AMERICAN BUILDER

WORLD'S GREATEST BUILDING PAPER

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DETROIT

HORSEPOWER ON THE JOB CUTS BUILDING COSTS
Your farm market is almost unlimited for

**Celo-Siding**

The Celotex product ideal for constructing insulated farm utility buildings

**A remarkable product**—Celo-Siding offers insulation plus sheathing, structural strength and exterior finish, all in one application!

**Perfect for any utility buildings**—brooder houses, range shelters, laying houses, work sheds; almost any farm utility building can be built with Celo-Siding quickly, easily, economically.

**Nationally advertised** in farm publications. Merchandising and display material also available to Celo-Siding dealers.

**Available now!** See your Celotex representative or write us—find out how you can use Celo-Siding most effectively.

Celo-Siding is a superior insulation siding. Core is genuine Celotex Cane Fibre Board, famous for insulation and strength—Ferox-treated to resist termites, dry rot, fungus growth. All sides and edges sealed against moisture by coating of asphalt, extra thick on outside and surfaced with durable, colorful finish of firmly imbedded mineral granules that never needs painting.

**CELOTEX DEALERS:** We will supply Celo-Siding broadside for mailings to farmers on R.F.D. Box Holder lists, imprinted with your name. No addressing necessary. Only cost to you is 1½c postage per name. Write us direct ordering number desired.

**CELOTEX CORPORATION • CHICAGO 3, ILLINOIS**

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Ever wonder what a homeowner thinks about the house you built?

One way to win praise instead of brickbats is to take the struggle out of window opening, now and for good, with windows that can't warp or swell... windows that operate freely whatever the weather, first, because they're steel... second, because a Fenestra Casement swings out—away from the frame.

Unlike windows that slide, the weather-tight fit of a Fenestra Casement in no way affects its freedom of operation. Even in difficult places, such as over a sink or davenport, it opens by finger-tip control of a small adjuster. No rugging or straining.

Easy opening windows build good will... turn homeowner talk in your favor. Why not write now for full information? Detroit Steel Products Company, Dept. AB-5, 2260 East Grand Blvd., Detroit 11, Michigan.

UP-TO-DATE HOUSES CALL FOR UP-TO-DATE WINDOWS

OTHER IMPORTANT ADVANTAGES, TOO
Double-duty INSULITE SHEATHING gives your customers two things for the price of one:

(1st) It Sheathes  
(2nd) It Insulates

One material — DOUBLE usage. One application — TWO important services to help your customer get double for his money.

Double benefits also for you. It goes on fast, takes less time, and offers important structural advantages. Greater bracing strength than wood sheathing horizontally applied. Lower application costs and improved rigidity...

PLUS insulation! To speed up the job and make a better profit, build with double-duty Insulite Sheathing.

INSULATES AS IT BUILDS . . . .
Double-duty INSULITE LOK-JOIN LATH also performs two duties for the price of one:

(1st) Plaster Base  
(2nd) Insulates

One material — DOUBLE usage. You can give your customer a PLUS value with his purchase: plastered walls — PLUS insulation and vapor control! Two things for the price of one! Ask any customer how he'd like double value for his money!
(Cracked Plaster Ceilings) What do you say when a customer says to you: "My ceilings are cracked, what can I do about them?"

The answer is easy: **UPSONIZE**

Simply apply furring strips over the old plaster. On these go the Upson Floating Fasteners which anchor the Upson Panels securely, from the back.

Result: A permanently beautiful CRACKPROOF ceiling in two days' time. No muss, no fuss, no delay and at moderate cost. Plus a satisfied customer.

The use of Upson Panels affords wide opportunity for improved ceiling design in keeping with either conventional or modern interiors. Pebbled and presized, they have an ideal painting surface. Installations have been made in thousands of homes, churches, restaurants, offices and stores.

Due to excessive demand, Upson Panels are not yet fully available. We're pushing hard to catch up, however, and like many others, we know you, too, will find them worth waiting for.

THE UPSON COMPANY, Lockport, New York.
AMERICAN BUILDER
and BUILDING AGE
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AMERICAN BUILDER HAS THE LARGEST CIRCULATION OF ANY TRADE JOURNAL IN ANY FIELD
Here's why HomeOla builders from coast to coast can determine costs in advance and be sure of their profits:

1. All parts, including steel beams, copper plumbing, full insulation, nationally known plumbing and heating equipment—furnished at a fixed price—all are delivered when needed.

2. Construction, regardless of weather, is reduced to within a 3-week cycle—five carpenters, in five days, can complete their job.

**HomeOla IS TOP QUALITY THROUGHOUT**

All of HomeOla post-war design features are pre-war quality . . . or better. Full modular construction makes field erection an assembly line operation. All parts have been tested at a leading State University and at the National Bureau of Standards.

**HomeOla IS EASY TO SELL**

There is a model for every need and income—in the most popular price range of $6000 to $8000. In addition, each HomeOla is expandable to meet the needs of a growing family. Thousands of families are living in HomeOla homes bought on FHA terms.

**HomeOla IS A "NATURAL" FOR BUILDERS**

You can build more popular priced homes in 1947 without expanding your organization. A five-man carpenter crew can complete a Berkeley HomeOla in five days or less. Factory-trained supervisors assist HomeOla builders to streamline assembly operations and build larger volume.

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**The HomeOla Corporation**

Manufacturers of Standardized House Parts

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**It's a GRAND Prize**

Procter and Gamble selected The Berkeley HomeOla (at left) for the five Grand Prizes in their contest for Spic and Span cleaner. This tremendous promotional program can sell houses for you.

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**The HomeOla Corporation**

Dept.520, 9 S. Clinton St., Chicago 6, Illinois

Please send proof that I can build now, faster and more profitably with HomeOla Manufactured Houses and Standardized House Parts.

Name: 
Street: 
City: 
State: 
I am planning to build houses this year, to sell at about $
What - ALL THIS IN A SMALL HOME?

Right! This compact little "castle" has all the "modern living" advantages of a larger home—it's easy to look at, easy to live in and easy to build. And because every foot of space has been put to use, this home can be built on a small lot!

The designer of this house put a lot of smart ideas into it—and none is shrewder than the provision made for coal heating. This foresight allows the owner at the outset to heat by any fuel he chooses—but prevents his home from being "cut adrift" should he want to convert to coal later, when stoker developments, cost differentials or scarcity of other fuels convince him of the advantages of Bituminous coal. This little home has a chimney with a flue capacity sufficient to burn coal efficiently, and sufficient space for immediate or eventual stoker installation and coal storage. When the owner makes this installation and uses coal—Fuel Satisfaction—he has not "painted himself into a corner!"


Automatic Heating. Over a period of time, the cost of stoker heating is no greater than any other automatic plan. Economy of fuel is the difference.

Clean, smokeless fuel. Coal is the cleanest and dust-proofed at the mine. Other fuels may become scarce—but there is coal to last 3,000 years!
More American homes have heating and plumbing products by... American-Standard than by any other single company

Yes, American-Standard Heating Equipment and Plumbing Fixtures enjoy a public acceptance that's second to none! Remember this fact when you're selecting equipment and fixtures. It is your assurance of smart styling, expert engineering, sturdy construction...of unvarying quality standards in materials and workmanship...of efficient performance and long, trouble-free service. Remember, too, that while they are as fine as money can buy, American-Standard products cost no more than others...furthermore, they are available for modernization on a convenient Time Payment Plan. For details, see your Heating & Plumbing Contractor. American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.

The MARLEDGE — A shelf back, square bowl lavatory of genuine vitreous china. Available in white and many attractive colors. Fittings, towel bars, legs and other exposed metal finished in lustrous, non-tarnishing Chromal. This lavatory can also be supplied without legs for wall-hung installation.

The COMPACT Water Closet, with its syphon vortex water action, was developed to meet the most discriminating demand for quietness in operation. It is a close-coupled closet combination of genuine vitreous china. Comes in gleaming white and choice of many striking colors with Church seat to match.

The ARCOLINER Wet Base Oil Boiler — Provides small to medium sized homes with the comforts of clean, automatic radiator heating. Highly efficient with the Arcoliner or any other standard oil burner. Waterways extending below fire chamber provide extra heating surface and help keep floor cool, thus permitting first floor installation.

RONAWK Winter Air Conditioner burns natural, manufactured, mixed, or liquefied petroleum gas. Burner of cast iron has patented high temperature alloy, corrugated ribbons. Heating element has precision ground faces and leak-proof joints. Pre-heating return air saves fuel, increases efficiency. In 9 sizes—from 60,000 to 300,000 Btu input per hr.

LOOK FOR THIS MARK OF MERIT—It identifies the world's largest line of Heating and Plumbing Products for every use...including Boilers, Warm Air Furnaces, Winter Air Conditioners, Water Heaters, for all fuels—Radiators, Convector, Enclosures—Gas and Oil Burners—Heating Accessories—Bathubs, Water Closets, Lavatories, Kitchen Sinks, Laundry Trays, Brass Trim—and specialized products for Hospitals, Hotels, Schools, Ships, and Railroads.
**Time to Go to Work**

The New Deal was a confession by its proponents of a lack of confidence in men to seek and reach new levels of industrial and social accomplishment by the means successfully employed to give Americans greater opportunities and higher living standards than have ever been attained anywhere in the world. It was a confession of a lack of imagination, of belief that the ultimate in scientific and mechanical achievement has been reached. It stemmed from the defeatist attitude that since there was little left to invent and to produce for increased living comfort, the time had come to divide the wealth and resources evenly.

It failed to recognize that in crises similar to the depression that followed the stock market crash in 1929, free men in their urgent need to protect their jobs and their investments, and to feed and care for their families, had always solved their problems by finding new and more economical methods of doing the things they had been doing, and by inventing new machines to lighten labor, and new implements to provide easier and fuller living for everyone according to his ability to pay with his own efforts.

It took the attitude that since the heights in technological advancement had been reached, the only way to provide markets for the products of industry was to guarantee to every man a share of the world's goods regardless of his ability or desire to earn that share.

The result is that today, as science and industry stand on the threshold of new and hitherto undreamed of opportunities and accomplishments, many Americans indoctrinated with the poison-
Three Walker-Turner 3 h.p. Radial Saws are set on channel beams on a 40 foot conveyor table which reaches to the railroad siding. The saws are set by control handles placed at both ends of the table.

**PIONEERING WITH PROFIT**

A pioneer in the design and manufacture of prefabricated housing, Mr. E. A. Chandler, President of Well Built Manufacturing Co., writes:

"To meet the problem of rising costs and the shortage of building materials we have designed a special setup with Walker-Turner Radial Saws which has resulted in the greatest production volume in our history.

"With this setup, cutting and handling costs are reduced by \( \frac{3}{5} \), and waste is cut from 10% to 1/10 of 1%.

"The Walker-Turner Radial Saws were chosen for this setup because they combine versatility, safety and ease of operation—and afford a clear view of the work at any angle of operation.

"In our experience we find that a Walker-Turner Radial Saw pays for itself in less than four months. In eight years we have had 16 Walker-Turner Radial Saws—repairs amounted to less than $50.00.

E. A. Chandler, President
Well Built Manufacturing Co.

*F.O.B. Plainfield, slightly higher west of the Rockies and in Canada
SOLD ONLY BY AUTHORIZED INDUSTRIAL MACHINERY DISTRIBUTORS*
Wired Today—
for 1997!

IF IT'S PARANITE IT'S RIGHT!

That's why new 1947 homes wired with Parane Building Wire—Paraflex—ABC Cable—Service Cable—will have the same efficient electrical service in 1997 and beyond! For every bit of Paranite wire or cable is made under the watchful eye of SQC—Statistical Quality Control! Nothing is left to chance—scores of tests, graphs, measurements—figures and figures—by columns and rows of columns—are drilled and marshalled by our statisticians—are compiled and analyzed, while the individual operations are still in progress. With our goal set high and Statistical Quality Control guarding each individual operation, you can confidently recommend and use Paranite wires and cables in all residential construction today for lasting satisfaction in 1997!

Building Wire
Types R—RH—RW—T—TW

Paraflex
Non-Metallic Sheathed Cable

Service Entrance Cable

A. B. C.
Flexible Metallic Cable

DISTRIBUTED THROUGH WHOLESALERS

PARANITE WIRE AND CABLE
Division of ESSEX WIRE CORPORATION
FORT WAYNE 6, INDIANA

ELECTRICAL WIRES AND CABLES "BETTER THAN CODE REQUIRES"
Small Sloan houses

To the Editor: The house that Builder Sloan erected, and which you show in your April issue, is a grand thing for those who can afford all the glass and heating refinements in it. Is there any way, though, that Builder Sloan or anyone else can design and build a small house in the reach of the young G.I., and give him the comforts Sloan has in his house? I'd like to know. I've been in the building business long enough to know that you can't put thirty thousand dollars worth of value and space in a house that has to sell for one-third of that, but with the public housing gang yelling their heads off about the builders not going anywhere, and still building horse and buggy houses, it seems to me that Sloan or somebody would help a lot if they can tell us how to put some of the things in the Sloan house in a small house.

And while I am writing to you, I always read your editorials, and I have liked them. But, what about the editorial in the April issue. Are you getting soft, or have you got some good Republican friends in the new Congress? Sounded to me like you were making alibis for a Congress that doesn't look to me like it was any better than the one we had before the election. Don't get soft on bureaucrats or Congress. Keep after them till we get something from the building industry again.—C. D. ALIN, Chicago, Ill.

- Mr. Sloan says that he believes the answer to your question is "Yes." He hopes to prove soon that he is right. We hope and believe that he will prove it. When he does, American Builder will be the first to demonstrate the proof. It was an interesting experience to be asked if we were getting soft in our attitude toward bureaucratic direction of the home building industry. More often we are taken to task for being too tough. No, there is no softening. Purpose of the editorial was to show why the fight probably will be longer than many thought it would be. We make no compromise with the issue of free private enterprise. American Builder will be in the forefront of the battle until it is won.—Ed.

Thank you

To the Editor: All the men were very much pleased with the write-ups on the Tacoma Home Builders Association which appeared in the April issue of American Builder. Our new organization is progressing very nicely, and has every indication of being an outstanding success. We are now getting the cooperation of practically all builders in the area, a feat which we were never able to accomplish before.—EDWARD P. MILLER, President, Tacoma Home Builders Association, Tacoma, Wash.

Reversed photograph

To the Editor: Why don't the advertisers and your editors get together? The Fenestra and Libbey-Owens-Ford advertisements on pages 3 and 21 of the April issue show the Sloan house facing one way, and your editors use the same picture on the cover, but they show the house facing the opposite way. Who is right? It's confusing.—JERRY MRZ, New York, N.Y.

- Glad you studied the advertisements carefully, Jerry. You should have studied the story beginning on page 96 just as carefully. You would have discovered that the advertiser was right. But we think we were right, also. We deliberately reversed the photograph on the cover to achieve what we call good composition. Ask any artist friend of yours what he thinks.—Ed.

"Cure-all" legislation

To the Editor: Taft, Wagner and Ellender certainly make the rest of the socialistic-minded senators look bad. With most of the population unfed according to the media, why not a federal feeding bill, all planned and paid for by the government? Most men, at least, are undernourished. Why not a government clothing bill? Draft boards turned down three million emotionally unstable young men, and psychologists blame it on bad parenting. Why not a government parenting bill for all under-parented kids, etc., etc.?—W.G.R., San Francisco, Calif.

Building in Yuba City

To the Editor: I built homes before the war. During the war I confined myself to repair work. Now, after two months preparation, I was all set to resume house building. By a chance remark made to me I was warned in time that a federal permit is still required. I also heard about a builder who was fined one thousand dollars for not having one.

I thought that sort of thing had been done away with, and forgotten months ago. City officials here no longer ask to see a federal housing permit. That is bad, and acts as a trap to innocent and uninformed builders.

I found application blanks at the Chamber of Commerce, five sets of four large pages each, to be filled in and sent to a distant large city for processing. I cannot see how any builder can safely commit himself over his signature that he will do all the things he is required to state, especially with the labor and material situations as they are, and prices advancing into and out of sight. Also, how can a builder commit himself to sell at a required stated price? It looks to me very much as if the builder is being made the great fool.

I have since found that the old style complicated forms are still being handed out here to builders. I have now got hold of the new simplified forms, which are not nearly so hard, as no commitment to certain materials or selling price is required. I still think, however, that all federal controls on residential building should be removed at once. Surely, nobody should be fined for building a house. Prices are bad. We have rustic at $180; No. 2 white fir sheathing at $98; pine flooring at $225; hardwood flooring at $350; small dimension at $96; and cedar shingles at $4 a bundle of 200.—G. A. AHNER, Yuba City, Calif.

Good old days?

To the Editor: Heh, heh, excuse me, young fella, if I seem to point. In those days when we worked a 60-hour week for $7.50—yeah, a week, not an hour—and we read it by lamp light, because there was no other light or time, it was called "American Carpenter & Builder." To put on the dog, we would have cards printed with our name and add, "Carpenter & Builder—Estimates Cheerfully Given." It was supposed to be the last word in fancy advertising. Don't remember? Ask the old man up front. He won't bark. He'll only laugh mellow like.—OLD TIMER, South Bend, Ind.

Change ahead

To the Editor: Kindly send our office our enclosed clippings. We are very much interested in the products. Best wishes on your new drive to out controls holding back construction work. I have been after my friend, Senator Ferguson, to stop all appropriations that have anything to do with controls. He has promised that he's for free enterprise, and we can soon hope for a great change.—J. LEONARD RUSH, Detroit, Mich.

Our Readers Say:
The TRUSCON Planning Board Says: "With the high degree of production efficiency which has now been attained in the Truscon plants, we are able to meet normal demands for delivery of many of our steel building products." Contact the nearest Truscon District Sales Office for up-to-the-minute information, and cooperation in filling your requirements with the greatest efficiency.

608 New Apartments

There'll soon be a lot of pleased and happy new residents in the area between 9th and 10th Avenues, and West 25th and West 27th Streets, in New York City. This is the site of the Elliot Housing Project, consisting of four big modern structures containing 608 modern apartments, and rapidly being readied for habitation.

Large quantities of Truscon Diamond Metal Lath, in conjunction with Truscon 3/8" Channels and Tie Wire, were used for the 2' solid metal lath and plaster partitions for this project. These Truscon steel building materials served several important functions: (1) They permitted the quick, low-cost coverage of large areas with smooth, flat lath; (2) they met strict fire-proofing requirements; and (3) they helped attain a high quality of plastered job, and will protect the fine appearance of the walls and ceilings for a great many years.

Truscon Diamond Lath is a flat metal lath, uniformly expanded throughout the entire sheet. Its use is almost universal, for it is adaptable for practically all classes of work—as a base for walls, partitions, ceilings, as a reinforcement for stucco, as a protection for steel beams and columns, and for protecting hazardous points in wood frame construction—such as ceilings under inhabited floors, especially over heating plants and coal bins, around flues, and back of kitchen ranges, stair wells, and under stairs.

Did you know that Truscon Steel Company manufactures practically all of the necessary collateral window equipment such as mechanical operators and screens. There is a type of window design to meet any window requirement in any type of building in any industry. Ask for information on Truscon's complete line of steel windows.

More "Light-Power" for Power Houses

There is a growing use of Truscon Donovan Steel Windows for structures housing power units. These windows permit modern, streamlined design for exterior distinctiveness in appearance. Large areas can be covered by one complete window unit, permitting ample introduction of light and air. The operator mechanism, although concealed, assures positive control of the window openings. This mechanism replaces the unsightly mechanical operators usually necessary to effectively control ventilators. The steel sections used in Donovan Windows are rolled exclusively for Truscon, and are the largest and heaviest steel sections manufactured expressly for windows. Write for free catalog describing Truscon Donovan Steel Windows.

A Steel Window for Every Purpose

Did you know that Truscon Steel Company manufactures a more diversified line of steel windows than any other window manufacturer? Truscon also manufactures practically all of the necessary collateral window equipment such as mechanical operators and screens. There is a type of window design to meet any window requirement in any type of building in any industry. Ask for information on Truscon's complete line of steel windows.

Sky High

Truscon design and engineering ability in steel construction is evidenced by Truscon contracts to build America's tallest radio tower. The tallest one right now, is the WKY Radio Tower in Oklahoma City, 956 feet high from the ground to the top of the FM antenna. Tall or small, AM to FM, Truscon can supply girted or self-supporting radio towers for every requirement.

New Literature

Write for catalog describing the new Truscon line of plastering accessories, including Bull Nose and Scalloped Edge Corner Beads, Special Base Grounds and Screeds, Picture Mold, Castings, Fittings and other items.

TRUSCON STEEL COMPANY
YOUNGSTOWN, OHIO
Subsidiary of Republic Steel Corporation

TRUSCON
The new Truscon line of plastering accessories, including Bull Nose and Scalloped Edge Corner Beads, Special Base Grounds and Screeds, Picture Mold, Castings, Fittings and other items.

How to get the type of real estate loan YOU need

ANSWER: ask Prudential.

For, Prudential offers a complete financing service for builders: conventional, F. H. A., construction, G. I., individual building sites, subdivisions, residential, suburban, apartment, industrial, mercantile.

And Prudential makes every size of loan—from the smallest to the largest type of building project.

Prudential service too, is something for you to consider.

There are Prudential Mortgage Loan branch offices in all principal cities, representatives in most principal towns. They understand and are sympathetic to local conditions and problems. They can give you "on the ground" financing—swift, efficient closings, no red tape.

Get in touch with the nearest Prudential branch office or representative. Or write to the Mortgage Loan Department C, The Prudential Insurance Company of America, Newark 1, N. J.
Sound basic design... Good construction... These are the qualities that assure efficient, trouble-free operation of windows. These are the qualities you get when you choose ALWINTITE aluminum windows.

No "new-fangled," impractical ideas. No special gimmicks. Instead, ALWINTITE is a truly fine, low-cost aluminum window embodying more than 35 years’ window manufacturing experience. It has been tested and approved by the Pittsburgh Testing Laboratory and conforms in Materials, Construction, Strength of Sections and Air Infiltration requirements to specifications of the Aluminum Window Manufacturers Association.

ALWINTITE aluminum windows are completely factory-assembled. They include frame, sash, hardware, balances and built-in stainless steel weatherstripping, complete in one unit. Various muntin arrangements are available and are easily installed in any of these windows.

ALWINTITE aluminum windows are easy to handle and erect in frame, brick, brick veneer or other types of construction. Screens and stormsash, as well as panorama and basement windows are also available.

ALWINTITE double-hung, aluminum windows are manufactured in 12 stock sizes, with 4 type muntin arrangements. They are stocked by leading building supply, lumber, sash and door stores in every area. For complete information and name of your nearest distributor, write to Dept. AB-5.

