down and discharged at the floor level. Blenders are concealed in the wall. Where the furnace is installed in the basement, air pipes run through the wall between the studs to the blender.

Each of the heating systems incorporates a return air duct to the furnace. Normally the location of the return air grille is in the hallway. It may be installed in any inconspicuous and readily accessible place in the house, however, providing there is a free flow of air to it from most of the rooms.

Location of the blenders depends upon the shape of the room, total heat loss, exposed wall with greatest heat loss, and doors swinging into the room.
The past quarter century has marked continuous advances in the paint field—advances which have completely changed the thinking of both the industrialist and the home owner. A growing recognition of the seriousness of surface protection has led to specialization and an awareness that it is good economy to use “the correct paint for the job.”

As everyone knows, there are only two reasons for painting any kind of surface, whether indoors or out. Those two reasons are: To provide protection and beauty. Only to the degree that any paint satisfies both these requirements can it be called good, bad, or indifferent—expensive or economical. Good paint and good application always pay for themselves. For people judge by what they see, and what they see first on most structures is paint—a thin covering perhaps one one-hundredth of an inch thick.

Selecting the proper paint is always a matter of compromise. There is no best paint for all purposes but there is a best type of paint for each set of conditions. Cost, exposure, required durability, frequency of cleaning and of repainting, all influence the selection of the paint to be used. Only an expert can gauge the precise formula to meet the requirements of varying combinations of these factors; and even then final results depend upon the skill of the painter.

That is why an understanding of paints and their uses is so difficult. Reputable manufacturers can do no more than guarantee the composition of the paints they sell, the purity of the materials they offer, and give recommendations or instructions for their use. They cannot guarantee results. Only a master painter is qualified to weigh all factors and to change his formulas and procedure to meet them.

Good quality paints are those containing pigments and vehicles which are adapted to the conditions of a particular job and which leave a surface that can be readily repainted. For some jobs these paints may cost little; for others, they may be expensive. Poor quality paints contain pigment and vehicles which are not adapted to the conditions of the job, or which leave a surface that requires costly preparation for repainting. A poor paint contains useless fillers as substitutes for pigments of effective hiding power, with water, cheap mineral spirits and low grade oils used instead of a durable binder, turpentine and acceptable driers. No matter what is paid for such paints, they are extravagantly expensive. Their use on a project may have dire effects on a builder’s reputation. As a case in point, during the competitive days of the 1930’s, a development company built several hundred homes, practically all of them of wood construction, using millions of feet of lumber. Only beautiful homes of colonial and modern designs were erected. Great care was taken to make the community homes attractive. However, paint on the homes began to fail within nine months after application. Immediately sales stopped and were not resumed until after the developing company spent thousands of dollars removing the old paint and repainting the homes with a quality product. In this case the impression had been created that the lumber in the homes was of a poor grade, and the homes themselves of shoddy construction.

Initial cost must be balanced against durability, appearance, cost of repainting and similar factors. In leased or rented buildings, exteriors and public interior surfaces must look their best and the expense and annoyance of frequent repainting must be avoided. Here, long life paints are required. A durable, washable finish
American Builder, August 1949.

is also usually more desirable in ten-
ent space and apartments, because a
long life paint is less expensive in the
long run than a paint which must be
frequently re-applied. If frequent re-
decoration is to be required, a low-
cost paint will serve the purpose.
However, a durable paint should be
used as a priming coat so that the
expense of surface preparation for
repaints will be minimized. In the
choice of paint, preparation for re-
paint is an essential factor. If a paint
leaves a surface that can be readily
repainted, heavy preparation costs
will be saved. If it fails by cracking,
scaling, or peeling, so that it must be
scraped or burned off before repaint-
ing, it will prove excessively high in
cost, regardless of its price. In gen-
eral, the labor cost in painting is two
to three times the cost of materials.
Thus a 10 per cent variation in the
price of materials will change the
total cost of a job by only a small
percentage.

Today, the paint business has be-
come a chemical business, and many
of the problems which faced the early
paint industry are rapidly being re-
solved in the laboratory. The devel-
lopment of zinc oxide, titanium dioxide
and other titanium pigments and the
development of alkyd resins, de-
hydrated castor oil and the myriad of
new synthetic vehicles have made it
possible to produce paints of superior
durability, hideability, and _ color-
properties: ;

Thus, there are paints available
that are fume-resistant (will not dis-
color when sulphurous gases are
present): that contain a fungicide
that definitely resists mildew; that
include DDT as a protection against
insects. There are coatings with high
rubber content for application over
masonry, concrete and metal surfaces.
An all purpose varnish has been de-
developed that is applicable to exteriors
of the paint. Summerwood is about
times as dense as springwood,
accounting for the fact that paint wears
toff summerwood more rapidly than
springwood.

Also, to insure thorough drying of
the unusually thick coat.

To achieve these objectives, special
attention must be paid to the prime
coat. Primers for two-coat work on
new wood require four distinct prop-
erties: 1. Controlled Penetration—To pre-
vent most of the oil in the paint
from sinking into the bare wood. Excessive penetration robs the
paint film of too much oil and
leaves it weak and thin.

2. Pigment Concentration — The
ratio of the pigment to the non-
volatile parts of the vehicle should
be high if the paint is to wear satis-
factorily.

3. Quick Drying—The first coat
must dry rapidly to help check pen-
etration and secure a thick film.
Also, to insure thorough drying of
the unusually thick coat.

4. Rate of Spread—The paint must
be applied with more moderate
brushing out to obtain the proper
thickness for durability and good
hiding.

While other features might be
added, these are the essential ones.

How Paint Holds to Wood
To understand how paint holds to
wood, the structure of the wood itself
must be understood. Wood consists of
millions of tiny cells, or hollow tubes
(about 10,000,000 to the cubic inch
in soft wood). When wood is sawed
into lumber and planed, the surface
cells are partly opened up. This
provides anchorage for the priming coat
of the paint. Summerwood is about
three times as dense as springwood,
and paint has more difficulty in pene-
trating its smaller pores. This ac-
counts for the fact that paint wears
off summerwood more rapidly than
springwood.

It also accounts for the uneven ex-
pansion and contraction of wood un-
der moist conditions. Just as other
(Continued on page 170)
Dates Announced for 1950 State And Regional Dealer Conventions

ANNOUNCEMENT has been made by regional and state dealer associations of the dates for their annual conventions in 1950.

Many of the convention sessions in 1949 set attendance records, and the interest in industry affairs was generally higher than in past years. It is anticipated by association officials that the high interest will be maintained with suggestion continuing the trend of increase which it has shown for several seasons.

General business features of the annual conclaves are reports from association officials, discussion panels with audience participation, resolutions on major issues and talks by authorities on subjects of interest. Manufacturers' and dealers' exhibits are a part of most of the conventions and attract wide interest.

Next year, exhibits are planned by all except the Florida, Northern California and New Jersey associations.

The schedules for 1950 follow:


February: Middle Atlantic Lumbermen's Association, Chalfonte-Haddon Hall, Atlantic City, N.J., 1-3; Michigan Retail Lumber Dealers Association, Pantlind Hotel, Grand Rapids, 7-9; Lumber Dealers Association of Western Pennsylvania, William Penn Hotel, Pittsburgh, 8-9; Mountain States Lumber Dealers Association, Shirley-Savoy Hotel, Denver, Colo., 9-11, Wisconsin Retail Lumbermen's Association, Milwaukee Auditorium, 14-16; Virginia Building Material Association, Roanoke Hotel, Roanoke, 17-18; Illinois Lumber and Material Dealers Association, Hotel Sherman, Chicago, 21-23; Indiana Lumber and Builders' Supply Association, Murat Temple, Indianapolis, 28 through March 2; North Dakota Retail Lumbermen's Association, Fargo, 28 through March 1.


April: Mississippi Retail Lumber Dealers Association, Buena Vista Hotel, Biloxi, 12-13; Florida Lumber and Millwork Association, Palm Beach Biltmore Hotel, Palm Beach, 12-14; Southern California Retail Lumber Association, Ambassador Hotel, Los Angeles, 13-15; Arizona Retail Lumber and Builders Supply Association, Inc., Maricopa Inn, Mesa, 20-22; Lumbermen's Association of Texas, Municipal Pier, Galveston, 23-25; Lumber Merchants Association of Northern California, Ahwanee Hotel, Yosemite National Park, 26-27.

Rental Housing Booklet Prepared by CIIC

"The Postwar Rental Housing Situation" is the title of a new booklet which has been prepared by the Construction Industry Information Committee. The booklet contains facts and statistics on the nation's rental housing supply.

The booklets are being distributed by the National Building Materials Dealers Service Corp., 302 King Building, Washington 6, D.C. They may be ordered by Association members and executive committees at a small charge.
Arrangements Announced for NRLDA Directors Meeting

Headquarters of NRLDA has announced hotel arrangements for the annual board of directors meeting in San Francisco the week of Nov. 7.

This year, it is requested that reservation requests be returned to the national office. After being recorded, they will be forwarded to the Housing and Information Bureau of the San Francisco Convention and Tourists Bureau for completion. Any further reservation correspondence will be carried on directly with the San Francisco Bureau.

The Fairmont Hotel, meeting headquarters, has reserved enough rooms for officers, directors and committee-men. Deadline for reservations is Sept. 15.

Rooms are also being held at the Mark Hopkins, Sir Francis Drake and Palace Hotels.

Efforts will be made to effect a complete pre-registration for the meeting.

Hold Mass Hoo-Hoo Initiation for Red Cedar Shingle Bureau Trustees

In what is believed to be the first industry association Hoo-Hoo concatenation ever held, members of the Red Cedar Shingle Bureau's board of trustees were initiated en masse into the International Concatenated Order of Hoo-Hoo at ceremonies at Seattle in June.

Presiding at the event was LeRoy H. Stanton of Los Angeles, Hoo-Hoo Grand Snark of the Universe. He was assisted by W. C. Bell, Hoo-Hoo Custocation member of the Supreme Nine. The initiation team was composed of members from the Everett and Tacoma-Olympia Hoo-Hoo.

Bureau Secretary-Manager W. W. Woodbridge originated the event, but was unable to be present for the ceremonies.

Use of Welded Studs in Application of Roofing

A FAST method of welding rivet studs with a special lightweight gun, used widely during the war in shipbuilding, is being adapted to the building industry, where it has proved particularly successful in the application of corrugated sheet metal roofing in conjunction with steel framework. By use of the method, sheet metal roofing crews have been enabled to perform their entire job from the topside of the structure, an important factor in increasing the speed of operations. The system is applicable to either old or new buildings.

The gun, which is easy to operate, end-welds studs to the steel purlins. The process is very rapid. The welder loads the gun with a stud, places it in position and presses the trigger. A lightweight template is used to locate the studs correctly.

The first step in application is the welding into place, through the template, of the rivet studs. The corrugated sheets are then placed into position. A worker, striking with a rubber hammer at each stud location, drives the stud extensions through the crown of the corrugated sheets. The job is completed by another worker who, with a rivet-set and machinist's hammer, upsets and rounds-off the rivet stud.

The gun welds studs from COMPOSITE stud for applying corrugated aluminum roofing and siding is made with cadmium-plated, flux-filled mild steel base and aluminum insert. Aluminum washer is placed over stud before stud is riveted over to secure sheet. This construction minimizes possibility of electrolytic action

¼ inch to ¾ inch in diameter, up to 9 inches in length. It operates from a standard DC welding generator, suited to welding the size stud required for the job. Welding time is regulated by a timer control box which is an integral part of the apparatus. For an ordinary operation, the timer control is set only once.

Studs are flux loaded on the welding end, with flux distributed to permit welding from varied positions. Porcelain ferrules are used with each stud to confine the arc and to control the weld fillet.

The stud welding method can also be used in application of asbestos cement board siding, a type of wall surface which has proved especially suitable for small industrial buildings.

In mounting the insulating fiber board, a threaded stud is end-welded through a hole in the material to the steel frame surface. A flat head zinc die cast nut and flat head washer are then screwed down on the stud to secure the material.

Holes for welding the studs may be pre-drilled on the ground or drilled after panels have been placed in position.

(Data and illustrations furnished by Nelson Stud Welding Div., Morton Gregory Corp., Lorain, Ohio)
How to Obtain Quality Work

With Power Hand Sanders

It is necessary to sand plaster in order to prepare the surface for coating such as glue size, paint or wallpaper. To obtain a well-adapted surface for finishing the plaster, use a power hand sander, equipped with a standard sanding pad and a garnet or aluminum oxide, open coat cabinet paper. The grit size will range from 0-80 to 4/0-150, depending on the initial condition of the surface and the degree of smoothness desired. If removable type dust fillers are used, they should be tapped out frequently to prevent excessive accumulation of dust on filter element.

Sanding Joint Cement In Dry Wall Construction

In dry wall construction, which consists of nailing wallboard, usually of the gypsum type, to the studding, the wallboard is prepared for painting or wallpapering in the following manner:

Place joint cement in the recessed edge where one sheet of wallboard abuts the next, filling the recess completely with cement. Place perforated tape, made for this purpose, in this cement-filled, recessed joint. Cover tape with a thin layer of cement, bringing the joint flush with the face of the board, smoothing it as evenly as possible with trowel. Fill any nail holes with cement at the same time and allow it to dry (usually overnight).

The costliest, most time-consuming and most tiresome part of dry wall construction is the hand sanding of the taped joint. A power hand sander is ideal for this job. Use a 2/0-100 aluminum oxide, open coat, cabinet paper with standard sanding pad to smooth cement over joints and nail holes.

Apply second coat of cement, feathering edges out a few inches beyond the edges of the first coat, and machine sand with a 4/0-150 aluminum oxide, open coat, cabinet paper and standard flat pad. Cement and sand the nail holes a second time. Apply a third light coat of cement to compensate for any shrinkage and to level any defects, feathering this coat out an inch or two beyond the second coat. Sand lightly with a 5/0-180 aluminum oxide cement and sand the nail holes a third time.

Usually after the joint is sanded and dusted, a coat of a lime-locking primer is applied to condition surface of the wallboard for painting; or, if wallboard is to be papered, a coat of varnish size is applied.

Finishing Interior Woodwork With Oil-Base Paint or Enamel

Before applying finish to interior woodwork, sand all surfaces perfectly smooth, using 4/0-150 or 5/0-180 grit garnet or aluminum oxide open coat paper and standard sanding pad. Spray or brush on first coat and allow to dry overnight.

For best and quickest results, sand undercoat until smooth, using a standard sanding pad with 5/0-180 grit garnet or aluminum oxide finishing paper. Dust off surfaces and fill all open joints; nail holes and any other imperfections with putty. When puttied areas have dried, sand smooth with power hand sander, equipped with standard sanding pad and 5/0-180 grit garnet or aluminum oxide finishing paper.

(Data and drawings through courtesy of Sterling Tool Products Co., Melrose Park, Ill.)

SHOWN at left is use of power hand sander in rounding and chamfering plywood edges. Power tool (center) takes place of hand method of sanding taped joint in dry wall construction. Right, note ease with which power sander is used in hard-to-reach areas. Spray or brush on second undercoat and follow same drying and sanding procedure as for first. Dust surface and then spray on lacquer enamel; or brush or spray on an oil base enamel.

If a paste form of wax is used, apply by hand and rub with power hand sander, using a special rubbing pad absolutely free from abrasive particles. If liquid wax is used, apply and rub by hand with clean cheesecloth. Rounded and Chamfering Plywood Edges

For plywood edges, use power hand sander with 120 grit aluminum oxide open coat cabinet paper. For a flat bevel, standard sanding pad is used, holding machine at desired angle of chamfer. On rounded edges, use standard sanding pad, moving machine around edge until desired radius of curvature is obtained; or use sponge rubber pad, applying pressure proportional to desired size of round, it being necessary to move machine only slightly around edge.

With the soft, sponge rubber pad, particularly, abrasive paper may tear, unless long dimension of pad is used, or unless care is taken to use only slight pressure until sharp edge has been knocked off.
How to Make Metal Book Ends

To make book ends from any stiff metal, bend the metal as illustrated in diagram. Drill three holes in the turned under lip, through one thickness only. While the metal is clamped in position, fill holes with lead solder. If desired, finished book ends may be painted or decorated.—George T. Mann, Ft. Myers, Fla.

How to Make a Door Setting Rig

The variation that often occurs between the width of door opening at the head and floor can be eliminated by use of adjustable rig placed in position between jambs. In conjunction with rig a large wood square, together with level, is used in preference to the carpenter’s steel square. This brings the whole frame into line when plumbing the hanging side of door frame.—H. Cole, Vancouver, B.C.

How to Make a Sidewalk Edger

A SIDEWALK edger may be made by using an old hoe handle and a flat piece of steel from an old square point shovel. Anneal shovel and cut to shape as shown; then heat edge and turn one-half inch to form shaping edge for tool. Rivet a piece of 3/16 x 1 1/2 inch flat stock to tool and bend shank of hoe handle to fit. Secure handle with one-fourth inch bolt.—J. G. Caldwell, San Mateo, Calif.

How to Make a Strong, Light Ladder

CLEAR 2x4’s are used in making rails for ladder, 13/16 inch grooves being cut for each rung as shown; 1x3 inch rungs are 12 inches O.C. Drill a 5/16 inch hole in each end of 2x4 rails and insert one-fourth inch carriage bolts in holes. Eight gauge galvanized wire is then countersunk into bottom face of each 2x4 rail and extended for entire length of rail. Wire is bent tightly around carriage bolts and extended over to top of rail where it is securely fastened to 2x4 with bolt. Countersunk wire is stapled to rail approximately 24 inches O.C.—J. G. Caldwell, San Mateo, Calif.
How to Make Wide Boards for Shelving

A SIMPLE way to make wide boards is to drive nails 24 inches O.C. about halfway into one board, and then remove heads, place boards flat on floor with one against wall and drive the two edges together.—H. W. Myers, Allegan, Mich.

How to Drive Nails In Siding Application

IN applying bevel or other siding to wall surface, drive nails at a slightly upward angle. This method causes surface water to drain from nail head thus reducing checking of the board and loosening of paint. Do not drive nail too near bottom edge of siding, as this may split the siding underneath.—H. B. Johnson, Rochelle, Ill.

How to Schedule Trim for Each Room

WHEN job is ready for trim, put all door jambs in one room where ample working space is available. Using blueprint, go through house and mark location and hanging position (see diagram) of each door. Then mark and cut jambs for hinges.—J. G. Caldwell, San Mateo, Calif.

How to Hang Overhead Garage Doors

TIME-SAVING way of locating rear hangers on tracks: Since door is square, if pushed to open position and held by wedges, it will automatically locate rear hangers. Level tracks and lag bolt into position and fasten rear bumpers.—J. G. Caldwell, San Mateo, Calif.

How to Make a Convenience Rung for Ladders

THIS middle rung, which permits a change of position for convenience, is made of a length of steel rod bent as indicated. It hooks over one rung and lies flat against the one below. When hung from back of ladder it swings clear of workman and serves as holder for tool box, etc. —H. Moore, Hamilton, Ont., Canada.

American Builder will pay $5 for your favorite short cut or job pointer. Send rough draft to Architectural Editor, American Builder, 79 W. Monroe St., Chicago 3, Ill.
How to Make Templates for Bevel Cuts on Rafters

This template is designed for laying out bevel cuts for an 8 to 12 pitched hip roof. Templates for any pitch roof may be made same way.—C. C. Boles, Saginaw, Mich.

How to Make a Built-up Wood Beam

In remodeling a commercial building where a load bearing partition was removed, Edward Grabowski, Toledo, Ohio, shored the ceiling and installed a beam built up of two 2x12's with a diagonal 2x4 in between. This builder felt that greater load bearing qualities could be obtained from this type beam than from three 2x12's securely spiked together.

Modern Design Expressed by Generous Use of Glass

By R. J. Alexander

An interesting and important development in both design and livability is the widespread and extensive use of glass in residential building.

Single windows have increased from the standard 24 inch by 24 inch two-light sash to an average of 28 inch width glass. The old cottage sash of 44 inches by 16 inches over 44 inches by 40 inches has become the picture window of today. Designers have gone even further than this by making the entire exposed wall of a room entirely of glass.

Manufactured double glazing units which provide for two thicknesses of glass with an insulated, sealed air space between, eliminate the use of unwieldy storm sash and the problem of their storage. The use of a single thickness of glass in a picture window and large areas of stationary sash many times create a problem in ventilation and condensation.

The details on the opposite page show how one architect solved the problem of glazing. Large double-glazed sash are flanked by ventilating louver vents. The sash and louvers blend well into the over-all design of the house, a design admirably suited to today's living.
NO. D.57 - DOUBLE GLAZING WITH LOUVER VENTS


Detail at "A."


Detail at "A."

Friction stays.

Glass & Louver.

Metal clips.

HORIZONTAL SECTION Thru Sash & Louver Vent.

Header

Spring bronze weather strip.

1 3/4" x 1 3/4"

Bolt for door pull.

1" x 3 4"

Plywood

Doors hinged at bottom. Opening regulated by adjustable friction stays.

Note: Height equally divided for 4 doors.

Insulation board.

Metal clips.

Glass.

Furring

Vean screen

Louver.

HORIZONTAL SECTION Thru Sash & Louver Vent.

Detail at "A."

Friction stays.

Glass & Louver.

Metal clips.

HORIZONTAL SECTION Thru Sash & Louver Vent.

Detail at "A."

Friction stays.

Glass & Louver.

Metal clips.

HORIZONTAL SECTION Thru Sash & Louver Vent.
NEW PRODUCTS
Offered by Manufacturers

CEILING FAN
NEW PRODUCTS
Ceiling fan, Ventrola 30-C, is powered to move 500 cubic feet of free air per minute, and in average home changes air in several connecting rooms many times an hour. Induction type motor is shielded to prevent radio or television interference. Operation is with 110-120 volts, 60 cycle A.C., giving a speed of 1,600 r.p.m. to fan which has 10-inch blade. Required ceiling opening is 11 1/2 inches. National Appliance Co., 4814-18 West Vernor, Detroit, Mich.

DRILL JIG
Drill jig, designed to cut door lock installation time, weighs 2 1/2 pounds. Made of cast aluminum with steel inserts, it clamps on quickly and holds securely, assuring exact right angle holes for a perfect lock fit. Spacing screw permits accurate adjustment on door thicknesses from 1 1/2 to 2 inches. Kwintset Locks, Inc., Anaheim, Calif.

ELECTRIC HAND SAW
The Maxaw, a new lightweight electric hand saw, is now being manufactured by Fred W. Wappat, Inc., Mayville, N. Y. The Maxaw has "big saw" features found on no other lightweight 6 inch electric handsaw. It has a 6 1/2 inch blade that cuts to a full 2 inch depth on square cuts, and cuts 2 inch dressed lumber at a 45 degree angle. Depth adjustment, built-in as an integral part of the Maxaw, is from 3/16 inch to 2 inch. Bevel adjustment, also an integral part of the saw, is from 0 to 45 degrees.