THE ALUMINUM WINDOW CORPORATION
A Subsidiary of General Bronze Corporation
34-20 Tenth Street Long Island City 1, N.Y.

"BUILD RIGHT WITH ALWINTITE"
how to keep the boom from boomeranging!

Sure, there's a building boom today...and with a few operators in the building industry, anything goes. But when the chips are down tomorrow, when the boom becomes a battle for business, good reputations built today will be paying off. That's why far-sighted dealers and contractors are handling only the best materials available; giving top value for every dollar customers spend. They know a reputation for integrity in the boom market today is going to be worth a lion's share of the business tomorrow.

FOR 74 YEARS, the name Carey has meant quality wherever men build with

the future in mind. Today, with a home-hungry nation clamoring for more building materials, Carey's vast storehouse of experience serves as a firm foundation for expanding research and production facilities. Carey's men of science are "burning the midnight oil" in the enlarged Carey Research Laboratory, setting the pace for progress in development of desirable new products, improvement of those now familiar. Soon, too, Carey's new plants for production of Asbestos Shingles, Sidings, Asbestos Board and Rock Wool Insulation will be humming along, turning out increased volume of these quality products.

THE FAMOUS CAREY NAME on the job sign helps build the reputations of both the dealer and the builder—for quality. So tap Carey's business-building force for yourself. Build for the future with...

the Carey line

Asbestos Shingles and Sidings
Asphalt Roll Brick Siding
Asphalt Shingles and Roofings
Rooftop Coatings and Cements
Asbestos Coverall Wallboard
Waterproofing Materials
Miami-Carey Bathroom Cabineats and Accessories

In Canada: The Philip Carey Co., Ltd.
Montreal 1, P. Q.

THE PHILIP CAREY MANUFACTURING CO., CINCINNATI 15; OHIO
7. The 6

Your Pick of Power

The 8

Ford Cab-Over-Engine units, in 1½- and 5-ton nominal ratings, are available in 101", 134" and 158" wheelbases. The 134" chassis and cab, with Ford 12-foot Platform Stake Body, is pictured. Less garage space, shorter turning radius and shorter overall length for trailer service are important Ford C.O.E. dividends to owners.

"WE AGREE—

FORD TRUCKS LAST LONGER!"

Mr. Robert S. Swanson, treasurer, S. B. Thomas, Inc., Long Island City, N. Y., wrote recently: "In our pool of 120 Ford Trucks, 56 are over 10 years old, and 6 are 1932 models—14 years old! Their reliability and economy have given us good reason to be thankful that Ford Trucks Last Longer!"

ONLY FORD GIVES YOU ALL THESE LONG-LIFE TRUCK FEATURES: Either of two great engines, the V-8 or the SIX, both with full pressure lubrication to all main, connecting-rod and camshaft bearings, Flightlight oil-saving 4-ring pistons, precision-type heat-resistant bearings and fast-warmup temperature control • rear axle design that takes all weight load off the shafts (¾-floating in half ton units, full-floating in all others) • heavy channel section frames, doubled between springs in heavy duty models • big, self-centering brakes, with heavy, cast drum surfaces, non-warping and score-resistant—all told, more than fifty such examples of Ford endurance-engineering.

NATURALLY, FORD TRUCKS LAST LONGER! Latest 1946 registration figures show that 78% of all 1936 model Ford Trucks in use 9 years ago are still on the job! That's up to 15.8% better than the records of the next four sales leaders—5% better than the average of all four. More than 100 body-chassis combinations. See your Ford Dealer!

ONE Big Reason—Ford Drive-Line Units Stand Up!

The Ford Truck drive-line is exceptionally enduring. Friction is minimized by needle roller bearings, protected by relief fittings, in all universal joints in all models. Half-ton chassis have two such joints. All other models (except 101" w.b.) have three, and, in addition, a heavy duty ball center bearing. This bearing is self-aligning—cushion-mounted in live rubber. It is leakproof, excluding dust and water. It is unaffected by frame flexing and is notably long-lived. Large-diameter tubular steel propeller shafts with forged ends are properly balanced. This assures freedom from destructive vibration and great strength without excess weight.

MORE FORD TRUCKS IN USE TODAY THAN ANY OTHER MAKE
Pictured here are a few of the 182 comfortable homes built during the past year by John R. Worthman, Inc., in Ft. Wayne, Indiana. These and similar homes are an ideal answer to the current housing shortage. Each of 35 Worthman homes now under construction is being speeded to completion, thanks to the Ingersoll Utility Unit.

INGERSOLL UTILITY UNIT

SAVES TIME AND SPACE IN MAJOR HOUSING DEVELOPMENTS

Hundreds of Leading Builders Everywhere Are Including Utility Units in 1947 Projects!

All over the country forward-looking builders, convinced of the efficiency, convenience and adaptability of the Ingersoll Utility Unit, are ordering thousands of these single-engineered assemblies for immediate installation. In modern housing developments in New York, Dayton, Detroit, Indianapolis, Boston, San Francisco, in towns

and cities everywhere, more and more of these easy-to-install units are daily proving the means to economy of space and lower all-around cost. With each part engineered to fit snugly in its place, this practical, compact and sturdy unit, complete from one source, contains everything needed for comfort and homemaking efficiency.
Kitchen, Bath, Heating Plant, plus all plumbing and electrical lines, are included in the Standard Model Utility Unit. Equipped with all fixtures and appliances.

Ingersoll
UTILITY UNIT

J. A. Jones Construction Company, one of the country's largest builders, is installing Ingersoll Units in the 59 houses in this project, Country Club Hilda, Charlotte, North Carolina. One of several veterans' housing developments in that section, this modern community offers comfortable homes with attractive, space-saving kitchens and bathrooms, plus efficient heating plants.

Ingersoll Steel Division
Borg-Warner Corp., Dept. BS
310 S. Michigan Ave., Chicago 4, Ill.

Please send me complete descriptive literature on the Ingersoll Utility Unit.

Name

Firm

Address

City

State
EVIDENCE is accumulating to indicate that some elements of the building industry have priced themselves out of the market, and thus have stalled the building boom. Some observers believe that the well-being of the nation's economy is dependent upon construction of at least 750,000 non-farm dwelling units in 1947. They contend that failure of the industry to achieve a sustained full building program will reverberate throughout the economy. Consumer resistance to high prices in a segment of the housing market is all that will prevent attainment of the industry's objective, since the industry now is mobilized, and most materials are now or soon will be in adequate supply.

The Bureau of Labor Statistics' index of wholesale prices of construction materials registered an increase of three per cent in March over February, 1947, which had exceeded January by eight per cent. The composite index of building material prices in February was 193.1, the year 1939 being equal to 100. An important component is the wholesale lumber price index, which rose to 282.8.

The buyer's dollar in February, 1947, would purchase only as much lumber on the average as could have been bought for 35 cents in 1939. In terms of housing, a 1939 house that required $1,000 worth of lumber would show a lumber cost of $2,828 in February, 1947. The increased cost of lumber and other materials, excessively priced in relation to current price levels, as well as rises in already high construction labor costs, may prevent the construction of rental housing in the volume projected for 1947, and may delay new starts of medium priced, single-family units for sale.

Production of building materials in the first months of 1947 was at a level more than 40 per cent higher than at the beginning of 1946. Production at the beginning of last year was hampered by work stoppages in several of the major building material industries and, in addition, very few industries had completed reconversion from war to normal operation. Great progress has been made toward balancing supply and demand of many construction materials.

Several building materials—brick, cement, concrete block and asphalt roofing—are approaching a market balance, although supply difficulties are being encountered in certain areas because of the difficulties of reorganizing the distribution system so badly disrupted by the war. It is expected that for some time there will continue to be shortages in some places, with possible surpluses in others. The condition is due to difficulties in determining the changed volumes of concentrated building activity in different localities, and in lieu of authoritative information, shipping by some producers based on prewar volume of orders. Distributors' problems are expected to continue in some areas, particularly for insect screen cloth, building boards, plaster, water closets and water heaters.

Despite high production levels achieved early in 1947 for such items as millwork, hardwood flooring, gypsum board, plumbing fixtures and cast iron soil pipe, output is still too low to meet current requirements. In some instances gray market speculators are delaying the return of normal distribution.

The supply of many building materials is curtailed by an acute shortage of freight cars. Although a program to channel steel to car builders has already been put into operation, results will not be apparent until the middle of 1947.

agnost production approximates 6,500,000 tons monthly. Thus, despite continuing scrap difficulties, production remains at a high level. However, because of the relatively short position of some items—chiefly sheet and strip—a balance between supply and demand remains months away, while inventories naturally become some what unbalanced as between products.

For the first two months of 1947, total new construction activity exceeded 1.5 billion dollars, 57 per cent above that for the corresponding period in 1946. Private construction constituted 80 per cent of the total, amounting to 1,234 million dollars, 51 per cent above the volume put in place during the first two months of 1946. New public construction amounted to 310 million dollars during the first two months of 1947, 83 per cent above that for the corresponding period a year ago.

During February and March there were signs that the price rise had begun to decline. Department of Commerce, however, believed that the real test for price leveling would not be apparent until building activity reached its seasonal start in April. January lumber production was 2.547 million board feet, one-third more than for the same period in 1946. First quarter production estimate is around eight billion feet. Hardwood production continued at high levels. Production gains in 1946 were attributed to expanded production by small mills, particularly in the East and South. More than three billion feet of the gain was made by small mills making less than a million feet a year. Not enough of the increased production was in uppers and shop grades to promise great increase in the production of millwork. Improvement in these grades is expected as greater production develops.

GRAPH showing trends and relationship of private, public and total construction.
there's only ONE

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and only INSELBRIC has PRECISION SHIPLAP

Because Inselbric is precision-built! All edges so skillfully machined and matched—you cannot tell where one panel begins or where one ends. That's precision shiplap! The all-important feature that gives you one continuous brick-like pattern—the nearest approach to real brick. That's why people who know insist upon INSELBRIC.

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MAKERS OF INSELBRIC AND INSELSTONE NATIONAL DISTRIBUTORS OF INSELBRIC AND INSELSTONE
SOUTH BEND, IND. ELIZABETH, N. J.
PITTSBURGH, PA.
Now you can SAVE MONEY wherever you work!

Your NEW MONARCH* UNI-POINT PORTABLE RADIAL SAW IS HERE!...

...made of magnesium

LIGHTEST Tough, non-rusting magnesium makes this revolutionary Monarch Uni-Point the world's lightest 12-inch radial saw. Now you can have the famous money-saving Monarch Uni-Point advantages within arm's reach, wherever you work.

AT LEAST 25% FASTER
The exclusive Monarch Uni-Point principle slashes one fourth from sawing time. "One Point Cutting" ends costly waste motions . . . piles up extra profits.

DIFFERENT in 4 important ways...

ALL-PURPOSE Monarch Uni-Point does any kind of production cut in wood . . . with the dexterity of a surgeon! Its rigidity and machine tool construction assure absolute accuracy. And the 3 by 16-inch crosscut and 20½-inch ripping capacity is far greater than that of any other radial saw of similar mobility.

SAFEST On the Portable Monarch Uni-Point there's no hazardous jutting arm between you and your lumber. This and other outstanding protection features make this new magnesium radial saw your one best bet for safer, bigger production. Get all the facts and see how it can increase your earnings.

There's a larger Monarch Uni-Point, too, for heavier production

Prompt shipment also can be made of stationary Model AJ, for heavier production. Mounted on open steel frame table, its 16-inch blade is powered by 3 HP or 5 HP motor; crosscut capacity 4½ inches deep by 25 inches wide and 0 to 31 inches for ripping. Order now for best delivery.

AMERICAN SAW MILL MACHINERY CO.
Manufacturers of Saw Mill and Woodworking Machinery
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A Winning
COMBINATION
AUTOMATIC HEAT
AND
HONEYWELL CONTROLS

COMPLETELY automatic heat is insurance of dependable attention-free heating comfort for the owners of your homes. And to get the most satisfactory performance with economy, make sure the heating system in every home you build is Honeywell-controlled.

This combination — automatic heat and Honeywell controls — has always been a winner when judged by the standard that counts most...efficient, reliable performance. Home owners recognize and accept this Honeywell reputation for performance. They've seen it demonstrated millions of times in homes throughout the country.

So capitalize on this universal acceptance as a prestige feature for your homes. Standardize on Honeywell—the leader. It's assurance that a heating plant is going to function at its best. And when the ultimate in heating comfort is desired, install Moduflow, the remarkable new Honeywell control system. Minneapolis-Honeywell Regulator Company, 2655 Fourth Avenue South, Minneapolis 8, Minnesota. In Canada: Toronto 12, Ontario.
No home owner should be left "holding the bag"!

- Architects and builders know there's no other home-heating fuel as dependable and economical as Bituminous Coal.

So even when a client of yours insists on some other fuel for his new home, it's wise to give him a chance to change his mind later on—and turn to coal.

Otherwise, he'll be left "holding the bag" when stoker developments, cost differentials, improved local services or other factors convince him he should heat with coal.

Just make sure his house plans include: (1) A chimney with sufficient flue capacity to burn coal efficiently; (2) Sufficient space adjacent to the heating unit for eventual coal storage and stoker installation.

These sensible precautions involve but trifling cost—and they may add greatly to the future value of a house.

Coal supplies uniform, steady warmth throughout every portion of each room. For there's always a fire in the furnace—no "pop on and pop off" periods that permit accumulated heat to rise to the ceilings and leave floor areas dangerously cold. That, plus its low cost, is why more than 4 out of every 7 homes in the United States now heat with coal!

BETTER AND BETTER THINGS ARE COMING FROM COAL!
for more savings on every cut.

Get a SKILSAW RADIAL SUPPORT
and don't just saw it...

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© Gang-cut lumber with SKILSAW and SKILSAW Radial Support and you gain extra profit from the extra speed on accuracy. You'll save time on layout. You'll save money cutting random lengths into usable pieces. You'll cut costs on every cut. And you'll still have portable SKILSAW with all its wonderful advantages. Ask your distributor today about a demonstration SKILSAW and SKILSAW Radial Support.

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BRYANT STEEL GRAVITY
WARM-AIR FURNACE

For immediate delivery . . . the furnace that will win those small homes jobs. Economical and completely automatic, this Bryant warm-air furnace gives you the plus to your sales story . . . a famous brand name and a price that is in line with small homes construction. Attractive in its Bryant Grey casing, this furnace is available with controls designed for natural, manufactured or liquefied petroleum gas.

See your Bryant distributor or branch representative now! He will ship from stock to get you set for extra profits! Bryant Heater Company, 17825 St. Clair Avenue, Cleveland 10, Ohio. One of the Dresser Industries.

BRYANT MODEL GS-57 STEEL GRAVITY
WARM-AIR FURNACE OFFERS THESE FEATURES:

1. Drum-tube heat exchanger—flue gas travels all upward, no condensation pockets, quiet operation.
2. Inner radiation shield—completely surrounds heating element to insure low casing temperature.
3. Axial burner—cast iron with raised drilled ports; easily accessible, adjusted or removed.
4. Easy-reach controls—handily located for inspection and adjustment.
5. Compact draft hood—easily accessible for periodic cleaning.
6. Burner baffles—contribute to uniform temperatures in heat exchanger; no "hot spots". Baffles eliminate expansion and contraction noises.

The most complete line of gas heating equipment in the nation!
ROOFING QUALITY...

...DETERMINED IN A Flash!

Not a spectacular flash ... but certainly a mighty important one to home owners who want a dependable, long-life roof.

Important, also, to builders whose business future depends on the high quality of the jobs they do.

We're talking about "Flash Point" ... the temperature at which asphalt fumes will produce a momentary flash in the presence of an open flame. It is one means of indicating the suitability of asphalt for roofing products.

Flash Point Determination is merely one of many scientific tests applied every day to the asphalts used in Flintkote roofing to assure highest quality ... to satisfy home owners ... help dealers sell more ... enable applicators to do better jobs.

FLINTKOTE QUALITY BUILDING MATERIALS FOR MANY PURPOSES

A new $1,000,000 research laboratory, part of a $16,000,000 plant expansion program, will bring you even better Flintkote products.

Flintkote Asbestos-Cement Shingles and Siding are ideal for new construction ... or for the economical modernization of existing homes.

Flintkote Insulating Wool is easy to apply, light in weight, fire resistant, and won't mat or settle. Provides year-round home comfort.

Flintkote Cold Process Built-up Roofs go on fast and economically, without fire hazard, when they're applied by brush or spray equipment.
Freedom from pitch in this all-purpose wood explains its remarkably soft texture through which you can drive every nail tight and know it will hold. That means each joist, stud, board and rafter will be firmly anchored in the framing, and stay put.

By the same token, window jambs, sills, siding and outside trim of Arkansas Soft Pine hold snug at every joint and mitre.

Remember, too, that just as this soft texture safeguards sound framework, it also insures smooth, workmanlike finished surfaces; because it takes paint, enamel or stain and holds them, absorbing the primer evenly and carrying the intermediate and final coats uniformly, with no risk of bleeding, discoloration or raised grain.

These are the extra profitable values you get in the time-proved soft texture of Arkansas Soft Pine... values which protect your workmanship from foundation plates to picture moulding... qualities that insure your reputation as a builder of sound, lasting construction.

Ask for our Builders' Handbook, giving you complete information about Arkansas Soft Pine, including construction details, stress tables, grades to specify in all locations, painting and finishing instructions. Write today for YOUR FREE COPY.

Arkansas Soft Pine is trade and grade marked, qualifies for Federal Specifications and is sold by retail lumber dealers east of the Rockies.

ARKANSAS SOFT PINE BUREAU
1141 BOYLE BUILDING
LITTLE ROCK, ARKANSAS
Here, at last, is low-cost housing that you can build now and in a hurry—and sell as fast as you build!

Everything is made quick, easy and profitable for you. Your local Quonset dealer supplies you with complete designs, Stran-Steel arch-rib framing and exterior steel sheathing. Yet you have all the advantages of using your own labor force and collateral materials!

With Stran-Steel nailable arch-rib framing, you cut erection time and labor costs to the bone. Close-in time is shorter, financing time is reduced, turnover is speeded, and profit opportunities are increased! And you offer better-built, permanent homes with distinctive, modern styling.

The greatest low-cost home market in history is waiting for you to build these finer homes! Why delay? Your local Quonset dealer will show you how quickly you can go ahead with the designs he furnishes—or how easily your own architect can introduce variations in exteriors and floor plans. See your Quonset dealer today, or write for his name and additional information.

SITE PLANS, TOO!

Typical site plans for communities of 25, 100 and 1,000 homes have been developed by Seward H. Mott, famous land planning engineer. They show you the importance of proper planning in making the most effective use of land and in saving the most money.
any way you look at it . . .

**THIS IS YOUR ADVERTISING**

- In powerful, selling advertisements like these, the story of Ruberoid's exclusive feature products is steadily reaching the best building prospects in your community. Eleven million home and farm families will read about the year's outstanding new roofing development: the windproof, Dubl-Coverage Tite-On Shingle that gives a locked-down double layer over the entire roof area! Farmers will be especially interested in the greater value and utility offered by Ruberoid Stonewall Board—the fireproof asbestos-cement building board that can't rot or rust and needs no painting.

In the average community, 6 out of 10 families with worth-while purchasing power will read about Ruberoid products in these advertisements. That's advertising that works for you . . . another example of Ruberoid's consistent policy of producing products with exclusive features and then supporting them with all-out, year-round, national promotion!
Here is the latest and most efficient roofing nail and washer combination ever offered. NICHOLS ALUMINUM NAILS have all lubricant removed. Their entire surface is etched to provide a firm friction grip that causes the wood fibers to grip and hold the nail, when driven. No more slipping or “loosening up” after application. No rusting or electrolytic corrosion. Permanent Aluminum Nails for permanent aluminum roofs.

The war tested, nationally known GORA-LEE NEOPRENE WASHERS used with NICHOLS ALUMINUM NAILS are weatherproof and resilient for exposed service from 65° below to 250° above zero. They provide a cushion-like expansion joint that lessens the pull on the nail head, caused by air pressure in buildings of any kind. Note how Neoprene Washer tightly seals itself around nail opening in sectional drawing at right.

<table>
<thead>
<tr>
<th>Nail Length</th>
<th>Size Head</th>
<th>Gauge</th>
<th>Nails per box</th>
<th>Washers per box</th>
<th>Boxes per ctn.</th>
<th>Weight per ctn.</th>
<th>Price per ctn.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1/2&quot;</td>
<td>7/16&quot;</td>
<td>10</td>
<td>1050</td>
<td>1100</td>
<td>10</td>
<td>35 lbs.</td>
<td>Write your jobber or us direct</td>
</tr>
<tr>
<td>2&quot;</td>
<td>7/16&quot;</td>
<td>10</td>
<td>1050</td>
<td>1100</td>
<td>10</td>
<td>38.5 lbs.</td>
<td>Write your jobber or us direct</td>
</tr>
</tbody>
</table>

Also available in 50 lb. kegs for asphalt and other types of roofing—with or without washers in bulk.

One box will cover 10 squares of Aluminum Roofing.

Be sure in mind that there are three times as many aluminum nails per pound as there are steel nails.

**roofing accessories**

NICHOLS ALUMINUM ROOFING ACCESSORIES last for years because aluminum can’t rust and can’t rot. Requires no upkeep. Alert dealers will order an assorted stock today to meet the big warm weather building and remodeling program now under way.

**GAMBREL ROOF JOINT**

.019" thick, 12" girth, 28" length. Covers one sheet width—24". Available in 1 1/4" and 2 1/2" corrugations to match roofing sheet. Packed 100 pcs. per ctn.

**SIDE WALL FLASHING**

.019" thick, 10" girth, 10 ft. length. Available in 1 1/4" and 2 1/2" corrugations to match roofing sheet. Packed 150 ft. per carton.

**ROLL VALLEY**

.019" thick, 14", 20", and 24" widths. One continuous coil of 60 ft. per carton. Also available in 10 ft. lengths. Packed 10 rolls (100 ft.) per ctn.

**FLASHING SHINGLES**

.019" thick. Available in 8" x 8" and 8" x 10" sizes. 5" x 8" packed 500 pcs. per ctn. 8" x 10" packed 250 pcs. per ctn.

**BARN BATTEN**

.019" thick, 8 and 10 ft. lengths, in styles shown at right. Packed 250 ft. per carton. Specify style wanted on your order.

**END WALL FLASHING**

.019" thick, 10" girth, 28" length. Covers one sheet width—24". Available in 1 1/4" and 2 1/2" corrugations to match roofing sheets. Packed 100 pcs. per carton.

**CORRUGATED RIDGE ROLL**

.019" thick, 11/2" roll—8" girth. Covers one sheet width—24". Length, 20" with either 1 1/4" or 2 1/2" corrugations to match roofing sheet. Pkg. 100 pcs. per carton.

**PLAIN RIDGE ROLL**

.019" thick, 11/2" roll—8" girth. Also 2" roll in 10" and 14" girth. All in 10 ft. lengths. Packed 150 ft. per carton.

**NOTE** — When Aluminum sheets or accessories are applied to raw mortar, cement or plaster, the concealed surfaces should be painted with asphalt paint.

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NICHOLS WIRE AND STEEL CO.

Main Office: DAVENPORT, IOWA

Warehouses: Battle Creek, Mich. • Mason City, Iowa
The styling and high-quality features of Eljer vitreous china lavatories enable architects, builders and master plumbers to give customers extra values they recognize and appreciate.

Consider, for example, these features of the Martha Washington shelf-back Lavatory (Catalog No. 3150P). . . . real vitreous china . . . a lustrous finish, impervious to stains and not affected by ordinary acids . . . concealed front overflow outlet with a smooth, unbroken back surface . . . anti-splash rim . . . chromium-plated 2-step legs . . . chromium-plated combination supply and pop-up waste fitting . . . ideally adaptable to single or multiple installation . . . long life . . . now being furnished in three colors and white.

REMEMBER: Adequate Housing Will Eventually Mean At Least Two Bathrooms In Every Home.

Eljer fixtures are available with quality renewable brass fittings . . . featuring the exclusive Eljer Swivel-Diac that virtually eliminates dripping. Faucets operate smoothly at the touch of a finger and wear on moving parts is reduced to a minimum.

Eljer's line of brass goods is a precision line, accurately gauged and can have no variations over the years. This is a standardized and simplified line . . . with a minimum number of interchangeable wearing parts to give long and satisfactory service . . . easily replaceable if ever necessary.

NAHB Officials Working on Plans for 1948 Convention

Plans for the 1948 annual convention and exposition of the NAHB are already under way, according to Paul Van Auken, convention and exposition director. W. Hamilton Crawford, Baton Rouge, La., who turned in a stellar performance as chairman of the 1947 association convention committee, has been named to head the 1948 committee. Damon Elder will continue as Mr. Van Auken’s assistant.

Recently Mr. Van Auken expressed the conviction that the 1948 Exposition will include many more new materials than have been shown previously by exhibitors. It is expected that a host of new and improved materials not available early in 1947 will increase the demand for exhibit space in 1948. The director, therefore, is arranging for more exhibit space for next year, and has several plans in mind.

Plans for the program necessarily will not be made until late in the year, but the 1947 program is being reviewed with the intention of drafting a rough outline of speakers, panel members and subjects to be presented and discussed as soon as possible.

American Builder editors, who produced the popular Convention Daily this year, have completed their plans to repeat in 1948 with an even better series of daily newspapers.

Builders of Northern Indiana Hold Meeting

The Woodmar Country Club near Hammond, Ind., was the scene of a large gathering of members of the Home Builders Association of Northern Indiana on April 8. About 200 were present. After a social hour and dinner the assembly was called to order by Director Chairman Henry J. Kranz.

The association is an affiliate of the Chicago Metropolitan Home Builders Association, and the meeting was attended by Charles Huggett, Chicago secretary, and members of his staff.

After introducing his cabinet and notable guests, Mr. Kranz presented Arthur E. Fossier, president of the Chicago association. Mr. Fossier commended the Indiana association, then introduced his friend of 30 years standing, Ed Gavin, editor of American Builder, as the speaker. Mr. Gavin, using the subject, “The Building Outlook,” outlined the reasons for spiraling building costs and prices, and suggested some measures builders might take to start a downward cost and price trend.

EDWARD R. CARR

President Edward R. Carr Testifies Before Congressional Committees

In an almost unprecedented occurrence National Association President Edward R. Carr late in March appeared before the Senate Banking and Currency Committee to assail the Taft-Wagner-Ellender omnibus housing bill (S. 866) during a morning session, and in the afternoon before House Banking and Currency Committee to testify on the Wolcott bill (H.R. 2549). The T-W-E measure is a revised version of the Wagner-Ellender-Taft bill (S. 1592) which, after being bitterly contested last year, received Senate approval but did not get out of committee in the House of Representatives.

In a telling manner President Carr listed point by point objections to the various provisions of the bill and urged that it be broken into four primary parts—slum clearance, reorganization of government agencies dealing with housing, “aids to private enterprise,” and public housing, so that each could be considered and acted upon in accordance with its merits.

Because Senator Charles W. Tobey of New Hampshire, chairman of the Senate committee, had announced that the hearings would be limited to “the changes in the bill,” Mr. Carr pointed out that many of the general provisions of S. 866 were contained in two previous bills, the Wagner-Ellender Bill and the Wagner-Ellender-Taft measure. He said: “Our position against those bills is very clear, as evidenced by our appearances before the committees of Congress in the past. We have not deviated. We are against this bill.

“The original and major purpose of this bill, of course, is to establish a large scale public housing program in this country to be subsidized at the rate of $105,600,000 a year for 45 years by the federal government. The bill provides for 500,000 public housing units. Simple arithmetic shows that this subsidy amount is $17.50 per month per family. To this must be added two indirect subsidies. Housing authority bonds which finance the construction of these public housing projects are tax exempt. Since the bonds would be issued in heavy volume other financial outlays authorized in the bill would obligate the federal government to finance the construction of somewhere around $27.50. When this subsidy is added to the rent which families pay, it becomes crystal clear that these are not low rent public housing projects at all but high rent projects paid for by the government and subsidized by the government,” he continued.

Mr. Carr warned the Senate committee that the total cost of the Taft-Wagner-Ellender bill warranted serious and lengthy consideration, and added, “Senator Taft has told this committee that the ‘subsidies together with their responsibility to produce houses in every price class and particularly to produce the maximum number at the lowest possible cost, both for rent and for sale.”
NAHB New Executive Committee Meets

The first meeting of NAHB's newly constituted Executive Committee was held at the Wardman Park Hotel in Washington, March 24 and 25. The two-day session covered problems ranging from a discussion of the recently introduced Taft-Wagner-Ellender bill to labor problems and the high cost of building materials. A meeting of the Board of Directors was called for late this month.

Luther J. Boggs, Atlanta, Named NAHB National Secretary

Well-known throughout the southeastern part of the country for his leadership in advocating and sponsoring low-cost housing, Luther J. Boggs, a prominent building contractor in Atlanta, Ga., since 1923, was elected secretary of the National Association during its 1947 Annual Convention, held in Chicago late in February.

Mr. Boggs organized the Home Builders Association of Atlanta in 1944 and was its first president. He is now chairman of the Association's slum clearance committee which is actively sponsoring an immediate local privately-financed slum clearance project. Members of the Association have organized on a non-profit basis to buy blighted land and clear it for low-cost housing.

NAHB's new secretary, who replaces 1946 Secretary George J. Goudreau of Cleveland, has built all types of housing, but in recent years has specialized in building for low and moderate income groups. Just before the war he completed 250 five-room houses which sold for $2,500 to $3,500. He is now building veterans' housing and is embarking on a project of 100 low-cost units.

Elected regional vice-president of NAHB in 1946, Mr. Boggs was instrumental in stimulating interest in the national association in his region. As national secretary he will also serve as a member of the Executive Committee.

Carr Visits Eight Local Groups

Following his post-election promise to meet with as many NAHB affiliated associations as possible during his presidency, "Eddie" Carr has traveled on a "tight" schedule during his first 60 days in office. Last month he successively visited Philadelphia, Boston, Springfield, Mass., Dayton, Oklahoma City, Dallas, Houston and Syracuse, N.Y.

Detroit Builders Say Veterans' Administration Unrealistic

"The Bildor," official publication of the Builders Association of Metropolitan Detroit, recently charged that G.I. appraisals show a lack of realism. It asserted:

"The Veterans' Administration's G.I. Housing Division is keeping veterans out of new houses by a totally unrealistic appraisal system. With building costs over 80 per cent above 1940 levels, these gentlemen seem to think that builders should produce new housing at somewhere near 1940 levels. If the VA has some magic formula by which this can be achieved, we builders will appreciate receipt of same. Meanwhile there is little use of building houses for veterans, if a government agency continues to prevent veteran occupancy. New houses, available to veterans at $6,450, have currently been rejected by G.I. appraisers, despite the fact that this reflects a margin of profit of less than 5 per cent to competent efficient builders. And," the article concludes, "despite the fact that the total selling price is less than the cost of most of local temporary government three-room duplex housing units."

NAHB Personnel Make Changes

The resignations of several members of NAHB's Washington headquarters personnel was made known recently. Lawrence Hanson, who headed up the department for committee organization and legislative activities, resigned to accept the appointment of executive director of the Home Builders Association of Metropolitan Washington. Others resigning include Lawrence Holmes, administrative assistant; Joseph Robitscher, public relations assistant; and James Heaton, who was in charge of expediting materials.

Mr. Heaton plans to return to the private building business in New York, while the plans of Mr. Holmes and Mr. Robitscher have not been announced.

Portland Home Builders Hold Open House

The newly formed Portland, Ore., building firm of Sandberg-Asbahr Company recently held an open house in its new concrete office building, marking another step forward in the advance of this young organization, which is already one of the Northwest's leading building companies.

The office section of the 50 x 100 ft. modern building is finished in mahogany paneling, the plan room is knotty pine, and the conference room is enclosed with Flutex glass. Warehouse space is in rear of the office section.
Tobin Appointed to Head NAHB's New Labor Relations Department

The establishment of a Labor Relations Department in the National Association under the direction of William J. Tobin, Jr., of Washington, D.C., was announced last month by Frank W. Cortright.

The department will develop information on labor problems affecting home building, serve as a clearing house to assist local member associations in closed shop areas, and seek to work with labor representatives of the building trades on

the objective of a maximum production of housing at lower cost.

"The fullest coordination of effort between builders and labor is imperative if we are to have the volume of home construction, and particularly of moderate cost rental housing, that is needed this year," Mr. Cortright said, in announcing the appointment of Mr. Tobin. "The main function of the Labor Relations Department will be to work toward that end."

Mr. Tobin was formerly executive secretary and treasurer of the Master Builders' Association of Washington, D.C. He was a lieutenant commander in the Navy during the war with a part of his service in the field of labor relations. As industrial labor supply officer in the Chicago area, Mr. Tobin advised with manufacturing plants on labor for the Navy's wartime production needs. A native of Washington, Mr. Tobin is a graduate of the Catholic University School of Law.

Westchester Home Builders to Issue Monthly Publication

At its regular monthly meeting in March, the Home Builders Association of Westchester, Inc., approved the proposal of President Irving A. Lipsig, New Rochelle, that the group officially publish each month a magazine for distribution to the members and "other industry factors in Westchester County" to promote the interests of the association and disseminate information concerning its activities. Lawrence M. Loeb of White Plains was named to be in charge of the publication's editorial policy and give it direction.

The meeting, held in Tarrytown, N.Y., also heard a representative of the Ingersoll Steel Division of the Borg-Warner Corp. describe the construction and installation of the Ingersoll utility unit.

Rising wage demands and mounting materials costs have reached proportions of gravest consequence in this year's production of housing. Permits to build dropped from 73,273 units in January to 47,512 in February and further defied seasonal factors to settle at a little over 46,000 units in March.

Maintenance of the January rate would have meant the industry was on the way to full use of its productive capacity. But while these statistics were accumulating in Washington, builders throughout the country were face to face with the actualities that are now shown by another set of Washington figures.

These show that the sharp drop in permits coincided with a sharp rise in costs. In the first two months of 1947 the increase in wholesale prices of construction materials was nearly 11 per cent, according to BLS. In the first two months of 1947, NHA's construction cost index, covering housing labor and housing materials, rose from 160.8 to 174.8. These figures may definitely be considered on the conservative side as contrasted to the realities when the builder sets out to buy materials at retail and to hire site labor. The NHA figures are conceded not to reflect increased labor costs caused by decreased productivity of labor.

While the building materials producers can still point with justification to the dislocations they still suffer under government controls and from their own labor problems, this segment of the industry nevertheless has gone on record many times in promise of lowered prices with increased production. The fact that materials prices went up less than half as much in February this year as in the preceding month gives a faint glimmer of hope for a leveling off as promised.

The producers and the whole distribution chain for building materials must share in the responsibility for a recapture of the house market.

While too many figures are not palatable, we believe that one more set of them merits acknowledgment. It is the fact that out of approximately 30,000 units of new construction for which FHA insurance was sought in March, more than 11,000 were rental units. Here we have a most convincing demonstration of the good faith of builders in attempting to carry out their pledge to build the rental housing the country needs.

These groups of figures give a pretty good idea of the conditions surrounding the launching of the National Association's rental housing drive for this year. It is a drive that was immediately beset with adverse conditions, particularly since labor at the same time was apparently giving birth to an organized drive for higher wages pyramided on a level that already exceeded anything in history.

At this writing we have reports from throughout the country that projects are being suspended or called off altogether because of the heavy wage increases sought and strikes in progress or threatening.

In analyzing all the unfavorable factors in the picture now, including the continuing weary pattern of governmental interference, it is as plain as day that the big opportunity to hold the line on housing costs rests with labor. Without sacrificing any of its real gains, building trades labor can meet the present challenge to its own greatest advantage.

Labor's failure so far has been shocking. Its heavier and heavier wage demands are not accompanied by any offers of increased productivity and a full day's work. Lathers are not offering to apply 55 bundles instead of 33 bundles. Bricklayers are not offering to lay 800 to 1,000 bricks instead of 400 to 500. Blocklayers are not offering to let one man lay a 35 pound concrete block.

The NAHB, through its new Labor Relations department, is now compiling results of a nation-wide survey. Wage contracts are being analyzed, information on restrictive practices documented and the status of apprentice training determined. This is information that the home building industry must put before the people and the Congress. There is no time to be lost in bringing the force of public opinion to bear on the anti-blussing stand taken by union labor.
**WASHINGTON BUILDERS PLAN BIG HOME SHOW**

**SHOWN above are: (l to r.) Clarence W. Gosnell, Donal L. Chamberlin, Lawrence Hanson.**

The Home Builders Association of Metropolitan Washington has announced its plans to stage a home show and exposition in the nation's capital, Oct. 11-19. The committee, appointed by President Donald L. Chamberlin, will be headed by Clarence W. Gosnell, who told a recent meeting of the Washington builders that the theme of the show will be "to promote home ownership and bring together all that is new in the design and furnishing of the modern home."

Mr. Chamberlin also announced the appointment of Lawrence Hanson, formerly legislative representative of NAHB, as executive director of the Washington association to replace Ernest F. Henry, who resigned to resume the practice of law.

**CHICAGO HOME BUILDERS WARNED OF SERIOUS SITUATION AHEAD**

In a recent issue of the Chicago Metropolitan Home Builders Association weekly Bulletin, Executive Secretary Martin C. "Charlie" Huggett told his membership that all signs indicate a slowing down of construction "that will bring men and interests engaged to their senses, but possibly too late to effect a remedy during the present season."

Declaring that home building in the Chicago area is sagging away into deflation through lack of confidence and a complete incapacity to perform under existing conditions, he said: "Prices and wages have not risen to a point where present bids and estimates are justified, and the elements of the industry should look each other in the face and resolve to eliminate profiteering. This applies to builders who, through the elimination of ceilings, can charge what they can get; to the subcontractors, who regard scarcity as an opportunity to gouge the builders with a 50 per cent instead of 20 per cent net; to manufacturers and purveyors, who adhere to undercover deals and boost the prices of scarce materials; and to union workmen whose makework and featherbedding practices, nursed by New Deal indulgence, constitute a theft of time that is the worst type of profiteering."

Mincing no words, Mr. Huggett suggests two remedies, one problematical and one certain. Explaining, he says: "It is possible but quite problematical that all will appreciate the trend of the times and join in a united effort to uproot profiteering and price-building practices and lower costs accordingly, and that labor will cooperate by giving a full day's work for a full day's pay, all to the end that construction may be placed upon a sound basis. The alternative is hard times, when businesses fail and men go hungry. This is a bitter dose, but may be the only one that will completely cure the situation, since adversity is the only remedy that carries complete recovery in its wake."

**GUINAN ADDRESSES LANSING BUILDERS ASSOCIATION**

The Lansing Home Builders Association was host to William J. "Bill" Guinan, executive director of the Builders Association of Metropolitan Detroit, at its regular monthly dinner meeting, April 7. Taking subject, "Should We Build Now," Mr. Guinan pointed out the difficulties ahead "when the day of reckoning arrives for high material and labor prices," while stressing the adequacy of today's financing for new construction.

Other speakers were W. Scott Hamlin, a representative of the Social Security Board, who outlined the functions and purpose of that organization, and Fred G. Skubick of Trim Edge, Inc., Youngstown, O. Mr. Skubick arranged with the Dow Chemical Company for an engineer to report on that firm's research in the field of plastics and gave a demonstration on the application of plastic tile.

**NAHB 1947 MEMBERSHIP DRIVE GETS UNDER WAY; GOAL 15,000**

Under the chairmanship of Joseph B. Haverstick, Dayton, Ohio, NAHB's Membership Committee, which is composed of the regional vice presidents, has laid plans to increase the present membership of 11,346, and 102 affiliated local associations, to 15,000 members and 125 associations by the end of 1947.

Guiding the drive from Washington will be "Jim" Hoag, NAHB Membership and Chapter Relations Director, who was instrumental in assisting last year's membership chairman, George J. Goudreau of Cleveland, to add about 3,500 new members and 30 local associations to the NAHB roster.

The award for the greatest increase shown in the 1947 campaign will be the Dallas Trophy, a beautiful trophy donated to the National Association during the recent Convention and Exposition by the Home Builders Association of Dallas.

**GREATER BOSTON HOME BUILDERS HEAR GROSS ON RENTAL HOUSING**

In a special meeting recently sponsored by the Home Builders Association of Boston and restricted to home builders and representatives of New England lending institutions, Alfred Gross of Gross-Morton Co., one of Long Island's largest residential building organizations with headquarters in Jamaica, told of his firm's experience with rental housing under Section 608 of the National Housing Act.

In announcing the meeting Angus M. MacNeil, president of the Boston builders, explained that Mr. Gross would make an "off the record" talk from which representatives of federal agencies would be excluded. He said: "We have heard the ballyhoo of government spokesmen, but in Mr. Gross we have a practical and successful builder who has had a wealth of experience, and knows his subject."

At its regular March dinner meeting emphasis was placed on the importance of each member of the Boston association publicizing his membership in the local organization and its affiliation with NAHB. Its "value is readily apparent," declared Arnold Hartman, organizer and first president of the Boston group. "It immediately identifies an individual associated with a progressive and ethical group of conscientious builders."
Insure Increased Efficiency and More Pleasant Summer Living in Light, Cooler Rooms...

Specify **KOOLSHADE SUN SCREEN**

No Loss of Light... No Glare... Clear Vision!

Sun-drenched rooms can be comfortably cool, shaded and light! Actual cases in every section of the country—in factories, homes, public buildings—prove that KoolShade blocks and radiates up to 90% of the sun rays outside the window, cuts temperatures as much as 15 degrees, lets in an abundance of clear, glareless light and gives unobstructed vision.

KoolShade is in effect a miniature outside venetian blind. Paper thin bronze "slats" are permanently set at a 17° slant... blocking sun's heat rays outside the window. It frames and installs as simply and neatly as ordinary insect screen—that's real double-duty efficiency.

Air Conditioned Rooms... are kept cooler at less cost in KoolShade equipped buildings because KoolShade reduces the Sun Heat Load on glazed openings, 80 per cent to 85 per cent—thus cutting equipment and operating costs.

KoolShade preserves... the smart architectural lines of modern building design—no projecting hardware is necessary, no adjusting and practically no maintenance. For economical "sun-conditioning" specify KoolShade Sun Screen.

WHY YOU SHOULD SPECIFY KOOLSHADE!
- Easy and inexpensive to install—will not rust, rot or rattle.
- Permanently adjusted for greatest shading efficiency.
- Prevents fading of valuable drapes and furnishings.
- Fits neatly and smoothly into modern architectural design.
- Durable bronze KoolShade also effective as insect screen.
There's a promise of better living in these Dallas homes, being built by Allan Graham. General Electric kitchens—included as a basic part of the home—will offer homeowners all the advantages and economies of modern, efficient, labor-saving appliances.

This typical kitchen in one of Allan Graham's homes is planned for ease and convenience. The General Electric Sink—with Dishwasher and Disposall (for automatic garbage disposal), General Electric Range, Refrigerator, and Steel Storage Cabinets—are all included in the long-term realty mortgage. They make only a minor difference in initial cost, and the slight increase in monthly payments can be more than offset by economies in operation and maintenance of the dependable General Electric Equipment.
Says Allan Graham of Dallas, Texas:

“We’re building homes to sell for less than $10,000—
with complete all-electric kitchens containing the latest
General Electric equipment!”

You probably know that home-buyers today have their
hearts set on fully equipped, all-electric kitchens included as
part of the house itself.

But do you think that such homes can’t be built except in
the higher-price class—out of reach of the volume market?
They can be built . . . as builder after builder is proving.
Here’s what Allan Graham of Dallas, Texas, says about his
new houses:

“Under our loan plan, the extra cost of including a mod-
erne, efficient, all-electric kitchen isn’t more than $2.50
to $3.00 a month to the buyer.

“On that basis, who wouldn’t favor the type of home I’m
building. I can offer complete General Electric equip-
ment—Range, Refrigerator, Automatic Dishwasher, Dis-
posall,* General Electric Steel Storage Cabinets, and an
Attic Fan—built right into the house and included in the
finance plan!

“With top-quality equipment like this—inexpensive to
operate and maintain—it can really cost the owner less
per month, in terms of actual outlay, than if he had had
to buy his own equipment.”

Choose your all-electric equipment wisely

In selecting equipment for the homes you may design or build,
it’s important to remember that your reputation rests—in part
—on the quality of equipment you install, and the service it
renders.

That’s one reason it’s wise to choose General Electric Ap-
pliances! For most people would buy General Electric for
themselves. Recent surveys show that 53% of all women, and
51% of all men, prefer General Electric to any other appliances.
This preference is more than twice that for the next leading
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Let us help you with your plans

The experience of General Electric in working with architects
and builders on projects of this kind may be of value to you
in your own developments.

For complete information, write to General Electric Home
Bureau, General Electric Company, Bridgeport 2, Conn.