ALUMINUM WINDOW
New awning-type aluminum window has patented "Auto-Lok" hardware which closes window automatically, and keeps it closed tightly to permit effective weathering. When vents reach closed position, a lock-

CEILING FAN

DOORKNOB LOCK
Doorknob locks can be master-keyed or keyed alike. Outer knob spins freely when locked, and cannot be jammed or sprung. Quarter turn of milled-type key unlocks outer knob so that it will draw latch. Only outer knob is controlled by the mechanism; inner knob opens door at all times. In statuary bronze, polished brass, dull brass, polished chrome and dull chrome. Especially adaptable to apartment houses, office buildings, motels and resorts. La-Belle Industries, Inc., Oconomowoc, Wis.

ADJUSTABLE LAVATORY FIXTURE
No. 703 Shermran adjustable lavatory fixture fits lavatories requiring a two-valve central spout combination. Special adjusting features help plumbers overcome many difficulties encountered in replacing fittings on old-style lavatory sinks. Swivel on spout tail-piece permits location of spout forward or backward about 1 1/2 inches. Slip-joint extension tubes allow maximum spacing of 12 inches between valves. H. B. Sherman Manufacturing Co., 22 Barney St., Battle Creek, Mich.

UPWARD ACTING GARAGE DOOR
No. 77 "Over-the-Top" upward acting garage door unit will fit openings eight feet wide by six feet eight inches high. Requires two inch headroom. Door of 24-
Their Good Looks
Your Good Will

Ro-Way Doors are built to keep both

When you specify Ro-Way Overhead Type Garage Doors, you have four assurances.

1st. Every Ro-Way Door is built completely in the Ro-Way plant, even to the power-metered springs, double-thick tread rollers, and friction-reducing track.

2nd. Exclusive built-in features give extra values in service and satisfaction.

3rd. All hardware is Parkerized and painted after fabrication to give Ro-Way Doors longer life and lasting good looks.

4th. A carefully selected network of National Distributors covers all principal cities. Installations are carefully made by them to protect your reputation and ours. (See your Classified Telephone Directory for names and addresses of Ro-Way Distributors.)

Yes, Ro-Way Overhead Type Doors for all commercial, industrial and residential installations are designed and built to "keep Their Good Looks and Your Good Will."

ROWE MANUFACTURING COMPANY
754 Holton Street, Galesburg, Ill., U. S. A.

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CUPBOARD DOOR STOCK  AB8923
Made in seven widths starting at one foot and increasing at two-inch intervals to two feet, and any length up to eight feet, cupboard door stock is 3/4-inch thick with patented insert stiles of solid wood on both edges. Matching face veneers cover both faces of stock. Woods used include two-wood, African mahogany, maple, white oak, birch and rotary cut and vertical grain fir. Made in standard cupboard door widths, it needs to be cut only to desired lengths. M and M Wood Working Co., Columbia Blvd., Portland, Ore.

FLOORING MATERIAL  AB9119
Roc-Wood flooring is made of hardwood fibers, chemically treated and bonded together with plastic. In application, dry material is mixed with gel until reaching consistency of coarse wet sand. Wet material is placed on floor, levelled off and trowelled to smooth surface. Can be finished by sanding, varnishing and waxing. Roc-Wood Floors, Inc., 3321 S. Pulaski Rd., Chicago 23, Ill.

CALKING COMPOUND  AB9115
"Nu-Calk" is a non-staining off-white prepared plastic compound, not subject to drying, cracking and hardening. Qualities of elasticity nullify effects of weather change and permit expansion and contraction to form bond with surface to which applied. Macklanburg-Duncan Co., Oklahoma City, Okla.

WALL CRACK FILLER  AB8934
"Shel-Plas," wall crack filler, allows user to repair as he paints. No shellac, sealer, or sanding necessary. May be painted over immediately. Works well under all flat paints and oil flat. Fills grain of plywood sufficiently so that it can be painted without grain showing. May also be used in caulking gun to seal doors, windows. Benwell Corp., 3010 Book Tower, Detroit 26, Mich.

COMPLETE KITCHENS  AB8939
Complete General Electric kitchen designed to fit into a space 60 inches wide, 25 inches deep and 84 inches high are available to builders for small home and apartment projects. Compact kitchens include a range, refrigerator, three storage cabinets and a stainless steel sink top. AP-1 range has three five-heat Calrod surface units and full-size oven and broiler. Refrigerator has four cubic feet of space. Shelf area totals 8.7 square feet. Sink has chrome-plated faucet and a duo-strainer.

METAL TRIM  AB8912
Stipple embossed aluminum trim is used around windows and doors in applying lap-shingle design insulating siding. The side fitted against window or door casing is tapered from top to bottom, completely covering edges of siding. Trim pieces may be applied as each siding panel is nailed into place or upon completion of entire job. Trim is installed by slipping it under the exposed lap of the course above and fastening lower end with a single nail.

FLUORESCENT FIXTURES  AB8938
New and improved Lytron fluorescent fixtures include: "Solo-Stall" hanger designed to reduce installation time; a new 25-watt light; two and four light Lytrons with slip-on, snap-on parts; a new one tube bracket with decorative shield, and a new "Circleline" series. One light Lytrons are for use in kitchens, baths, playrooms, offices, stores; over work tables, mirrors, under cabinets, in corridors and booths. Have ceramic-textured glass shield. Two-light Lytrons have slip-on covers for easy installation. Four-light units have slip-on covers plus snap-on die cast ends. No screws required. Circleline series is hand-somely designed for modern or traditional rooms. Lightolier, Inc., 346 Claremont Ave., Jersey City, N.J.

CARBIDE GLASS DRILL  AB8930
Carbide tipped glass drills in sizes from 1/8 to 1/2-inch have two-flute design for easy sharpening. Built to quality standards for industrial and home use in drilling glass, tile and many other ceramics. Super Tool Co., 21650 Hoover Road, Detroit 13, Mich.

SECTIONAL GARAGE DOOR  AB8919
Sectional, pine upward-acting garage door incorporates hardwood plywood panels, available in sizes 12x12 feet and smaller. Has ball-bearing rollers and pulleys. Joint between sections rabbed so that they cover each other, making door weather-proof and dust-proof when closed. Section next to top constructed so that four glass panes may be used instead of wood panels. Overall length of 121/2 inches and side room of 31/4 inches required for track assembly. Hall Enterprises, Casco, Wis.

SELF-PRIMING PUMPS  AB8932
Six stationary models cover range of capacities from 10 to 300 gallons per minute against heads up to 250 feet. One portable type has capacity range of 10 to 90 gallons per minute against respective heads of 80 to 15 feet. Stationary types are for general industrial pumping services, irrigation or dewatering service and sump or bilge pumping. Portable type used for wide variety of drainage or water handling. The Deming Co., Salem, Ohio.

ELECTRIC RANGE  AB8907
Features of L & H Supreme Deluxe Electric Range include two full size ovens, each with automatic temperature control; four variable speed Monobrite surface units with heat volume control; and two seven heat Monobrite surface units. Has automatic time control for right oven, appliance outlet, at two left surface units. Left oven is manually controlled. One-piece body is electrically welded and finish is porcelain enamel. A. J. Lindemann and Hoverson Co., Milwaukee 7, Wis.

(Continued from page 122)
For many years intensive research on the cause and prevention of leaky brick walls has been conducted by various organizations and individuals, and much vital information has been gathered.

Most authorities agree that workmanship is the most important thing involved, but until now, no one has attempted to explain and illustrate the difference between good and bad workmanship.

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WOOD SCREW PACKAGES  
**AB8904**
"Tape-Pakt" wood screws are applied to strips of printed tape which give data on size, type and finish. Screws, in 59 sizes, are made of steel and brass, with flat, round and oval heads. Finishes are zinc plate, blued and chrome. National Lock Co., Rockford, Ill.

OIL WATER HEATER  
**AB8917**
Coleman automatic oil water heater burns straight run No. 1 fuel; can heat water up to one and a half times its capacity per hour. Has special low-draft burner. Galvanized tank is tested at 300 pounds pressure per square inch. Draft meter eliminates excessive drafts, reducing heat waste. Storage capacity is 30 gallons; over-all height, 54'/2 inches; weight, 197 pounds. The Coleman Co., Inc., Wichita 1, Kas.

GUN TACKER  
**AB8914**
Gun Tacker T-32 has double-leverage and safety lock, and uses three different staple lengths: 3/5, 1/4, and 5/16-inch. Many-purpose tool is made of steel, and is precision locked. Arrow Fastener Co., Inc., 30-38 Mauler St., Brooklyn, N. Y.

COMPACT OIL FURNACE  
**AB8929**
Unitized Hi-Furnaces, incorporating walk-flame oil burner, furnace, blower, air filters, and optional humidifier in single compact cabinet, are offered specifically for small home installations. Oil burner contained entirely within unit. Operates at low oil rates. Timken Silent Automatic Div., Jackson, Mich.

HOME FREEZER  
**AB8918**

CONDUCTOR PIPE HANGER  
**AB8909**
Galvanized sheet base of new hanger can be attached to buildings with either screws or nails; hanger is designed for easy installation and removal. Wire loop holds conductor pipe securely, at sufficient distance to permit painting behind pipe. Mid-States Steel and Wire Co., Crawfordsville, Ind.

FLOOR FURNACE  
**AB8913**
New "Superflame Twin" oil burning furnace may be installed under floor; requires no basement or air ducts. Has heat output of 59,000 B.T.U.'s per hour. Is fully automatic, thermostatically controlled. Two safety bulbs stop fuel flow if furnace becomes overheated. Has two "Triple-Combustion" burners and two combustion chambers. One burner is used in mild weather, two in cold. Manufactured with either dual wall registers or floor registers. Queen Stove Works, Inc., Albert Lea, Minn.
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Inasmuch as it is our intention from time to time to review worthwhile works of a more or less specialized nature, we can think of no better little book with which to start than this newly-published guide to the crafts of painting and decoration.

The volume is arranged in nine sections, each dealing with a separate subject. The first part on materials tells about pigments, oils, solvents, synthetic resins, other basic coatings, and accessory materials; next comes tools and equipment; then standard painting specifications and procedures; then an examination of paint failure and ways to avoid it; after this there is a simply written presentation of the subject of color; followed by chapters on wallpaper hanging; estimating and cost finding; there is also a helpful seventeen-page dictionary of trade terms; and finally a brief historical supplement that provides the student with a handful of facts about the age-old trade of painting. Did you know, for example, that the ancient Greeks used the tails and feet of fur-bearing animals for paint brushes? Or that in 17th Century England the practice of stencilling was downright unlawful since the licensed company of Paynters and Steyners considered it "false and deceitful work and destructive of the what and the how of painting but also explains the whys—a real asset to the apprentice. It should not be assumed, however, that this is just another textbook. It is, in fact, a valuable pocket-sized reference work that contains a wealth of practical information generally useful to all journeymen, painters, and painting contractors.


While on the subject of books dealing with matters of specialized interest in the building field, we would like to call attention to a small yet comprehensive volume that explains by word and picture just how to use a slide rule properly.

We recommend THE SLIDE RULE not because it is a new book—it was first published in 1939 and revised last year—but because it contains clear, concise instructions that are nicely keyed with pictures of actual slide rule settings. By following these simple directions the average person can soon learn to use the slide rule effectively for making calculations involving multiplication, division, proportion, finding powers and roots. Instructions are included not only for the standard Mannheim rules but for the various types of duplex and circular slide rules as well. Since it has been demonstrated that there is nothing difficult or mysterious about using a slide rule, there is no reason why it should not prove to be one of the best time saving tools in the builder's kit.

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Here's an easy way to get new essential information that will help you increase your income. Every volume a standard work by leading authority. Remember—it's the informed builder who is the successful builder.

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1. THE BUILDING ESTIMATOR'S REFERENCE BOOK and Vest Pocket Estimator (not sold separately). By Frank R. Walker. Most complete estimating and reference book. 1,687 pages, 803 illus. $10.00

2. SIMPLIFIED CARPENTRY ESTIMATING. By J. W. Wilson and Clell M. Rogers. Basic text with handy tables. $3.00

3. THE BUILDING TRADES HANDBOOK. Ready reference on building subjects. $1.75

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6. HOUSE CONSTRUCTION DETAILS. Compiled by Nelson L. Burbank. Detail drawings, photographs and text cover every step in house construction. $4.50

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11. STEEL SQUARE POCKET BOOK. By Dwight L. Stoddard. Illustrated and worked-out problems of laying out rafters. $1.25


13. SIMPLIFIED DESIGN OF ROOF TRUSSES. By Prof. Henry Parker, M.S. Basic design principles of structural members. $3.25

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24. MODERN METHODS OF HOME HEATING. Standard systems of heating homes and small buildings. $ .50
25. HOW TO DESIGN AND INSTALL PLUMBING. Describes modern plumbing practice. $3.50
26. STANDARD PLUMBING DETAILS. By Louis J. Day. Drawings showing connections required and how they fit in plumbing installations. $7.00

PAINTING AND DECORATING

27. PRICE GUIDE. By the Painting and Decorating Contractors of America. $1.25
28. PAINTING AND DECORATING CRAFTSMAN'S MANUAL. Sponsored by the Painting and Decorating Contractors of America. $2.00

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29. HANDBOOK OF BRICK MASONRY CONSTRUCTION. By John A. Mulligan. For mason contractors, estimators and construction engineers. $5.50
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604—UPWARD ACTING DOOR HARDWARE—A
bulletin describing pivot type and jamb type hardware
for residential and light commercial doors has been
published by the Holmes Manufacturing Co., 211 X
Madison Ave., Los Angeles 4, Calif. Installation de-
tails are illustrated and a schedule indicating overhead
clearance for the various types of hardware is included.

605—OIL FLOOR FURNACE—Six-page, four-color
describes in detail the H. C. Little oil-fired floor
furnace. Included are complete specifications, cross
section detail, and a cutaway photo of the product with
thirteen important features shown. Offered by H. C.
Little Burner Co., San Rafael, Calif.

606—SCHOOL BUILDINGS—An eight page bro-
cure published by the Luria Engineering Corp., 500
Fifth Ave., New York 18, N.Y., contains drawings and
floor plans of six Luria schools, including both mod-
ern and traditional styles of architecture. A descrip-
tion of the standard units is given.

607—"HOW TO SELECT YOUR WATER SYS-
TEM"—A 32-page booklet published by The Deming
Co., Salem, Ohio, explains what to look for in a pump,
and how to protect water supply against contamina-
tion. The firm's line of pumps are illustrated.

608—WATERPROOFING MANUAL—Comprehen-
sive and instructive "Exterior Waterproofing Manual"
is available from the Wurdack Chemical Co., 4956
Fyler Ave., St. Louis, Mo. Contains 29 pages of infor-
mation on specification, method and amount of appli-
cation, costs and other waterproofing factors.

609—FARM BUILDINGS—"Farm Building Con-
struction Book No. 116," published by Starline, Inc.,
Dept. 116, Harvard, Ill., contains technical information
and more than 100 drawings covering construc-
tion details of modern barn buildings. The 65 page book
also provides comprehensive treatment of insulation
and ventilation for farm buildings.

610—BRONZE MOULDINGS—A fully illustrated
pamphlet issued by the Loxit Moulding Co., 1217 W.
Madison Ave., Los Angeles 4, Calif. Installation de-
tails are illustrated and buyers. It contains a number of useful tables and
drawings.

611—OUTDOOR FIREPLACES—"How to Enjoy an
Outdoor Cook-Nook," a 52 page book published by
the Majestic Company, Huntington, Ind., contains
drawings of 11 fireplace designs, instructions for build-
ing outdoor fireplaces of varied sizes and styles and
menu and recipe suggestions for outdoor meals.

612—"SOUTHERN PINE DIMENSION . . . ITS
PROPERTIES, GRADES AND USES"—This book-
et, published by the Southern Pine Association, New
Orleans, La., is designed to assist designers, specifiers
and buyers. It contains a number of useful tables and
drawings.

613—TRUSSED RAFTERS—A new leaflet, prepared
by the Timber Engineering Co., 1319 Louisiana St., N.W.
Washington 6, D.C., gives detailed information about
clear span Teco trussed rafters, including assembly,
erection, design and mechanics.

(Continued on page 134)
Your customers will thank you again and again for installing the Electric @ Quikheter in their new or remodeled homes.

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Catalogs


615—TOWEL BARS—"Chrome-Forever" towel bars, manufactured by General Chrome, Bridgman, Mich., are described in a folder issued by the firm. The folder illustrates uses of the towel bars and gives information about installation.

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CORRECTIONS

In the June issue, item 579, page 140, name of manufacturers whose locks are described in their catalog "Preview" is the Best Universal Lock Co., Inc., 10 North Senate Ave., Indianapolis 4, Ind.

New address of the Independent Pneumatic Tool Co. is Aurora, Ill. Last month the firm's old address was published in connection with a catalog describing their "Silver Line" of Thor portable electric tools.

616—SHOWER EQUIPMENT—A catalog prepared by the Fiat Metal Manufacturing Co., 1205 Roscoe St., Chicago 13, III., contains illustrations and descriptive data for the company's line of shower cabinets, doors, receptors and accessories. It includes battery installation details, roughing-in details and construction features.

617—APPLICATION OF ASPHALT ROOFING—a summary of recommended application practices for various types of asphalt roofing is given in new booklet, "Good Application Makes a Good Roof Better," published by the Asphalt Roofing Industry Bureau, 2 West 45th St., New York 19, N.Y.

618—HEATING EQUIPMENT—New revised edition of 28-page catalog issued by the Burnham Corp., Boiler Div., Irvington, N.Y., is titled "Dependable Heating Equipment." Illustrates fully the entire line of Burnham products, including boilers, radiators, radiant radiators and Base-Ray radiant baseboards.
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TECHNICAL GUIDE
for Builders and Craftsmen

Framing of Door and Window Openings

Here's How!

While double-framing of door and window openings is a requirement in most building codes and for FHA approved construction, often the installation of the extra studs below the header is a symbol of compliance rather than an added element of strength and support to the header and the construction above it.

Usually the header is installed first, and the inside 2x4 inch studs are cut to support it, but they often actually fail to reach the header.

In order to save time and cost of material, the use of a 1x4 inch member on each side of the studs can be used instead of the usual 2x4. Either rough 1x4's may be used or 1x4 roofers, which must be measured and marked exactly for each side below the header.

When sprung into place as shown in the accompanying sketch and nailed to the standing stud, the combination of 2x4 and 1x4 is stiff and rigid and the trussed header will support the load of wall above without settlement.

The strength of the 1x4 in compression on end may be more than the shear-strength of the end of the header bearing on it, both being capable of sustaining more than the headers share of the load.

The real value of the 1x4 used in this manner in addition to the better type of construction obtained, lies in standing the 1x4 as well as the studs on the sill or plate below and not on the flooring. It permits nailing the studs into the sides of joists thereby obtaining greater rigidity to the wall construction. This type of construction applies to door and window openings alike. Erwin L. Schwatt, Atlantic City, N.J.
 Builders like Kwikset's low price, good looks, and rugged strength

Certainly, the price is low—because engineered craftsmanship makes volume production practical. You save money on the job, too...because easy 2-hole installation keeps time and labor to a minimum.

Good looks and ruggedness are built in! Kwikset working parts are of brass stampings or pressure-cast Zamak No. 5, the rugged, high-test* alloy that stands up under years of heavy service. External parts are handsomely designed, beautifully hand-finished in polished or satin brass or chrome, or satin bronze...authentic for every traditional or modern residence.

Materials and workmanship are unconditionally guaranteed!

Available for standard residential installations, with or without deadlatch. Write for file-size catalogue.

* Tensile strength, 45,400 lbs./sq. in.; compression strength, 87,000 lbs./sq. in.; impact strength, 18 ft. lb.

Manufactured by Kwikset Locks, Inc., Anaheim, California

Distributed by PETKO Industries, Inc.
1107 East Eighth Street
Los Angeles 21, California

Please send me complete information on Kwikset locksets and name of my nearest dealer.

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Federal Government Enacts
PUBLIC HOUSING LAW

Congressional action in July made public housing in the United States an established fact. There are those who are convinced that the passage of the Housing Act of 1949 constitutes the first and irrevocable step on the road to complete socialization. Similar laws in other countries have led to the liquidation of private building and the socialization of all housing. The results in those countries have been depressing. The United States is not of the same mold, however, as the famous Russwin all-steel rack and pinion construction which assures smooth, positive, trouble-free action... the automatic throw-off safety feature (in case of accidental closing of door)—in a lockset that's easy to install.

See your Russwin dealer. Buy the hardware backed by over a century of experience—RUSSWIN, the "good will builders" in builders' hardware. Russell & Erwin Division, The American Hardware Corp., New Britain, Conn.

As this is written (early in July) the Housing Act of 1949 needs only the signature of President Truman to become law. No one doubts that the President will sign the Act. Following the passage of H.R. 4009, which called for 1,050,000 public housing units, a joint committee of the Senate and House agreed to a limit of 810,000 units in the next six years. That amounts to 135,000 units a year. The President, however, is authorized to accelerate construction from 135,000 to 200,000 units a year, but with the total limited to 810,000 units in the next six years.

Federal subsidies are limited to $308,000,000 a year for 40 years, but under the acceleration provision an additional amount up to $55,000,000 a year may be pledged. A revolving loan fund of $1,500,000,000 is authorized for interim short term loans. The maximum allowable cost limit is $2,500 a room. That is exclusive of land, utilities, site preparation and equipment. Actually, the bill limits the cost per room to $1,750, but provides that where the Administration finds that the $1,750 limit is not feasible and that there is acute need for such housing, the cost per room may exceed $1,750 by amounts up to an additional $750.

With certain exceptions it is necessary for the local governing body to agree with the local public housing agency that within five years following the completion of a public housing project a number of unsubsidized and insanitary dwelling units substantially equal to the number in the project will be eliminated. Fixing of maximum income limits is left to the Authority to determine eligibility for admission and continued occupancy of public housing units is a function of the local public housing agency. Recommendations are subject to prior approval of the Authority, which also may require the agency to review and revise maximum income limits if the Authority decides that changed conditions make the revisions necessary. Certain priorities are established for the selection of families to be admitted to the low-rent public housing units. Periodic investigations are required to determine eligibility for continued occupancy. Eligibility preference is given to veterans of both wars. First preference is to families of veterans with service-connected disabilities; second to families of veterans who died as a result of service, and third to other veterans. The Authority may make no contract with a local public housing agency for low-rent public housing unless the agency has demonstrated that there is a gap of at least 20 percent between the upper rental limits for propositions for low-rent public housing and the lowest rents at which private enterprise unaided by public subsidy is providing decent, safe and sanitary housing.

Special provisions determine the eligibility of large families of low

(Continued on page 140)
Here's Why It Pays To Specify

Pittsburgh Steeltex Lath For Plaster

You get low maintenance and high fire protection in your buildings with Pittsburgh Steeltex Lath for Plaster. This combination of galvanized welded wire mesh and absorbent backing makes possible positive embedment of the wire mesh and provides maximum reinforcement and protection against plaster cracks. Also, this reinforcement has earned high fire ratings for Steeltex including Underwriters' Laboratories, Inc. test R-2258.

In addition Steeltex provides a rigid troweling surface which speeds its application and saves plaster. For better plaster construction see our catalog in Sweet's or write for Catalog D.S. 130 to Dept. AB, Pittsburgh Steel Products Company, Grant Building, Pittsburgh 30, Pennsylvania.