THE APPLIANCES MOST WOMEN WANT MOST

GENERAL ELECTRIC

Details are important when you're making a little living space do a BIG job. For example, a raceway for telephone wires will more than justify its small extra cost.

It will avoid exposed telephone wires on attractive walls and woodwork. It will provide the owner with handy, built-in outlets for future telephones.

In homes without basements, wiring channels should be installed before the floors are laid and walls are finished. Otherwise, it may not be possible later on to conceal the telephone wiring.

Your Bell Telephone Company will be glad to help you plan telephone wiring facilities for small homes as well as larger ones. Just call your Telephone Business Office and ask for "Architects and Builders Service."

BELL TELEPHONE SYSTEM
ART-ROC *Built-in COLOR*
makes this concrete terrace look like REAL TILE!

Wherever a flat concrete surface is used—terrace, basement, driveway, sun room, porch, walk, etc.,—it can be given beauty and distinction with Truscon ART-ROC Color and Hardener for concrete. ART-ROC Aggregate is dusted on before finish troweling and produces a richly colored, BUILT-IN surface which takes all kinds of punishment because it is much harder than ordinary concrete. The surface can be scored to simulate tile, random flagstones or any similar effect and thus given added distinction—over and above the distinction achieved by the use of ART-ROC color. ART-ROC involves very little labor and the cost is trifling. We invite your inquiries. Write Dept. AR-4, Truscon Laboratories, Division of Devoe & Raynolds Co., Inc., Detroit 11, Michigan.
Take a good look at this window wall. Then imagine a conventional wall and window in its place. Feel the room shrink?

Glass is the answer here to the problem of providing a feeling of spaciousness to small rooms. It extends the room—adds the spaciousness and color of the outdoors.

It pays to glaze with high-quality glass. When prospective home buyers see the L·O·F label on windows, it assures them that better, clearer glass has been used. Libby·Owens·Ford Glass Company, 4357 Nicholas Building, Toledo 3, Ohio.
RICHMOND equipment is packed with sales appeal—visible quality that helps sell your house, impresses your customer. For example, all Richmond home heating units have a baked-on Dulux enamel finish, yet they cost no more.

And—Richmond's well-packaged units keep installation costs down. They require less servicing, too—Richmond's eighty-year-old reputation for quality assures that. All Richmond gas heating units have AGA approval plus a one-year replacement guarantee. All Richmond plumbing fixtures bear the one-year guarantees recommended by the National Bureau of Standards.

You can get delivery now on most Richmond products. For complete details, see your plumbing and heating contractor or write Richmond Radiator Co., Dept. AB-5, 19 East 47th St., New York 17, N. Y.
DO MORE SAWING
with ONE HAND!

DOES MORE WORK PER MAN HOUR
See your local dealer for more complete details about the Speedmatic Saw and the Take-About Sander—both by Porter-Cable.

SAVE COSTLY LABOR

NEW Porter-Cable Take-About Sander

Does a lot of sanding smoother and faster!

1. Handle is correctly placed
2. Shoe is of correct width
3. Torque reactions of blade are correctly compensated

SAVES TIME AND COSTLY LABOR!

Without a doubt, the Porter-Cable Speedmatic Saw is the easiest handling power handsaw on the market.

IT HAS SPEED!
The blade enters cut at 7000 RPM. Cuts straight to the line. Greatly reduces sawing time of your worker.

IT HAS BALANCE!
Scientifically balanced for one-hand sawing in almost any position on light or heavy work. This modern saw does not twist, tip or veer from the line.

IT HAS EFFICIENCY!
It delivers the most power where the work is done—at the fast-cutting blade. Gives you more reliable service with the husky Helical Gear Drive.

Model A-3—Perfectly balanced! Won't dig into the softest woods. Eliminates "wrist-twist."
Faster! Pulley travels at 2700 RPM. Delivers 1500 surface feet of abrasive belt per minute.
Lighter! Reduces fatigue because it weighs only 14 lbs.
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is never over-taxed. The air intake is high up on machine to prevent inhaling of damaging dust.
Compact! You'll like the fast-action trigger switch conveniently placed in the handle. The silent chain drive. The full 3” pulleys. The streamlined die-cast aluminum case. The "feel" of a smoother sander.

There's a big market for Armstrong's Insulated Siding. It's ideal for old buildings... popular for farm buildings, too. Check these big advantages:

1. **LARGE PANELS.** Armstrong panels are 50 percent larger than most. They measure 24" x 36". This saves labor time in handling and installation of the material.

2. **EFFICIENT INSULATION.** It’s made on a base of Armstrong’s Temlok. This material does an efficient insulation job—and adds strength.

3. **LIGHT IN WEIGHT.** Armstrong’s Insulated Siding weighs only 1.7 lbs. per square foot. That minimizes structural strain on old buildings. And you save on freight.

4. **NEAT APPEARANCE.** It comes in attractive blended colors that won’t streak or show dirt. The red and buff blends—both now available—are uniform in shade from one shipment to the next, because brick granules used for the finish surface are all carefully selected.

5. **LONG LIFE.** Armstrong’s Insulated Siding will stand up against the weather without warping. The panels are completely waterproofed, because they are deeply impregnated on all surfaces and edges with hot asphalt. They are faced with a heavy armor of weather-tested mineralized asphalt and brick granules, embossed under heat and pressure.

These five points of superiority will help you sell Armstrong's Insulated Siding. You can build up a profitable volume with this new Armstrong product. It is packaged for easy storage and handling. For further information, write today to Armstrong Cork Co., Lumber Dealer Products Dept., 1605 James St., Lancaster, Pa.
Wide selection... another big plus of Youngstown Kitchens

It takes no elaborate designing or fitting to equip any house with a smart, modern Youngstown Kitchen.

Right off, you have a wide selection of Youngstown Kitchen arrangements available from your dealer. They can be used as suggested, or varied in any way you prefer.

In addition, units of your own choice can be quickly combined to any other plan you desire.

Yet wide selection is only one of the big pluses you get with Youngstown Kitchens (see right). For all Youngstown units are standard; mass produced and precision-built to hair-splitting standards. This assures the economy, fast installation and smooth handling so important in budgeting costs.

All Youngstown cabinet sinks, wall and base cabinets and accessories are white-enameled steel. Sink tops are acid-resisting porcelain enamel. Units go perfectly with any range, refrigerator or laundry equipment... give that inviting, luxurious “custom” look in your completed kitchens.

Sixty experienced Mullins’ Field Men and 7500 trained Youngstown Kitchen dealers throughout the U.S.A. are ready to give every assistance. For name of nearest distributor or field man please write—

MULLINS MANUFACTURING CORPORATION
WARREN, OHIO
Porcelain Enameled Products, Large Pressed Metal Parts,
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Youngstown Kitchens
BY MULLINS

Other Youngstown pluses

- Low cost
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Who Says You Can't Get Good Siding Now?

—All you want! Shipped within 24 hours!

It could have happened to you. Like many builders, you could have accepted this new Reynolds clapboard to meet an emergency...then found it was really something new and better.

So discover now the important selling advantages in Reynolds Lifetime Aluminum Clapboard Siding. Trim lines, never warping or sagging...insulation by radiant heat reflection...lifetime permanence: fire-proof, rust-proof, rot-proof, termite-proof.

And you'll find many construction economies, too! Carpenters like the easy application of this lightweight, self-aligning clapboard...fitting snugly, weathertight...with practically invisible butt joint and handsome corner finish.

Jobbers, take advantage of quick deliveries and low prices on mixed carload orders. National advertising and promotion are building a demand you'll be feeling. Write, wire or phone for detailed literature...offices in principal cities. Reynolds Metals Company, Building Products Division, Louisville 1, Kentucky.
A Prize House in '40
...but what about today?

The prize home in Spokane, Washington, as it looked in 1940, shortly after taking first award in a competition sponsored by the Spokane Chamber of Commerce.

The same home today — attractive, livable, sound. Plywood's rugged strength and rigidity helped make it a better home.

“one of my most successful houses”
says Architect Edwin J. Peterson,

“AFTER SEVEN YEARS, IN PERFECT CONDITION—INSIDE AND OUT”

Built in 1940, this attractive home demonstrates the many advantages to be gained through Douglas fir plywood Dri-bilt construction. Architect Edwin J. Peterson of Spokane used plywood for both interior and exterior surfaces because it lent itself so admirably to his clean-cut, modern design and provided permanent wall surfaces that would withstand extremes in temperature. The plan was laid out on 4-foot modules, taking advantage of the erection-economy offered by standard 4'x8' panels. Mr. Peterson says: “After seven years, this house is in perfect condition. The interior panels proved to be excellent for a variety of finishes, such as the plain painted living room, the papered bedroom and the canvas-covered bath.”

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LARGE, LIGHT, STRONG

PLYWOOD'S MANY ADVANTAGES
KEEP DEMANDS GREATER THAN PRESENT SUPPLIES

Douglas fir plywood production is greater now than in prewar years. Today’s demand, however, is unprecedented—and raw material availability is the controlling factor in attaining higher output. This uneven demand-supply ratio naturally means that plywood may not always be readily obtainable at any given time and place. Keep in touch with your regular source of supply as to price and delivery information. For technical data, write the Douglas Fir Plywood Association, Tacoma 2, Washington.
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As builders, you know what your clients want—the finest heating system—healthful and automatic and attractive enough to add glamour to any play room.

And, as manufacturers, we know what you want—a heating system that needs a minimum of installation, a minimum of service, and that gives your clients what they want.

That’s your heating problem—and that’s the one we solve with the new line of PRESSSED STEEL warm-air MOR-SUN furnaces.

Remember—you and your clients—get more with a MOR-SUN.

Morrison’s nationwide dealer organization is at your Service. Write us for the address of our representative nearest to you.
When the emphasis is on Rental Housing

Naturally, most contractors and builders are concentrating on rental housing today.

It's the best and quickest way to supply housing for veterans and others who need it.

And just as naturally, these contractors and builders are using modular brick and tile for much of their construction.

Here's why:

**Available.** There's plenty of modular brick and tile for immediate construction of rental housing.

**Less costly in the beginning.** Cost of masonry construction has not increased as much as other types. Brick and tile have remained reasonably priced at present day levels. In modular sizes they simplify planning and estimating—reduce costly cutting and chipping on the site.

**Less costly in the long run.** Strong and durable, brick and tile practically eliminate periodic repair and maintenance costs. Returns on the original investment and resale value are protected for years to come.

**Good looking, fire-safe.** Beauty and resistance to fire are traditional features that always have been associated with brick and tile. And housing built with these materials keeps its good looks for the life of the structure.


Now it will be built with Modular-Designed

**BRICK AND TILE**
CERTAIN-TEED
THE ROOFING THAT HELPS
YOUR CUSTOMERS BUILD YOUR BUSINESS

- Any home owner wants to talk about his new roof.
- When you apply Certain-teed, the well-known roofing, you make it much easier for him to sell his friends on the splendid job and extra roofing value he bought from you.
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BUILD ON CERTAIN-TEED
THE WELL-KNOWN NAME
Now Ready...

Complete Materials, Plans, and Sales Program for General Plywood's New FIVE STAR Homes!

All This — And More — Comes In The FIVE STAR HOME "Package!"

Framing...Sub-Flooring...Roof Sheathing...Siding...Interior Walls...Assembled Doors and Windows...Kitchen Cabinet and Sink Units...Medicine Cabinet...Hardware! Even has a disappearing stairway to attic storage space! All factory built units and pre-cut members necessary to erect a complete house, except for foundation, wiring, plumbing, heating equipment and minor accessories.

Here's the conventional home you can build now...complete fast...sell at a reasonable price...and take the if out of your profits! General Plywood's 5-Star Homes make all this possible because each home comes as a package! You face no delay from shortages of structural materials...can quickly build a fine quality, real value home! Only top grade, kiln dried materials are used. House can be completed in less than two weeks! Rapid completion means rapid turnover of investment. 5-Star Homes sell at attractively low prices but allow substantial profits.

Investigate these homes—quality wise, construction-wise, and profit-wise—now! Immediate delivery. Send for full details on General Plywood's 5-Star Homes today.

ALL CONSTRUCTION DETAILS OF GENERAL PLYWOOD'S FIVE-STAR HOMES HAVE BEEN APPROVED BY FHA, VETERANS ADMINISTRATION AND OTHER INTERESTED FEDERAL AGENCIES.

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of a Miraplas tiled home

Look into this new home with kitchen and bath of Miraplas plastic wall tile. This is the home which will sell quicker — will bring bigger profits — will give greater customer satisfaction.

Look into this entirely new concept in wall coverings — Miraplas, the original plastic wall tile. Available, for immediate delivery, in 16 marbleized and solid colors. Miraplas tile is not a wall board — not an imitation but individual solid plastic tiles. It is just the right answer for remodeling, too. Miraplas tile is so light in weight that it may be installed over old walls without costly wall preparation.

Miraplas tile will not crack, check, peel or rust — and the beautiful colors go all the way through the tile. Give your customers a lifetime of tile beauty at a moderate cost with Miraplas plastic wall tile.

SEND FOR FREE FOLDER SHOWING 16 MIRAPLAS COLORS AND TYPICAL INSTALLATIONS

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At ONE glance—

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1 ATTRACTIVE APPEARANCE . . . neat, workmanlike finish in pleasing gray color.
2 ROCK-LIKE PERMANENCE . . . can’t burn, can’t rot, can’t rust, grows tougher with age.
3 FLEXIBILITY . . . conforms to considerable degree of curvature.
4 FAST COVERAGE . . . 4’ x 8’ sheets go up 32 sq. ft. at a time; fasten with nails or screws; save man-hours.
5 VERSATILITY . . . laid horizontally or vertically. Apac sheets are adaptable to any flat surface requirement.
6 SPEEDIER CUTTING . . . just score Apac as shown above, then snap off over straight edge. Quicker and just as accurate as hand-sawing.

Consider those six advantages of K&M “Century” Apac . . . couple them up with low cost and freedom from maintenance . . . and you have a rugged sheet material that will save you time and money on almost any job you undertake. You can apply Apac directly over wood studding on centers up to 24” (see details at left), or over insulation board, solid wood sheathing or steel girts. It’s easy to handle, and comes in 4’ x 8’ sheets, 7/16”, 1/4”, 3/8” thick. See your dealer about it, or write direct to us for further particulars.

Original manufacturers of asbestos-cement roofing shingles in this country.

KEASBEY & MATTISON
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YEAR-AROUND
AIR CONDITIONING
FOR HOMES

Winter Air Conditioner
Also a Product of
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At left is one of a long line of quality gas, oil and coal heating products for homes of all sizes. This automatic Winter Air Conditioner heats (gas or oil fired), filters and circulates the air—adds moisture as required.

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HEATING • AIR CONDITIONING • COMMERCIAL REFRIGERATION

In Canada—Therm-O-Rite Products, Ltd., Toronto
What Price Friendliness?

Repeatedly, surveys show that people want houses that make them feel "at home"—friendly rooms in which architectural design provides a feeling of warmth and comfort.

You can create such interiors—at modest cost—with stock design Ponderosa Pine doors and windows.

Ponderosa Pine paneled doors capture light and shadow in interesting patterns—help you add character to dwellings you plan. Ponderosa Pine windows combine grace and charm with the natural insulating qualities of wood. And all Ponderosa Pine Woodwork is friendly to the owner's pocketbook—because smooth-grained Ponderosa Pine holds paint or other coatings easily—and because Ponderosa Pine is durable.

For reference, you'll want a copy of "Today's Idea House"—Ponderosa Pine's booklet containing photographs of typical interiors made friendly with Ponderosa Pine doors and windows. Mail the coupon for your copy!
ADDs SALES-APPEAL TO MODERN HOMES

Because it's easy to install, and adds bright sparkling beauty, Blue Ridge Patterned Glass provides countless ways to achieve the kind of individuality that attracts discriminating buyers.

Fire-polished or Satinol-finished, it may be used for panels, partitions, doors or entire walls. It transmits light, assures privacy...provides a look of luxury—even on limited budgets.

Ask your Libbey-Owens-Ford Glass Distributor to show you the range of distinctive patterns made by the Blue Ridge Glass Corporation. Send 10c for our book "Bright Ideas with Decorative Glass". Blue Ridge Sales Division, Libbey-Owens-Ford Glass Co., 157 Nicholas Building, Toledo 3, Ohio.

FIVE POPULAR BLUE RIDGE PATTERNS

LOUVREX  LINEX  FLUTEX  STYLEX  DOUBLEX

BLUE RIDGE Patterned GLASS
FOR SOFT, DIFFUSED LIGHT • SMART DECORATION • COMPLETE PRIVACY
No noise, no wear

GIVES TENANTS AND OWNERS

BIG FROZEN FOOD LOCKER

Servel's big, convenient Frozen Food Locker stores up to 60 packages of frozen meats, poultry, vegetables, fruits, biscuits. It saves housewives hours of shopping time.

MOIST COLD, DRY COLD

Garden vegetables and fruits stay fresh and appetizing in Servel's big dew-action fresheners, and meat keeps tender for days in the Servel meat keeper.

NO NOISE, NO WEAR

There's no machinery to cause noise or wear in the famous Servel Gas Refrigerator. Not a single moving part in its freezing system. Thus, Servel stays silent, lasts longer.

STAYS SILENT LASTS LONGER

Servel The GAS

- As modern as tomorrow, the Servel Gas Refrigerator is modern yet dependable. Its famous freezing system is the greener, the quieter, easier way to freeze food. The Servel Gas Refrigerator saves you money on frozen food storage.

The Servel Gas Refrigerator is Taller and Wider. With it you can plan for more frozen foods and bigger menus than ever before. A Servel Gas Refrigerator of 1947 gives you 20% more cold, and the freezer is in a position of greater efficiency. Its two sets of shelves keep meats, vegetables, and fruits where they belong.

Of course, the famous Servel Gas Refrigerator is easier to maintain. It's made to run forever without a single maintenance charge. Its freezing system is so efficient, so efficient is the famous Servel Gas Refrigerator. It has no moving parts; it has no noise; it has none of the usual service charges.

So far this year, the Servel Gas Refrigerator has been appointed the most popular appliance for new homes. Servel Gas Refrigerators are the most popular appliance for new homes. The Servel Gas Refrigerator is the appliance for new homes. Ask your dealer for more information about the Servel Gas Refrigerator.
As more than 2,000,000 Servels have proved, this modern Gas Refrigerator provides noise-free, dependable operation throughout its long life. Now the great new 1947 Servel offers even more—a host of new features that insure the finest in modern food storage.

The new 1947 Servel contains a big Frozen Food Locker that stores up to 60 packages of frozen foods. With it, homemakers can plan varied and delightful menus every season of the year. In addition, the 1947 Gas Refrigerator provides moist cold and dry cold, a new flexible interior adjustable to eleven positions, rust- and scratch-resistant Plastic Coated shelves and many other big new conveniences tenants will appreciate.

Offers Silence and Dependability, Too

Of course, the Servel Gas Refrigerator is still permanently silent, lastingly dependable. Servel’s unmatched performance throughout the war has demonstrated to owners that the Gas Refrigerator stays on the job year after year. Operating and maintenance costs remain low. That’s because the freezing system of Servel is different from all others. It has no machinery, no moving parts to get noisy, none to wear or break down.

So for the tops in food storage, plus silent, dependable performance, specify the great new 1947 Servel Gas Refrigerator for the apartment buildings and homes you design, build or manage. Plan now to provide outlets for Gas Refrigeration in your current designs and construction work. For installation data and complete information on the new 1947 Servel Gas Refrigerator, consult Sweet’s Builders’ File. Or write today to Servel, Inc., Evansville 20, Indiana.
When a Couple of Inches Mean a Lot...

YOU need doors and plywood. Our ability to meet your needs largely hangs on a couple of inches in the width of the doors and plywood you specify.

The production of stock sizes means multiplied production—more doors and plywood for more customers. On the other hand, odd-size doors and plywood mean manpower wasted—production slowed—orders unfilled.

So plan for stock sizes only and we'll plan to meet your needs.

Roddiscraft
Roddiscraft warehouses, located at strategic points throughout the country, have been set up to save you time and serve you better—by making stock size doors and plywood available when and where you want them. Roddiscraft warehouse service is based on production and stocking of doors and plywood in stock sizes. Only by limiting ourselves to stock sizes can we give you the additional value of "on hand" service at convenient locations.
Home buyers exclaim with delight when the plumbing in their new house is Crane. The modern beauty, the efficiency and high quality of Crane equipment add sales appeal and increased value in the eyes of its future owners.

The 1947 line of Crane plumbing includes kitchen sinks, bathroom groups, laundry tubs in a size and style to suit every building plan—a price to meet every budget. This line is the finest Crane has ever produced, and every item in it is designed to suit today's taste.

In heating, too, Crane offers the builder a complete range of boilers and furnaces to meet every fuel requirement, coal or coke—oil or gas. This line also includes radiators and convectors, controls and water specialties, pipe, valves and fittings—everything for every heating system.

Your Crane Branch will discuss your needs and give you an approximate delivery date. They also have available illustrations of the Crane 1947 line photographed in color in actual room settings. Check your requirements with them.

Shown at the left is a floor plan of the kitchen illustrated above. The Crane Stewardess Sink can, of course, be used in smaller kitchens as suggested in the two layouts at the right.

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5
VALVES • FITTINGS • PIPE
PLUMBING AND HEATING
NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS
Related designs bring

Enriching A PLAN THAT HAS DEMONSTRATED ITS POPULARITY

DIVIDEND HOUSES! The Related Designs illustrated above were developed to give expanding sales value to the Weyerhaeuser 4-Square Home Building Service. Such additions over and above the home of the month will be released periodically during the remainder of the year.
EXPANDING Sales Values
to the Weyerhaeuser 4-Square Home Building Service

Based on the thousands of orders for blueprints for the many homes in the 4-Square Home Building Service, Weyerhaeuser has selected several of the more popular plans for special treatment.

These were assigned to skilled architects with the commission to render several additional modern exterior designs. The first group of these new Related Designs illustrated here is now being released for your examination and use at the office of your Weyerhaeuser 4-Square Lumber Dealer.

With this new feature contractors can now offer their customers room arrangements of proven popularity in a variety of exterior styles. Each is architect designed and Weyerhaeuser engineered. So distinctive are these designs that they can be erected side by side without the hazard of monotony.

Thus another refinement in the ever-growing Weyerhaeuser 4-Square Home Building Service brings expanding sales value to one of the greatest selling tools available to the shelter builder. Acquaint yourself with the Service soon and make it part of your building program and selling effort. It’s well worth using.

WEYERHAEUSER SALES COMPANY
SAINT PAUL 1, MINNESOTA

The most complete Home Building Service ever offered—scores of designs, floor plans, descriptive details, working drawings, material lists, estimating forms—plus a new modern design each month.
Mr. Steward Griffith says "My skilled mechanics—and I employ only the best—like to work with KIMSUL; it is so easy to handle, clean, and once installed, it is there for the life of the building; always uniform, due to its many layer construction; always in place, no settling or sagging."

"I have had many years' experience in various fields of insulation work. About two years ago I definitely decided to go into the insulation business for myself. I gave the matter very careful consideration over a period of time, making a close study of all insulation materials on the market, and as a result of that study, decided that KIMSUL Insulation is outstanding, having many advantages, both for the applicator and owner, not possessed by other types of insulation."

"I am happy to say that my decision was a good one. KIMSUL Insulation, when properly applied, does everything you claim for it. Owners are proud of their KIMSUL installations and at times the voluntary statements they make as to benefits derived are a little embarrassing. They seem too good to be true."

"We have very little sales resistance to overcome on KIMSUL Insulation, as most of our prospects are familiar with KIMSUL due to the extensive advertising program in popular magazines for the home, architectural and other magazines for the designer and builder."

"The assistance we have had from Kimberly-Clark Corporation in the way of technical data, etc., has of course been of great benefit to me in my work; and I know when I get it from them, it is authentic."

"The insulation business is definitely a growth business; no home is modern without insulation; KIMSUL is the outstanding home insulation and we look forward to an ever-increasing volume of business for many years to come."

Yours very truly

STEWARD GRIFFITH CO.

Send today for our factual Application Data File giving installation details and complete information on KIMSUL. Write Kimberly-Clark Corporation, KIMSUL Division, Neenah, Wisconsin.

We are producing all the KIMSUL Insulation we possibly can, but due to the great demand, your dealer may have some difficulty in supplying your requirements as promptly as usual.

"KIMSUL (trademark) means Kimberly-Clark Insulation"
TWO KINDS OF HEAT IN ONE GREAT MODERN BLEND! — that's what Modine Convectors offer you!

**RADIANT HEATING**
Mild, radiant heat in just enough quantity to offset heat loss from window areas — that's what those arrows represent, coming from the Modine Convector Panel below the window. To this we add . . .

**CONVECTION HEATING**
Warmed air circulated by Convection Heating. Hot water or steam passes through copper heating unit which draws cooler, floor-line air into bottom of convector where it's warmed, rises and then passes out through grille.

Result: A modern, blended heating system for modern winter comfort — whether it's school, hospital, home or apartment! A heating system that gives you individual room control . . . gentle, draft-free air circulation without the use of moving parts that wear out! Yes, the dependable heating comfort, distinctive charm, space saving, cleanliness, and long service life of Modine Convector Radiation is recommended for all types of residential and institutional heating needs. Look for Modine's representative in the "Where to Buy it" section of your phone book. Write for complete information and free descriptive literature. MODINE MANUFACTURING CO., 1701 Racine St., Racine, Wis.

**Modine Convectors Radiation**
The Modern "proved by use" heating method
New aluminum combination storm sash

Aluminum storm panels for metal casements also available

In construction products CECO ENGINEERING
storm panel and screen

You change from winter storm windows to summer screens in seconds—just raise the bottom panel.

Yet, if desired, the storm panels and screen are easily removed from inside the home.

This Ceco all-aluminum all-weather window and screen adds beauty to any style of architecture.

The frame is easily adjusted to the window opening by use of special closure sections.

Remains economical through the years. Maintenance is eliminated—no painting or repairing.

Storm panels and screens are easily washed at the sink—no standing on ladders.

Provides all-weather ventilation and protection—ends nuisance of frosted and steamed windows.

Saves up to 30% on fuel by keeping heat from dissipating through single glass panes.

CECO STEEL PRODUCTS CORPORATION
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CECO STEEL

makes the big difference
Specializing in this BUILDER'S SAW has been our business for 25 years

This marks the 25th year DeWalt has been specializing in making this famous saw. We created it. We perfected it. We've built more than 70,000 units. It's the only equipment we've ever made.

Here are the real reasons why builders prefer DeWalt saws:

- **Flexibility.** DeWalt not only cuts out your framing but turns out your specialty items on the job. Just change the cutting tool.
- **Power.** The DeWalt-built, "life-time" motor gives trouble-free performance, and makes it easy for the operator to meet all cutting schedules.
- **Accuracy.** DeWalt features mechanical adjustments which maintain precision accuracy of all cutting operations during the life of the machine.
- **Safety.** DeWalt safety equipment has been engineered, tested and proved so that today it gives maximum protection to the operator.
- **Wide range of models and low prices.** DeWalt builds many models ranging from a portable job type for the small builder to the larger sizes used in pre-cutting shops. Each model is the finest machine in its class, and sells for the lowest price.
- **Good delivery.** DeWalt's entire production is devoted to building these saws. That's why deliveries are excellent, with preference given to help ease the housing shortage.

For more information, write for latest catalogs. DeWalt, Inc., 15 Fountain Avenue, Lancaster, Penna.
"yes, but why advertise like this now!"

Some of our good dealer and applicator friends have asked us why we continue to advertise Barrett Building Materials when we can't supply them with all they want and all they could sell.

That's a fair question...and here's a fair answer: Barrett advertising today is good business for you and us both...now and in the future.

It's true, of course, that the demand for Barrett Shingles and Roll Roofings today far exceeds the supply. But we're busy making all the roofings we can without sacrificing quality.

True "sellers' markets" never last forever, and we want to be sure that home-owners and farmers continue to ask for Barrett Roofings, and seek the people who sell them...at all times. Consistent advertising over the years has helped to make Barrett "the greatest name in roofing" and helped to create and maintain unmatched consumer acceptance for these well-known building products.

We think that's too important and valuable an asset to risk by withholding our name from the public for any extended time. So we keep on advertising in home-service, farm and national magazines.

Because we know that this policy will eventually pay off for us...and for you, too.
Look at the food you can store in Kelvinator's new "Space Saver"! No wonder leading managements and builders call for "Space Saver" installations in apartments and small homes the country over!

6 cu. ft. of storage... only 3¾" higher... uses no more floor space than preceding 4 cu. ft. models! Every exclusive Kelvinator feature besides!

For the perfect solution to your small-kitchen problems, count on Kelvinator's new "Space Saver"! Write today for further information... Kelvinator Division, Nash-Kelvinator Corporation, Detroit 32, Michigan.

Look at these Ultra-Modern Features!

- Handy Chilling Tray—Dual purpose, drawn aluminum defrosting tray. Stores meat and extra ice cubes.
- "Seal Tight" Door Latch—Kelvinator's newest exclusive! Assures better door seal with longer life!
- Five Full-Width Shelves—with greater space between shelves. Extra room for tall bottles on both sides of freezer.
Indifference versus Initiative

The costs and prices of home building are too high, and the time has come for a show-down on causes, a frank examination of practices within their own segments of the industry by manufacturers, distributors, builders, subcontractors and labor. Some will argue in defense of current prices that they have been brought about by increased labor scales at all levels from raw material sources to job site operations. That is a major cause, and one which, discounting featherbedding and make-work practices which add unjustified labor costs, will keep building costs permanently higher than they were before the war.

Some will argue that postwar increases in building prices are not as great as price increases in other basic and important industries. Generally that is true, but to attempt smug justification of present building costs on that comparative condition is to overlook the fact that scarcities have led to profiteering and to costly gray market distribution and procurement practices by some elements in all segments of the home building industry. Any attempt to conceal or deny conditions that unjustifiably contribute to added building costs will not accelerate an already sagging 1947 home building program brought about by the demonstrated unwillingness or inability of consumers to pay the present prices.

Builders everywhere have been forced by the high fixed charges of materials and labor with which they begin their operations, plus the costly handicaps of archaic building codes, and featherbedding and make-work practices of the labor they employ, to cut their 1947 home building programs to fractions of what they expected to do. The reason is that material estimates in a disrupted distribution system are too high, subcontract bids are exorbitant, and no one can predict the end of profiteering through wasted time by labor. Builders who sought to profiteer have found that the public will not or cannot pay fantastic prices. In some cases builders who priced their houses reasonably are finding resistance to the actual building cost established as a selling price.

Before the end of 1947 manufacturers and distributors of building materials and equipment will be in sharp competition. Distribution channels will be re-established on a competitive basis. Prices will come down. Both prices and costs can and should come down now. They can and will come down if all manufacturers will tailor their net profits to reasonable percentages consistent with increased volume, make it their business to see that their products do not get into gray market channels, and insist that their distributors adhere to reasonable mark-up policies; if distributors and builders will hold fast against the insistence of impatient customers and refuse to patronize gray market opportunists; if subcontractors will prevent pricing themselves out of their own markets by policing their own ranks against profiteering; if labor can be made to see that featherbedding and make-work practices price labor out of both jobs and homes; and if labor and industry will get together to change collusive and prohibitive building codes that deny city builders the advantages of modern materials, factory assembled parts and new building techniques.

Competition and public pressure eventually will force all of this in the interest of providing housing that the public can and will buy. The home building industry can make up its mind between an attitude of indifference which will unnecessarily postpone for months the development of a great and continuing volume of new home building, or taking the initiative in effecting changes that will bring it about now.
Ingenious manufacturers have kept pace with development of new materials and need for lowering man-hours on the job in fabricating conventional materials by designing and producing efficient, economically operating power equipment. Today’s home builder without power equipment on the job is at a disadvantage in competing with precision machined houses and the closely related economical operation of his new power-equipped competitors.

The innate inventiveness of Americans in applying horsepower to specific and complicated operations, plus the initiative and enterprise of manufacturers, have provided the home building industry with a vast array of efficient, economical power tools. As recently as thirty years ago, man power and hand work were dominant labor factors in the construction of homes. Men on the job laboriously mixed concrete, pushed hand saws, scraped and sanded floors and did a multitude of other operations by hand so that houses in those days were virtually handmade products. Today the slow, rhythmic wheeze of the hand saw has been replaced by the busy whir of power machines. On every job site, and in factories producing manufactured parts for houses, horse power in the form of power tools is cutting man-hours and costs. At the same time, the use of power tools permits man to achieve vastly more precision in materials worked, thus producing a superior product.

Mechanical horsepower is playing an ever increasing part in home construction today, from the time ground is first broken for the footings and foundation until the family is moved in. Gasoline and diesel powered tractors and power shovels clear ground, level it, grade streets and excavate for foundations. Power mixers, either on the site or preparing and delivering concrete, mix it faster and more efficiently than it could ever be done by man power.

Lumber, which is still the basic material for home building, is handled and worked into a house today in a manner considerably faster, more accurately and more economically than ever before. Large operators in all parts of the nation have pretty generally adopted the practice of precutting framing in a shop on or adjacent to the home development site. Powered hand saws, radial arm saws and a host of other power tools used in these shops and on the site have been major factors in retarding even further increases in home building costs in today’s market. Floor joists, studs, rafters, headers, braces and virtually all framing parts can be cut up for a house in a fraction of the time formerly required by laborers on the site using hand saws. Light tractors and trucks again enter the picture here in home building to furnish transportation for precut and preassembled house parts from the shop to the actual building site.

Use of hand saws on the job today in large housing developments is an exception. Powered hand saws have been universally adopted to trim sheathing and roof boards, trim around openings and do odd cutting necessary on the site. Some home builders make it a practice now to use precision power tools to precut all lumber used in a house, even the trim, so that no saws are needed on the job except to cut sheathing around openings, corners, etc. Many builders have assembled enough small, efficient power equipment in their woodworking shops to fabricate kitchen cabinets, built-in closets with sliding doors and small inside doors to keep themselves supplied with these house components during the critical supply period existing at present. Home builders and lumber dealers, using the ordinary modern woodworking tools.

Special blades in conventionally powered hand saws permit the use of these tools on the job to speed work on numerous hard materials. Photo: Fred W. Wappel.
Building Costs

Portable edger eliminates need for hand scraping. Photo: American Floor Surfacing Machine Co.

Tools such as this power machine to V-groove wall panels save many man-hours. Photo: Stanley Tools.

Pneumatic powered hand saws have proved their efficiency. Photo: Independent Pneumatic Tool Co.

Electrically powered hand saw cutting stair stringer. Photo: American Floor Surfacing Machine Co.

Power drill equipped with a cutting tool for drilling large holes in wood. Photo: Black & Decker.

Small, portable powered hand Sanders have a wide variety of applications. Photo: Porter-Cable.

Portable power drills speed work on all materials used in construction work. Photo: Black & Decker.

These machines will sand or polish wood, metal or other materials. Photo: Sterling Tool Products.

Pneumatic back-fill tampers can save dozens of man hours. Photo: Independent Pneumatic Tool Co.
Where electrical lines have not been extended to job site, small portable electric generators are available to provide power for tools. Photo: Homelite.

shown on these pages, have fabricated double hung window sash, frames, louvers, and such items as a stop gap operation while conventional suppliers of such house parts are unable to make deliveries in sufficient quantities to keep house building crews busy.

Power tools to work materials other than wood have also made their contribution to today's streamlined house building operation. Specially designed blades for use with power hand saws and radial arm saws can be used to cut metals of various types, asbestos cement products, tile, brick, concrete blocks, and other materials which are used in home construction. Manufacturers' initiative in developing these supplements to woodworking tools has again contributed immeasurably to cut man-hours on the job in addition to producing a better, precision-cut product. Tool manufacturers have kept pace with the development of new building materials by designing and making tools with which to work them accurately and efficiently.

In finishing home interiors, power tools play no less a part than they do in the actual assembly of rough parts. Although windows are fabricated and prefitted on precision power equipment in factories, trim for them and for other openings is cut today on the job with power tools which assure a neater, more accurate fit than was ever possible with hand tools. Hardwood floors finished at the factory on specially designed power equipment are available today. Where factory-finished flooring is not available, modern floor finishing power equipment delivers an on-site job in a fraction of the time formerly required and

Electric hammer can make work with star drills in masonry easy. Photo: Independent Pneumatic Tool Co.

For quick, efficient finish sanding or polishing many materials. Photo: Detroit Surfacing Machine Co.

Another example of a multitude of tasks for power hand saws. Photo: Mall Tool Co.

Power pumps eliminate troublesome water on the job. Photo: Allis-Chalmers.

Small, crawler-type tractors with various dirt-moving attachments save today's home buyers many dollars and provide a more finished job. Photo: Caterpillar.

Horsepower starts saving home builders money in woods and in mines. This is a chain power saw in use in logging operation. Photo: E. C. Atkins Co.

Handling of bulk aggregates and other materials with power equipment is a must with today's building methods and labor market. Photo: Harnischfeger.

Scenery in large subdivisions is changed overnight with power equipment which can rough out and finish smooth, curvilinear streets. Photo: Allis-Chalmers.
When concrete and mortar must be mixed on the job site, a better, more uniform product can be produced today with the use of power mixers of this type. Precision in batching, low operating costs and easy maintenance make for economies. Photos, left to right: T. L. Smith, Jaeger, and Chain Belt.

results in a much more satisfactory floor. Power equipment has been a boon to the business of refinishing hardwood floors in older houses to restore their original beauty.

Successful home builders today are not underestimating the importance of power tools in home building operations. Labor’s strong tendency to boost hourly wages has stimulated the development of more and more power machinery. The situation has reached the point where the builder who has not mechanized his operation to the utmost in today’s market is at a big disadvantage price-wise in competition. Manufacturers were quick to sense this situation and have come forth since World War II with many new and refined power tools to assist home builders in cutting costs. Even where electrical power is not immediately available on home building sites, small portable power generators have been developed which are simple and economical to operate.

The modern home builder is more equipment-minded than ever. He has changed his methods of operation and in some instances the design of his houses to work in as much mechanical power on the job as possible. Combination shop precutting and prefabricating in conjunction with on-site house assembly and finishing is popular today in all sections of the nation chiefly because judicious selection of power tools developed by ingenious manufacturers makes that system of operation the most efficient and economical for large-scale operations. Smaller operators, like their large-scale operating colleagues, have brought mechanized power to the job site to the same relative degree, so that hand power in today’s home building industry is becoming more and more a minor, outmoded factor.
Mixing concrete in transit so it is ready for pouring on arrival at the building site is a big factor in time and labor saving. Photo: General Motors.

Handling lumber in this manner instead of the costly piece-by-piece method with hand labor has been a definite cost reducer. Photo: Levitt & Sons.

Another type portable power saw with plenty of versatility for precutting lumber to save man hours and assure precision on the job. Photo: Nordberg Mfg. Co.

For the large builder or lumber dealer who must do considerable resawing and ripping, equipment of this type in the shop will save money. Photo: Levitt & Sons.

Saws of this type are available in a wide range of sizes and capacities to meet the needs of woodworking shops and builders. Photo: C. H. & E. Mfg. Co.

A small but versatile piece of bench equipment which will do many jobs economically for cabinet makers, builders and ordinary carpenters. Photo: Boice Crane.

More and more precision tools work for builders. Photo: Walker-Turner.

A band saw makes intricate designs easy and cheap. Photo: Walker-Turner.

Drill presses also do power jobs for home builders. Photo: Walker-Turner.

A portable power hand drill becomes a drill press. Photo: Black & Decker.
Radial saws in a wide range of designs and capacities, with numerous special tools and attachments, are available for use in a multitude of operations for builders in today's market with rising hourly wage costs and the need for efficient time use.

Radial saws are versatile radial saws dado quickly and accurately in minimum amount of time. Difficult and costly compound mitering jobs are easy for the radial saws.

Most recent addition to versatility of radial saws is the Hall Mobil-Shop. Completely enclosed saw with equipment is mounted on a trailer for easy transport.

With special cutting tools and natural aptitude on the part of men, radial woodworkers can do an infinite number of tasks which formerly required specific machines. Some of these are shown here left to right—nosing a stair tread, bevel cutting, rabbing and shaping.
Radial Saws Are Versatile Power Tools with Many Applications

The popularity of radial arm saws in all segments of the building industry is evidence of their value in speeding work with accuracy and a minimum of waste. Fitted with an ordinary saw blade these machines will crosscut, rip, bevel, mitre and do all the ordinary operations done with a saw. Versatility here is achieved by most manufacturers with simplified and easily adjusted controls to place the blade in the position required. When feeding to stops, material can be processed about as fast as in some instances faster than the ordinary carpenter can mark it up for conventional cutting with other saws.

In addition to their value when equipped with a regular saw blade, radial saws become in reality woodworking tools when equipped with all the various other cutting heads now available and practical for use with them. Rabbeting, dadoing, rafter notching, angle dadoes, radius shaping, tongue and groove, tenon joints and other operations are now common with radial woodworkers. With a little innate skill and some practice, workmen have turned out jobs in an emergency on radial woodworkers which ordinarily would require special equipment in a conventional woodworking factory.

The ruggedness of these machines plus the simple manner of adjustment and operation make them adaptable to a wide variety of operations of different sizes and character in the building industry. Manufacturers have presented the industry with a wide choice in capacity of radial woodworkers. Ordinary labor, on any job, with a small amount of training, can operate these saws satisfactorily.
Utilizing the techniques of factory line production, Smith and Hill, builders and developers, have planned a schedule that will permit five veterans' families each week to solve their acute housing problems.

**OAK MEADOWS**

A Development Featuring 1200 "Lockweld Houses"

The erection and completion of two houses a day is the immediate goal of Smith and Hill, builders and developers of Oak Meadows, a community of low priced homes now in process of building in Oak Lawn, Ill. This schedule will permit the purchaser to move into his home forty-five days after the framework of the house has been started.

This development, which is planned for veterans, will
ARCHITECT'S rendering of "Lockweld House" style 2R, without special features, is shown at right. Floor plan of house with furniture indicated in position, is shown above.

eventually be comprised of 1200 individual units. Designed by Perkins and Will, well known Chicago architects and engineers, these attractive homes include many of the modern features that are being incorporated in expensive ranch type houses. After intensive study the architects located each style of house so as to create attractive groups.

The entire project revolves around variations of three basic floor plans and elevations. The addition of gables to place emphasis on certain portions of the exterior, changes in fenestration, the application of features around entrance or over windows, all tend to make each house appear as an individual unit unrelated to its neighbor except for its general outline.

Changes in exterior materials including plywood, vertical and horizontal siding, brick and stone veneer and combinations of the above, further accentuate this thought. In addition to this, the architects have carefully scheduled the painting of each house, outlining on a chart the color of the trim, doors, windows and siding, so that none of the houses that adjoin each other will have the same arrangement.

They have provided for garages in the completed plan of each house.

Mr. Hill has, however, purposely omitted them temporarily in addition to the applied features, in order to complete the basic house to accommodate as many G.I.'s as quickly as possible. After this has been accomplished he then will return and complete them as originally planned. Curvilinear streets have added their part to the changing view. A fixed building line has been studiously avoided. Groups of houses have been so arranged by the architects as to give prominence to the garage and breezeway by setting the house properly toward the center of the lot, thus in effect creating the principle of an entrance court. This and many other interesting combinations have been worked out to avoid the effect of over-regularity.

One of the outstanding features of
this project is the ever present evidence of what the skill of Chicago's building mechanics and the "know how" of a conventional builder can do when working together with mass production techniques to produce quality housing quickly for veterans. By utilizing certain operational methods more men can be concentrated on one house without losing efficiency, and the time normally taken to ready a house can be halved.

The "Lockweld House," as it is called by Mr. Hill of the firm of Smith and Hill, builders, was conceived in the belief that the application of mass production techniques, utilizing the best in materials, skilled workmanship, and power equipment, would reduce the cost of construction and give solidity to the construction units. Before this method was adapted, all types of construction used in different sections of the country were examined to determine which would be best fitted to the weather conditions and living requirements of this community.

The "Lockweld House" and the methods employed in construction have been the means of lowering the cost of the house without reducing its size, or by cheapening the quality of the materials used, or by lowering the standard of workmanship employed.

Smith and Hill have acted as innovators in the field of conventional house construction by adapting the techniques of factory line production. This can be practically applied in a house production program that is governed by the requirement that the finished product meet the quality standards of conventional construction.

By connecting five conventional homes with temporary enclosures, they have created a shop area of some 5400 square feet in which they assemble their laminated panels and the lumber that has been previously cut with power equipment. The finished walls as they come out of the jigs in which they have been assembled from the framing stage by
skilled carpenters are then moved out of the shop on an overhead conveyor system. The finished sections are then taken to the foundation site where six men take over and assemble the wall sections and roof trusses, completing two houses in one day. The builders by utilizing erected homes are able to have innumerable shops for the operation of plumbing, painting, and sub-assembly work.