PITTSBURGH STEEL PRODUCTS COMPANY
A Subsidiary of Pittsburgh Steel Company
Pittsburgh, Pa.
PUBLIC HOUSING LAW
(Continued from page 138)

income for public low-rent housing. In such cases the annual family income, less an exception of $100 for each minor, may not exceed five times the annual rental including the cost of water, electricity, gas, other heating or cooking fuels and other utilities. That is the provision for admission. For continued occupancy, the local housing agency may allow from the net income of any family, an exemption of $100 for each minor member of the family (except the head of the family and his spouse) or all or any part of the annual income of each minor.

The slum clearance section of the Act provides loans in the amount of $1,000,000,000 during the next five years to local communities for the acquisition and clearance of slum properties. In addition, $500,000,000 in grants is authorized to defray two-thirds of the difference between acquisition cost and resale value. Land can be acquired for slum clearance purposes only after a public hearing following notice of date, time, place and purpose of such hearing.

Authorizations are granted for unlimited appropriations to the Housing and Home Finance Agency to conduct research in materials, methods and techniques. The program can concern itself with standardized building codes, standardized dimensions, and methods of production, distribution and assembly.

Title V of the law—farm housing—places the government in the business of making direct loans to farmers for building, replacing or improving farm houses or farm buildings. Loans may be made at interest rates not to exceed four per cent, and for periods not to exceed 33 years, provided that in the opinion of the Secretary of Agriculture the applicant has the ability to repay the loan. Grants are also provided for land acquisition and development purposes. Total authorization for this loan and subsidy program for farms is $325,000,000.

FHA amendments included in the Act extend Title I to September 1, 1949, and extend Section 608 to August 31, 1949. An increase of $500,000,000 in the insurance authorization of Title II is provided.

Whereas the House bill provided that preference for occupancy in development and re-development projects be given to families dis-

(Continued on page 142)
Are you driving prospects away by trying to sell 1939 houses in a 1949 market? Are you up to date? Are you giving today's prospects the beauty, quality and ease of maintenance they demand by using today's quality materials in houses designed for today's living? You will be surprised at the case with which such houses are sold.

When you select materials, remember this: No other single item can increase the salability of a house more than floors of WRIGHT RUBBER TILE.

HOW WRIGHT RUBBER TILE MAKES HOUSES MORE SALABLE

Ideal for today's homes, WRIGHT RUBBER TILE gives a house extra beauty that makes every prospect want to call it "home"!

They will be even more enthusiastic when you show them that WRIGHT RUBBER TILE is the easiest of all floors to keep clean.

You clinch the sale still more when you point out the comfort of WRIGHT RUBBER TILE—and when you call attention to how much quieter it makes a house.

Then, when you assure them that their floors of WRIGHT RUBBER TILE will still be new-looking the day their house is paid for, they will be ready to sign the papers!

AND YOU MAKE MORE PROFIT

One builder reports that by spending less than $200 extra for WRIGHT RUBBER TILE, he could sell his houses faster—and at a $500 premium! Many other builders, from all sections of the country, are reporting similar experiences.

Don't delay! Start making your houses easier to sell by installing WRIGHT RUBBER TILE in kitchens, bathrooms, halls and other rooms. Call your flooring contractor or write us for full information and samples. WRIGHT MANUFACTURING CO., 5205 Post Oak Road, Houston 5, Texas.

THE FINEST FLOOR COVERING IN THE WORLD IS MADE IN TWO DIFFERENT TYPES:

WRIGHTTEX is the soft rubber tile for homes, churches, hospitals and other places where extreme quiet and comfort are desired. WRIGHTTEX wears longer than any other brand of rubber tile made.

WRIGHTFLOR Hard Surface Rubber Tile is especially recommended for restaurants, offices, public buildings, and wherever traffic is extremely heavy. No other resilient floor covering is as durable, economical and low in over all cost as WRIGHTFLOR. It stands supreme!

WRIGHT-ON-TOP Compression Cove Base is now available in twenty colors! WRIGHT-ON-TOP, the perfect "tie-in" between floor covering and wall fits snugly, resists scuffing and lasts a lifetime. This smart, smooth, glossy wall base is now being made in all twenty field tile colors—to provide the perfect mate for WRIGHTFLOR and WRIGHTTEX Rubber Tile.
"Big Savings on Small Jobs"

Hydrocrane owners find this fast, truck-mounted unit ideal for quick digging on housing and light commercial projects. It saves man power and keeps excavation moving at a fast clip. Here are a few examples:

DIGGING WATER CONNECTION PITS

"We saved 22 man hours by using a Hydrocrane to dig house water connections. This unit is particularly good when working below overhead wires and in tight quarters. Also, it's very handy for digging between sidewalks and curbing."—D-V Construction Company, West Allis, Wisconsin.

TRENCHING FOR HOME SEWERS

"This is the most remarkable machine I have ever seen in my work for digging street to house trench for water and sewer pipe. It gets into tight spots and really moves along on the road. On one job we saved 48 man hours over hand labor."—John B. Przybyski, Contractor, Milwaukee, Wisconsin.

EXCAVATING FOR AND INSTALLING SEPTIC TANK

"We often dig 200 ft. of drain trench and install a 540 gallon septic tank in eight hours with a Hydrocrane — once we did it in six hours. Hand methods required three men one-half day to set tank, three days to dig ditches, one day to lay pipe and place rock. We save about 100 man hours with our Hydrocrane."—Winchester Building Supply Co., Winchester, Virginia.

In addition to digging, you can use the Hydrocrane for countless hoisting, material handling and hauling jobs. Send the coupon for full details.

BUCYRUS-ERIE HYDROCRANE DIVISION
SOUTH MILWAUKEE, WISCONSIN

Gentlemen: Tell me how the Hydrocrane can speed up my jobs.

Name: ____________________________

Company: ____________________________

Address: ____________________________

City: __________________ State: ____________

BUCYRUS-ERIE HYDROCRANE DIVISION

South Milwaukee, Wisconsin

American Builder, August 1949,

PUBLIC HOUSING LAW

(Continued from page 140)

placed by reason of the project, the final bill contained no such provision.

Determination of wages to be paid to on-site building labor is to be entirely in the hands of the Secretary of Labor.

The House bill contained a provision requiring that none of the appropriations, loans or expenditures be used to pay the salaries of persons belonging to organizations asserting the right to strike against the government, or who belong to organizations which advocate the overthrow of the government by force or violence. The final bill limits the requirement only to officers or employees of the Housing and Home Finance Agency and the Department of Agriculture.

The foregoing are the highlights of the bill as reported out by the joint Senate and House committee. The final vote in the House was 228 to 185, recorded only after one of the bitterest and tightly contested struggles in recent years.

Prior to the final vote on the entire bill in the House, a vote was taken on the public housing section. The section was defeated 168 to 165. Then a record vote was called for. The record vote was 204, a plurality of only five votes. Of the 204 votes against public housing, 63 were Democrats and 141, Republican.

The fact that the final vote was 228 to 185 is not an accurate indication of the bill's support. Many of the switches on the final vote were made for political reasons by Congressmen who, seeing that the fight was lost, saw no reason to jeopardize re-election in districts where the votes of strong public housing minorities are necessary.

Passage of the Housing Act of 1949 probably is not the end of legislation respecting housing that the current Congress will pass. A number of bills designed to aid private enterprise are under consideration.

First, the Senate recognizing the need for temporary relief approved a new $500,000,000 authorization for FNMA. The action was taken on July 8, and it was expected that the House would concur before the end of the month. The Senate took that action while S.712 was still awaiting consideration by the Senate Banking and Currency Committee.

S.712, before hearings and debate, is reported to provide for making FHA Title I permanent with a large increase in its authority.

(Continued on page 144)
THIS beautiful new interior finish, with rich textured surface in buff and oyster white, will give every room modern beauty plus extra insulation. It’s not only decorative, but practical and durable. Resists scuffing and rubbing... cleans easily, paints easily.

NEW IMPROVED METHOD OF APPLICATION
Ingenious new INSULITE Clip helps assure easy, accurate, economical application. Joint and Clip combine to produce an accurately aligned, level ceiling or wall surface. Long nailing slot in Clip accommodates practical variation in position of nailing member—makes nailing easier, faster.

APPLIED JOB STAYS RIGID AND LEVEL
Close, tight inter-locking joint stays trim and neat—panels stay rigid and level. You get smart, handsome finished jobs that attract attention, build new business, and give you a reputation for perfection.

WRITE FOR DETAILED INFORMATION

MANY USES — MANY VARIATIONS
Ideal for restaurants, taverns, lounges, stores, display rooms, and home construction. This product now readily available in variety of widths and lengths for interesting pattern arrangement.

INSULITE DIVISION
MINNEAPOLIS 2, MINNESOTA

"Insulite" is a registered trade mark, U.S. Pat. Off.
IT'S EASY TO PUT SPARKLING NEW BEAUTY IN BATHROOMS

With its tasteful designs that combine lustrous chrome on solid brass with clear, sparkling crystal, Hall-Mack Crystalcrome adds a dramatic new touch to bathroom styling. It is fast becoming the choice of more and more architects, builders and contractors for fine bathroom accessories...accessories that are new in appearance, new in design, yet made for a lifetime of practical daily use.

Crystalcrome Accessories are available for all bathroom needs, from towel bars, soap dishes and paper holders to shelves, robe hooks, and toothbrush holders—and in regular wall and recessed types. If you have not received your copy of the new Crystalcrome Catalog, write today.

Crystalcrome Accessories are a part of the complete Hall-Mack line. Standardize on Hall-Mack—and know that in one line you can find accessories and cabinets that meet your most exacting requirements whether you're planning a millionaire's mansion or a low-cost housing project.

HALL-MACK COMPANY

1344 WEST WASHINGTON BOULEVARD, LOS ANGELES 7, CALIFORNIA
7455 EXCHANGE AVENUE, CHICAGO 40, ILLINOIS

PUBLIC HOUSING LAW
(Continued from page 142)

It had been proposed that the bill include an extension of Section 608 until March 31, 1950, and to provide for FHA operating expenses to be paid out of earnings. This latter proposal would eliminate the need for Congress to vote an annual appropriation for operating FHA. Another provision would set up 95 per cent, 30-year mortgages up to $6,650 for two-bedroom houses, plus $950 for each additional bedroom not exceeding four, up to $8,550, with an 85 per cent firm commitment to the builder up to $7,650. The bill was expected to call for an increase in FNMA authorization.

S.1184, the Wherry bill, had passed the Senate by early July, and had been reported out by the House Banking and Currency committee. It contains certain provisions for aiding builders to construct rental units on leased land at military establishments. It provided FHA insurance up to 90 per cent, and granted an authorization of $500,000,000, with an additional $500,000,000 to be made available at the discretion of the President.

Armstrong Cork Extends Wholesale Distribution

THE Armstrong Cork Co. has added Cushiontone, perforated fiberboard acoustical tile, to its products wholesale distribution effective July 1. Formerly this product was distributed only through acoustical contractors. Announcement of the extension of Armstrong's program of wholesale distribution was made before over 300 wholesalers, special guests, and Armstrong field men at the second annual convention of Armstrong's building materials wholesalers.

Several other changes in merchandising and selling plans and policies were announced at the convention. These include the development of wholesale salesman's seminars, a plan by which groups of 12 wholesale salesmen will be brought to the company's home offices for a one-week training period during each seminar. Armstrong executives who spoke at the convention reaffirmed their faith in the over-all stability of the building materials industry even though economic conditions result in a downturn of construction.

C. J. Backstrand, Armstrong first vice president, said there is no economic situation ahead of us that cannot be mastered by "sound planning, intelligent leadership, and hard work."
One Multiplex does all this—and more!

- Bevel Cut-off
- Rip
- Miter
- Compound Miter
- Plow
- Dado
- Rabbet
- Shape
- Tenon

"Saves enough labor to pay for itself on one $12,000-$15,000 house"—that's what a Kansas construction firm says of the Delta Multiplex Radial-Arm Saw

You cut job time and costs, with a Delta Multiplex. Two men can carry even a cabinet model, so it's easy to take right to the job.

That's like bringing along a whole shopful of handy tools. You can use a Delta Multiplex blade at any angle — and get 100% mitering capacity. The patented "Versatile Elbow" sees to that. It's a center-pivoted track that carries the cutting head and rotates 360°.

With a Delta Multiplex, you cut the full length of the sliding arm on both right-hand — and left-hand — miters from 0° to 90°! The blade moves through practically the center of the table. Your work rests on the full table and you get full-capacity cuts.

Your nearby Delta distributor has Multiplex models with rip capacities up to 6". Inspect them there. See for yourself the Delta Multiplex features that assure you of safety, speed, convenience, capacity, and economy.

Send coupon for descriptive literature.

POWER TOOL DIVISION
ROCKWELL MANUFACTURING COMPANY
MILWAUKEE 1, WISCONSIN

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

TEAR OUT COUPON AND MAIL TODAY!

Send me descriptive literature on the complete line of Delta Multiplex Radial-Arm Saws.

Name:
Title:
Company:
Address:
City...
State...
Zip

Shown is Delta Multiplex Model 40A with cabinet base. It has a rip capacity up to 3½". Also available is Delta Multiplex Model 50A with cabinet base — and a rip capacity up to 5". Both models are widely used for cutting foundation forms, sheathing, roofing, cabinets, doors, frames, drawers, sills, stair treads, etc.
NEW PRODUCTS
(Continued from page 126)

CABLE CONNECTORS AB921
"Harbot" 3/4-inch connectors, for attach. ing armored cable to knockout boxes in electrical installations, form rigid fitting to protect wiring from damage at point of entry to box. Each of two parts has grooved lip which engages edge and inside surface of standard 3/4-inch knockout opening. Operating on simple cam-wedge principle, it is possible to install connector from out- side of box after wiring hook-up is com- pleted. Does not project into box, allowing full use of interior. Unimatic Corp., 52 East Centre St., Nutley, N.J.

CAVITY WALL TIE AB916
A new moisture drip feature of "Rock- Fast" cavity wall tie is designed for per- manent protection of the tie from cor- rosive action of moisture, lime and mortar. Ties are manufactured with six-inch stem, with two-inch spacer for two-inch cavity; and with eight-inch stem with four-inch spacer for four-inch cavity. Produced in high strength zinc clad, steel alloy copper clad and stainless steel wire. Rockford Fastener Co., P.O. Box 353, Rockford, Ill.

DOUBLE CASEMENT WINDOW AB920
Malta twin casement kitchen window unit is fully modular for masonry, frame, block or veneer construction; is adaptable to varied types of construction and wall thicknesses. Manufactured in variety of light sizes. Water-tight sills and all supports are patented features. Unit is assembled, glazed, weather stripped and treated at factory. Malta Manufac- turing Co., Malta, Ohio.

HEATILATOR* Fireplace Unit

The Heatilator unit is a scientifically designed form around which any style of fireplace is easily built. Complete from floor to flue, it actually circulates heat ... gives protection against the common causes of smoking.

Saves Time . . . Saves Materials

★ SAVES cost of building downdraft shelf and smoke dome.
★ SAVES cost of separate damper and its installation.
★ SAVES time and labor in forming firebox and throat.
★ SAVES cost of firebrick and labor to line firebox.

The Heatilator name on the dome and the damper handle is your protection—refuse substitutes.

Write today for installation data.

HEATILATOR, INC.
353 E. Brighton Ave., Syracuse, N.Y.
*Heatilator is the registered trade mark of Heatilator, Inc.
The Strand all-steel one-piece door-leaf eliminates field assembly of single doors—receding or canopy type (8' x 7'). Receding-type doors for double garages (16' x 7') are quickly assembled from two 8' x 7' door-leaf units and splice channel.

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

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

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

here's proof from "Pittsburgh"

IN BANKS OR BAKERIES... shoe stores or hat shops, "open vision" fronts help achieve the same end — more business. "Pittsburgh's" complete line of quality glass products and "Pittsburgh's" trained and skilled installation crews have helped to create talked-about "open vision" fronts across the country. So when you're selling store fronts, remember — your job will be easier when you mention "Pittsburgh" Products — and the store will be a better one if you use them.

MODERN HOMEOWNERS want mirrors such as this. Every modern home needs them. While the full-length door mirror tops the popularity list, other practical applications are...over living room mantels...in kitchens and entrance halls for quick spruce-ups. "Pittsburgh" Mirrors not only increase the appeal of your homes, but help increase your profits as well.
Better Buildings

2 PITTCO DE LUXE MEMBERS — a sill—sash combination — have been designed to simplify installation and reduce the hazards of glass breakage in certain types of modern store front design. Setting procedure is so simple that a substantial saving in setting time is usually effected. The sill was designed to recess the Carrara Structural Glass bulkhead, providing toe room and protection. Invertible sill members offer variety in styling.

TO HELP YOU make better Carrara Glass installations, a new Carrara edge point—ing compound has been developed in "Pittsburgh" laboratories. Setting into a tough, resilient, non—absorbent film, this new compound maintains high adhe—sion to the edges of the Carrara Glass. This development is typical of the work being done in "Pittsburgh" laboratories to improve the performance of all "Pittsburgh" glass products in service, as well as the quality of the products themselves.

MOST HOMEOWNERS want to take full advantage of pleasant views. That, of course, calls for picture windows. Because of its perfect transparency and brilliant flaw—less surfaces, Pittsburgh Polished Plate Glass is ideal for picture windows. And where insulated windows are required, we suggest twindow — "Pittsburgh's" window with built-in insulation.

Free! We will gladly send you free our special "Builders Kit" which includes illustrated literature showing how you can use glass effec-tively on all types of jobs in which you are interested.

Pittsburgh Glass
PAINTS · GLASS · CHEMICALS · BRUSHES · PLASTICS

PITTSBURGH PLATE GLASS COMPANY
NEW PRODUCTS
(Continued from page 146)

HOT WATER BOILER
ABB910
Horizontal type hot water boiler is designed for use as medium for either baseboard, radiant or conventional water heating in low-cost housing. Can be fired inter-
changeably with breeze or gun type burner or gas-fired equipment. Maximum capacity is 70,000 B.T.U.'s; and unit recovers 93 gallons of water per hour at 87 degree rise. Outside jacket dimensions are: 18 inches wide, 18 inches high and 39 inches long. Burner equipment projects from the above jacket. Dewey Shepard Boiler Co., 1311 N. Capitol Ave., Indianapolis, Ind.

PLYWOOD PANELS
ABB911
Douglas fir, California redwood and Southern pine are plywood chiefly used in "Ply-
tex." Panels, 4 feet by 8 feet, are pro-
duced in variety of hues and tones, or may be finished with clear lacquer. Triwood, Inc., Napans, Ind.

MASONRY SAW
ABB931
Fireproofer masonry saws feature easily-
Screw the object adjusted patented cutting table. To cut to a pares materials of varying thickness, adjust by %" deep. incl pointin anchor is nad _— lines simply lifting table. It automatically locks down. in place, and may be lowered by fingertip control release levers. Model ADF, one of four models, is dry-cutting saw with a built-in dust collector. Utilizes two 1/2 HP shielded motors. Manufacturer makes blades for cutting every type of masonry material. Diamond blades for wet cutting and several types of abrasive blades for both wet and dry cutting are available. Martin Fireproofing Corp., 2200 Military Rd., Buffalo 17, N. Y.

(Continued on page 152)
A new smooth, “ironed-on” finish is now being applied to Armstrong’s Temlok® Insulation Board. The color of Temlok board is now a pleasing “warm white.”

This new surface is designed to meet the need for an interior finish material that is bright and attractive yet economical to install and maintain.

The satiny smoothness of Temlok is produced by big heated rollers that iron paint evenly over the surface of the board. This smoothness makes “warm white” walls and ceilings of Temlok practical for home construction as well as for farm and commercial building and remodeling.

The board itself is the same strong, durable fiberboard that has already made Temlok popular with carpenters and builders. On the job this strength makes Temlok easy to handle and install. Temlok’s insulating efficiency is important to your customers, too. It cuts the cost required to maintain comfortable inside temperatures.

Armstrong’s Temlok Insulation Board is available in 4’ widths, 6’, 7’, 8’, 9’, 10’, and 12’ long. For samples and complete information about this improved interior building material, see your lumber dealer or write Armstrong Cork Co., 1608 Ross St., Lancaster, Pa.
There is available a Fully Guaranteed hollow core flush door

The PAINE REZO

Made entirely of wood, by the world’s largest producer of flush doors, this resin-bonded trouble-free door with the patented construction has been time-tried and time-proved by over three million installations in buildings of every type from coast to coast.

Rezo doors are now available to all dealers.

NEW PRODUCTS (Continued from page 150)

SANDER-EDGER-POLISHER AB8906
The "Jyro" is a light, rotary type sander, edger or polisher, especially adapted for rapid stock removal where fine finishing is not required. Weight is 4 1/2 pounds. Unit is ball-bearing equipped throughout. AC-DC motor in which no gears are incorporated provides silent operation. Peninsula Tool Co., Inc., Menominee, Mich.

SAW SHARPENING FIXTURE AB8903
Commercial sharpener is for use on all types of circular saws from 1 1/2 inches to 16 inches in diameter. Adjustable index finger sets distance between each saw tooth during sharpening operation. Entire table top may be tilted more than 30 degrees on either side, set at correct angle to meet requirements for different saw types and for uniform angle on lead edge of each saw tooth. Treyco Products, 264 Hartford Ave., Buffalo 17, N.Y.

POWER TENONER AB8908
"Powermatic" motor driven, single end tenoner is used in making windows, doors, screens, storm sash and doors, cabinet work, etc. Has top and bottom heads, upper and lower cope spindles and cut-off attachment. Table is of easy rolling type with clamp for holding material. A 2 HP motor drives tenon heads and cut-off saw. Woodworkers’ Tool Works, Inc., 222 S. Jefferson St., Chicago 6, III.

(Continued on page 154)
TODAY'S big news

IN INTERIOR FINISH

Nu-Wood SHADOW-LINE BOARD

Beautiful Joints at No Extra Cost!

Why didn't somebody think of it before? That's the question builders are asking about Nu-Wood Sta-Lite Board with the new SHADOW-LINE edge! For here's a board that solves the problem of getting decorative and beautiful joints with board installations—at no extra cost!

Saves Several Dollars per Thousand Feet!

All first-rate interior finish jobs require some kind of joint treatment. Such treatments normally cost several dollars per thousand feet, whether done at the factory or on the job. With Shadow-Line Board, this expense and time on the job are completely eliminated. This Nu-Wood product creates a beautiful, modern shadow-line effect—with plus values of distinctive texture and lasting light reflection!

For more attractive interior finish jobs—at moderate cost—investigate Nu-Wood Shadow-Line Board. The coupon will bring you complete information!

Here's Why Owners Will Want Nu-Wood Shadow-Line Board

1. New, modern effects . . . the joint between boards now adds a distinctive, decorative touch to interiors.
2. Nu-Wood Shadow-Line Board and decoration are applied in one operation . . . no further decoration is required.
3. No "on-the-job" processing because edges are factory-finished.
4. Attractive walls without use of moldings or other joint treatment.
5. Faster application . . . can be applied directly to framing, no furring strips needed.
6. Chamfer on shadow-line edges provides better edge protection during shipment and application.
7. Shadow-line edge conceals movement of joints caused by dimensional changes.
8. Can be used on sidewalls and ceilings.