The house is set on poured concrete footings and foundation walls, on which is poured the reinforced concrete floor that is insulated from dampness and cold. The walls and ceiling are constructed in the modern "drywall" method, and great solidity is obtained by the use of Penacolite in applying the exterior panels to the studding in addition to the ordinary nailing procedure. Three-eighths inch thick especially prepared laminated panels, which have been tested for resistance to all types of weather, are used for exterior sheathing. To this sheathing is applied either bevelled siding or vertical or horizontal siding. Insulation is applied to the stud area while the wall section is still in the jig. Overhead insulation is provided not only by the fully insulated ceiling but also by the use of solid panel roof sheathing, which in turn is covered with 210-pound 3 in 1 asphalt shingles.

The living and dining room area, which may be separated or treated as a unit, extends thirty feet in length to two large picture windows that are placed in the corner of the living room, which in turn are flanked by two casement windows. The unusual number and size of the windows throughout the entire house is one of its many outstanding characteristics. Striped mahogany plywood paneling enriches the walls of both the living and dining room and is left in a natural finish. Interior walls are designed to blend with the usual furnishings applicable to the different rooms of the house. Plywood which has been used on walls of the bedrooms has been papered and painted.
in order to provide an interesting variation for the interior.

The rigid tile board used in the bath, utility room, and kitchen is resistant to the usual condensation that collects on the walls of these rooms and eliminates much of the redecorating expense that would occur from time to time. In the kitchen and bathroom the tile board has been provided in color with a white metal edging which gives a spotless and refreshing atmosphere to these rooms.

An innovation reflecting the careful planning that has gone into these houses is the large utility room, which could more suitably be called an all-purpose room. The omission of a door between this room and the kitchen permits the activities of one to be extended into the other without any apparent encroachment upon the normal functions of each. In an emergency it could also function as a dining room; as a place for indoor recreation and child's play, it is especially convenient.

An abundance of modern storage walls with built-in cupboards, which form the dividing partitions between rooms, is provided throughout. A drop leaf table is built into the kitchen cupboards, and it can be raised when required. The lack of proper storage space, particularly in the basementless house, has in the past always made living in the small house rather difficult.

The finished floors in the bedrooms, living and dining room are of oak. The bathroom and kitchen floors are covered with attractive asphalt tile. All are laid directly on the concrete floor slab. The use of flush built-up interior doors adds to the attractiveness of the interior and eliminates the usual refitting of stock panel doors.

“Mechani-core,” a free air distribution heating system, supplies modern automatic warm air heat. Utilizing a gas burner unit with a built-in blower which forces the warm air...
LIVING room as seen from corner of dining portion. Wood grille in foreground provides the separation between these two rooms.

out through a large grille into the rooms, and with the aid of a louvered door between living room and utility room, circulation is maintained to heat all rooms at the temperature that is desired.

Perkins and Wills, the architects, have followed the general contemporary design trend which is quite prevalent in the small one-story houses that are being built today. In this development, however, the architects had to arrange the houses on lots not larger than 54 x 120 feet. Considering the limitations imposed upon them because of the emphasis placed upon economy, the placement of window and door openings in relation to the rooms in which they occurred and the adjoining building was of utmost importance. The fact that a measure of privacy has been maintained in each house in spite of the large glass area involved speaks highly for the ingenuity and care that have been exercised by the architects in the overall planning of this project.
Combining Economy and Good Design

The basic idea behind this design was to develop a simple, economical two-story plan which would appeal to the commercial builder, says Mr. Anicka. The overall width is only 38 ft., including the garage, which makes it possible for it to be built on a 45 ft. lot where side yard restrictions are not too stringent, or on a 50 ft. lot, which would allow ample side yard easements.

The actual house measures only 22 ft. by 28 ft. 10 in., but still satisfies all the demands of the average home seeker. The living and dining room combination affords unusual spaciousness for a house of this small overall size. The kitchen is large, and provides a much desired eating nook contained within the kitchen itself. Easy access to the garage and service entry is afforded. The garage contains space for tool storage or work bench. The terrace is convenient for outdoor living in summer.

The second floor contains three well planned bedrooms, bath, and adequate closet and storage space.

By eliminating the intricate detail so often found in the usual conventional two-story designs, much economy, and simplicity have been realized. The side entrance location was dictated by the economical use of space on the interior; emphasis on this motif has been accomplished by an interesting continuation of the garage roof and by plant box treatment.

All the material is stock, in stock sizes, used to the maximum advantage. Standard length joists are used to their maximum spans without cutting or fitting. This means economy in construction. At the completion of the framing of this house, the only waste will be saw dust instead of a pile of expensive kindling.
FOOTING NOTES:
UNDER ALL 12 WALLS - 12' 7, 9, 11, 12' 24" REC
ALL AREAS - CORRUGATED GALV IRON
Washington Builders Developing
Suburban Community of Quality Homes

Barkley Brothers building
quantity of fully equipped
attractive, medium-priced
homes. Using two basic floor
plans, studied treatment of
exterior design helps achieve
individual character in de-
sirable residential area

For its first postwar community de-
velopment, Glen Mar Park, the
well-established Washington, D.C.,
residential building firm of Barkley
Bros. Inc., has selected a naturally
beautiful, rolling, wooded fifty-acre
tract facing on Massachusetts Avenue
in Montgomery County, Md.; this is
located in the heart of one of the
choice Washington suburban sections,
about a mile from the District of
Columbia line.

Because of present high material
and labor costs, and limitations im-
polved by government regulation, the
Barkleys find it impractical—if not
impossible—to build individually de-
signed homes in the upper price
ranges, as they did in most of their
developments before the war. In-
stead, they are concentrating on a
well-arranged, roomy, two-story,
three-bedroom, two and one-half bath
plan. To obtain the essential individ-
uality of character and variety of de-
sign in their homes, they have taken

THE ABOVE photograph shows how a house can be given individuality by the thoughtful use of materials in designing exterior walls.

full advantage of Glen Mar Park's natural contours, by reversing plans, by placement on site, and by varying the elevations, location of porches and attached garages. The successful manner in which this is being done is disclosed by the accompanying photographs of the project, taken at a time when more than fifty houses had been completed and sold.

Otho C. Barkley, president of the firm, has been identified with home building in Washington for more than thirty years—fifteen years as an active builder. "Home building is the only business I really know," he confesses, and adds, "However, I believe I have gotten more genuine pleasure and satisfaction out of building 'good' homes in the last fifteen years than most men get out of a lifetime in other occupations." As the organization's executive head he is in charge of all construction, and handles other matters related to their rather extensive building and real estate operations.

A brother, F. Latimer Barkley, who is vice president and treasurer, takes
In spite of strong market for "better type" homes in the upper price brackets, the Barkley Bros. are maintaining established policy of building quality construction in volume. Savings effected are passed on to the buyer.

OTO BARKLEY and F. Latimer Barkley

Of the financing, sales, property management and other phases of the business, Otho's son, W. Hasbrouck Barkley, is also associated with the company. However, he prefers, as he says, to be a foreman "on the job" rather than a "desk superintendent" in one of the family's four offices.

Designed by Architects Dana B. Johannes, Jr., and Loren L. Murray, the houses in Glen Mar Park are of frame construction with brick veneer exterior walls. Although built from two basic floor plans, similarity of appearance is studiously avoided by combinations of stucco and wood siding above the first story. Vari-colored slate roofs, harmonizing with pleasing paint combinations on the exterior woodwork, entrances, garage doors and blinds, further enhance the individual character of the houses.

All the houses have a porch, attached garage with upward-acting door, and fireplace, and are completely insulated. Standard equipment includes a gas-fired forced warm air (Continued to page 170)
Ten different exterior designs are used in connection with five basic floor plans. This project, which is being built by the Strausman Construction Company, is known as "Fairview Homes" and is located at Hempstead, Long Island.

One of the primary objects in the minds of the builders of this development was to provide houses of reasonable cost, commensurate with good design and pride of ownership. Houses designed to meet better the requirements of good family living have been their object. This has been accomplished through the variation obtained in the planning and the exterior treatment.

The development which is called "Fairview Homes" is located at Hempstead, L.I. When completed it will consist of 107 separate houses of which 60 have now been finished and sold. The Strausman Construction Company of Hempstead, L.I., which initiated and built this project from the plans of Rudolph A. Matern, architect of Jamaica, L.I., is proceeding with the balance of the houses as quickly as conditions permit.

The one-story houses contain five rooms and bath, which include two bedrooms and ample closet space. The two-story houses are more generous in their room area and contain three bedrooms. All are of frame construction with either brick or stone veneer placed upon a waterproofed poured concrete foundation. The best of materials have been used throughout, including plastered walls, oak floors, Morton kitchen cabinets and asphalt shingles on the roof.

Variety Is

Variations of this design have been employed in most houses built.

The single-story houses follow in general the basic plan shown above. This contains five good sized rooms with an expandable attic where future rooms can be provided.

Interior of living and dining room of house shown above. Note the large amount of glass area in both rooms.
Provided in Long Island Development

DETAIL of the iron entrance and the adjoining stonework of the house shown below. A well proportioned and effective overhang of the second floor is a feature of the front wall of house.

AT LEFT is shown one of several two-story houses that are located on strategic corners to establish scale to block development.

PLANS of the house shown above. Rooms are of generous size with good light, circulation and ample closet space.
Demand for low-cost housing being satisfied. Costs held down by efficient operation, power equipment, precutting, prefitting of house parts.

Constructing homes to keep pace with rapidly increasing population in a city of 500,000 to 600,000 population in this postwar period calls for large quantities of ingenuity and enterprise on the part of home builders. Although the pressure for low cost housing was strong nationally following the war, the situation is especially acute in Houston, Texas, where wartime expansion is being followed by a tremendous influx of new industry and population.

Despite governmental controls and critical material shortages, some 129 home builders completed about 8,500 new houses in the Houston area last year and had another 3,500 started but not completed at the start of 1947. J. C. Watts, executive vice president of the Houston Home Builders Association, estimates that between 12,000 and 14,000 homes will be completed in Houston in 1947 providing the industry is not hampered by materials shortages, labor difficulties or government restrictions.

The need for more housing in Houston is especially acute because of the rapid and tremendous growth of the area. C. J. Blum, of the Houston Lighting and Power Co., reveals that on Jan. 1, 1941, the com-
pany was serving a total of 155,965 meters, while on Jan. 1, 1947, this had increased to 217,777. Residential meters jumped from 132,937 on Jan. 1, 1941 to 161,307 on Jan. 1, 1947.

Dr. F. A. Buechel, manager of research for the Houston Chamber of Commerce, reports a population increase in the Houston metropolitan district of about 60,000 between 1940 and 1947. In Harris County, where Houston is located, population increased by more than 170,000 between 1940 and 1947. Employment in the Houston metropolitan area during 1946 was 95 per cent above the 1939 figure. Houston started 1947 with more than twice as many construction workers on the job as any city in Texas.

Immediately following the war, Houston home builders got to work in earnest to provide adequate low cost housing for the tremendous influx of new residents. They realized the great need was for low cost homes and although they found it impossible to deliver houses for $6,000, they have provided thousands of homes ranging in price from $6,500 to $10,000. Because of the great job to be done, it was necessary for many builders to set up large scale operations. Consequently there is an unusual number of large home building operations now under way in Houston in relation to its population. These range all the way from the largest development embracing 1,132 acres for 4,700 houses scheduled for completion in three years to the smaller annual operations of less than 100 houses. A number of these large operators are developing entire new communities on the outskirts of Houston, complete with shopping centers and other service facilities. Several large multiple-family dwelling projects are scheduled for 1947.

Keeping pace with the increase in population and home building, the business section of Houston is expanding. Several multi-story office buildings, a large six-story, block-and-a-half square department store, hotels, educational facilities, and other heavy construction on the boards or actually under way in 1947 totals about a half billion dollars.

Material shortages have been serious in Houston, just as they have in other sections of the nation, but the home builders there were successful in channeling sufficient materials into the area by setting up expediting offices as part of their operational procedure. Their success is attested to by the number of units completed in 1946, as totaled by P. B. Ezell, NHA expediter in Houston, who reports completion of 10,200 new permanent homes and apartments units.

**Brace & Carruth to Build 110 This Year**

Using about 20 different floor plans with several variations in elevation on each, Brace & Carruth plan to complete 110 houses in 1947. They are developing a group of previously unsold lots in the well-known Garden Oaks subdivision of Houston. Mr. Brace, who is in charge of construction, is delivering the same quality house he built prewar at the lowest prices consistent with good management in today's market. The houses are built on concrete slabs. Gypsum board interior walls, tiled baths and tiled kitchen work area are standard.
Largest Development to Include 4,700 Homes

The largest housing development now under way in Houston is the new Oak Forest Addition covering 1,132 acres to include 4,700 houses, two shopping centers, 28 acres for schools and playgrounds and 35 acres in parks. Frank W. Sharp, president, and P. S. Luttrell, vice president of this project, are building houses to sell from $7,200 to $15,000, with four out of every twelve houses three-bedroom jobs. These builders are designing each house individually for each lot, with Wilson, Morris & Crain, architects, of Houston, doing that part of the work.

A shop for precutting much of the material is on the site. All houses are of FHA approved construction on lots which have minimum dimensions of 60 x 120 feet.

Faulkner Completed 117 Houses Last Year

Development of the Oak Land Plaza subdivision is being handled by C. B. Faulkner, who is in charge of building operations, and W. F. Wisdom, who is handling sales. During the past year this firm completed 117 houses in the low price range and plans to complete about 100 more during the balance of 1947. The houses are priced from $8,975 to $10,000, on large lots; the smallest is 60 x 120 ft.

Using about seventy basic plans and elevations, every effort is made to give each house on a street individuality. Wide, curvilinear streets help to make this subdivision an attractive one.

Like many other builders operating on a sizable scale in Houston, Faulkner and Wisdom have set up a shop adjacent to the site with power equipment to precut framing and other house parts. Houses are built on concrete slabs covered with oak flooring.

As is customary in Houston, attics are insulated and bedrooms are on the southeast exposure to assure maximum comfort during warm weather. Bathrooms have tile floors and tile around the tubs and showers. There is good kitchen cabinet and closet space.

Typical floor plan in Oak Land Plaza.

Knostman and Webster are the architects.

Good window and porch area placed to take advantage of prevailing summer breezes features these houses in Oak Land Plaza.
THIS house, 1187 sq. ft., without garage or porches, on 60x125-ft. lot, is priced at $10,850.

200 Houses Going Up in Houston's Braes Heights

H. R. HOUCK and M. H. Godbold, of the Houck Realty Co., Houston, will build about 200 houses in their 334-acre Braes Heights addition this year. Using conventional building methods, but adding distinctive architectural notes to each house with stone or brick, these builders are selling their houses in the $10,000 to $12,000 price range. Some of the houses are equipped with central heating plants. Oak floors are standard, except in the kitchen where linoleum is used and the bathroom where floors are tile. Interior walls are gypsum board and attics are insulated. Kitchens in these houses are equipped with adequate cabinet space and tiled work counters.

Southern Builders to Erect 500 Houses

STERLING HOGAN, general manager of Southern Builders in Houston, is well on the way to erecting 500 low-cost houses in his Greenway Addition this year, designed by Frank C. Dill and R. Graham Jackson, associate architects.

Mr. Hogan's operation is undoubtedly the most highly mechanized production line setup in the Southwest for mass production and fitting of house parts and their preparation for on-site assembly. Basically the house parts are similar, with variations such as two different roof pitches and changes in window areas and window treatment. They are being erected, however, with about 45 different basic elevations and from one to six different exterior covering, paint and roof color combinations for each elevation.

Because the Southern Builders are using a specially designed roof truss which eliminates the need for bearing partitions, interior partitions may be arranged in an infinite variety.
PLENTY of closet and cabinet space are features in these houses. This 3-bedroom house in Meadowbrook sold for $10,500.

Meadowbrook Another Attractive Addition

THE Meadowbrook Building Co., operated by A. V. Arnold, president, and Earl C. Bradley, secretary-treasurer, completed about 100 low-cost houses in Houston last year. This spring they finished up another 60 and are starting work on another group which will include from 70 to 150 two and three-bedroom houses, the number built depending on market conditions later in 1947.

By using considerable ingenuity in exterior treatment, houses in this development show fine variation although constructed with only five basic floor plans. Outside walls are finished with asbestos cement siding and wood siding, along with touches of brick veneer. Various combinations of the three result in attractive elevations. H. D. Frankfurt is the architect.

Foundations for these houses, like most of those now being built in Houston, are monolithic concrete slabs. All floors, except bathroom and kitchen, are of oak, over 1x4 subfloors or screeds, imbedded in asphalt water proofing, applied directly to the slab with a double thickness of 15-pound felt and an additional coat of waterproofing. Bathroom floors are ceramic tile with tile wainscoting 4½ feet high around tub and shower. Kitchen floors are asphalt tile or linoleum laid directly over the slab. Lots average 60x128 feet, graded and planted with eight shrubs and San Augustine grass.

Farrington Keeps Price at $7,250 or Less

W. M. FARRINGTON was among the first Houston home builders to design and construct houses for veterans for less than $7,000 in the postwar period. Last year he built 120 two bedroom homes and plans to construct about 150 in 1947. Before the war, Mr. Farrington, whose own organization does all the designing, constructed homes in the higher-priced brackets. When the government and veterans organizations clamored for houses around $6,000, he geared his organization to produce a livable, permanent home near that price bracket, set his prices and has adhered to them.

Steel kitchen cabinets, oak flooring, floor furnaces, attached enclosed garages, gypsum board interior walls and quality plumbing fixtures are features of his houses selling in the Bellaire section of Houston at a top price of $7,250. Basic framing materials are precut on power machinery in a shop set up near the site.

FIFTEEN basic floor plans with numerous exterior elevations give good variety.

600 Homes in Sturman Park Project

B. F. STURMAN, president of the Pasadena Building Co., Houston, recently began work in his new Sturman Park Addition, which will include about 600 homes and a shopping center when completed. This year about 165 homes are to be built in the $10,000 to $12,000 price range.

Tiled floors and walls in bathrooms, tiled kitchen work counters, plenty of cabinets and closet space, hardwood floors, provisions for attic cooling and interior wall finished in attached garages are some of the features of Sturman Park houses.

Many Builders Active in Houston Area

ALTHOUGH about 129 active builders are participating in the construction of some 10,000 new homes in Houston in 1947, space limitations preclude mention of all of them with photos and plans of the houses being built. Those shown here were picked at random primarily to show a good cross-section of the type of low-cost housing in that area.

DeWitt D. Krahl has built a number of double garages with apartments above for occupancy by families until houses on lots can be completed. Miles Strickland has completed a sizable number of new houses and is currently planning a multiple-family rental project. The Bell Construction Co., M. A. Silverman, Paul H. Wolf and many others are doing sizable jobs.

In addition to the large number of single family dwellings now being built, Houston home builders are planning a record number of multiple-family rental housing projects. Many of these are to be started in 1947, providing material supplies, rent prices and labor conditions permit profitable completion and operation.
Modern Country Home

Built around a forecourt paved with cedar log cuts at Netarts Bay, Oregon

Pietro Belluschi, A.I.A., Architect; W. R. Coates, Owner

REAR OF HOUSE pictured at top overlooks a scenic valley. Small view above shows house from the road. Below, the charming entrance front and cedar log paved forecourt reveal new decorative uses of wood.
A FAR FLUNG plan for the wide open spaces near the ocean in Oregon has been used by Architect Pietro Belluschi of Portland for this country home near Tillamook. Appropriate to that great lumber producing region, wood in several unusual forms has been employed to give this home unusual character and informal charm.

In plan, the rooms are grouped on three sides of a cedar log paved forecourt, with double garage to the right backed by the service quarters. The big living room with reception hall is across the inner face of the court, while bedrooms with their adjacent baths occupy the left wing. Below this wing, advantage is taken of the slope of the land to work in a lower level floor with guest rooms, playroom, laundry, etc.

Interiors throughout are notable for their effective use of all-wood paneling for both ceilings and sidewalls in the truly modern style.

CLOSE-UP of front entrance. Wood and glass combine to give a warm and friendly welcome with a distinctly modern feeling.

LIVING ROOM above is lighted and tied into the scenic outdoors, both north and south, by floor-to-ceiling window-walls.

FLOOR PLAN shows three master bedrooms on the main floor and a guest room on the lower level overlooking the valley.
RESTRICTIONS, high material costs and a limited labor market have imposed limitations upon housing in all sections of the country. In the light of the above it is remarkable that operative builders have still been able to maintain the variety and quality that have continued to be manifested in all their operations.

In this respect the Valley Stream, North Country Homes development in Nassau County, Long Island, N. Y., shown here follows that general trend. This project, built by the Cord Meyer Development Company of Forest Hills, Long Island, at present contains eighteen houses that are completely finished, with others in the process of completion. The ultimate goal is a total of forty-eight houses built from two basic floor plans with four different exterior designs.

J. Edward Meyer, who is now president of the company, is best remembered for the Boulevard Garden development built in Forest Hills in 1933.

The present development contains houses that spring from a single basic floor plan with a number of alternate treatments on the exterior. Each house is placed on a generous sized lot and contains five complete rooms, which include two bedrooms. A stairway is provided to the unfinished attic, which in the future may be divided into two large bedrooms. The basement contains a large drying and recreation room in addition to the area set aside for heating and laundry.

All the elements of good living and construction have been incorporated in these houses. Bathrooms contain colored tile, closet space is generous. Floor joists are oversized for added protection. These are supported on steel girders and lally columns. Kitchen equipment includes custom-built cabinets, built-in sink and gas range. Exterior walls are of brick veneer with concrete foundation. The sales price of these houses is $10,575.
ONE plan for all the houses—five rooms complete with finished basement.

TYPICAL of the exterior designs in this development is the house shown above with its pleasing fenestration.
California Builders' Show
To Feature Model Home

Milton J. Brock, president of group staging second annual event in Los Angeles, expects more than 150,000 to visit displays

LARGEST single exhibit in the Construction Industries Home and Building Exposition June 12 to 22 at the Pan-Pacific Auditorium, Los Angeles, is the five-room California ranch style home now being built in front of the Auditorium.

The house, to be given away the final day of the exposition, is designed to show potential home builders and remodelers the latest features of modern architectural design, home appliances and other factors. It will include such unique features as sliding glass doors between living room and patio, glass-paneled alcove lighting dining room, porches with brick floors, open wood ceilings and a utility forced-air heating system. The house is designed for use of both gas and electricity in heating, cooking and refrigeration.