WOOD CONVERSION COMPANY

First National Bank Bldg., St. Paul 1, Minn.

BALSAM-WOOL® • Products of Weyerhaeuser • NU-WOOD®

We Need More Builders!

Now you can see this sensational low cost, 3-bedroom home! There's one near you.

Grade and lower level
Recreation and utility space without basement cost

Grade and upper level
Three bedrooms and bath
All on upper level

Other builders have proven that TRI-LEVEL means:
Low cost, top quality,
Quick sales, easier financing.

You must see it!

Words—even pictures—can't describe the uniqueness of the TRI-LEVEL. It offers privacy with spaciousness and compactness. It has a fabulous amount of storage and closet space. It provides a basement without basement costs and 7 rooms including 3 bedrooms.

In most areas TRI-LEVEL sells below $10,000 and its evaluation is invariably above the sale price.

Limited Territories still open for Factory Representatives

LUMBER FABRICATORS, INC.
FORT PAYNE, ALABAMA

NEW PRODUCTS
(Continued from page 152)

Picket Pointing Machine AB8940
Hand-operated machine makes fence pickets in three styles of Gothic points: short, medium and long. Points pickets available in any length; flat pickets are from ½ to 6 inches wide, and square pickets are from 1½ to 1½ inches wide. Woodworkers' Tool Works, Inc., 222 S. Jefferson St., Chicago 6, III.

Drying and Curing Fan AB8905
A direct-connected 42-inch fan, designed especially for farm drying and curing operations, the "Ilg-farmaire" mounts a cast-aluminum, non-overloading fan wheel to operate against resistance from products being dried. Fan has 5 HP, 1140 r.p.m., 220 volt, 1 phase, 60 cycle Ilg, ball-bearing capacitor motor. Handles cribs and mows, with delivery of 25,000 cubic feet of air per minute at one-half inch static pressure and 20,000 cubic feet per minute at three-fourths inch static pressure. Ilg Electric Ventilating Co., 2850 N. Crawford Ave., Chicago 41, III.

Gas Control Valve AB8928
B-50 electric diaphragm gas valve is designed for reliable control of natural, manufactured, mixed and liquefied petroleum gases in space and unit heaters, central, floor and wall furnaces and boilers. Valve is silent, has no packing glands or bellows. Low current consumption of 5 watts. For low or line voltage applications. Standard model and manual opening model with or without electric trip. Two small and medium sizes and three large sizes ranging from ½-inch to 1½-inch, with diaphragms from ½-inch to 5½ inches. General Controls Co., 801 Allen Ave., Glendale 1, Calif.
The maintenance superintendent of this modern school says: "I can wash down all the corridors in this building in a single day. Without tile, it would be a two to three week job!"

Yes, floors and walls of sparkling clay tile are easy to clean . . . keep their gleaming spic-and-span freshness for a lifetime. Even the pranks of mischievous youngsters leave clay tile's finish unimpaired. And the rich colors won't fade because they are fired in.

Water? It leaves no tell-tale streaks or fade-marks on a clay tile surface. Soaps, acids and greases are handled with equal ease.

And wherever you use it, clay tile means maintenance-cost savings that clients appreciate. It's in to stay—it stays good looking!

Today, genuine clay tile is available—there is no need to accept substitutes. For specific information, see Sweets Architectural or A-E-C File, THE TILE COUNCIL OF AMERICA, Room 3401: 10 East 40th Street, New York 16, New York. Room 433: 727 West Seventh Street, Los Angeles, Cal. 

The Tile Council of America was formed in January, 1945, to provide a central source of information about clay floor and wall tile, and to sponsor research and development projects designed to increase the usefulness of clay tile in all types of private and public building.

PARTICIPATING COMPANIES: American Encaustic Tiling Company Inc. • architectural Tiling Company, Inc. • Atlantic Tile Manufacturing Company • B. Mifflin Hood Company • Cambridge Tile Manufacturing Company • Carlyle Tile Company • General Tile Corp. • Gladding, McBean & Company • Mosaic Tile Co. • Murray Tile Company, Inc. • National Tile & Manufacturing Company • Olson Tile Company • Pacific Clay Products • Pacific Tile and Porcelain Co. • Pomona Tile Manufacturing Company • Robertson Manufacturing Company • The Sparta Ceramic Company • Summitville Face Brick Company • United States Quarry Tile Company
TRUSCON ARCHITECTURAL PROJECTED STEEL WINDOWS

Truscon Architectural Projected Steel Windows are especially recommended for use in any building where ample ventilation and freedom from drafts are important considerations. Outward projecting ventilators may be kept open during inclement weather; the ventilator acting as a canopy to deflect the rain and yet allow ventilation. The lower, inward projecting ventilator prevents drafts by deflecting air currents toward the ceiling. Projecting ventilators permit easy cleaning from the inside.

Wide Range of Types and Sizes

Truscon Architectural Projected Windows are adaptable to a great many different types of buildings, where their smartness and utility will help add appearance and value. Use nature’s free sunshine and fresh air by installing Truscon Architectural Projected Steel Windows—the nation’s favorite for beauty and efficiency.

Write for free literature describing the distinctive features of Truscon Architectural Projected Steel Windows, and the complete line of other Truscon Steel Windows and Steel Building Products.
GIVE YOUR CUSTOMERS
more home comfort...
more planning freedom

WITH CRANE BASEBOARD HEATING!

CRANE BOILERS cover every heating need. Among them are, left, the CRANE SIXTEEN Boiler, a completely packaged boiler-burner unit; and, right, the CRANE TWENTY Boiler, which may be installed to burn coal, or later converted to stoker, oil, or gas.

Crane Radiant Baseboard Panels are as inconspicuous as they are efficient ... especially when painted to match the walls. They heat rooms evenly throughout, from the floor up. Best of all, these modern panels permit complete freedom in furniture arrangement— they claim no valuable floor or wall space.

Crane Radiant Baseboard Panel Heating is economical and utilizes the maximum amount of heat developed by the heating system. Available in two types (Type R, Radiant—Type RC, Radiant-Convection), baseboard panels may be used with 2-pipe steam or hot water systems—they're completely practical for remodeling as well as for new homes.

See your Crane Branch or Crane Wholesaler for full information on Crane Radiant Baseboard Panels.
Facts (not claims) that every architect should know about

REYNOLDS ALUMINUM REFLECTIVE INSULATION

CRAWL SPACE: Between floor joists over unheated areas, shown unshaded in ground plan above, this is the only practical, economical insulation and vapor barrier. One layer of Type B meets FHA requirements in most areas. Approximate conductance coefficient 0.10. The accepted specification. (Above Garden Apartments, only a small part shown, insulated by The Fireproof Products Co., Inc., N. Y.)

SIDEWALLS: With the increasing use of radiant heating, logic demands this insulation that is radiant heat reflective in the highest degree. Bowed between studs and lapped over stud face, Reynolds Reflective Insulation provides high efficiency at low cost in both conductance and as a vapor barrier.

CEILINGS, RAFTERS: Two layers of Type B, with intervening air space, meets FHA requirements in most areas. Conductance 0.14. Single-faced Type C with blanket insulation laid above is a superior installation. Conductance 0.07. Single layer of Type B, while not sufficient for winter FHA standards in northern areas, is excellent to take off summer sun load.

REYNOLDS Lifetime ALUMINUM BUILDING PRODUCTS

REYNOLDS REFLECTIVE INSULATION HAS A PLACE IN YOUR PLANS

MAIL THIS COUPON FOR TECHNICAL DATA IN A. I. A. FILE FORM

Reynolds Metals Company, Building Products Division, 2003 South Ninth Street, Louisville 1, Ky.

Please send me A. I. A. File Folder on Reynolds Aluminum Reflective Insulation.

Name ________________________________

Company Name ________________________ Title ____________________

Address ________________________________
American-Standard first in heating ... first in plumbing

Baseboard Radiant Panels by American-Standard bring the “living” back into the living room, permit new freedom of design. For they’re just eight inches high and take up only an inch of floor space when recessed. There are two types—one for radiant heat, the other for both radiant and convected heat.

Designed for the job...

American-Standard is keenly interested in seeing that the products you specify or buy are appropriate for your particular jobs.

In the complete American-Standard line, you will find heating equipment and plumbing fixtures designed and styled to fit in with any type of architecture ... and to complement any decorative scheme. They are all properly proportioned in size and lines; their finishes are durable; and they are available in pleasing and permanent colors.

For detailed information about the complete line, contact your Heating and Plumbing Contractor. American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.

Look for this Mark of Merit

Serving home and industry

AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILER • ROSS HEATER • TONAWANDA IRON
There's a comfort reason for using wood windows! Sit close to one on a winter day . . . feel how the natural insulating qualities of wood help create comfort by resisting the transmission of cold. In summer you can feel that wood windows do not "heat up" readily.

Ponderosa Pine is an ideal wood for windows. Smooth, even-grained, it provides an excellent bonding surface for all finishes. Its low thermal conductivity discourages condensation, resulting in fewer decorating bills. As Ponderosa Pine is a workable material, its use in windows provides maximum flexibility of styling and design combinations. Ponderosa Pine windows are now available, treated at the factory with a scientific wood preservative process. This treatment is in accord with high industry standards and adds still more years to the long life of wood. Ponderosa Pine Windows are available in modular standard sizes in a wide variety of styles.

Ponderosa Pine Woodwork
Dept. SAB-8, 38 S. Dearborn St.
Chicago 3, Illinois

Please send me a copy of "Today's Idea House."
(Please print.)

Name: ____________________________
Address: ____________________________
City: ________________________ Zone: ______ State: ______

Mail the coupon for "Today's Idea House"—24-page booklet—full of photographs showing how Ponderosa Pine windows, doors and frames create more comfort, more comfortable living.

Reputation for Good...
(Continued from page 79)

American Builder, August 1949.

Architect Philip Resnyk of New York City. Royal Barry Wills has also done work for them.

The Wilnot Woods project, now being completed, is an especially attractive residential park in one of the finest sections of Westchester county. Homes here range from $25,000 to $35,000. One of the lower-priced designs is a five-room colonial ranch type with attached garage, designed by Resnyk, to sell for $25,500 on a 75x110-foot lot. The foundation, including a full basement, is of concrete blocks. Exterior walls are a combination of brick veneer and asbestos cement shingles with asphalt shingles on the roof.

Interior walls are finished with three coats of plaster over gypsum lath. Ceilings and sidewalls are insulated with mineral wool and windows are double-hung aluminum. Select oak hardwood floors are used throughout except in kitchen and bathroom. Both walls and floor are ceramic tile. The interior doors are all six-panel colonials. The kitchen here, as in all Haring & Grant houses, received special attention with top-quality cabinets, formica counter top, combination sink, good lighting, large window areas, and a ventilating fan. Plumbing fixtures are Standard and the furnace is a gas-fired forced warm air unit made by Richmond Radiator. Copper pipe is used for all the water lines and hot water is supplied by a Bryant gas-fired unit.

Finish hardware is by Dexter with a Skillman lockset on the front entrance. The garage door is a Wel-Bilt upward-acting unit. Landscaping is included in sale price.

Another example of the type of construction being offered in Wilnot Woods is a $32,500 ranch type house with six rooms and 2½ baths located on one-third of an acre. The general specifications on this house are about the same as the house described above except that the heating unit here is a Janitrol gas-fired forced warm air furnace and the hot water heater is a 70-gallon gas-fired Rheem tank.

An unusual feature in all Haring & Grant houses is a floating basement floor. Before the floor is poured a drainage system is laid in gravel and connected to a dry well. When the floor is poured, forms keep it four inches from the foundation walls on all sides. This 4-inch space is then filled with clean gravel to assure a basement floor that is

(Continued on page 162)
BUILDERS! CONTRACTORS! HERE'S HOW TO HANG DOORS FASTER, MORE PROFITABLY!

ASK FOR TRU-SIZED DOORS

THEY COME TO YOU ALREADY SAWED, PLANED, FITTED, PRIMED!

Save up to 55 minutes per installation with these top-quality, modern doors! They're precision-machined to standard book opening. That means they fit perfectly in any jamb that is square and true, save you valuable time and money!

Tru-Sized Streamliner Doors are lighter, stronger than old-type slab doors, too — thanks to their special horizontal girder, hollow core construction and specially built plywood panels. Every door is color labeled to tell you exactly what you're getting — and what you're getting is the best, the most profitable door you can buy! Write for all the facts about Streamliner Doors today!

Factory priming is available at a slight additional cost.

The Wheeler Osgood Company
Plants and General Offices: Tacoma, Washington

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200 Post St., San Francisco, Calif.

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The Wheeler Osgood Company

Every Door Tru-Sized
Available Resin-Sealed
NEW 10" CEILING ILGETTE KITCHEN VENTILATOR

Extra Quiet! Extra Powerful!

14 DISTINGUISHED FEATURES—here is the finest ceiling-type kitchen ventilator you have ever seen or heard! It's easy to install. It's automatic in operation. It's simple to clean (grille, motor and fan unit just lifts off). It has large Cfm capacity combined with super-quiet operation. It has a new hinged grille, motor and fan assembly (easily removed and replaced for cleaning) with built-in electrical plug which automatically breaks circuit when unit is removed. It has an insulated outer door with new spring booster control. This is just PART of the story—call nearby Branch Office (consult classified directory) or send coupon for complete details!

HURRY! GET FREE NEW BULLETIN!

ILG ELECTRIC VENTILATING CO.,
2852 N. Crawford Ave., Chicago 41, Ill.


Firm Name

Individual

Address

City

State

Title

Zone

Hurst Builders, August 1949.

Reputation for Good...

(Continued from page 160)

always dry. Any condensation that might accumulate on the walls and run down them disappears into the 4-inch-wide gravel bed to be drained away underneath the floor.

The current 36-acre Hickory Hill operation is to consist of 155 818,000 to $20,000 houses built from two basic floor plans with seven different exteriors. They will have full basements with concrete block foundations. The usual diagonal wood sheathing, which is standard with Haring & Grant, will be used here also. The windows in these houses will be Truscon steel double-hung with stainless steel weather stripping. Exteriors will be finished with asbestos cement shingles or Permastone with asphalt shingles on the roofs.

Interior walls will be finished with three coats of plaster over gypsum lath and floors will be select oak. Kitchens are to be equipped with Youngstown cabinets and a gas range. Bathrooms will be finished with ceramic tile and plumbing fixtures are Standard. Most of the houses, which are to be two-story in design, will have powder rooms on the first floor. A wood burning fireplace will be a feature of each of the houses in Hickory Hill. Copper gutters, metal venetian blinds, basic landscaping are standard with all this firm's houses.

Homes are not turned over to purchasers until yards are cleaned, graded and seeded and interiors of the houses are cleaned throughout, including a complete window washing job. Conscientious attention to details and quality throughout the construction job by all employees charged with supervision is a small factor in maintaining the excellent reputation of this firm for turning out fine homes in well-planned, attractive neighborhoods.

Fred Walters to Direct Hotpoint Marketing Program

FRED J. WALTERS, vice president of Hotpoint, Inc., has been named director of the company's marketing activities, James J. Nance, president, announced recently. Walters has served for the past two years as the firm's vice president in charge of industrial relations.

Walters, who joined Hotpoint in 1947, was for 15 years associated with a manufacturer in the automotive industry. Prior to changing to the industrial relations field during the war, he started as a retail salesman and advanced to managerial and sales executive posts.
No strong muscles needed to open a Curtis Overmatic garage door. One turn of the handle—and the door glides up and over. Anyone who can open a house or car door can open the Curtis Overmatic—and a slight pull closes it from outside or inside.

In the Overmatic, Curtis answers the problem of providing a truly modern overhead garage door at moderate cost! The Overmatic fits an opening 8’x7’, providing ample clearance for any style car. It comes as a complete unit with all hardware, ready to install.

Greater Strength with the New Prespine Panels

The door panels in the lightweight Overmatic are made of Curtis Prespine—a superior new wood product manufactured exclusively by Curtis. Prespine Panels will resist heavy impact blows—won’t mar or scratch readily... won’t splinter or chip. Prespine has superior bending strength, withstands warping, shrinking and swelling and it provides an excellent bond for paint or stain.
More powerful... size for size

STANLEY SAFETY SAW

More powerful... for size

STANLEY SAFETY SAW

No. 7 0".25" capacity, bevel cuts up to 1/4" at 45°, 3700 r.p.m.
No. 8 0".25/" capacity, bevel cuts up to 2 1/4" at 45°, 3500 r.p.m.
No. 9 0".31/" capacity, bevel cuts up to 2 1/4" at 45°, 3300 r.p.m.

FASTER ... More power and less weight.
TOUGHER ... Aluminum alloy base, heat-treated. Heavy-duty ground gears. Swivel points on steel trunnions.
SMOOTHER ... Gears adjustable for proper mesh. Ball bearing mounted. Forced oil lubrication.
EASIER ... Duplex handle with 2-position, independent trigger switches. Simple wing nut depth of cut adjustment and scale for bevel cuts up to 45°.
SAFER ... Cutting edge covered at all times. Blower removes saw dust ahead of cut.
COMPLETE ... Comes with combination rip and crosscut blade, ripping gauge, wrench, lubricant and carrying case.

Sold by your industrial distributor
Stanley Electric Tools, New Britain, Conn.

American Builder, August 1949.

Conventionally Built...
(Continued from page 95)

Conventionally Built...
(Continued from page 95)

on the tables. When completed the walls are moved by an overhead hoist to their places and are nailed.

The setting of rafters and application of roof sheathing is done in the third position. As the house moves on, the wood shingles are applied and part of the wiring, heating and plumbing is installed. All parts needed are in the bins on one side of the assembly line, so no time is wasted.

With the roof on, the house in position five, moves out of the sheltered portion and the rest of the work is not under cover. However, since the furnace is in place, gas can be piped in in cold weather, and the house heated with its own furnace. In this position plasterboard is applied and made ready for painting.

In number six the plasterboard is painted, cabinets installed and linoleum is laid over kitchen and bathroom floors. Metal lath is placed for kitchen and bathroom tile. At Bakersfield the company makes the cabinets in its own shop on the premises. In the next position the ceramic tile in colors previously selected by the buyer is set in place, and the fixtures are installed in the bathroom.

In position eight the hardware and lighting fixtures go in and the final coats of paint, both inside and out, are applied. In number nine the floors are again sanded and then finished and waxed.

In the tenth position the now completed house is raised on jacks about 18 inches above the rollers so that the three-wheeled dolly on which it is to travel can be slipped under it. The floor joists are attached to the heavy steel I-beams of the dolly which are V-shaped corresponding with the three wheels. Experience has shown that houses can be moved in this way with practically no racking. Curran says the trucks frequently travel at 30 miles per hour on good roads and that even when they have to traverse bad roads virtually no damage is done. Of course the unusually heavy construction, i.e., 2x12 floor joists, 2x6 ceiling joists, 4x6 headers over doors and windows, and the steel strapping of floor joists as well as wall sections is responsible for the "moveability" of the house.

At the lot where the foundation has been previously prepared (four walls and a concrete wall through the center) the dolly is backed right up to the foundation and the house deposited exactly in place on jacks and then lowered to the foundation walls and nailed in place. If the truck and dolly cannot get this close for any rea-
Build with pentachlorophenol-treated lumber and you build greater customer satisfaction.

This tested preservative protects wood from decay and termites. Dow pentachlorophenol increases the life of wood, cuts maintenance costs, and increases wood's salvage value.

Build with "penta"-treated wood and add to your reputation as a builder of quality.

For further information about pentachlorophenol write to Dow for free booklet PE 20A.

THE DOW CHEMICAL COMPANY
MIDLAND, MICHIGAN
GIANT INFRA-RED OVEN
BAKES NEW BEAUTY IN

New glowing beauty, a wonderful evenness of tone that you've never before seen in a shingle! Thanks to our Infra-Red drying process, American Dua-Laps are better protected during application and while in transit.

Butted and squared and tapered perfectly for easier application, Dua-Laps can be laid with a full 12" or 14" exposure over solid or spaced sheathing. Double coursing gives home owners double insulation value.

Write for samples to be sent direct from our warehouse stock.

NOW!
- A harder, more durable protective finish.
- A more beautiful, more uniform coating.
- Available in all greys.

American
Dua-Laps
DOUBLE COURSE SHINGLES
CERTIFIED GRADE STRAIGHT GRAIN RED CEDAR

American Stained Shingle Co.
General Offices Cor. Spruce St. and Dennison Ave.
Columbus 8, Ohio

Conventionally Built...
(Continued from page 164)

son the house is placed in front of the foundation on a cribbing of heavy timbers and then pulled by a winch and rollers onto the foundation.

There are openings in the concrete walls through which heavy I-beams are used to support the house while in transit and while it is being lowered, are removed. These openings are later plugged with concrete blocks. The floor joists are toenailed to the red-wood sills on the foundation walls; gas, electricity, water and sewer connections are made, a skirting board is applied to cover the concrete and the trim is put on and the last two items are painted. The owner is given the key—ten days after his house was started.

FHA, Veterans Administration and the local building departments involved have given their unqualified endorsement to the houses, because in addition to the heavier lumber and the bracing already mentioned quality materials are used throughout. Many nationally advertised appliances are used; the sink top and drain board are ceramic tile as is the backsplash. The same type of tile is used on two walls over the tub; cabinets are painted on the inside; eaves are boxed in, cedar shingles are used on the roof; three coats of paint are given on all surfaces inside and out; some of the cabinets have rounded corners; there is a laundry tray in some kitchens, guest closet in some models.

A wide choice of design is offered buyers in Bakersfield. There are five basic floor plans and these can be had with different roof and porch treatments and window placements. The prices ranging from $4,700 to $8,550, include completion of the house ready to move into—there are no extras. Sewers or cesspools are connected; concrete walks to the front property line as well as the usual rough grading are included. It should be emphasized that these houses are quality-built in every respect and that when placed on the foundations they cannot be distinguished from homes built on the site in the conventional way. Therefore their resale value is maintained and they have the added advantage that should the owner desire to move his house to another location he can do so. The houses are guaranteed for 90 days against defects in workmanship and materials.

The production line is not limited to single-family dwellings. Duplexes and medical buildings as well as garages have been made. One of the important features of this system of building is its flexibility with regard (Continued on page 168)
Here is a shingle that gives greatly increased protection against wind, weather, and fire. It is the J-M Giant Strip, so named because it is extra thick and extra heavy. The entire surface has extra coating of selected weather-resisting asphalt, in which colorful, fireproof, mineral granules are uniformly embedded. This results in a thicker, more rugged shingle—one that "stays put" and lasts longer.

Extra thickness over ENTIRE surface

Sketch shows how extra protection is built into the J-M Giant Strip. Note that the entire surface—not just the exposed portion—is covered with an extra thickness of asphalt and fireproof granules. On the ordinary thick-butt type of asphalt shingle only the butts have the extra thickness.

When you sell J-M Giant Strip Shingles, you provide the homeowner with a product backed by 90 years of roofing experience. And it has the Johns-Manville name, recognized by millions as the mark of quality in building materials. For further details, write Johns-Manville, Box 290, New York 16, N. Y.
PORTABLE ELECTRIC POWER FOR
Saws...Screw Drivers...Planers...Floor Sanders
Grinders...Pipe Threaders...Cutters...Drills

You'll finish more jobs in less time
with KOHLER Electric Plants

Whether you need a compact generator for small power tools or a large model for more power, there's a Kohler Electric Plant that will fit your requirements perfectly.