According to Milton J. Brock, president of the Exposition, exhibit space for this second annual show is practically sold out. The Southern California show is the nation's largest in floor space, with more than 100,000 square feet, or about three times as much as the NAHB Convention and Exposition had available. More than 150,000 spectators are expected to view this year's event. The Los Angeles Chamber of Commerce and fourteen building trades associations own and operate the non-profit corporation which produces the show. Industry exhibitors include building contractors, plumbers, plasterers, the lumber industry, heating and air conditioning contractors, mason contractors and general contractors. Surplus proceeds from the event will be spent in a public relations project for the welfare of the public and the construction industry.

ABOVE is an architectural drawing and floor plan of the five-room California ranch-style house being constructed outside the Auditorium.

MILTON J. BROCK, president of Construction Industries Home and Building Exposition, checks construction progress.
A House of Distinction

ADAPTABLE for a sixty-foot lot, this distinctive six-room house designed by Schreier and Patterson, architects, Washington, D.C., for the Westhaven Development Corporation of the same city, meets every requirement for the medium sized family.

In these days of increasing building costs, the prospective home owner needs to be constantly alert to every element of economy. In the rectangular straightforward type of house, such as shown on this page, every available opportunity for saving, commensurate with good construction, has been given full consideration.

On the exterior all unnecessary breaks in wall surfaces have been omitted, simple framing methods are possible through the use of center supporting members, and all plumbing and heating pipes have been concentrated. The thirty-foot long living and dining room affords excellent opportunities for entertaining. Elimination of all waste space in the entire planning of this house has been accomplished.

THE floor plans above indicate an arrangement whereby all service units are placed on the street front.

A FULL-SIZED, completely furnished and equipped, floor model of one of their new homes was opened for public inspection last month by N. K. Winston Associates, one of New York's largest community developers, in connection with an unusually elaborate permanent housing exhibit. The second floor of the Winston Building, opposite Radio City in Manhattan, is the location of this unique "one man" display of latest developments in building products, equipment and services of many leading manufacturers, and the model home.

Concerned over the continuing high cost of materials and labor the Winston organization, which built approximately 4,000 war housing units, has been working for many months with its architects on new approaches to problems of costs and floor space, which are believed to be necessary for the volume production of homes. One solution is an expansible plan designed by Architect Percy Goodman, the first full scale model of which is the central attraction of the Winston exhibit.

PHOTO showing entrance to N. K. Winston Associates' full-scale indoor model home.

A PARTIAL view of unique "mid-town New York" permanent building products exposition.

ABOVE: Another view of the Winston organization's colorful "one man" home show.

PHOTO of bathroom in "Versatile" home.
The "Versatile" home—a name given to his plan, says Mr. Goodman, because "it expands on the ground"—starts as a two and one-half room house with a large combination living room and bedroom, 15 by 23 ft.; a kitchen and dinette, 9 ft. by 11 ft. 2 in.; bathroom, 5 ft. 4 in. by 7 ft. 8 in.; a utility room, several spacious closets and a brick fireplace. As shown in the floor plan (below) future bedrooms may be added at any time.

In describing the flexibility of the "Versatile" plan, Mr. Winston points out that it can be built "with minimum equipment as a summer home and later converted to a year-round home of the same or a larger number of rooms, the one basic plan serving to provide a two and one-half room summer cottage, or a five and one-half room year-round residence." There will be twenty different exterior designs, according to Mr. Goodman, who has completed several Colonial and modern designs in addition to those shown here. The modern design (right, below) provides water-seal insulation which Goodman experiments have demonstrated makes the house as much as 15 per cent cooler in summer and permits greater heating efficiency in winter.

A feature attraction of the Winston home show is the Ingersoll Utility unit which has a prominent space in the center of the exhibit floor. There is a display of new plywoods, with a variety of modern finishes. The Winston house of "steel and concrete" is represented by a model and a section. The section shows an aluminum window and is covered by aluminum siding and shingles. A working model of a device for purifying and cleaning the air circulated through a home is another feature.

There are tile exhibits, including the model home bathroom, demonstrating a new application of mosaic tile that "saves 60 per cent in labor costs." Also, a model home incinerator; a new type of ventilating fan; a chrome bathroom fixture display and smartly styled hardware displays. Ultra-modern electric heaters, various new types of insulation, ventilators, venetian blinds, electrical switches and switch-plates, wall decorations, washable wallpaper, are all advantageously displayed, as are 40 different types of window glass and several models of door chimes.

A CORNER of the kitchen-dinette in the model home.

ARCHITECT'S sketch of two and one-half room "Versatile" home designed by Percy Goodman for N. K. Winston Associates.

A THREE and one-half room version, with attached garage.

FLOOR PLAN of expandable home showing location of future rooms.

MODERN design of home with "water-seal" roof insulation.
GOOD HOMES today in the Minneapolis area are not over-priced, and there is no real danger that the public will lose its enthusiasm for new homes until the present cycle has run its course. Despite shortages that have caused frequent use of substitute materials, homes built today offer much more than similar units of twenty years ago.

These are the opinions of Carl Carlson, Minneapolis builder. He cited improved insulation, better roofing, modern plumbing, more efficient heating plants, and planned kitchens as innovations now becoming standard parts of newly constructed homes as evidence that the consumer gets more for his dollar in a new home today than ever before.

Mr. Carlson is president of Victor Carlson's Sons, Inc., a company that completed 150 dwellings at an average price of $10,000 during 1946. Meanwhile, with his brother Walter, vice president, he opened a $75,000 building to house the firm's activities and to engage in the electric appliance business. "Our appliance business will supply us with kitchens for our own houses, supply a kitchen installation service for other builders, and operate as a vendor of appliances for kitchen remodeling," he said.

The Carlson firm was founded by the father of the present operators in 1894 as Victor Carlson and Sons. Both brothers literally grew up in the building business. Before 1941 the firm was known as "custom builders." During wartime it converted to Title VI housing and completed 300 of those buildings. In 1945 they built a few buildings under current restrictions, and 1946 saw them operating at the pace mentioned above.

Like other builders, Carlsons' problems centered around procuring materials. Unlike some, Carlsons did not start any building until they knew where they were going to get the materials to finish it. Even with double precautions and fully certified priorities for veterans, strikes played a part in delays. When metal wall- and base-cabinets, as specified in kitchen plans, could not be delivered, Carlson turned to wood cabinets, only to have a local strike shut off that source. He finally made a large percentage of the cabinets himself.

Carlsons' 1946 construction was in three projects. The largest type was a two-family bungalow with five or six rooms. These were made of stucco and lannon stone, and were built in a country club section in the eastern part of the city. All have five rooms on the first floor with a space for another room above.
TWO-FAMILY bungalows to sell for $18,500.

Across town in the southwest part of the city they built 74 houses of various types, according to available materials. Some used siding, others stucco, and still others are finished in shingles. All have gas heat with Waterman and Waterbury furnaces, Balsam-Wool, or Johns-Manville sidewall insulation and four-inch mineral wool ceiling insulation. Many have Hotpoint all-electric kitchens.

The other Carlson project is in Richfield, a suburb. Here the construction was of varied types. Of approximately 50 homes, they were equally divided among siding, shingles and stucco. These homes were sold for $10,000.

A natural advantage mentioned by Mr. Carlson in procuring good mechanics is the long association with plumbers, electricians, and others who sub-contract. He views these associates as a "family" and plans schedules to permit coordination between otherwise independent contr-

(Continued to page 168)
Power Equipment Plays Big Part In Building Byrne Community

A PARTIAL VIEW of Byrne's fabrication shops, equipment and materials stockpile, for the 1,200 home Harundale project.

TRENCHING job shown above is one of the many performed by this multi-purpose earthmover, with its 24-foot telescoping boom.

PHOTO shows concrete floor slab being poured over shop-fabricated and tested copper coils of the radiant heating system.

A TYPICAL three-bedroom unit at the Byrne development. Stucco and a variety of other exterior finishes are available.

ABOVE photo shows how monotony of appearance is studiously avoided by taking advantage of the terrain and by placement.
Efficiency in the use of materials, economies in large-scale construction methods, application of line production techniques to on-the-spot building, and maximum use of modern power equipment are translated into savings of erection time and labor costs

THE capacity of the construction industry to produce modern, moderately-priced, privately-financed, housing through the use of advanced building methods and materials, coupled with today’s versatile power equipment, is being demonstrated by the Byrne Organization of Washington, D.C., at Harundale, its $8 million veterans’ housing project, five miles south of Baltimore, in Anne Arundel County, Maryland, on the famed Governor Ritchie highway.

Site fabrication of complete sidewalls and roofs in mechanized assembly lines makes it possible to deliver three-bedroom steel framed, completely insulated, homes with hot water radiant heating, stucco exteriors and plastered walls for less than $7,000, including a fully landscaped lot 60 x 100 feet. With almost four hundred homes already up and in various stages of completion on the site, the fabricating shops are now geared up to turn out walls and roofs for seven houses each day.

The Harundale development will be a complete “satellite town,” designed to satisfy the demands of the veteran who seeks a balance between town and country life. Consisting of 300 acres of rolling Maryland countryside, the project will ultimately have a complete shopping center and full community facilities, for the more than 1200 detached two- and three-bedroom homes.

The houses are constructed of welded rigid steel frames. Insulation (applied with electrical stud-welding to the steel framework) covered with steel mesh and the exterior finish, comprises the basic wall sections. The interior is plaster applied on metal lath. Entire wall and roof sections are made up in the fabrication shops and trucked to the dwelling site. Cranes first set the walls on the concrete foundation slab, where they are bolted together. They then lift the complete roof from a truck and set it on the sidewalls. The entire house is then welded and bolted together. This entire assembly operation requires less than one hour to complete.

The three-bedroom house has a kitchen measuring 8 ft. by 7 ft. 6 in.; a living room 12 ft. by 17 ft. 4 in.; a dining alcove 8 ft. by 8 ft.; a bedroom 9 ft. by 14 ft.; a bathroom 7 ft. by 6 ft.

Products Specified for Homes in Harundale

- Macomber Steel framing.
- Milcor metal lath and accessories; gutters and down spouts.
- Pittsburgh Steel reinforcing wire mesh for floor slab, and paper back wire mesh for stucco exterior.
- Aetna Steel interior door frames.
- Bethlehem Steel reinforcing steel rods.
- Detrill Steel Fenestra sash.
- Briggs "Beautyware" bathroom fixtures and kitchen sinks.
- Chase Brass & Copper bathroom accessories.
- Ketcham bathroom cabinets.
- Owens-Corning Fiberglas insulation (walls and ceiling).
- Genasco asphalt shingles.
- U.S. Gypsum plaster, cement paint and interior paint.
- Alpha Portland cement.
- Chase and Revere copper tubing for radiant heating system and plumbing.
- Briggs Filtration boiler and burner units.
- Russell & Erwin hardware.
- Sall & Gosssett circulating pump for heating system.
- Swartwout metal louvers.
- Trubilt kitchen cabinets.
- Universal Clay vitrified sewer pipe.
- Auth oil storage tanks.
- Condensation Engineering Vitralliner, Rims.
- Rheem hot water heaters and expansion tanks.
THIS is the basic Model 21 "Berkeley" one-story HomeOla which can be modified or expanded by rearranging the modular panels. Proctor and Gamble Company selected this house as first prize in its spring consumer contest. Five were presented to individual contestants.

**The New Expandable HomeOla**

THE HomeOla Corporation, Chicago, is now making deliveries on the new, expandable models of its prefabricated houses. The original HomeOla models were designed on the basis of a four-foot module and with this basic panel measurements the firm is offering a wide variety of exterior and interior design. To supplement the basic four-foot panel arrangement, a new two-foot panel is being added to give even greater versatility.

The expandable house is an adaptation of the Model 21, originally announced last fall. This house has roof trusses of steel, eliminating the need for bearing partitions. As a consequence interior partitions and rooms may be shifted about in an infinite variety of patterns, and all panels fit because they are constructed on the four-foot and two-foot basic module. Rooms may be expanded or rearranged to suit the needs and desires of any individual family.

By shifting the exterior panels containing the windows and doors, the exterior appearance of the houses can also be changed to any desired pattern within the limits of the panels.

In addition to the versatility in interior and exterior arrangement, the one-story HomeOla may be constructed with attached or detached garage, using the panels as the basic elements in construction. Porches, dens and other plus items so desirable in low-cost houses can also be added to the basic one-story expandable house. When the owner reaches the point where he desires an extra room or two on his HomeOla house, removal of panels from the existing house at point of addition and re-assembly of those, plus the new panels required for additional room, will result in the finished addition.

Interior wall panels are of fir plywood and may be finished to reveal the natural wood, painted or papered, depending on the preference of the purchaser.

Architecturally the expandable one-story HomeOla achieves the long, low sweeping lines of the currently popular ranch-type house. Because the exterior panels are moisture-proof fir plywood, they may be painted and left as the final exterior covering, or they may be covered with whatever other outside building material the owner may desire to add. Roofing, likewise, may be selected by the purchaser, permitting him to achieve any particular color treatment.

The one-story HomeOla may be constructed over a basement if the climate and needs of the purchaser require it. As is the case with all the various model HomeOlas being marketed now, equipment furnished...
THE HomeOla Model 241 is a combination of the Model 21 and Model 41, with the four-foot modular panels permitting a variety of window arrangements. These houses are delivered with all equipment such as furnace, water heater, plumbing, wiring, hardware, etc.

Exterior and interior arrangement of modular panels provides infinite variety in design and room arrangement. Steel roof trusses eliminate need for bearing partitions

with the house includes a furnace, hot water heater, all plumbing, all electrical outlets and fixtures, ceiling insulation, finished hardware and cabinets for the kitchen and bathroom. The plumbing furnished with these houses has been approved by the Master Plumbers Union and arrives at the job site all assembled, ready to set in the house and connect fixtures.

Price of the Model 21 HomeOla, which is the basic one-story house, is now $4,245.97 to the consumer, F.O.B. car at shipping point. To date more than $7,000,000 worth of HomeOla houses in the various models have been constructed and occupied. The type of construction utilized in HomeOla houses has been approved by FHA and NHA, and various parts of the houses, tested by the National Bureau of Standards, have been found to exceed conventional strength specifications by an average of twelve times.

The speed with which HomeOla houses can be erected, plus the fact they come completely equipped, can assure quick turnover and profit for builders who have local labor in adequate supply. Erection of these houses on site is simple and does not require the use of highly skilled or technical labor.
WHAT does an architect do when he designs a home for himself? Well, if he's young and imaginative, like Herman H. Lackner of Winnetka, Ill., he makes free use of new techniques and materials. Unhampered by convention, he then can find out for himself if his ideas really work.

Fresh out of the Seabees, young Lackner opened up shop for himself in his home village a little more than a year ago. Business was brisk, so he decided to build a home for himself and his mother not far from his office.

During the war Lackner observed great quantities of corrugated asbestos sheets being used in factories, military and naval installations and ammunition depots. This material has long been popular in industrial construction, where its resistance to fire, corrosion and weather assures long service virtually without maintenance. Attracted by the pleasing appearance of the deep nesting corrugations, Lackner saw opportunities for adapting the sheets to residential design.

Lackner's new home, now practically completed, employs the corrugated asbestos sheets for both sidewalls and as a decorative fencing to enclose the front yard. They are carried around three sides of the first floor and then extended, with every second sheet omitted, to surround the yard, which will include a bluestone terrace.

The front of the house is finished on the first story with fir flooring. The objective there is to give the effect of flush siding, without prominent horizontal lines which would conflict with the vertical corrugations. The upper sidewalls all around are 1 x 12-inch pine boards, with the joints covered with 1 x 2-inch battens.

The corrugated asbestos sheets, which do not require initial painting or further preservative treatment, are left in their natural light gray color.

EXPANDABLE home under construction shows use of variety of exterior materials.
Corrugated asbestos sheets are used to advantage in this expandable two-story modern house. An extension of the sidewall material results in an attractive front court.

The lower sidewall in front is painted white. The upper sidewalls are green, with white window trim. A window box, extending the full length of the three windows, is painted red.

In addition to having decorative value, Lackner reports, the asbestos sheets are practical material for exterior siding. Sheets long enough to span from sill to plate were applied to 2x4-inch studs, with the sides lapped one corrugation. The one material makes up the entire exterior wall, without need for sheathing, building paper or decorative coating. Used as fencing, the sheets can be extended into the ground without danger of rotting.

The interior treatment of Lackner's home carries on the pioneering spirit. The interior walls of the first floor are of insulating building board, applied in large panels. Burlap has been placed over the insulating board with an adhesive and the burlap is painted.

Fir flooring is used as the base for the built-up roof, and doubles as the ceiling for second floor rooms. An asphalt treated insulating board provides roof insulation. The second story floor is made of 2 x 6-inch fir planks, applied directly to the joists. As the under sides of the joists are left uncovered, the bottom of the floor is also the first floor ceiling.

Lackner's purpose was to get as much home as possible for a minimum immediate outlay of money. The present structure contains only four rooms, but it is designed so that it can be expanded in easy stages. Only the front and back walls are load bearing. The first expansion will add a large living room, permitting the present combined living and dining room to be converted into a dining area.

Because of the successful way corrugated asbestos cement sidewalls have worked out in his own home, Lackner is including the material in several new residential plans now on his drawing board.

Shown here is a suggested method of applying corrugated asbestos sheets to a wood framing with butt side joints, which eliminates the need for overlapping corrugations and presents a smooth appearance. Butts are cut from corrugated sheets, three corrugations to the batten. Nails are then driven on either side of the joint as shown.
New residential architectural style produces continuous curving exterior which removes usual definite line between sidewall and roof. Will sell in $4,000-$6,000 range.

MODEL of Stran-Steel arch-rib community. Seward Mott, Urban Land Institute, has been retained to develop typical site plans.

A MODEL of the new arch-rib home which drew much interest during the annual NAHB Convention and Exposition in Chicago.

STRAN-STEEL Arch-Rib

STEEL arch-rib design houses to sell in the $4,000 to $6,000 price range have been developed by Great Lakes Steel Corporation, Stran-Steel Division. The units are of new architectural style with exterior sidewall and roof of continuous curved shape. Dormers, porches, window arrangements and similar conventional extensions provide individuality and variance in appearance.

The steel framing system, which is the key to economies in time and materials, is fabricated at the factory. Local builders assemble the units on building sites with local labor. Conventional materials are used to complete the structures, which are structurally acceptable for FHA mortgage insurance. Typical exterior covering consists of shop-curved corrugated steel sheets applied directly to the steel framing.

The houses may be built over basements, on concrete slabs, or on conventional foundations. Sill channels...
and column bases are first leveled, grouted and anchored on top of the foundation. The curved ribs or vertical studs are then secured to these by means of sheet metal screws, bolts or by welding. Purlins are attached to the curved ribs by means of screws or by welding. The corrugated metal sheets, which comprise the exterior covering, are then attached to purlins or the curved ribs. Nails are driven into the nailing grooves in the Stran-Steel members.

Floor construction is conventional for houses with or without basements. Interior ceilings may be curved or horizontal. When curved, ceiling coverings are fastened to furring members attached to the curved ribs. When horizontal ceilings are desired, Stran-Steel provides ceiling joists and the ceiling finish is otherwise conventionally applied on the site. Insulation for the exterior walls and ceilings is also conventional and site-applied. When ceilings are horizontal, metal louver-type vents are provided in the end walls to ventilate the space between the roof and the ceiling.

Steel casement type sash, with special molded asphalt and steel trim, is standard for vertical wall sections. Special steel sash which are hinged at the top are provided for inclined windows on the 20-foot wide house. Exterior coverings for the curved roof and wall sections consist of 24-gauge galvanized corrugated steel sheets or 22-gauge ungalvanized corrugated steel sheets. Corrugated sheets for the 24-foot wide house and the crown of the 20-foot wide house are shop curved. The sheets are fastened to the steel framing members with spring head nails, or other satisfactory nail attachment, which are provided with fibre washers. All vertical and horizontal laps between sheets are sealed with mastic. Ungalvanized steel framing and covering metals are given a shop coat of corrosion resisting paint. Steel members supporting floors over basementless areas are given an additional coat of rust-resisting paint after erection and all welds and abrasions to shop paint incurred during erection are also painted after erection. Nails, screws and bolts which are exposed to the weather are galvanized or cadmium plated, assuring long life for these low-cost houses.
How to Use Teco Trip-Grip Anchors in Framing

The illustrations above indicate several methods of attaching metal anchors to joists, beams, plates, rafters, openings, etc.

Greater strength is developed when framing members are supported in this manner. Increased rigidity results around openings; plaster cracking is reduced to a minimum.

These anchors are easily placed in position and provided with ample nail holes. The wasteful and expensive method of notching is eliminated.

How to Make a Cement Spreader

This spreader which looks like a large hoe is made from an old round point shovel which is annealed and bent as shown, so that the blade of spreader stands plumb when 80" handle is held in working position. This tool does the work of moving heavy concrete around in position.—J. G. CALDWELL, San Mateo, Calif.

How to Take the Spring Out of a Scaffold Plank

When scaffold plank is 14 or 16 ft. long, spike lookouts to underside to eliminate spring. J. C. HOLMER, Vancouver, B. C., Canada.

How to Repair Leak In a Concrete Wall

In repairing a leak in a concrete wall caused by checking, first cut a V-shaped groove about 2" deep the full length of crack. Apply asphalt paint in groove. After paint is dry, place heavy asphalt in one-half its depth. Fill balance of space with cement mortar.—H. F. HAAS, Elyria, Ohio.

How to Set Gutter to Proper Slope

Here is an easy and simple method to set gutters to proper slope. On the underside of the level fasten a wood strip of proper thickness that will extend over both sides of the gutter. Hold the level so that the bubble will be in the exact center. This method simplifies the job of hanging to a great extent. Be sure that the wood strip is of the proper thickness before you start to insure the desired pitch. HERBERT E. FEY, New Braunfels, Texas.

Rake Detail

Section Thru. Cornice Return

Elevation of Entrance

Gable Elevation

Plan of Entrance Stoop

Section A-A

Sect. Thru. Stoop

Elevation of Window in Entrance Hall

Elevation of Chimney Cap

Main Cornice

1" x 4"
3 1/4" crown mold.

Double-coursed wood shingles, Approx. 12" Exp.

Gutter to return.

Hanging gutter

Corner boards; 1 1/2" x 3" and 1 1/8" x 4"

B.

Hanging gutter

1 x 3'
1 x 6'

Brick.
Pre-cast cement or cut stone.

Brick, painted black and double receiver.

1/4" x 3" cove.

Brick.
Pre-cast cement or cut stone.

Brick, painted black and double receiver.

1/4" x 3" cove.

SAVE IN BUILDER'S BETTER DETAIL PLATE

Double-coursed wood shingles, Approx. 12" Exp.