Kohler Electric Plants are convenient, easy-to-handle sources of electric current which your men can move rapidly from one place to another. They are particularly valuable when you build homes or cottages in outlying districts, lake resort areas and other places where central station electricity is not available—for they enable carpenters, electricians and plumbers to use many time-saving power tools. A carpenter using a power saw, for example, will be able to do a faster job at a lower contract price.

Where power line service is available, you'll find many occasions when it is far more practical and convenient to use a Kohler Electric Plant than to buy the current you need. There are, indeed, many ways in which your investment in Kohler Electric Plants will pay dividends. One contractor recently said: "In the short time we've had it, the plant has already paid for itself."

Sizes range from 350 watts to 10 KW. A Kohler field representative will gladly advise you as to the most practical unit for your needs. Write for illustrated folder E-9. Kohler Co., Kohler, Wis.
Field tests show Comet Saws consistently give 20% more cutting per eight hour shift. That is service with profit! And, after years of tough work, parts replacement cost is practically nothing. Comets are more versatile, most accurate in all practical applications. Comet owners say one thing is sure about Comets: they are worth far more than they cost! Immediate delivery, all models. See your nearest Comet dealer or write direct.

COMETS cut quicker

DADOING

SHAPING

BEVEL RIPPING

RIPPING

COMPOUND MITERING

BEVEL CROSS CUTTING

Distributors of Davis and Wells Woodworking Machines

CONSOLIDATED MACHINERY & SUPPLY CO., LTD.

2037-33 Santa Fe Ave., Los Angeles 21, Calif.
WHAT WINDOW IS:
... EASIEST TO SELL?
... SAFEST TO RECOMMEND?

Why,
The REMOVABLE Window
of course—R·O·W!

REMOVABLE
She Washes Both Sides IN-DOORS! She moves the lower sash up, the upper sash down, presses the left side of each, and removes. No weights, no cords, no pulleys.

PENS EASILY

EATHERSTIPPED
Infiltration, 22.1% less than government requirements. R·O·W Windows can be shipped to your job complete; no assembling on-the-job.

The R·O·W Window is nationally advertised, nationally accepted. Over four million in use. There are 47 R·O·W Distributors—one near you. For his name, write R·O·W Sales Co., Dept. B9, Royal Oak, Mich.

Correct Paint
(Continued from page 113)
building materials expand and contract due to temperature changes, changes in humidity cause the wood to expand and contract, but, because of the greater density of summer-wood, it expands and contracts a different amount from the spring-wood. Naturally, this means that a paint, successfully to hold to wood without cracking, must be able to stretch with the wood. It must be tough, elastic, and flexible.

Cedar, cypress and redwood, used in large quantities for siding and trim in present-day building construction, rank as among the best “paint-holding” woods, lumber experts at the Government’s Forest Products Laboratory assert.

To provide the most durable and long-lived paint film on redwood sid-
You'll never know exactly what a roof costs until it's worn out, or until its service fails. Then it may prove terribly expensive... or it may prove to have been an excellent investment.

**Investment**... that's the word for a roof of Bird Master-Bilt® Shingles... the kind of strong, lasting investment your clients and customers expect you to make for them. Master-Bilts add rich beauty and texture... they're available in many colors and blends, in more variety than any other roofing material. Bird's experience since 1795 is reflected in the narrow cut-outs, the heavy shadowlines, and the massive Bird thick-butt construction (extra layers of asphalt and mineral granules where it counts... on exposed tabs).

Bird processes every material...another reason for the unparalleled quality of these shingles.

This fact is equally important... Bird Master-Bilt Shingles are economical because of the long life built in them... a fact daily becoming more important in the specification of good roofs.

SAVE HALF
the installation costs for clients by including an EMERSON-ELECTRIC ATTIC FAN when the house is built!

Clients appreciate the savings you can show them by planning to include an Emerson-Electric Attic Fan in new homes or major remodeling jobs during construction. Savings up to one-half—as compared with later installation costs—are easily effected. In addition, you assure your clients of a completely satisfactory, economical home cooling system that will give extra years of trouble-free service. These powerful fans quickly and quietly exhaust hot, stagnant air... replace it with a continuous flow of cool night air drawn in through windows and doors in living quarters... providing "sleeping porch comfort."

Sleeve-bearing fans are available in blade sizes from 24 to 48 inches for horizontal-discharge mounting in outside wall or as illustrated; also ball-bearing type for vertical-discharge mounting in four blade sizes from 30 to 48 inches. Capacities up to 19,350 cubic feet of air per minute. See your electrical supplier, or write for Home Cooler Fan Bulletin No. B-49.

SPECIFY EMERSON-ELECTRIC KITCHEN FANS
Please specify with a Kitchen Ventilator Fan... to whisk away heat, smoke and cooking odors, prevent spread of greasy vapors to walls and drapes. Easy to install in any type of construction. Models for wall and ceiling installation.

HEATED AIR HAS PRESSURE-FORCING MOISTURE VAPOR OUTWARDS. WHEN PROPERLY POLICED THIS VAPOR EVIPTS HARMLESSLY. WHEN NOT CONTROLLED, IT MAY LEAD TO MANY DISTURBANCES, INCLUDING PAINT FAILURE.

under the proper circumstances, pass through certain building materials. This generally occurs when indoor humidity and temperature are comparatively high and the outside temperature is low. When the moisture-laden warm indoor air passes through the walls and strikes the colder exterior part of the walls, condensation occurs and droplets of water form. These cause the trouble—blistering of the exterior paint.

When houses were built "roomy" and were not too tightly constructed, adequate ventilation, intentional or otherwise, allowed the house to breathe. Thus, during the summer, when the weather humidity was low, there was some opportunity for a
A FAMOUS NATIONAL MAGAZINE asked
LEVITT AND SONS, of Long Island, N. Y.—

"What gave Timken Silent Automatic the winning edge over all competition for your 1949 heating business in the $20,000 home class?"

AND BILL LEVITT REPLIED:

"When you see the new Timken Silent Automatic Kitchen-Type Oil Boiler, you will understand. It's a terrific job!"

WHEN YOU SEE THIS REVOLUTIONARY NEW UNIT, YOU TOO WILL UNDERSTAND WHY ADVANCE ORDERS FOR THE TIMKEN SILENT AUTOMATIC KITCHEN-TYPE OIL BOILER ARE MOUNTING SKY-HIGH!

Write for Free Literature Today!

TIMKEN Silent Automatic Heat

Here is the first all-in-one house-heating and water-heating unit for kitchen installation—the new Timken Silent Automatic Kitchen-Type Oil Boiler. The counter-high cabinet, finished in sparkling white and topped by a stainless steel work surface, contains a house-heating boiler fired by the Wall-Flame Oil Burner, instantaneous water heater, expansion tank, circulating pump, tempering valve and automatic controls.
Correct Paint

(Continued from page 172)

fair balance between indoor and outdoor humidity. Walls were seldom insulated and were not too tight, and the exterior finish materials, such as sheathing and siding, were at a higher temperature relative to their temperatures in insulated walls. These two hazards worked together to reduce the hazard of moisture condensation in walls.

Today's homes have much higher humidities in the winter time. The use of humidifiers and air conditioning systems, more bathrooms, greater use of home laundries and kitchens have added to the amount of moisture in the average new home. Not only is more moisture produced, but in many cases it is confined to smaller spaces.

Another reason for higher humidities in the modern home is that tighter construction, due to the use of weather stripping, storm sash and caulking materials, as well as other improvements in construction, literally "bottles up" the moisture and forces it out through the walls.

Several effective remedies can be used to overcome condensation trouble. One is to suitably ventilate the house. Another is the installation of a vapor barrier. Insomuch as moisture condensation will take place in any type of wall, whether it is insulated or not, provided the conditions are right, the solution lies in the placement of a barrier which will prevent moisture penetration to the outer wall where it will condense. Blistering due to this source is thus eliminated. A barrier of this type, be it paper, paint, or metal foil, should be placed as near as possible to the warm or room side of the wall to prevent the moisture from reaching the colder outer section of the wall.

In many cases, the paper type of barrier should be asphalt impregnated, or a sheet material of proper thickness and sufficiently waterproofed with wax and bitumen to insure adequate vapor resistance. This type of barrier should be applied to the inside face of the vertical framing members (studding) before the lath and plaster or other interior finish is installed.

A paint vapor barrier is generally used in buildings which have been completed and which do not readily permit the installation of paper barriers within the outer walls. The paint must be applied to the entire wall in order to eliminate through-the-wall moisture condensation which causes blistering of exterior paint.

In addition to moisture condensation, other causes of blistering paint may be moisture entering through flush siding, or entering the wall through improper flashing. Excessive moisture in basements due to ground water encountered in excavations, unusually damp surrounding areas, stoppage of sub-surface drainage, leaks caused by broken or clogged gutters, and downspouts—any of these conditions may be found at the bottom of the trouble, and should be investigated before placing the blame on the paint itself.

Painting Masonry Construction

Structures of stone, brick, concrete and stucco often are incorrectly thought of as being permanent. However, if these surfaces are not given the proper maintenance treatment, they inevitably succumb to the attack of natural weather elements.

Protective and decorative coatings for such surfaces may be divided into four classes: cement-water paint, resin-emulsion paint, oil paint, and paint containing rubber in the vehicle.

These paints are also suitable for use on such masonry surfaces as foundations, interior walls, gate posts and (fence) enclosure walls, but they should not be used on floors which are subject to abrasion. Instead, for such surfaces a very hard-drying paint with good water resistance and good gloss retention is recommended.

In selecting the type of paint to be used, some consideration should be

(Continued on page 176)
This Cost-cutting Building Combination Helps You Sell More Houses

Low-cost, modern reinforced concrete stucco construction, plus the Keystone System of Stucco Application meets today's market requirements.

The combination of modern stucco and the Keystone System of Stucco Application boosts the building business two ways:

First, modern stucco means lower cost construction—to produce homes that appeal to buyers price-wise. In most areas stucco siding costs only about 1/3 the cost of equivalent siding material.

Second, the Keystone System of Stucco Application produces stronger, more durable stucco—for lasting crack-resistance and permanent beauty.

So, take advantage of the cost reduction and quality construction you achieve with this sales-stimulating building combination now. Build with stucco—the Keystone way.

For complete information, see your building materials dealer or write direct. Find out all about the Keystone System of Stucco Application, and use Keymesh Reinforcing in easy-to-handle 3' x 150' rolls.

Keymesh Steel & Wire Company
PEORIA 7, ILLINOIS

Manufacturers of Keymesh Reinforcing, Welded Fabric, Tie Wire and Nails

Durable, Low-Cost Stucco Calls for KEYMESH
Don't let prospective buyers see the need for unsightly and dangerous extension cord entanglements, due to a lack of convenience outlets in your homes. These are the things on which a sale can hang—or they can hang you!

An adequately wired home sells readily at a good price, because home buyers nowadays have learned to look for Adequate Wiring.

An Adequate Wiring Certificate is your proof that each house you design and build has:

- Enough outlets, fixed lights and switches.
- Adequate electric service entrance equipment, fed by three ample size wires.
- Enough branch circuits and spares for present and future electrical needs.

The Sign of the Times

Use the services of the local Adequate Wiring Bureau in preparing a complete Adequate Wiring layout and specification, before you put the electrical job out for bids. Get the wiring into the plans for better appraisal—a better loan!

If there is no Adequate Wiring Bureau in your community, write us or your local electric utility for information on how to take advantage of Adequate Wiring in the homes you build.

ANOTHER HOME with Adequate Wiring Certified

Look for this Sign

Correct Paint

(Continued from page 174)

given to the physical characteristics of the surface, such as relative moisture content and age, texture and porosity and, in the case of repaintings, the type of coating previously applied. Cement-water paints are particularly suitable for application on walls which are damp at the time of painting or may become damp after painting as a result of structural defects, new structures (less than 6 months old) which normally contain water-soluble alkaline salts, and open-texture surfaces (for example: cinder, concrete and lightweight aggregate block). Gloss-textured surfaces (cast concrete, asbestos-cement siding, tile, etc.) which are relatively dry may be painted with resin-emulsion paint or paints containing rubber in the vehicle. Walls which are dry at the time of painting and are so constructed as to remain dry after painting may be decorated satisfactorily with oil paints.

The performance of the paint selected will depend to a large extent on the preparation of the wall surface and the application of the paint.

COLOR...

There is underway today a great renaissance of color. Intense interest is being aroused in the great masses of people in better and more extensive use of colors. Decorators, painters, printers, factory finishers of furniture, textiles and all who use color, are confronted with the necessity for learning more about its tasteful and harmonious use. A greater knowledge of color pigments, liquids, theory of color and principles of color law is imperative for those who would keep abreast of the times. More and more people are beginning to realize that simply painting the exterior or interior of the home is not enough.

The medical profession has long realized that colors can be used to stimulate or depress. Some help people to relax and be cheerful. Others stimulate and invigorate them. Still others set up irritation and actual physical discomfort.

Color used judiciously can be an effective sales weapon in the sale of homes. Within the house it can be used to create the illusion of space. On the exterior, it can be used to accentuate the best architectural features of a house and to suppress its unimportant details. A tall, narrow house can be made to appear lower and a small house larger, when color is selected both scientifically and intelligently.

For frame homes the top preference...

(Continued on page 178)
Now!...a worthy addition to the great WARM MORNING Line...a Package COAL FURNACE with many new, advanced features! A complete, compact packaged unit for quick, easy, low-cost installation. Does triple duty...serves as a gravity or pipeless furnace; a forced air furnace (with or without ducts) or as an all-purpose Space Heater.

WARM MORNING PACKAGE COAL FURNACE

- Heat output 80,000 B.T.U. at Bonnet
- Exclusive, patented interior
- Fuel capacity 100 lbs.
- Cabinet finished in Beige Brown, Hammertone; feed and ash doors in aluminum
- Built-in automatic heat regulator
- Ball-bearing grates; heavy duty, draw center
- Removable ash container - ½ bu. cap.
- Blower adjustable for range of 800 to 1250 C. F. M.
- Height 54"; width 28"; depth 36"

WRITE for Illustrated Folder giving detailed information on this New WARM MORNING FURNACE!

LOCKE STOVE COMPANY
114 West 11th St.
Kansas City 6, Mo.

As a Pipeless Furnace
Basement Installation

As a Regular Furnace
Utility Room Installation

As a Regular Furnace
Basement Installation

As a Space Heater
for Schools, Churches, Warehouses, etc.
Correct Paint
(Continued from page 176)

still goes to white for exteriors. Probably one reason for this outstanding preference is the way in which white paints affect apparent size. For example, two houses can be exactly the same as to shape and dimension, yet one painted white will appear considerably larger than its counterpart painted another color. Another reason is that a house painted white can be as much as 15 degrees cooler in direct sunlight than a house painted a dark color. Also, today, because of the self-cleaning action inherent in quality paints, white paint on homes is not an extravagance, and creates an appearance of high quality and taste.

In any paint plan, color styling should play an important part. Royal Barry Wills, well known small home architect, believes that a house should be color-styled in keeping with its architectural design and landscape planting. He believes that color is important in setting the tone of the home, so that it harmonizes with its surroundings. Near a manufacturing district, a grey or grey-green would be a wiser choice than white, while white or some very light shade makes a nice contrast for a house on a tree-lined street. Then, too, if a house is situated close to other homes, the choice of color should be based on adjacent structures to avoid an unpleasant clash.

First consideration in the choice of color should be the large area of the house. However, correct handling of the attractive little details can make a house stand out from the commonplace. Objects such as doors, shutters, fences, the underside of porch roofs, door and window frames and sash and even chimneys can be enlivened with color. These are the “window dressings” of a house and when properly treated can

(Continued on page 180)
Glass And Screen Panels, Weather Stripping And Wood Surround, Completely Assembled—Ready To Nail Into Window Opening...

Twelve years of experience in the field have gone into the design and development of the Rusco Prime Window. All working parts are of sturdy, tubular, hot-dipped galvanized steel...factory treated and painted... all installation members of toxic-treated wood. Only the wood surround needs field painting.

The trim appearance, smooth operation, durability and efficiency of the Rusco Prime Window appeals strongly to the home owner. Its completeness, its ease and low cost of installation makes a hit with builders and architects.

Lightweight, Streamlined Glass and Screen Panels Are Easily Removed From Inside... Makes Window Cleaning Easy...

Slight Pressure With Thumb On Side Of Handle Releases Lock So Panel Can Be Raised To Any Level. Release Of Pressure Locks Window...No Weights, Cords Or Spring Balances.

All sash frame members finest quality, tubular, hot-dipped galvanized steel—bonderized, zinc chromated and finished with outdoor, baked-on enamel for lasting beauty...cannot warp, stick or bind.

- Toxic-treated wood installation members complete—for easy installation.
- Waterproof felt weather stripping throughout assures easy, silent operation—complete weathertightness.
- Glass bedded in mastic and held in with stainless steel spline...simplifies glass replacement...no short-lived, unsightly putty is used.
- Lumite Plastic Screen Cloth—will not rust, rot, corrode or bulge—is left in place the year round.
- AVAILABLE WITH STORM PANELS — inside-adjustable, self-storing — factory-fitted—complete in frost-break frame.

SEND COUPON FOR COMPLETE CATALOG
Valuable Franchise Territories Still Available.

THE F. C. RUSSELL CO.
DEPARTMENT 7-AB 89 • CLEVELAND 1, OHIO
G. E.'s New Electric Heater is easily built right into wall!

For Old Houses . . . for New Houses!

Here's one of those extra, inexpensive luxury features that people look for when they're buying a house.

It's a Built-in Electric Wall Heater, manufactured by the General Electric Company—a wonderful selling feature for any house, old or new.

It was designed with the bathroom in mind, but is installed easily in any room in the house.

Complete, this heater makes any bathroom, any room look more modern. With the snap of a switch, it circulates heat throughout the room by the radiant-convection principle.

And for a very little bit extra, a remote control switch can be attached, so that the heater can be turned on from the bedside or from another room.

Specifications for General Electric Built-in Wall Heater

1. Comes completely equipped with tumbler switch as integral part.
2. Beautiful Hammerstone gray finish—can easily be painted another color.
3. Fits flush with wall—guard projects only 3/4 of an inch.
4. Highly polished corrugated-aluminum reflector that radiates heat in wide zone.
5. Protective grille of high-quality-steel wire—easily removed for cleaning.
6. Two long-life heating elements of nichrome wire—ceramic cores.
7. Rating—1220 watts, 115 volts, a-c/d-c, 1507 Btu.
9. Shipping weight, 10 pounds.

Amazingly low-priced

BUILT-IN ELECTRIC WALL HEATER

General Electric Co., Section NN6X
1285 Boston Avenue
Bridgeport 2, Connecticut

Please send me complete information on General Electric's Built-in Wall Heaters.

NAME........................................
ADDRESS.................................
CITY........................................
STATE......................................

Heater consists of only three separate pieces: a wall box, heating assembly, and guard. Easy to install—instructions attached to each heater.

Correct Paint

(Corrected from page 187)

reflect good taste and individuality. For example, consider the garden fence. Think how much additional interest a simple striping line can add to it.

On interior surfaces, paints are not used as protection but to give uniform color, texture and decorative value. As design follows function, so colors must fit the purpose for which a room is used. Leading decorators today urge the use of solid color walls in greyed tones for the best effects. Greyed shades and light tints are receding colors and should be used in small rooms to create the illusion of space. Moderately large rooms offer greater latitude in choice of colors, textures and design. Here color schemes may be used which utilize greater contrasts of values as between tints and shades of one color or as between light and dark colors. Gloss and semi-gloss finishes may be used in large rooms but should not be used in small rooms since they emphasize the limits of vision and make a room appear smaller. Flat finish is best for small rooms and may also be used in large rooms.

A national survey conducted by Ponderosa Pine revealed that geographic location has a definite influence on the decorative preferences of people. For example, in the north central and western regions, people prefer a natural wood look while in the northeastern and southern regions the trend is toward painted interior doors. Painted bedroom doors are preferred nationally except in the north central region. Nation-wide the preference was for painted walls of pastel shades in living rooms, kitchens, and halls, while wallpaper had a slight edge over paint for the dining room and both paper and paint were equally favored for bedrooms.

Source material and illustrations for this article courtesy of following firms:
The Eagle-Picher Co., Cincinnati, Ohio
The Sherwin-Williams Co., Cleveland, Ohio
National Lead Co. (Dutch Boy Painters), New York, N.Y.
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The Truscon Laboratories, Detroit, Mich.
American-Marietta Co., Chicago, Ill.
Pratt & Lambert, Inc., Buffalo, N.Y.
Devoe & Reynolds Co., New York, N.Y.
The O'Brien Corp., South Bend, Ind.
Ponderosa Pine Woodwork, Chicago, Ill.
Paint Progress, The New Jersey Zinc Co., New York, N.Y.
California Redwood Assn., San Francisco, Calif.
National Painters Magazine, New York City

American Builder, August 1949.
HASTINGS ALUMITILE OFFERS YOU quality, permanence and dependability in a lustrous modern wall covering that can be easily and quickly applied to any flat surface. Properly installed, it becomes an integral part of the wall itself, proof against fire, water, rust, heat and cold.

HASTINGS ALUMITILE CAN SAVE YOU tons of structural weight, hundreds of man hours of labor and thousands of dollars. Fabricated of sturdy aircraft aluminum, it is remarkably low in price, easy to handle and fast to install. Yet it holds all of the advantages of conventional wall tile.

HASTINGS ALUMITILE COMES IN 15 vital decorator colors for interior use and 7 specially embossed color finishes for exterior use. It offers a wide range of distinctive designs and unlimited possibilities for residential and commercial installations.

and

HASTINGS alumi-SHIELD Awnings will complete the job!

WINDPROOF! WEATHERPROOF!

Alumi-SHIELD Awnings are built for a lifetime of comfort, beauty and service. They will not sag, tear, rot, rust or flap noisily in the wind. Well designed louvers in the side panels guarantee adequate cooling and ventilation without weakening the structure or adding unnecessary weight. Interchangeable units in choice of colors allow wide latitude for color combinations, and this interlocking strip design means that the awnings can be tailored to fit individual window and door openings. The method of assembly is so simple that full installation can be made in a matter of minutes.

For complete data see Sweet's File or MAIL THE COUPON for the story of Alumitile and our amazingly priced awning.

METAL TILE PRODUCTS, INC.
HASTINGS, MICHIGAN
BETTER BUILDING...LESS WASTE!

1. "I was amazed at the saving in time, material and labor," writes a contractor who used End-Matched lumber for siding and lining on a 66 x 100 foot dairy barn.

2. Interior lining of barn is made smooth, clean, and sanitary with End-Matched lumber.

3. Every piece of End-Matched lumber fits. No sawing needed...no time lost squaring up the ends. It lays up fast, and stays up tight.

4. Appearance counts too...and what could be better looking than the perfectly smooth undersurface of this fine home. End-joints are practically invisible.

5. Diagonal sheathing makes a sounder, more perfect building...and End-Matched lumber is ideal for the job. Let the joints fall where they may!
Retail lumber dealers are in a position to furnish End-Matched lumber from softwood species of the West Coast... lumber that locks together at the ends and edges to form smooth, tight, rigid panels of any desired area. There is no waste with End-Matched lumber—no cutting and fitting of each piece. It makes possible sound, speedy construction at lowered cost.

End-Matched, with its superior construction qualities for sheathing, siding and flooring, is extremely popular among builders who have used it and seen its extra values. They will be glad to know that End-Matched is available. The pictures on the opposite page illustrate some of the advantages of this superior lumber product.

Sound quality in lumber helps you win friends, build sales, increase your profits. You can offer that kind of quality in fullest measure, in Weyerhaeuser End-Matched Lumber!
SPOT SASH CORD

Simplicity — no other device is as simple or as permanently efficient for balancing double-hung windows as the time-tested combination of Spot Cord, pulleys and weights. Perfect and permanent balance and noiseless operation are assured. There is nothing to get out of order.

The part that takes the wear is the cord — and Spot Sash Cord will last almost indefinitely. It is made of extra quality fine cotton yarn, firmly and smoothly braided, and guaranteed free from imperfections.

Identified by our trade-mark, the Colored Spots (Reg. U.S. Pat. Off.) Send for sample card with table showing right sizes for different weights.

SAMSON CORDAGE WORKS
Douglas Fir Plywood's

STOCK SIZES*

permit more exact specification

...with full material utilization

Because big, rigid, durable 4 x 8-foot panels of Douglas fir plywood are so easy to use, so versatile and so perfectly suited to so many applications, this "modern miracle wood" ranks as one of America's preferred building materials.

Other stock sizes, too (see below) now mean even greater usefulness for remodeling and new construction alike.

For many applications, you'll find a stock size that will fit the need exactly—without cutting, without trimming—and with full utilization of the material. Many other needs will be met with less sawing and fitting—a substantial saving of both on-the-job and mill-work costs.

Complete data on stock sizes, thicknesses and grades of Douglas fir plywood are detailed in Sweet's File, Architectural. Or you may write for the 1949 Basic Plywood Catalog (a reprint of Sweet's). Other ideas for using plywood's stock sizes are contained in "The Wood of 1,000 Uses." For your copy, address the Douglas Fir Plywood Association office nearest you: Tacoma Bldg., Tacoma 2, Wash.; 848 Daily News Bldg., Chicago 6; 1232 Shoreham Bldg., Washington 5, D. C.; The 500 Fifth Avenue Bldg., New York City 18.

Douglas Fir Plywood's

STOCK SIZES*

**LENGTHS:**
60"72"84"96"108"120"144"

**WIDTHS:**
30"36"42"48"

(Some grades limited to fewer sizes)

Douglas Fir Plywood

LARGE, LIGHT, STRONG

Real Wood Panels

For remodeling...for refinishing attics and basement rooms...stock sizes other than 4 x 8 are often ideal—saving installation time and labor.

Interesting wall treatments are made easier when planning with various plywood stock sizes. In remodeling, such panels are especially convenient.
E. W. Smith Named to Owens-Corning Post

E. W. PAT SMITH has been appointed director of merchandising for the Owens-Corning Fiberglass Corp., Toledo, Ohio, according to an announcement by Ben S. Wright, vice president and general sales manager. Smith, who joined the firm in April as special assistant to the general sales manager, was formerly vice president of sales for the Philip Carey Manufacturing Co., Cincinnati, Ohio. Working with Smith are Tyler S. Rogers, technical editor and manager of Fiberglass Standards publications; Stephen J. Daly, advertising manager of the general products division; and Philip Linne, in charge of displays and exhibits. Edward C. Ames has been named director of public relations and publicity.

Lowry Heads Sioux Metal

DIRECTORS of the Sioux Metal Products Co., Bedford, Ohio, recently elected C. Dean Lowry president. Lowry joined the Sioux organization last fall as vice president in charge of sales. Active in the metal and glass trade during his entire business career, Lowry was affiliated with the Libby-Owens-Ford Glass Co., Toledo, Ohio, for more than ten years.

SPANS of standard Rilco bowstring trusses used in roof framing of plant for rafters at St. Paul, Minn., designs and produces glued-laminated wood products and framing members for commercial and farm uses.

When the new building is completed it will be used for fabrication of rafters for farm buildings, and heavy arches and trusses for churches, gymnasiuims, community buildings and similar structures.

Do Sidewall Jobs in Greater Safety with "TROUBLE SAVER" Scaffold Brackets

On jobs like this—and many others—"Trouble Savers" pay big dividends by saving time, labor and materials. They provide safe working platforms that give your men safe footing. Made of rail steel, "Trouble Saver" Scaffold Brackets are light, easy to handle and extra strong. They're available in nail-attached, studding and bolt-attached types. Write for catalog of "Trouble Saver" Equipment.

THE STEEL SCAFFOLDING COMPANY, INC.
Dept. AB, 856 HUMBOLDT STREET BROOKLYN 22, NEW YORK Telephone Evergreen 3-5510
EASY TO INSTALL
EASY TO CLEAN

TO INSTALL:

1. Blo-Fan housing merely nails between standard ceiling joists. Requires only 3½" depth. Wire is run into knockout box and connected to a standard receptacle. Duct is standard 3½"x10" size.
   Time: 20 to 40 minutes.

2. After job is finished the Blo-Fan combination fan and blower motor unit is merely plugged into the receptacle. Three grease resistant neoprene feet hold unit in housing. No tools used for this operation.
   Time: one minute.

3. Grill is held in place by the center knob, which is screwed onto the spindle. No tools used for this operation.
   Time: 20 seconds.

TO CLEAN:

Reverse operations 2 and 3 and each part is removed. No tools necessary. As easy as changing a light bulb.

ELECTRIC CEILING VENTILATOR

SPOT ventilation at the point of air pollution
For Kitchen, Bath, Game Room and Laundry

LOOK!
Balance Sash and Weatherstrip with One Enclosed Unit

MAKE IT EASY FOR YOURSELF. Give your client a better installation and better sash control by using this combination Sash Balance and Weatherstrip Unit. The ALLMETAL Sash Balance is rolled from one piece of metal and new engineering principles have been applied to give true two-way balance action—making use of both spring tension and metal tension—thus gaining stability. In raising and lowering sash, spring housing (in itself the most effective weatherstrip) compresses against groove yet does not hinder vertical movement. Hemmed side ribbing against the stops gives additional weatherstrip protection. Spring never shows. It is completely concealed.

1. Spring for vertical tension.
2. Enclosed housing for lateral stability and neater appearance.
3. Complete metal runway coverage.
4. One-piece tubular housing conceals spring.
5. Specially designed sash clip for secure spring holding.
6. Full ¼" x ¼" sash groove (after fitting).

Write today for complete details about this new, better, economical window equipment which saves so much in labor and time.

ALLMETAL WEATHERSTRIP COMPANY
2243 North Knox Avenue • Chicago 39, Illinois

Gentlemen: Please send me complete information and prices.

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Two Mixers Every Builder Should Have

3½S NON-TILT
Improved Gated Batch Hopper with cam-operated shaker gives you power loader speed without its cost! 100% Timken equipped. Drum tracks are fully machined.

- Positive, no-slip no-thrust spur gear drive.
- Separate, self-cleaning blades and buckets mix and remix batch thoroughly in less time!
- Vertical water tank accurately calibrated.

Compact, perfectly balanced end-charge design.

SUPER "6" WONDER
This new 6 cu. ft. Wonder has telescoping axle. Special caster-type wheels available which permit mixer through 32" door. Plus many other features. A better mortar mixer any way you look at it!

- Often pays for itself on first job.
- Triple mixing hoes with exclusive adjustable blades assure perfect mixing.
- Mixes cement, mortar, patent plaster with hair or fiber, etc.


New Electric Freight Elevator is Self-Supporting
Inexpensive to Install

A new self-supporting elevator has been designed to provide a low-cost, electric elevator installation for every type of business and institution that requires vertical freight transportation, but does not need heavy-duty freight elevators. It fills a long-felt need by making materials handling considerably easier and less costly for small business. The elevator is being made in three standard sizes of 1,500, 2,000 and 2,500 pounds capacity. Vertical rise is limited to 35 feet—sufficient for a three story building.

As illustrated, the elevator is installed as a complete unit in a new or existing hoistway. Only 11 feet of headroom is needed above the top floor landing. Expensive construction, such as a penthouse on top of the building for the electric motors and other operating machinery, overhead supports, roof alteration and building reinforcement, is eliminated. As the elevator supports itself, no heavy strain is placed on the building. The weight of car, load, hoist ropes and sheaves is carried by three guide rails in the hoistway and transferred to the bottom of the shaft. The elevator can be operated by any employee without special training. For complete details, write for Bulletin B-720H. Address: Otis Elevator Company, 369 11th Avenue, New York 1, N. Y.
WHAT'S THE SENSIBLE WAY TO CUT BUILDING TIME?

It's simple and easy to cut down the time needed to build any structure. To do it requires no change from conventional methods. A simple system of coordinating the sizes of the materials that go into the job is all that is needed. Known as modular design, this system is now the national standard. Building materials are sized on a 4-inch "module" or unit of measurement to save time, labor and cost in construction!

WOOD . . . BETTER THAN EVER WITH MODULAR DESIGN! Wood has always been the ideal material for windows, sash, frames, screens, storm sash and other woodwork products. Warm to the touch, wood insulates against heat and cold. Easily painted, stained or varnished, it holds finishes lastingly. Woodwork products are moderate in cost—precision made for quick installation. Toxic preservative treatment at the factory enhances their long life—provides extra resistance to staining, decay, insect attack or humidity. And today, leading woodwork manufacturers add an EXTRA advantage—MODULAR DESIGN!

ANSWERING YOUR QUESTIONS ABOUT MODULAR-SIZE WOODWORK

Q. HOW DOES MODULAR DESIGN HELP ON THE JOB?

In installing windows, for example, there is ONE standard opening. This opening takes any design of modular-size window. There's less cutting, less trimming, less waste of material.

Q. WHO STANDS BEHIND MODULAR DESIGN?

Leading organizations in the building industry such as the Associated General Contractors of America, American Institute of Architects and Producers' Council endorse modular design. The U. S. Housing & Home Finance Agency recognizes modular coordination as a cost reduction system.

Q. ARE MODULAR-SIZE WINDOWS EASY TO OBTAIN?

Yes. Modular standard windows, window frames and screens are fast becoming available in all localities, thus simplifying specification procedure and assuring a ready source of supply.

Q. HOW DOES MODULAR DESIGN BENEFIT THE OWNER?

It gives him more for his building dollar. Modular design also simplifies repair and replacements of windows. In addition, the consumer can get not only his windows but his frames, storm sash, screens, trim, window shades, venetian blinds, etc., in standard sizes to fit modular openings.

NATIONAL WOODWORK MANUFACTURERS ASSOCIATION
332 SOUTH MICHIGAN AVENUE • CHICAGO

The seal of approval identifies woodwork products which meet the requirements of toxic preservation. Any woodwork or wood product assembly that bears the NATL. WOODWORK MFRS. ASSN. APPROVED label has been submitted to the National Woodwork Manufacturers Association for toxic preservation treatment.
Globe Roofing Appoints New Advertising Manager

C. James Dunham has been appointed advertising manager of Globe Roofing Products Co., Inc., according to an announcement by Harry F. Altheide, vice president in charge of sales.

Dunham will have headquarters at the Whiting, Ind., executive offices of Globe. He was formerly advertising manager of The Ruberoid Co., and has been in the sales promotion end of the roofing and building material industry for 25 years.

The addition of Dunham to the Globe executive sales staff is intended to implement a stepped-up program of new product promotion and dealer helps for the trade.

Ponderosa Pine Appoints New Director Member

A. J. Glassow, general manager and vice president of Brooks-Scanlon, Inc., Bend, Ore., has been appointed a director of Ponderosa Pine Woodwork to fill a vacancy on the board.

Glassow has long been prominent in West Coast lumber industry, and was formerly president of the National Lumber Manufacturers Association.

Product Service Facilities Expanded by Hotpoint

A PROGRAM of expansion for its product service facilities has been completed by Hotpoint, Inc., Chicago, David C. Marble, product service division manager has announced.

Facilities of the service division which now occupy 165,000 square feet covered 50,000 square feet before the war.

Dewey B. Rinehart has been appointed assistant manager of the division and will direct service operations for the company's distributor and field organizations. Other service division executives are A. F. Deering, manager of the customer service and parts department, and E. H. Ruesch, manager, technical and training section.

Since May, 1946 the product service division has conducted two-week training courses for all distributor product service managers.

Palmer Corp. Purchases California Plants

THE Pacific and Superior Heating Divisions of the Naco Manufacturing Corp. of Los Angeles, have been purchased by the Palmer Manufacturing Corp., Phoenix, Ariz., Oscar C. Palmer, owner-president of the Arizona firm has announced.

American Builder, August 1949
The new basic mouldings in the Premier line of Pittco Store Front Metal may be truly called a Moulding Kit. They may be combined in a wide variety of attractive patterns, giving the architect fresh style and beauty, and great variety in design to help in the creation of distinctive, sales-winning store fronts.

Shown here with the same head and drip members are three of the many designs which may be formed with these new shapes. Cross sections of some of the new mouldings are shown at left.

Most of the shapes in the Premier Moulding Kit are interchangeable and may be used both horizontally and vertically. They make it easy to design several adjacent store fronts, giving each a distinctively different appearance through the proper selection and arrangement of mouldings.

This convenient Moulding Kit of Pittco Premier Store Front Metal, is another result of "Pittsburgh's" constant research, aimed at helping you solve architectural and building problems encountered in the field.
Do You Know
YOU CAN INCREASE QUALITY
AND REDUCE HOUSING COSTS
by using all three
SISALKRAFT PRODUCTS

1. SISALKRAFT Reinforced Building Paper

SISALKRAFT is the best sheathing paper that money can buy! Costs very little more than ordinary tar paper . . . but it costs less to apply. Use SISALKRAFT for OUTER WALLS over sheathing . . . for INTERIOR WALLS, as a vapor-barrier (FHA-approved) . . . UNDER WOOD FLOORING . . . UNDER RUBBER TILE for "on-grade" floors . . . OVER SUB-FILL (under concrete slabs) . . . under radiant heated floor slabs.

2. SISALATION Reinforced Reflective Insulation

At about $25 per 1000 sq. ft., SISALATION saves 50% or more, compared with bulk or blanket-type insulation. SISALATION also costs less to apply. Provides BOTH sidewall insulation and vapor-barrier (FHA-approved). Lining attics with SISALATION makes them more livable and attractive. SISALATION and SISALKRAFT, used together, provide modern DRY WALL construction . . . SISALATION for effective insulation and vapor-sealing from the inside . . . SISALKRAFT for weather-sealing from the outside. Highest QUALITY construction at low cost!

3. COPPER ARMORED SISALKRAFT

For about 75¢ per window or door opening, you can get this pure copper flashing. Highest quality, low-cost, enduring protection . . . for flashing door and window openings, foundation damp-coursing, ridge roll and other flashing, waterproofing shower stalls . . . and other concealed flashing uses.

See Sisalkraft Insert In Sweet's BUILDERS' File

Use all three products for quality housing at low cost

American Builder, August 1949.
Beautiful bathrooms win more acclaim from home owners and their guests than practically any other room in the home. So the bathrooms of your houses are long-lasting advertisements of your discrimination as a quality builder.

Buyers of the homes you build will be enthusiastic in their joy with the sparkle of AllianceWare porcelain-on-steel sanitary fixtures that stay young year after year. The beauty of AllianceWare makes a wonderful appeal to home owners.

Your customers will be delighted, too, with the convenience of the wide seat which is an integral part of the outer rim of the AllianceWare tub illustrated here.

And you, as the builder, will appreciate AllianceWare’s wallguard construction—an integral flange extending upward a full inch from the rim of the tub where it joins the wall. Concealed behind the wall tile or plaster, this wallguard provides a permanent water-tight seal of tub to walls. Neither can an AllianceWare tub shift from its permanent position—the AllianceWare method of installation prevents shifting and settling.

Builders from coast to coast are finding complete satisfaction for both themselves and their owners with AllianceWare. Your plumbing contractor can give full details of AllianceWare. Or write us for catalog sheets.

ALLIANCEWARE, INC. • Alliance, Ohio
Bathtubs • Lavatories • Sinks
ALUMAROLL
The Roll-Up Patio Cover

Try adding an outdoor living room at little extra cost. Watch the home-seekers sales resistance vanish.

Home-seekers are quick to note the added dollar value, with the added living space. You won't need to point out how much more cool and comfortable the window-wall room is, when the direct rays of the sun are blocked. They'll fall in love with Alumaroll's sparkling baked on enamel finish, in colors that harmonize with the house. There's an invitation to relax in the shade of an Alumaroll aluminum patio cover.

A home with an Alumaroll Roll-Up patio cover definitely has a silent salesman that speaks louder than words.

So make an ALUMAROLL Roll-Up Patio Cover a MUST in your plans for them.

Mail coupon today: Get full and complete information, including our super-fast delivery schedule — thru O.B.I.'s nation wide K.D. plant setup.

Orchard Bros., Inc.
67 Meadow Rd, Rutherford, N. J.
Please send full information about ALUMAROLL patio cover.
I am a □ Dealer □ Contractor □ Builder □ I would like to know about the K.D. plan.
Name ........................................
Address ......................................
City ........................................... State ............

Revere House Institute Becomes Division of Southwest Research Group

IN a step to expand a program already under way for raising the standards of design and construction in moderate-priced houses, the Revere Quality House Institute has become the Revere Quality House Division of the Southwest Research Institute, it was recently announced by C. Donald Dallas, chairman of the board of Revere Copper and Brass Inc., and Dr. Harold Vagtborg, president of Southwest Research Institute.

"As a result of this affiliation," the announcement said, "it is expected that in addition to Revere, other manufacturers of building products will join in supporting the broad objectives of the program, and in promoting locally or nationally such houses as seem to fulfill the ideal of quality at low cost."

Southwest Research Institute was founded and endowed as a public service, non-profit organization by Tom Slick, Texas oil producer and rancher. It is located on the 4,000-acre Essar Ranch, eight miles west of San Antonio, Texas. It is engaged in four specialized fields of scientific and practical research; housing; fire technology; petroleum technology; oceanography and meteorology.

"This Institute," the announcement continued, "has more than 100 employees, and among its resources are research departments in chemistry, physics and engineering which provide extensive facilities for investigations of building materials, methods of construction, and standards of quality. With the housing programs of the two institutes combined, all these facilities will be employed toward the objective of bringing constantly increasing quality to American homes.

"As before, the basis of the program will be that of local design to meet local conditions, and construction by capable merchant builders. Under the Revere Quality House Institute, beginning in 1948, several hundred Revere quality houses have been erected and sold in eight communities from coast to coast, and this year there will be projects under the Revere Quality House Division in approximately 12 other communities. This construction is all done by the builders themselves, as the organization neither builds nor sells houses. It identifies quality and helps the public to recognize quality and the builder to merchandise quality.

"Also under the expanded program, field studies will provide information on methods of assuring (Continued on page 198)
Beautiful, practical FORMICA—the plastic laminate that's out front in service and quality—is distributed by Roddiscraft warehouses. Hand in hand with Roddiscraft plywoods, FORMICA gives you a "two-way-stretch" to the big profits you want.

There are countless markets for FORMICA. Restaurants, homes, hotels, office buildings, stores, and many others. People go for the cheerful, colorful finishes . . . the rugged resistance to hard use. Yes, and when they get FORMICA, they need plywood, too—Roddiscraft plywood for bonding to Formica and for other parts of the installation.

It's a money-making combination—Beauty-Bonded FORMICA and Roddiscraft quality plywood! Stock up now. Order both FORMICA and plywood from your nearest Roddiscraft warehouse.
BUILDERS PREFER BEAUTIFUL TEXOAK FLOORING FOR THESE REASONS:

1. TEXOAK FLOORING is scientifically kiln dried.
2. TEXOAK FLOORING is precision machined in one of the nation's most modern flooring plants.
3. TEXOAK FLOORING is carefully and accurately graded.
4. TEXOAK FLOORING makes the ideal flooring whether you are building one house or a thousand.

For further information, see your distributor or write for our free booklet.

TEXOAK PARQUET FLOORING
Interlocking tongued and grooved floor blocks of beautiful kiln dried oak, 9" x 9" x 25/32". Write for free sample. No obligation.

TEXOAK STAIR TREADS
These beautiful glued warp-proof Texoak stair treads and risers are of fine quality. All your customers will like the rich texture of the wood.

TEXOAK THRESHOLDS
Scientifically kiln dried and machined to a beautiful finish, Texoak thresholds are made under same specifications as our Texoak Flooring.

TEXOAK FLOORING COMPANY
CROCKETT, TEXAS
Please send me the complete story of Texoak Flooring including the new booklet on "How to make flooring profits through proper storage and grading."

Name
Address
City State

SAVE SPACE WITH THE BESSLER DISAPPEARING STAIRWAY

Your Choice of 7 Models

The one and only original Disappearing stairway. Tested and approved by home owners for 35 years.

Write today for literature and details.

THE BESSLER DISAPPEARING STAIRWAY CO.
1900 E. Market St.
Akron 5, Ohio

S E A V E     S P A C E
W I T H   T H E
B E S S L E R   D I S A P P E A R I N G
S TA I R W A Y

THE CAPITOL TAPER SEAL GARAGE DOOR

BOTH you and your customer will be satisfied if you install CAPITOL Taper Seal doors on that next garage job, and you'll recommend them consistently, for they're by far the easiest door to install.

Precision built of finest materials and hardware, parts fit perfectly with minimum labor — tracks automatically line up — four hinged sections and short radius require but minimum clearance — unique rabbet seals section joints.

CUSTOMERS LIKE THESE TAPER SEAL FEATURES
Modern Beauty • Balanced Action on Ball Bearing Rollers for "Feather Touch" operation • Complete Taper Seal Weather Protection • Long Trouble-free Service Life • Reasonable Price.

See Your Lumber Dealer or Write Us For Prices

CAPITOL PRODUCTS
311 East Adams St.
SPRINGFIELD, ILL.
The Economy Home
IS THE ANSWER TO THE PUBLIC DEMAND
FOR LOW COST HOUSING

Yes, this new series of PH Homes is the perfect blending of beauty, sound construction and low cost. And each quality speaks for itself in a manner that means business for builders in '49, and business means more profit for you, Mr. Builder. Write or wire for full details.

Experienced builders who see these new PH Homes quickly recognize the values that home buyers are seeking — supremely good design, expert craftsmanship, high quality materials — real livability. P&H's modern production methods make the most effective use of time and materials — insure precision down to the last detail — shorten the period of construction — effect the cost savings that are so important in today's market.

P&H Homes come to you from the factory 83% complete — fully panelized and insulated — requiring only 169 man hours or less to erect. This low cost economy Home presents a great opportunity for the active builder.

OUTSTANDING SALES APPEAL!

1. Full size — 24 ft. wide x 32 ft. long.
2. Large living room — 11' 7" x 17' 4".
4. Choice of two or three bedrooms.
5. Flush doors throughout.
6. Built with or without basement.
7. Choice of heating equipment.
8. Highly rated for FHA financing.

Model PH 4 — 24 x 32 feet. (Breezeway and garage not included.) 5 Other Models Available.

HOMES
301 Spring Street,
Port Washington, Wisconsin

HARNISCHFEGGER
INSTALL Pyrofax GAS

In Homes beyond the Gas Mains

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

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

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

Rever House
(Continued from page 194)
higher quality, and greater value. Along with work in the field will go investigations of a more scientific nature, using the laboratories and other facilities of the Southwest Institute.

"Another new activity for the Rever House Division is the preparation of a 'check list' of house quality features, for the guidance of home buyers. This is based on the 12 principles of quality which govern the identification of Rever quality houses."

The announcement invited further builder participation in the program, which is conducted without cost to the builders themselves. The builder phase of the activities is centralized in a New York office, maintained by the Builder Relations Department, Rever House Division, Southwest Research Institute, at 280 Madison Ave., New York 16, N.Y.

C. W. Smith is director of the division, and John Hancock Callender, architectural consultant.

In a separate statement, Dallas said: "This expansion of the service to builders and the public of the Rever Quality House movement gives Rever the greatest satisfaction. It was made possible by the thorough work done by the eight original architect-builder teams who designed and built the first Rever Quality Houses. Rever salutes them, and the Institute staff, which is being maintained."

Reorganization Made by Pacific Mutual Door Co.
IN a recent reorganization of the Pacific Mutual Door Co., Tacoma, Wash., Hollis J. Nunneley, was appointed headquarters manager, with the dual title of Western sales manager and director of purchases.

Nunneley has had 15 years experience as a plywood sales executive and was in the marketing field for lumber and allied materials for a like period. He will continue to be an officer of Industrial Plywood Corp. He is a former sales manager of Associated Plywood Mills, Inc.

The firm interests of T. F. Eckstrom, former president, have been purchased by the present principals of the company. Eckstrom entered business in California. Present officers of Pacific Mutual are: Kenneth D. Hoag, Garwood, N.J., president; Earl G. Thuresson, Chicago, vice president; Evan J. Owens, St. Paul, and S. Ray Lambert, Kansas City, vice presidents; Norman L. Johnson, Tacoma, secretary; and Ralph W. Sherrill, treasurer, Tacoma.
Figure RILCO members on those “sharp pencil” jobs

Pinched for time? You build faster with Rilco Glued Laminated Arches and Trusses. They come to your job all ready to set up, make it easy to beat deadlines because of their speedy erection.

Stumped by labor costs? Rilco framing members sharply reduce man-hours and eliminate on-the-job cutting and fitting. Precision-built at the Rilco factory to fit with absolute accuracy, they are easily managed by your regular crew without special tools.

Send for our new booklet today! It describes and illustrates Rilco Glued Laminated Arches and Trusses, shows the many types available for various uses—churches, gymnasiums, bowling alleys, theatres, garages, etc. These modern, efficient framing members will save you time and money, and provide load-bearing strength and rigidity you need. Figure on Rilco for easier, better construction—and greater profits!

HERE’S THE BOOKLET THAT SHOWS YOU HOW!

RILCO LAMINATED PRODUCTS, INC. 1667 FIRST NATIONAL BANK BLDG., ST. PAUL 1, MINN.

Glass Shower Doors and Medicine Cabinets

Add Extra Beauty and Salability to Your Building Project

- Add Beauty, Utility, and Economy with Glass Shower Doors or Tub Enclosures. Special Builders Prices on request.
- Medicine Cabinets ... of the highest quality and Beauty. All sizes and styles suitable for every type building from low income housing projects to fine Mansions and Hotels.

SOUTHERN SHOWER DOOR & CABINET CO. Dept. ABA - 4511 Kyle St. - Houston 6, Texas

DEALERS WANTED

Wilson storm panels are installed from the inside—they’re interchangeable with screens. A hollow rubber gasket prevents transfer of cold from metal casement. 1” dead air space gives maximum insulation. You’ll find the Wilson window will make friends wherever sold. Wilson storm windows available K.D. or completely assembled.

MANUFACTURED BY METAL WINDOW SERVICE CO. 4601 West 47th Street, Chicago 32, Illinois

PATENT PENDING

 Figures: RILCO, American Builder, August 1949.
STANLEY-CARTER
HINGE BUTT ROUTER

Door and frame mortises are accomplished in a minimum of time with this new Stanley-Carter Router. Ten times faster than handwork, plus machine accuracy. Works on house current. High-speed cutting . . . 18,000 r.p.m. . . . gives smooth, chatter-free operation. Direct drive from universal motor.

Simple to operate. Depth of cut easily, accurately adjusted by turning threaded motor in base. Resharpen its own bits.

Built for years of hard, profitable work. Sealed ball bearings, lubricated for the life of the bearing. Heavy duty motor with extra large shaft to withstand vibration and mechanical shock. Aluminum sub-base with anodized surface to minimize wear and prevent discoloration of wood.


The Kaufmann Aluminum Window
uses wood where it should

AVAILABLE FROM
YOUR RETAIL LUMBER DEALER

FOR COMPLETE DETAILS WRITE
KAUFMANN CORPORATION
Originators of the Aluminum Combination Window
17210 GABLE . . . . . . DETROIT 12, MICHIGAN
Remarkable is the word for these exciting new Marlite plastic-finished wall panels. Here's all the rich warmth of fine woods, the stately grandeur of rare-imported marbles...faithfully reproduced and permanently retained in Marlite's exclusive sealed-in surface. Think of the many places you can use these authentic patterns—in offices, stores, banks, hotels, institutions, homes and a host of other interiors. Every building prospect will be fascinated by this great new line. Famous Marlite is easy to work and handle...goes up fast over old walls or new...is perfect for either new construction or remodeling.

Homeowners and commercial prospects everywhere are reading about these new Marlite patterns in widespread advertising. Take advantage of it! Marsh Wall Products, Inc., Subsidiary of Masonite Corporation.

Get This New Folder!
High construction costs resulted in Speed-Wall! It is the answer to spiraling prices and hesitancy in building. Here is how exterior and partition Speed-Wall increase profits, yet cut costs: Reduce construction time 50 to 60%. Eliminate studding, fire-blocking, diagonal bracing, insulation, plaster and stucco. Made from No. 1 and better air dry Douglas Fir (o.p.), precision cut Speed-Wall is exceptionally fire-resistant. Also provides 25 to 34% more insulation. Speed-Wall is the outside surface as well as the inside surface. You may stain, varnish, paper, calcimine or panel interior surfaces. You may floor and roof with Speed-Wall. Using Speed-Wall eliminates many construction difficulties and inspections. Know more about this sound, new materials-method approach to building. Wire or write for full, free information and literature.

New Paneling Has Plastic Surface, Presdwood Base

PRODUCTION of a wall paneling material with a hard plastic surface in modern colors and patterns and a Tempered Masonite Presdwood base has recently been started by the Service Products Division of Woodall Industries, Inc., Chicago. The material is called Lamidall.

Qualities of the new product, the manufacturers said, are resistance to heat, moisture, abrasion and impact; and lack of harmful effect from contact with water, soap, beverages and common solvents.

The material is designed for wall paneling or wainscoting of bathrooms, kitchens and other rooms in the home, and for stores, hotels, hospitals and other commercial and industrial buildings.

Panels can be applied by nailing or cementing to existing walls. They are manufactured in size ranges up to 4 inches by 12 feet.

Facilities Expanded By Weyerhaeuser Co.

MACHINERY units recently added to the plywood plant of Weyerhaeuser Timber Co., Longview, Wash., are now in operation, Harry E. Morgan, Longview branch manager has announced.

Expansion was begun at the plant in 1948. The annual capacity of the expanded production facilities is approximately 60 million square feet of 3/4 inch plywood, Morgan said.

Principal equipment additions include an eight-line tray system for green veneer handling, a core lathe, a Smith veneer retriever, automatic stackers on the green veneer grading table, a second drying oven, an additional glue spreading machine and another hot press.
Dry Wall Construction

has come of age!

Homasote permits dry wall construction with the average wall in one piece

HOMASOTE COMPANY has long been one of the pioneers and strongest advocates of dry wall construction.

Today the average home owner knows a good deal about this sensible, modern method of building. For the past 32 years, Homasote has been steadily replacing plaster and has now been used in millions of dollars worth of private homes.

The average wall is-covered with a single piece of Homasote. If a wall runs longer than 14' the joint is made at the door or window and covered with an architectural panel. Ceilings larger than 8' x 14' are beamed or paneled so that every detail is a desirable architectural feature. Many an architect has acclaimed Homasote the perfect base for either paint or wallpaper.

When you design and build with Homasote you are giving the home owner tops in both structural strength and insulating value. You are giving him walls that are permanently crackproof. (You save yourself the time of waiting for plaster to dry.) You give him a quieter, drier house with dependable insulation against musty closets and mildewed walls.

Today you can specify dry wall construction—with Homasote—in complete confidence. We invite architects and builders to send for our illustrated booklet—giving physical characteristics, performance charts, specification data and application instructions.

AND... IT IS *Certified—Insl-Cotton contains no second-hand material. Every lot is tested and certified to the U.S. Government. No other insulation except flame-proof, fire-retarding cotton insulation made under Federal supervision can make this claim. Insl-Cotton exceeds Government requirements for "A" FHA, FPFA and JH-I-528 specifications. Available in open face, enclosed or reflective type—prompt deliveries.

All cotton insulation is not INSL-COTTON... insist on the original and genuine INSL-COTTON

INSL-COTTON DIVISION
TAYLOR BEDDING MFG. CO., Taylor, Texas
BELTON, TEXAS
The originators of flame-proof, fire-retarding Cotton Insulation

MAIL THIS COUPON TODAY!

TAYLOR BEDDING MFG. CO., Taylor, Texas
Gentlemen:

Please send specifications and full information on Insl-Cotton

Name__________________________
Address________________________

City and State_________________

Check Here:
□ Distributor □ Dealer □ Architect □ Building Contractor
"We use CUPRINOL Ourselves..."
says this building contractor
(New Jersey Slate Co., Blairstown, N. J.)
"... because it saves money."

Dear Sirs:

We use Cuprinol for ourselves wherever appropriate because it saves us money.

We recommend and use it on wood wherever it is impossible, impractical or inconvenient to paint, and where rain and dampness can penetrate or collect behind paint. A few such situations are: porch floors and timbers, porch steps, railings, and outside collar doors, and on the inside of swinging doors exposed to the weather, garage doors, etc. Outside steps we soak from the under side and fill all joints and cracks, because it penetrates where paint will not and where rot first occurs.

The only way to keep ahead of depreciation is to not let it start.

Preservative and paint cost less than lumber.

Our motto is to give our clients more than they expect, and better.

"Cuprinol" adds that extra value that customers appreciate.

Respectfully yours,

E. W. Gill, Jr.

NEW JERSEY SLATE CO.

Send a Post Card
for prices, information and dealers.

CUPRINOL Division, Darworth, Inc., 56 Maple St., Simsbury, Conn.

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"TAILOR-MADE" for Your Home!
The "True Economy" Home Uses VITRO LINER CHIMNEY

The Vitroliner type "E" Flue is a time-tested, proven practical, complete chimney designed to take care of all home heating equipment—used by large national builders and small contractors. Available individually or in any quantity.

- Completely Fabricated
- Underwriters' Listed for All Fuels
- Used in F.H.A. Construction
- Low Initial Cost
- Quality Built — Long Life
- Weight — 10 Lbs. Per Foot
- Improves Heating Performance
- Saves Floor Space — 2 Hour Installation

Write for details to Dept. A. B. - 8

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MFRS. OF VITREOUS ENAMELED PIPE FOR 20 YEARS

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The REAL FACTS about WATERPROOFING—in ONE complete MANUAL

Send for your free copy today!

WURDACK CHEMICAL COMPANY
4956 FYLER AVE.
ST. LOUIS 9, MO.
save up to $59 a day
JAEGER SELF-RAISING TOWER
with MATERIAL CAGE and CONCRETE BUCKET
Contractors everywhere are profiting with it! Saves scaffold erecting time — saves repeated loss and cost of scaffold material — handles and places materials faster and surer. Take the dis-assembled tower and 17-hp hoist to your jobs on a truck. Two men assemble it on the ground in two hours. Then the Jaeger "Hoister" raises it to 37' standard height — 67' with extra sections. Material cage accommodates two wheelbarrows or largest concrete cart — handles 1 ton loads with absolute safety. And, there's a Concrete Bucket available — easily interchangeable with the cage, on the job — water level capacity, 14 cu ft — working capacity, 11 cu ft (the full batch of an 11-S mixer)

Write for bulletin and complete information
THE JAEGER MACHINE CO., Columbus 16, Ohio
Distributors sales and service in 130 principal cities

LEMCOS Monomental
Series 62 EXTRUDED ALUMINUM AWNING WINDOWS
The result of 30 years of research and experimentation
THE WORLD'S FINEST WINDOW — FOR THE WORLD'S FINEST BUILDINGS
Write today for descriptive literature.
CROFT STEEL PRODUCTS, INC.
14 MARKET STREET • JAMESTOWN, N. Y.

FEATURES THAT HELP YOU SELL MORE WATER HEATERS
- Plenty of hot water at all times
- Advanced design
- Precision engineering
- Smart appearance
- Cathodic protection (optional)
- Zinc-clad tanks
- Adjustable thermostats
- Chromalox immersion elements (electric)
- Robertshaw unitized control (gas)
- 100% automatic safety pilot (gas)
- 350 lb. hot tank (gas)
- Baffles for best storage efficiency
- Galvanized or painted casing
- Fiberglass insulation

Homeowners need lots of hot water at an economical cost — that's why a KOVEN Electric or Gas Water Heater is the most efficient unit to recommend and install. Completely automatic, clean, dependable, silent and safe! Available in models and sizes for every requirement.
Liberal 10-year guarantee on pure copper or extra-heavy copper-bearing steel tanks when ordered with cathodic protection.
L. O. KOVEN & BRO., Inc.
154 OGDEN AVE., JERSEY CITY 7, N. J.
Plants: Jersey City, N. J. Dover, N. J.
Sub-base Without Sleepers
Applied with Adhesive
A METHOD of applying plank sub-base to concrete without use of sleepers has been announced by the Armstrong Cork Co., Lancaster, Pa. In the new installation method, the sub-base is cemented directly to the concrete by use of a special adhesive developed by the company. The adhesive forms a moisture barrier between the concrete and wood.

WORKMEN apply adhesive for cementing sub-base planking to concrete slab

Write for price list DC and catalog . . . today!

ACOUSTICAL TILE NAILS
... designed for the job

When installing acoustical tile choose a job-designed nail that combines ease of application with these special features: a head end which allows the nail to be driven home without damaging the tiles ... a collar which holds the tiles firmly in place... annular threading which gives superior holding power. The nails are furnished with a plated finish to prevent rust streaks where moisture is present. Send for free samples and descriptive literature.

Acoustical, Safe, Silent and Self-Operated
Put GENERAL CONTROLS heating comfort in the plans. It’s the easy, modern way and effects construction economies, too.
Request Free Descriptive Literature on the B-60 “All-Gas” Control System

WHY HALL PINE SECTIONAL
DOORS ARE PREFERRED BY
BUILDERS—USERS
@ Shown above is the sturdy overhead track assembly . . . precision-built with the finest materials to make HALL pine sectional doors easier to install . . . easier to use.
@ Made by craftsmen, HALL garage doors are shipped in convenient easy-to-assemble sets including track, door sections and all necessary hardware.
@ HALL pine sectional doors are attractively priced and are available in various sizes to fit any garage. For complete information write:
Bostitch H4 Self-Feeding Hammers are TWICE AS FAST FOR SHINGLING

It's no job at all for Bostitch H4 Self-Feeding Hammers to cut your shingling time at least in half. Each flick of your wrist places and drives home a sturdy 3/4" staple like a two-pointed nail... even through light metal. No mashed fingers...no infected mouths...no swallowed nails. These powerful hammers drive 50 staples with each quick, easy loading. And their longer reach cuts down your staging needs. No wonder Bostitch H4 Self-Feeding Hammers speed up shingling by a profitable margin. Try them yourself and see!

**FOR LIGHTER HAMMERING**

Bostitch H2 Self-Feeding Hammer for general use, such as installing insulation, attaching building paper or light roofing, etc.

**FOR ONE-HAND TACKING**

Bostitch T5 Gun Tacker shoots staples in, within 1/16" of corners. Saves time, labor and money on such jobs as applying metal lathe strips over joints for plastering. Many other cost-cutting uses.

**INVESTIGATE BOSTITCH!** You're sure to find, in building as in so many other industries, that Bostitch fastens it better and faster at lower cost. Fill in coupon below for all facts.

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Rex "Easy Flow" Pumps are not only completely efficient when new. They retain that efficiency for life. Even after years of tough service, they give you new pump priming efficiency at maximum suction lifts. Here's why:

**EXCLUSIVE Adjustable AIR PEELER**

Only Rex Pumps have the adjustable air peeler. When wear begins, you simply adjust the peeler to restore original clearance with the impeller and your pump is as good as new. No need with Rex to replace the whole pump when wear begins to cut down priming efficiency.

**REPLACEABLE WEARING PLATE**

The Rex replaceable wearing plate is another life-adding feature. When wear takes place, you just remove the wearing plate and replace the liner... a simple, inexpensive task... and restore original capacity.

---

PLUS...

an improved all-metal seal and many other outstanding Rex features such as: pressed steel body that's unbeatable for durability... lightweight for maximum portability... glass-smooth water passages for fastest flow through the pump with minimum friction losses.

Why not have your local Rex distributor show you how these outstanding advantages put profits in your pocket. Or write for your copy of Bulletin No. 47-12. Address Chain Belt Company, 1689 W. Bruce St., Milwaukee 4, Wis.
Here's BUILT-IN Sales Appeal

Built-In Radio Installations in Kitchens, Bedrooms, Bath, Etc.

THE Flush Wall Radio fits in perfectly with today's popular trend to built-in appliances and appointments in the modern home. Architects and builders find it gives that touch of individuality and charm which means added sales appeal.

And homeowners are enthusiastic about the Flush Wall Radio for it enables them to enjoy the convenience of several fine quality radios throughout the house—in kitchen, bathroom, bedrooms, study, recreation room, children's rooms—in addition to their large conventional living room radio.

FLUSH WALL RADIO FEATURES:
1. 5-tube AC-DC Superheterodyne Licensed by RCA and Hazeltine.
2. Easy Installation—Comes with Steel Box 67/8 x 91/4 x 33/4 deep, which Goes Between Studding. As Easy to Install as an Electrical Receptacle Outlet.
5. Approved by Underwriter's Laboratories for Built-in Installation.

Retail Price,
Radio, Model 90...
Panels Extra
From $2.45 to $4.45

Door Group Has New Name

THE name of the National Door Manufacturers Association has been changed to National Woodwork Manufacturers Association. Officials of the group said the change was made because the new name more adequately describes the products of the member companies, which include wood windows, doors, frames, screens and cabinets.

Ormie C. Lance is secretary-manager of the association. The headquarters remain at 332 S. Michigan Ave., Chicago 4, Ill.

Perlite Manufacturers Form Trade Association

EIGHTEEN companies which manufacture plaster and concrete aggregates from perlite rock organized a national trade association, the Perlite Institute, at a recent meeting in New York City.

Named to the board of directors of the new association were T. C. Carter, vice president of Great Lakes Carbon Corp., New York, N. Y., president; J. Don Alexander, president of Alexite Div., Alexander Film Co., Colorado Springs, Colo., vice president; Oliver N. Gregg, president of Gregg Lumber Co., Grand Rapids, Mich.; and C. H. Hall, presi-

(Continued on page 212)
Universal LEVEL-TRANSIT

Rugged — accurate — highly dependable, the Universal Level-Transit offers builders an all-purpose instrument of unexcelled practicality and versatility. Quickly converted from a precision level to a highly accurate transit in two easy motions.

Patented ball-bearing race assures perfect adjustment under severest conditions. Telescope 12" long, 25 power, horizontal circle 4½" with Verniers to 5 minutes. Write today for full information — also free booklet, "How To Lay Out Building Lots."

We repair all makes of instruments

311 West Court Street, Milwaukee 12, Wisconsin
Manufacturers of instruments for engineers, surveyors and builders.

HOW TO INSULATE RADIANT HEAT FLOORS

With Zonolite Concrete Aggregate your radiant heat jobs will assure rapid heating, better temperature control, and important fuel savings. Heat loss into the ground can be greatly reduced if you follow these simple steps:

1. On a level well-drained base prepare a 5 or 6-inch fill of coarse stone or gravel, tamper smooth and firm. On top of this, lay a moisture barrier of one or more saturated felts.

2. Pour 4 inches of Zonolite concrete and allow it to set. Zonolite Aggregate replaces sand, in proportions of 1½ bags of Zonolite Aggregate to 1 bag of portland cement, providing up to 16 times the insulating value of ordinary concrete.

3. Next the radiant heat pipes or ducts are placed, and ordinary concrete poured to a thickness of at least 1½" over the top of the pipes. A 2 x 8 sill insulates against lateral heat loss and serves as a carpenter nailer.

Write us for full details on any concrete or plastering job where insulation is important. Send for valuable booklet, "ZONOLITE VERMICULITE INSULATION AND LIGHTWEIGHT AGGREGATES."

ZONOLITE COMPANY
Dept. AB-89, 135 S. La Salle St., Chicago 3, Ill.

MAXAWS are balanced for the cutting line, as proven by this test —

Place MAXAW on board for ripping, start saw and lock switch on. Place fingertips against handle as shown, and push — do not try to guide the saw. The MAXAW follows the cutting line accurately, without wrist strain.

Fred W. Wappat, Inc.
135 Valley St., Mayville, N. Y.
(on Chautauqua Lake)
How to be Sure About Costs
When You Estimate a Building Job

THE SIMPLE TAMBLYN SYSTEM OF ESTIMATING REDUCES BUILDING MATERIALS and LABOR COSTS TO EASY-TO-USE FACTORS!

Do you get that creepy feeling about your estimates? Why take a chance when you can be sure! Just multiply by our simple factors to determine your labor and material costs. The Tamblyn System is simple, fast, accurate, complete and dependable!

YOU MAY SAVE MANY TIMES ITS LOW COST IN ONE USE

In order to get your share of profitable building contracts, you must be able to figure jobs fast and accurately. You must be sure your estimate is just right—low enough to get the job—high enough to give you a reasonable profit.

USED BY SUCCESSFUL CONTRACTORS FOR OVER 40 YEARS!

Many of the largest and most successful contractors in the United States and Canada—thousands of them—have used the Tamblyn System of estimating. It is tried and tested—it has been used for more than 25 years. Forty years of experience in construction and building is behind it. And you can study the system for 10 days without cost.

TEST THE TAMBLYN SYSTEM IN YOUR OWN OFFICE WITHOUT OBLIGATION

Send the coupon below for your complete Tamblyn System. Examine it in the privacy of your own home or office for 10 days. Try it on new jobs—check it against completed jobs. There is no obligation unless you keep it.

SEND NO MONEY—TRY IT FOR 10 DAYS FREE!

THE TAMBLYN SYSTEM, 1115 Sa. Pearl St., A-32, DENVER, COLO.

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STEEL KITCHEN CABINET INSTITUTE
140 PUBLIC SQUARE • CLEVELAND 14, OHIO

For Your Tubular Steel SCAFFOLDS and ROLLING TOWERS...

For Your SWING SCAFFOLDS
...New Aluminum

SAF-T-SWING STAGE

Get Complete Information on SAFWAY Scaffold Equipment...
Write for Bulletin AB-849
The plywood produced by Associated Plywood Mills is available quickly at 14 different locations in the United States. That means you can get what you want when you want it—and in the quantity desired. Quality plus service is our policy—and your assurance of prompt delivery.

2 MILLS
Eugene, Oregon
Willamina, Oregon

5 BRANCH SALES WAREHOUSES
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Willamina, Oregon
925 Toland St., San Francisco, Calif.
4814 Bengal St., Dallas, Texas
4268 Utah St., St. Louis, Mo.

7 SALES WAREHOUSES
Bessonette & Eckstrom
2719 S. Compton, Los Angeles, Calif.
Pacific Mutual Door Co.
626 Tacoma Bldg., (Home Office) Tacoma, Wn.
1407 Fleet St., Baltimore, Md.
2141 Throop St., Chicago, III.
516 South Ave., Garwood, N.J.
Adams and Shawnee Sts., Kansas City
2235 Territorial Road, St. Paul, Minn.

The window that cools...protects...saves!

Home buyers "go" for smooth-operating Gate City Awning Windows that cool off hot rooms...provide 100% controlled ventilation all year 'round.

Scientifically designed and architecturally correct, these windows provide draft-free ventilation, indoor installation of screens and storm sash, safety from prowlers. One redecorating bill saved by the rain deflecting sash more than pays any difference in initial cost. Toxic treated, Gate City Awning Windows provide extra durability and reduced maintenance.

Every window furnished with a Lumite screen. All glass and hardware factory installed. You receive the window as a precision-fabricated "package", ready for economical installation.

15 standard and 36 special sizes meet every requirement. Write for name of nearest distributor, Gate City Sash & Door Co., Dept. B-8, Fort Lauderdale, Fla.

See our catalog in Sweet's Architectural and Builder Files.
ACME
sash balances are
Unconditionally GUARANTEED for LIFE!

For use with double-hung wooden windows. Single or double installations.

ACME TWIN
only 3/4" thick. Fits flush in pulley stile.

ACME Overhead Type
Fits neatly into frame head of window.

ACME Side Type
A mortise type balance. Fits into side of frame.

Acme Sash Balances are fully enclosed, easy to weatherstrip, require no adjustment and provide quiet, effortless window opening. Packed complete with fixtures. Sold only through leading hardware, building supply dealers, jobbers. Write for literature.

Perlite Association
(Continued from page 208)

dent of Standard Perlite Corp., Pasadena, Calif.

Wharton Clay, formerly secretary of the National Mineral Wool Asso-

WHARTON CLAY

lication, was appointed executive secretary.

Plans of the group call for research study, designed to develop new uses and markets, promotional campaigns, and work in cooperation with government agencies and other industries.

Headquarters of the Institute are at 35 W. 53rd St., New York City. The next meeting is scheduled for September 7-9 at Colorado Springs.

Art in Iron
NEW stock designs — lower prices!

Remarkable new features are incorporated in the Ware Aluminum Awning Type Window. Vents may be opened beyond normal ventilating position for easy washing of outside as well as inside surface. When closed all corners are weather-tight. Easily operated. Easily cleaned. Draft-free ventilation. Two types—Monumental—for schools, hospitals, institutions. Intermediate—for most residential applications. Immediately available. Write for details.

WARE LABORATORIES, Inc.
1827 Delaware Parkway, Miami 55, Fla.
New York Office: 21 West Street, N.Y. 6, N.Y.

ACME SASH BALANCE COMPANY
1626 Long Beach Ave.
Los Angeles 21, Calif.
A Gleaming Example of Cause and Effect!

Your regular retail dealer or warehouse can supply you.

CROSSETT LUMBER COMPANY
CROSSETT ARKANSAS

FORMULA FOR
SALES SUCCESS

Quality Products
+ Convenient Packaging
+ Selling Aids
+ Fair Prices
+ Established Integrity

NATIONAL LOCK
- Cabinet Hardware in Chrome, Brass, Bronze
- Handsome, Authentic Period Furniture Trim
THEY MEET EVERY REQUIREMENT
Ask Your Jobber

NATIONAL LOCK COMPANY
ROCKFORD • ILLINOIS
MERCHANT SALES DIVISION

ACCURACY! CONVENIENCE! BEAUTY!

Next time you're near your hardware or building supply dealer, try MASTER STREAMLINE. You'll know you're handling a superbly precise measuring instrument... worthy of the professional man and the highly skilled craftsman!

Note the extra-long 7/16" tips: STAYS PUT ALMOST ANYWHERE!... the positive LeverTape brake: HOLDS READING AUTOMATICALLY!... fine tempered steel blade graduated on both sides: ALWAYS RIGHT FOR ANY MEASUREMENT!... direct reading inside measure: QUICK AND EASY TO USE!... mirror-chromed case: STREAMLINE'S FUNCTIONAL BEAUTY LASTS!

MASTER STREAMLINE HAS EVERYTHING!
See, try and buy one now. If you prefer, mail coupon with remittance for your STREAMLINE today!

WOOD AND STEEL TAPE RULES

Master Rule Mfg. Co., Inc.
201 Main Street, White Plains, N. Y.
I enclose $2.25 for the 6 ft. Streamline
$2.50 for the 8 ft. Streamline
Engrave my name (75c extra). Please print clearly.
NAME
ADDRESS
CITY
STATE

REG. U. S. PAT. OFF.
for forms OLD
and forms NEW

Lime Plaster is the Answer

No building material lends itself so willingly to the imagery of the architect. To the smooth surfaces, regardless of their contours; the highly ornamented, regardless of their style.

Also, no substitute has matched good plaster for soundness of construction and life-of-the-building durability. It provides an interior finish that is smooth, clean, free of joints, vermin and rodent proof, fire safe and acoustically right:

Finishing Lime from Northwestern Ohio has long been the accepted standard.

- OHIO WHITE and HAWK SPREAD are Ohio Hydrate's identical brands of hydrated finishing lime. They are always uniformly right, 99.5% pure.
- OHIO WHITE AUTOCLAVED Finishing Lime is equally good quality. It needs no soaking. For fine, white coat plaster, brick mortar and other uses.
- OHIO SANLIME FINISH, a plaster for sand finish interior work, contains all ingredients in dry-mixed form. In white and in colors: ivory, buff, pink, blue, and light green.

The red zigzags on the bags are our trademark, your assurance of quality.

The OHIO HYDRATE & SUPPLY Co.
WOODVILLE, OHIO

Agricultural Engineers
Design and Test New Grain Storage Structure

A NEW type grain storage bin designed and tested by agricultural engineers at the University of Illinois College of Agriculture can be easily built at low cost on the farm.

In designing the grain bin or crib, Deane G. Carter, professor of Farm Structures, and his associates applied previous findings in grain storage research to a new laminate building material. The result is a round bin,

NEW structure holds 1,000 bushels
14 feet in diameter and 8 feet high. It has a capacity of 1,000 bushels, and can be constructed and set up by two men in about a day's time.

The design uses twelve 4x8-foot... (Continued on page 218)

Brown's SUPERCEDAR

Red Cedar Closet Lining
Guaranteed 90% Red Heart or Better

Only SUPERCEDAR is of the same uniform high quality standard that guarantees every package to contain 90% Red Heart or better, and 100% oil content which produces the pleasing aroma.

SEALED PACKAGED LABELED

More home builders are specifying cedar lined closets today than ever—and Brown's SUPERCEDAR is nationally advertised to thousands of new home prospects, architects and builders.

SUPERCEDAR closet lining is surfaced, tongue and grooved, ready to put on with no waste. Packaged and sealed with the Geo. C. Brown label and guarantee, famous since 1886.

Product of GEO. C. BROWN & CO.
GREENSBORO, N. C. ESTABLISHED 1886

LARGEST MANUFACTURERS OF AROMATIC RED CEDAR IN THE WORLD

PLASTER and MORTAR MIXER
HERE is the job you have been looking for... a mixer that can really take it. Equipped with a big 4½-hp. Briggs & Stratton air-cooled engine, and driven through quiet roller chains, cut-tooth sprockets and cut-tooth gears. It has 5.50 x 16 tires, disc wheels with Timken bearings, and a hinged safety grating with a time-saving bag splitter.

Write for prices and specifications

MULLER MACHINERY CO., Inc.
750 Whitman Avenue
METUCHEN, NEW JERSEY

Tilters, Non-Tilters, Plaster Mixers, Concrete Carts, Mortar Boxes

6 cu. ft. capacity

MULLER MIXER

...better 5 ways because—

1. Mounts in ceiling directly above stove—Instantly catches heat, grease and odors as they rise.
2. Only inconspicuous "dripless" ceiling grille is visible, yet unit easily installed.
3. Powerful squirrel-cage blower (not a fan!) creates fast-moving stream of air to do job efficiently.
4. Because of patented construction which isolates motor from greasy air stream, unit guaranteed 5 years.
5. Available everywhere. Stocked by dealers coast to coast.

Ask your Electrical Dealer or mail coupon.

Trade-Wind MotorFans, Inc.
5705 S. Main St., Los Angeles 37, Calif.

Name
Address

LARGEST MANUFACTURERS OF AROMATIC RED CEDAR IN THE WORLD
THE MAGNET THAT DRAWS A WOMAN’S ATTENTION TO...

Your New Homes

• RAISE THE FIXTURE ALLOWANCE!

—to include the “dress ups” that really sell the woman—like NuTone’s “4-Way” Package. After all, it’s the woman who decides which new home to buy—and she insists on fine features like NuTone in her new home.

NUTONE HELPS SELL YOUR NEW HOMES FASTER!

Be sure to tell your wiring contractor to install NuTone Door Chimes (with trouble-free transformer), NuTone Luminous Push Buttons and NuTone Kitchen Ventilating Fans. These fine NuTone features help sell your homes quicker! Ask your architect and wiring contractor to include the NuTone “4-Way” Package in their estimates. Write for free, new catalogs.

NUTONE, INC., DEPT. A-89, CINCINNATI 2, OHIO

THE CONCORD, STYLE PB-5 —

Solid brass, luminous push button with personalized name-plate. List, $2.50. One of 6 styles—36c to $2.50.

THE CONTINENTAL, STYLE K-32 —
A beautiful chime, with ivory-plastic cover and satin-brass tubes. List, $12.95. One of 14 models—$3.95 to $69.95.

MODEL NV-18 — An efficient kitchen ventilating fan, with chrome grille. List, $26.95. Other models, $24.95 to $36.95.

Superlite Panels
Offer More Than Meets The Eye

Superlite Panels now are surfaced with a new high-gloss, plastic finish, BAKED ON for extra lustre and extra resistance to abrasion. New rounded-edge score lines mean less dust collection and greater ease in cleaning. Just a wipe of a damp cloth over Superlite Panel’s high-gloss surface and they’re glistening again!

Large sheet size means reduced application cost. And no fuss and muss as in the application of plaster or similar materials!

Superlite Panels for interior walls and ceilings, in either new construction or renovation, are available in eleven pleasing colors.

Your customers will be pleased with Superlite Paneling because of its beauty and durability. Ideal for kitchens, bathrooms, game rooms, restaurants, hospitals—and other institutions.

Use the coupon below for descriptive literature and other pertinent information.

Superlite Panels are sheets of Masonite Presdwood, surfaced with a high-gloss, baked-on plastic finish. Eleven colors (including black and white) are offered, with a variety of colors in the score line. Available in sheet sizes 4 ft. wide, and 4 ft., 6 ft., 8 ft. and 12 ft. long. Finished four ways: plain colors, tile design (4” x 4” square), Leveline (horizontal lines on 8” centers) and in a grained leather effect, in 4 colors and in sizes 4 ft. x 4 ft. and 4 ft. x 8 ft.

Superior Wall Products Co.
Philadelphia 40, Penna.
"for more than a decade"

SUPERIOR WALL PRODUCTS CO., 4403 N. American St., Philadelphia 40, Pa.
Send us descriptive literature.
Tell us the advantages of handling Superlite Panels.
NAME
ADDRESS
CITY STATE

United States Gypsum
For Building • For Industry
Gypsum • Lime • Steel • Insulation • Roofing • Paint
"the more expensive the house...

the more important
the roof...

writes Pennsylvania builder about
choice of Dubl-Coverage Tite-Ons
for swank Main Line development

"When homes sell for between $19,000 and $35,000 —
roofing materials must meet two key requirements," writes

"First is appearance... the shingles must look as if they
belong on an expensive house. Second—they must provide the
trouble-free service expected from quality roofing materials.

"On both counts, Dubl-Coverage Tite-Ons filled the bill.
Their basket-weave beauty is in keeping with the finest traditional architecture. And their
proved wind and weather resistance promise more roofing years for the home-owners dollar.

"Builders like us prosper to the extent we keep home-owners
happy. So, from our point of view, also, the choice of
Tite-Ons was an ideal one."

More and more builders are coming to the same conclusion. Wouldn't it be smart to check the Dubl-Coverage Tite-On
story yourself?

The RUBEROID Co.
Executive Offices: 500 Fifth Ave., New York 18, N.Y.
Building Materials for Home, Farm and Industry
Favrot Heads Asbestos Cement Association

CLIFFORD F. FAVROT, who as vice president has served as head of the Asbestos Cement Products Association since the resignation of former President E. W. (Pat) Smith early in the year, was elected president of the association at its 12th annual meeting, held recently in New York City. Favrot is president of the Astibesite Corp., New Orleans.

Named to the vice presidency was W. R. Wilkinson, vice president and general merchandise manager of the building products division of Johns-Manville Sales Corp. S. M. Moffitt, Ruberoid Company, New York City, treasurer, and Chester C. Kelsey, New York, secretary, were re-elected.


Agricultural Engineers

(Continued from page 214)

sheets of the laminated wood and paper material. The sheets have a wood veneer core, glued and covered with tough asphalt-resin paper. The sheets are 1/7-inch thick and are light enough so that they can easily be carried by one man.

In building the crib, three sheets of the building material are assembled at one time. Sheets are over-laid four inches along the 8-foot edge and glued with a special urea-formaldehyde glue. Strips of 1-inch by 4-inch board are then placed on each side of the glued joint and nailed with 13/4 inch nails three inches apart. The built-up sections of three sheets are then joined in pairs, making two half-circle walls. In joining the sections, a 2-inch by 4-inch plank strip is used in place of one of the 1-inch by 4-inch strips.

The next step is to erect the two half walls and join them to form the circle wall. Two 2-inch by 4-inch cross ties are nailed across the top of the crib.

Professor Carter points out that there has been time to run only limited tests on the new bin, but that these tests indicated that the bin will stand the weight and pressure of the stored grain satisfactorily. In the tests the crib was filled with 1,115 bushels of shelled corn; that is 62,440 pounds, and 10 per cent above the rated capacity of the crib. The bin was left under test for 112 hours, during which time the frame-work was severely jarred to reveal possible weaknesses. There was no damage, and glued joints remained sound.
Am rican Builder, August 1949,

BUILDERS • CONTRACTORS

CUT COSTS
With MULKEY'S
All-Steel
PORTABLE ELEVATOR
It's Balanced

★ For bricks, blocks, mortar in buckets, sand, roofing, lumber, boxes, dirt, sacks, etc.
★ One man can handle and operate...easily trailed up to 35 miles per hour.
★ Clutch and Brake Assembly own design

Basic Length 24 ft. • 17 1/2 ft. Maximum Litt
8' and 14' Extensions Available
Also Available: 16' Elevator (Zero Design)

Write for FREE Literature and Prices!

SAM MULKEY COMPANY
1621-XG Locust
Kansas City 8, Mo.

EASY INSTALLATION

ALUMINUM TENSION SCREEN

Lifetime Service at Common Sense Cost!

Heavy, rust-proof, corrosion-resistant aluminum frames and wire—stainless steel hardware. Simpliest to install of all screens made—only 4 screws necessary. Greatest variance for adjustment. Maximum tension from two stainless steel handles, engaged at bottom of screen. Full range of sizes.

OTHER ALUMINUM BUILDING PRODUCTS

Aluminum double-hung windows, two types, 51 sizes, 8 styles with trim. Packaged, glazed and screened.

CUSTOM FRAMED SCREENS—ALUMINUM SHUTTERS—ATTIC VENTILATORS—STORM WINDOWS

Exclusive areas available to Agents and Distributors

the best laid plans include

INDIVIDUAL
VIKON METAL TILES

IT PAYS 3 WAYS

1 The low initial cost of this tile beauty fits your plans on the most modest budget.

2 There's no need for extra wall strengthening. Vikon tiles are made of feather-light aluminum or steel bases.

3 You guarantee your client's complete satisfaction with the lasting beauty of Vikon tile. Easy to maintain, durable surfaces of baked-on enamel.

• 27 fade-resistant decorator colors and stainless steel
• will not warp, crack or craze
• resists heat and household chemicals
• fire-resistant, waterproof, seals out insects

The Original Individual Metal Tile. Established 1926.

See our catalog in Sweet's Files

MAIL THIS COUPON TODAY

VIKON TILE CORPORATION Dept. 3B
Washington, New Jersey

Please send me, without obligation or cost, a full-color descriptive brochure and samples of Vikon Tiles. I am interested in tile for:
My home ☒ As a dealer ☒ As a contractor ☒

NAME (Please Print):

ADDRESS

CITY ☐ ZONE ☐ STATE ☐
Six-Inch Jointer

The 2%" diameter cutterhead has a 3" diameter...common to small diameter cutterheads. The 6" cutterhead and bearings will withstand speeds up to 5500 r.p.m.

The 2%" diameter cutterhead has a 3" diameter bearing, which is designed to withstand the high speeds required for efficient jointing.

Overall length: 43%". Max. width of cut: 6". Depth of cut: Max. 9/16".

The 6-inch jointer is equipped with a quick acting fence locks at both ends. This feature is particularly useful when jointing long stock or fitting doors.

The fence is 100¢ rigid, permitting steady guidance and accurate cuts through the full length of even heavy 12-foot doors and sash. Unskilled operators get perfect results and more output because they can give entire attention to feeding the stock.

This jointer is especially designed for fitting doors. It is placed low on the floor, allowing the operator full control in jointing the edges of doors and large panels. The floor cabinet has a motor compartment and a dust chute.

Dual fence controls are located at both operator's fingertips. This allows for maximum control and efficiency.

The 6-inch jointer features a double-pivoted cutterhead guard which, when rabbeting, is not bodily removed from the machine. This design allows for increased safety and adaptability to a wide range of projects.

As nearly 100% safe as modern devices permit, this jointer is durably constructed to withstand the rigors of daily use.

Features designed for ready adaptability to a wide range of projects, including the ability to fit doors and large panels with ease.

A feature especially designed for the builder is the ability to fit doors and large panels with ease. The jointer is designed for ready adaptability to a wide range of projects, including the ability to fit doors and large panels with ease.

At minimum cost you can completely equip a shop that makes you practically independent of the mill.
Goldblatt MASONRY TOOLS

Goldblatt masonry tools save time, work, money. For 64 years, skilled craftsmen have chosen Goldblatt, because Goldblatt tools are forged stronger, balanced better, more comfortable, non-corrosive, more flexible. Every Goldblatt tool is guaranteed for materials and workmanship.

WRITE FOR FREE CATALOG

Send today for 64-page illustrated catalog describing largest line of tools for your trade, including Steel Mortar Boxes and Transit Levels. Goldblatt offers a complete line of bricklayer, mason, and plasterer tools and supplies for every masonry need—and for Road Paving and General Building Contractors, Trade Schools, Institutions, and Municipalities. Goldblatt can re-blade plastering trowels, can make up special tools to your specifications.

Goldblatt Tool Co.
1515 Walnut St.
Kansas City 8, Mo.
THE ORIGINAL QUALITY
for SLIDING DOORS
Single assembly easily installed by simple cut-out, even in narrow stiles. No mortising. 3 types of doors: 11/4"—11/8" thickness, with a 3/8" wardrope type. Lacquer and thumb butt type. Latch and thumb button types. Emergency unlocking feature adaptable to either hand. Pin tumbler cylinder in escutcheon is optional. Exterior parts solid brass. Escutcheons measure 4 1/2" x 2 1/8".

MINIMUM BACKSET DEADLOCKS FOR STANDARD CYLINDERS Can Be Keyed to Any Job
For narrowest extruded aluminum, structural steel and wood stiles. Series 970 Deadlocks for standard cylinders have 3/4" backset, 1 1/8" depth. Fifteen other standard backsets to 1 3/8". Series 990 identical except for 5/8" dia. pin tumbler cylinder and 1 1/4" backset. Burred steel and brass construction, armored bolt with 5/8" throw, bronze or aluminum face and strike. Radius, flat and bevelled faces interchangeable.

TEMPERED GLASS DOOR DEADLOCK
Takes the place of 2 locks. Has simple or double bolts and 1 or 2 cylinders. Handle operates both in sequence, cylinder locks handle. Designed for and can be installed in any tempered glass door top or bottom channel. 4 sizes: 1-15/16″ High x 1-13/32″ Wide.

CYLINDER SLIDING DOOR LOCK
Operates by cylinder from one or both sides. Fits all standard cylinders with adapter cones furnished. Specify when using Yale. Solid brass face, strike & bolt. Heat treated aluminum alloy case. Use your own cylinders and trim. Also used as jimmy-proof lock.

Manufacturer Provides Builders' Hardware Sales Aid for Lumber Dealer
A MERCHANDISING method designed to enable retail lumber dealers and hardware dealers to compete in builders' hardware sales with firms maintaining special departments has been developed by Sargent and Company, New Haven, Conn.

Called the "Select-O-Graph" system, the merchandising plan is centered on an especially designed display cabinet, which provides both stock and display space. Every type of item needed to supply a house is advantageously shown, with such articles as locksets mounted on blocks to show actual operation.

The articles on display are those which, in the manufacturer's experience, have proved the fastest-selling. Harmonizing designs and finishes are emphasized in the exhibit; and ample storage space is provided in compartments behind the display panels.

An equally important part of the merchandising system is a Select-O-Graph manual, which contains more than 50 pages of color-chart floor plans, graphs and drawings. This data points out all the "openings" where builders' hardware is required in the average home, and the various types of hardware recommended for these installations. In each instance a choice of recommended and optional designs and finishes is given. The factual material in the manual aids the retailer to give technical advice.

Also included in the plan are lists covering stock quantities, costs and suggested resale prices; fine drawings of each item to provide easy recognition; stock control sheets to keep a running check on shelf supplies; order pads and addressed envelopes for replacing stock; and label cards for open merchandise trays.

Infra Insulation Is Never A Wet Blanket
Excludes Unwanted Heat, Cold or Vapor—Never Retains Them
Infra Accordian Aluminum Insulation neither absorbs, retains, nor is harmed by moisture. Fireproof, it will not swell nor warp, is effective at any temperature. One carton, 2 cubic feet of Infra, provides 1000 square feet of insulation. Infra is easy to unpack and install.

Read the following quotation from a paper by a renowned authority on Insulation, Prof. G. B. Wilkes of Massachusetts Institute of Technology.

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