Gutter to return.
PORTABLE POWER SAWS

The Paxson Co., of Dowagiac, Mich., is now manufacturing four models of the Bearcat portable power saw. Two basic sizes are offered, each

ventis entry of insects, rain or snow. The directional air flow may be upward or downward, or from left to right. Installation of the unit, which can be installed or replaced by removing the required number of glass block, follows the conventional manner of glass brick construction. Picture are the front view showing diffusers, and the rear view showing directional air flow downwards.

GLASS BLOCK VENTILATOR

A glass block ventilator designed to fit any type glass block construction without distorting lines has been developed by Air Rectifiers, Inc., 3734 Southport Ave., Chicago, III. The unit, built of cast aluminum with polished aluminum frame and stainless steel weatherstripping, has glass front diffusers and inside glass louvres. A fine mesh screen in the interior prevents entry of insects, rain or snow. The directional air flow may be upward or downward, or from left to right. Installation of the unit, which can be installed or replaced by removing the required number of glass block, follows the conventional manner of glass brick construction. Picture are the front view showing diffusers, and the rear view showing directional air flow downwards.

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FOLDING SAWHORSE

A sawhorse which folds into a compact package 6 in. square and 42 in. long is the first of several wood products planned for the open market by The Long-Bell Lumber Co., Longview, Wash.

Extended, the sawhorse measures 24 in. in height, and 42 in. in length, with a 19 in. spread at the floor. A 6 in. working surface is provided when sawhorse is unfolded. Rigidity is maintained by locking hinges, which join the legs to the body of the sawhorse, and a hinged brace midway the length of the legs. The sawhorse will hold 1000 pounds.

COMPOSITION FLOORING

A new type plastic composition flooring for use in residential construction is being manufactured by the Kompolite Co., Brooklyn, N.Y. The product, named Oaktred, comes in powder form in moisture-resistant bags or drums. Mixed with water on the site, it is troweled on like cement to a minimum thickness of 1/8ths of an inch. The result is a monolithic flooring which can be sanded to a smooth finish and then varnished or shellacked, similar to hardwood strip flooring. This material can be applied on sub-flooring, or concrete, or over old flooring. It can be scored to resemble tile or random-width oak flooring.

METAL COVERED MOULDINGS

Highly decorative effects are achieved through the use of the new metal covered wood mouldings being offered by The Loxit Moulding Co., 1217 W. Washington Blvd., Chicago 7, III. The line includes heavy chrome-plated zinc sections suitable for interior decoration, cabinet work, and many other purposes. Two hundred different designs are available, a few of which are shown in the illustration.

FRAMING ANCHOR

To increase rigidity around window and door openings, and give added strength in floor and wall framing, the Timber Engineering Co., 1319-18th St. N.W., Washington 6, D.C., offers a new timber connector known as Trip-L-Grip framing anchor.

Made of 18 gauge zinc coated, corrosion resistant sheet steel, the anchor is joined to the wood with non-splitting full bodied nails that develop maximum shear without splitting the lumber.

CUSTOM BUILT STEEL SINKS

A custom built stainless steel sink is offered by Harris, Inc., 1157 Cleveland Ave., Columbus 3, Ohio. It is constructed of heavy grade No. 4 satin finish stainless steel with an under casing of enameled mild steel around the bowl and drainboard. The drainboards are corrugated with a 3/16 in. pitch and are equipped with a stainless steel crumb strainer of the basket type. The sink is available in either the single or double bowl type in lengths from 42 in. to 84 in.

(Continued to page 126)
Any good garage door will protect the contents of your building, but Ro-Way protection goes much farther than that. **First**, when opened, no part of the Ro-Way Overhead Type Door is exposed to the elements or to breakage from outside forces. **Second**, Ro-Ways operate so easily the user is never tempted to carelessly leave them open. **Third**, Ro-Way Tracks, Rollers, and all other hardware parts are protected by Parkerizing and painting after fabrication.

So in selecting the Doors for any Residential, Commercial, Industrial, or Agricultural job, remember that Ro-Way Overhead Type Doors are designed and built for "self-protection" as well as property protection.

**Every Ro-Way Door is built completely by Ro-Way, and Ro-Way sales and installation service is nationwide. Distributors in all principal cities. See your classified directory, or write for distributor's name. See our catalog in Sweet's.**

**ROWE MANUFACTURING COMPANY**

721 Holton Street

Galesburg, Illinois, U.S.A.

There’s a Ro-Way for every Doorway!
METAL COPING AB5712

A new metal coping which is light in weight, needs no caulking or resealing, and requires no special tools for erection is being produced by the Overly Mfg. Co., Greensburg, Pa. It comes in a series of standard sizes and edgings, and any fitting necessary can be accomplished on the job.

Installation begins with the anchor bolts which are set in the mortar when the two top rows of bricks are laid in a new wall. For existing walls, a hole is drilled and anchor bolt set. A formed metal channel fastens to this anchor and the longitudinal sheets with crimped edges hook over the gutter bar, forming a tight joint. Over this joint slides the safety cover, held in place with two screws. The result is a tight joint with ample room for expansion and contraction. The product is named Goodwin lifetime metal coping.

ELECTRIC DISPOSAL UNIT AB5703

An electric garbage disposal unit which pulverizes all food waste and flushes it into the sewage system with a swirling, cleansing action, is available from Thomas W. Berger, Inc., 6 East Fourth St., Cincinnati, Ohio.

The unit, designed for installation under the kitchen sink, is simple and easy to operate. Just scrape all food wastes, including fruit pits, peelings, bones of any size or shape, into the extra-wide drain opening, insert the basket strainer, and turn on the water faucet. Silverware, tin cans, or bottles accidentally dropped into the drain will not damage or stall the mechanism and are easily retrieved. Steel rods support the unit from the floor; aluminum castings are used throughout.

ASPHALT SHINGLE AB5707

A new asphalt shingle which cannot blow up or off, no matter how hard the wind blows, is being manufactured by The Ruberoid Co., 500 Fifth Ave., New York City. By means of an ingenious locking device, each shingle is securely locked to adjacent shingles at four points; in addition, it is nailed to the roof deck with four concealed nails. These shingles, named Dubl-Coverage Tite-Ons, give double coverage over the entire roof area, with triple coverage at the locks.

INDUSTRIAL APRONS AB5711

All-plastic industrial aprons are available from Hydro-Tex Corp., 564 W. Adams St., Chicago 6, Ill. Strong, modern, pliable, and sanitary, they are resistant to snagging, abrasion, oil, water, heat and cold. These aprons are equipped with permanently fused all-plastic eyelets and are available in white, black or Hydro-Glass.

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Daylighting with a flair for Glamour

Women selecting materials to daylight their ideal home or apartment choose Insulux Glass Block.

The proof?

Both winners in Glamour magazine's recent $10,000 Private Life Contest, which involved a plan for remodeling a part of a home into an ideal apartment, made extensive use of Insulux Glass Block.

In homes you're building there are many places where Insulux can bring in cheerful natural light with privacy — add that note of glamour women like.

Why not send the coupon today for our free booklet that's packed with new ideas for Insulux in any room of a home?

A winner in Glamour magazine's recent Private Life Contest, Miss Jane Edwards wisely chose Insulux Glass Block for the "dream" apartment she designed. In the kitchen an Insulux panel brings abundant light to stove and counter — assures privacy.

See how an Insulux partition transmits light between rooms. Both kitchen and living room are lighter and brighter. Small rooms seem larger, too. Note the easy-to-clean Insulux panel behind the stove. It can't absorb grease or moisture.

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Gentlemen: Please send me your free 16-page booklet, "Ideas for brighter homes."

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Street Address _______________________

City ________ State ________

Signature ________________________

Insulux Glass Block is made in three sizes, many attractive and functional face patterns. Here's a profit maker for builders. Investigate!
"Gimme that!*"

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whose idea of a dream house calls for trouble-proof double-hung windows and modern window hardware.

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GRAND RAPIDS HARDWARE COMPANY
Grand Rapids, Michigan
Quality Leaders in Sash Hardware for 50 Years

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316—AIR FILTER EQUIPMENT—for all types of ventilating, air conditioning and heating systems is shown in the 1947 catalog of Air-Rectifiers, Inc., 3734 Southport Ave., Chicago 13, Ill. Descriptions of various kinds of ventilators are illustrated with technical drawings. Actual installations are also featured.

317—GLASS SHOWER DOORS—constructed of corrosion-resistant aluminum with mitred joints and patented adjustable jamb are effectively illustrated in a booklet available from the Shower Door Co., 973 Peachtree St. N.E., Atlanta 5, Ga. Various styles, colors and a variety of corner-cut patterns are pictured.

318—CHROME FIXTURES—The entire line of chrome plated aluminum household fixtures and accessories of the Camp Mfg. & Sales Co., Tacoma 2, Wash., is featured in an 8-page booklet. A variety of towel bars, soap dishes, shelves, and lavatory legs is illustrated and described.

319—WINDOW VENTILATORS—A pamphlet prepared by Watco Engineering Inc., Cleveland 13, Ohio, describes and illustrates at length the Winco ventilating window. Stock sizes and installation instructions are given.

320—PITTSBURGH DATA SHEET HANDBOOK—designed to answer all questions concerning the various glass, paint and metal products of the Pittsburgh Plate Glass Co. is being distributed by the Pittsburgh Plate Glass Co., 632 Duquesne Way, Pittsburgh, Pa. It is pocket size, with loose leaves. Individual sections are indexed for ready reference.

321—BUILT-UP ROOFS APPLIED COLD!—is the title of an informative booklet prepared by the Flintkote Co., 30 Rockefeller Plaza, New York 20, N.Y. Specifications of the eight types of cold process are given, together with step-by-step illustrations of the methods used. Typical installations are also shown.

322—ASPHALT TILE FLOORING—product of The Tile-Tex Co., Chicago Heights, Ill., is the subject of a colorful 16-page booklet. The product's wide color range is shown and specifications are given. It is used over wood, cement, and plywood floors.

323—WARM AIR HEATING—American-Standard’s General Catalog has just been released. It presents information about the complete line of warm air heating equipment including Sunbeam winter air conditioners, gravity furnaces, floor furnaces, and blower-filter units. Capacities and dimensions are given and the outstanding features of design and construction fully described. American-Standard, P.O. Box 1226, Pittsburgh, Pa.

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*Please note that occupation must be stated if full service is to be given.
Everybody

4222 PRISCILLA. Note self-adjusting latch mechanism.

4224 NEWPORT  4220 REGENCY  4221 PRINCESS  4773 CENTURY

Full-hand and knob pulls to match, in contrasting or matching colors.

LIKES THIS NEW CABINET HARDWARE

ARCHITECTS . . . because it offers beauty, practical utility.

BUILDERS . . . because they save time and money installing it.

DEALERS . . . because it is a clean, fast-moving line.

MRS. PUBLIC . . . because it's just what she has always wanted—in fact she helped design it.

THIS NEW STANLEY LINE is a 4-Way Winner. It appeals to everybody. It's a sure-fire line if there ever was one. Here's why—

A nation-wide consumer survey dictated the styling. Years of research produced the strong pressure-cast rust-proof alloys that guarantee lasting beauty. Careful engineering developed its numerous easy-installation features.

Standardize on this new Stanley Cabinet Hardware for BOTH new cabinets and replacements. It sells itself! Write for full information. The Stanley Works, New Britain, Conn.

STANLEY

Trade Mark

HARDWARE · HAND TOOLS · ELECTRIC TOOLS
Practical builders find this book very helpful when making alterations in a set of stock plans or drawing up a complete set of plans for a house or small building. The details shown in clear line drawings and in photographs conform with standardizations recommended by housing authorities wherever such have been established.

The chapters are in construction sequence and as such serve as a guide in detailing each step in the construction of a dwelling, from foundation to finish. Just enough description is included to explain general principles.

Many of the new materials such as plywood are shown in application. Various systems of pre-fabrication are shown in addition to traditional methods of house carpentry. Chapters on painting, wiring, insulation and sound proofing, and on heating and air conditioning show modern methods. Graphic and factual information from widely scattered sources is brought together and cross-indexed for quick reference.

Look over the table of contents below and see the wide scope of its information. Then send for a copy on our money back guarantee and give it a five days working tryout.

Contents

Floor Plans; Sets of House Plans—Excavations; Foundation Forms; Foundations—Sills; Girders; Joists; Sub-Flooring—Outside Walls—Inside Walls; Wall Sheathing; Ceiling Joists—Roof Construction; Bay Construction; Roofing—Cornices and Porches—Exterior Wall Construction—Interior Wall Coverings; Interior Trim—Stair Construction—Windows—Doors—Hardware—Closets; Shelves; Built-in Equipment—Finished Flooring—Chimneys and Fireplaces—Scaffolds—Garages—Wiring for Modern Homes—Insulation; Sound Proofing—Gates; Garden Furniture—Camps; Cabins; Cottages—Farm Buildings—Painting and Finishing—Modern Homes—Modern Building Materials—Heating; Air Conditioning—Pre-Fabrication.
A KOHLER bathroom means
first quality plus practical convenience

THIS bathroom shows how Kohler plumbing fixtures may be combined in a convenient, inviting arrangement for the home of average size. All the visual and practical advantages of Kohler quality are here—well-matched designs; clean cut lines; good proportions; lustrous, easily cleaned surfaces; and working parts that function smoothly and reliably. Homeowners know that Kohler quality means first quality—an investment that assures efficient health protection and adds permanent value to the home.

The Kohler fixtures illustrated are the Chesapeake vitreous china lavatory, with roomy basin, handy ledge and Centra fitting; and the Cosmopolitan Bench Bath, made with durable, gleaming enamel on time-tested, non-flexing cast iron, and equipped with the Triton shower mixer. The quiet, smooth-acting Wellworth closet completes this matched set.

Kohler quality is now a 74-year-old tradition, maintained through every step of production, which takes place in one great plant, under one supervision. Write for whatever additional information you need. Kohler Co., Dept. F, Kohler, Wisconsin.

KOHLER OF KOHLER
PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS
To meet the remarkable demand, J-M expands program
to supply you with American Colonial Asbestos Shingles—

"the most beautiful Asbestos Roofing Shingle
Johns-Manville has ever developed!"

We believe you will be pleased and encouraged to learn that J-M factory schedules provide for a great increase in the production of American Colonial Asbestos Shingles—the shingles that last 35 years PLUS. *

Because of their new beauty, attractive colors, and ease of application, demand for these improved, fireproof roofing shingles has grown tremendously.

The American Colonial is an outstanding Johns-Manville development. In fact, it is the most beautiful, economically priced asbestos roofing shingle J-M has ever developed.

Distinctive in appearance, with its horizontal shadow lines and deep grained texture... and permanent as stone... the American Colonial costs the homeowner less per year of service than any other roof.

Backed by the Johns-Manville name, these asbestos shingles are easier for you to sell. In a recent national survey, 83% of the people interviewed said they would be willing to pay a little more to make their home safer by using fireproof asbestos building materials, and of those who answered "yes", 66% named Johns-Manville as the manufacturer in whom they would have the greatest confidence.

This preference is being continually and increasingly developed by one of the most successful advertising campaigns in the building industry—the Johns-Manville Radio Program, "Bill Henry and the News."

Get the facts about American Colonials. Write for new full-color brochure, AS-85A, showing the many pleasing colors and blends. Johns-Manville, Box 290, New York 16, N.Y.

*YES, 35 YEARS PLUS—Thousands of J-M Asbestos Shingles have now been in service 35 years and more. They're still as fireproof, rotproof, and weatherproof as the day they were applied—show no signs of deterioration—no signs they won't last another 35 years or more! That's why we say American Colonial Asbestos Shingles last 35 years PLUS.
American Colonials last 35 years PLUS*
... and they're EASY TO APPLY

1. APPLIED LIKE ANY STRIP SHINGLE—
Each American Colonial is an asbestos strip, equivalent to 5 ordinary shingles.

2. SELF-SPACING FEATURE SAVES TIME
—Second course shingles are lined up by placing the shoulders over the points on the preceding course.

3. AUTOMATIC ALIGNMENT—No chalk lines necessary, no delays measuring courses. Any roofer could actually lay American Colonial Shingles blindfolded.

4. EASY TO HANDLE — Bundles weigh about the same as asphalt strips. Use only 80 pieces per square. Only 4 nails per shingle, in pre-punched holes.

5. EASILY APPLIED ON RIDGES—Special Hip and Ridge shingles supplied in exactly the same textured grain, the same beautiful, weathered appearance and colors as the main roof shingles.

6. CUTTER SPEEDS APPLICATION—When shingles must be cut to fit around valleys, dormers, along the rake, etc., a shingle cutter does the job easily, quickly—right on the roof.

"American Colonial" Asbestos Roofs
Scientifically prepared TRIMIX puts new speed and economy into concrete construction . . . overcomes uncertain human factors present on many construction jobs. TRIMIX is a multi-purpose admixture that has proved its efficiency in actual construction over a period of many years. Because of its exclusive features TRIMIX gives you a denser, richer mix plus these 11 important advantages:

1. Reduces Water-Cement Ratio.
2. Improves Workability of Mix.
3. Entails Air and Increases Resistance to Freezing and Thawing.
5. Increases Early Compressive Strength.
7. Produces Stable, Uniform Mixes.
8. Increases Resistance to Water and Erosion.
9. Reduces Bleeding and Laitance.
11. Aids Cold Weather Concrete Work.

TRIMIX is used extensively in all concrete work (ready-mixed, hand-mixed, Gunite process), stucco construction, mortar mixes, patching and maintenance, grouting, foundation walls and footings, floor construction, integral hardening of concrete surfaces, etc.

See SWEET's for further information, or for descriptive folder write Dept. BS.

Eleven Million
PresTile "Salesmen"!

TO MILLIONS of homes all over America — 11,674,703, to be exact — PresTile brings its message of beautiful, practical walls, quickly and inexpensively set up.

PresTile advertising appears in Better Homes & Gardens, American Home, House & Garden and Small Homes Guide. All of it is designed to make prospective home builders and remodelers familiar with PresTile advantages.

This means ready acceptance when you specify this tileboard of recognized quality!

To our Dealers: Much as we'd like to hurry up production of PresTile to meet the overwhelming demand, we will not skimp on quality and care needed to produce a better tileboard. However little you may receive, be assured it's the best that can be made.

PresTile Manufacturing Company
2860 Lincoln Avenue • Chicago 13, Illinois

SONNEBORN
"BUILDING SAVERS"

Floor Treatments • Waxes • Paints and Protective Coatings • Concrete and Mortar Admixtures • Waterproofing and Dampproofing • Caulking Compounds Roof Coatings

Building Products Division, L. SONNEBORN SONS, INC., New York 16, N. Y.
In the Southwest: Sonneborn Bros., Dallas 1, Texas
Another outside job has been taken over by the metal that has given permanent beauty to everything from kitchen sinks to building trim. Home owners are installing stainless steel screens for their windows, doors, and porches. They've found that the stainless steel screens do not stain any painted surface beneath them, though many times soaked by rain. And they resist denting and tearing, too. If you would like to keep informed about the many other uses for stainless steel in the home, ask to receive our monthly publication ELECTROMET REVIEW. Write to Department B-5.

ELECTRO METALLURGICAL COMPANY
Unit of Union Carbide and Carbon Corporation
30 East 42nd Street New York 17, N.Y.

PRODUCERS OF ALLOYS THAT MAKE STEEL STAINLESS

Beautiful Enduring Strong Tough
No. 80 Jr. "Over-the-Top" Door Equipment for openings 6' wide by 6'–6" to 7' high. For doors weighing up to 150 lbs.

Small doors or large, light doors or heavy, there is a size of "Over-the-Top" Door Equipment to handle them with ease. No matter what style of architecture the plans call for — whether the garage doors are single or double opening width, mill-made or built-on-the-job — doors can completely harmonize with the house design. An "automatic opener" makes opening effortless. A patented brake prevents slamming. "Over-the-Top" equipment has long been popular for remodeling because, with it, old doors can be quickly turned into a modern, efficient, over-head door. "Over-the-Top" type operation is available also in budget-saving units (with door and hardware complete). Write today for full information.

No. 912 "Over-the-Top" Equipment for doors 18' wide and up to 12' high, weighing up to 720 lbs.

Cotton Insulation is good soft fluffy cotton like you've used at home since babyhood— but flameproofed to make it amazingly fire-resistant. You could even wear Cotton Insulation next to your skin. Get the whole factual story of this miracle insulation, now being told to millions of magazine readers each month. It's ready for you in the illustrated folder listed below. Write for your copy now.

THE ABOVE ADVERTISEMENT WILL APPEAR IN MAY ISSUES OF Better Homes and Gardens House and Garden ALSO IN JUNE ISSUES OF American Home • House Beautiful

TOTAL CIRCULATION OVER 5¼ MILLION FREE! Send for your copy of the new folder "Cotton Insulation." It gives you many suggestions for dramatizing the powerful sales story of this amazing product. Address National Cotton Council, Box 18, Memphis, Tenn.
A Limited Number of
American Builder Subscriptions
Are Again Available!

NOW SERVES OVER 80,000 SUBSCRIBERS . . .

It is a pleasure to state that we are again in a position to accept a limited number of new subscriptions from those who are connected with the building field.

If you would like to have an up-to-date source of information covering the light construction industry—American Builder will give you the latest information on:

• new and improved products, materials and equipment
• new and more efficient methods of construction
• estimating • financing • land development
• and merchandising and selling

Also to be included in future monthly editions are:

• articles, designs and plans of homes, stores, motels, summer establishments, small town airplane hangars and roadside stands
• one complete blueprint in each issue—comprises a series of blueprints of modern homes
• Monthly Review of National Association of Home Builders
• American Builder Better Detail Plates
• Practical "How-To-Do-It" features

Be prepared for the progress ahead by sending us your order today.

PLEASE NOTE—
Kindly check your principal activity

Builders and Contractors:
[] Builders and Contractors specializing in Residential or Light Commercial or Light Industrial Building.
[] Contractors specializing in Heavy Building Construction.
[] Builders and Contractors engaged in both Residential or Light Commercial or Light Industrial Building and Heavy Building Construction, not specializing in either.
[] Contractors specializing in all types of Heavy Construction other than Buildings.
[] General Contractors engaged in Heavy Construction of both Buildings and other than Buildings, not specializing in either.
[] Special Trade Contractors, contracting for only such parts of Building Construction as carpentry, masonry, plumbing, roofing, heating, ventilating, electrical, painting, concrete and excavating.

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[] Wholesalers, Jobbers and Manufacturers' Agents of lumber, building materials and installed equipment.
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Type of Business

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NAME OF YOUR FIRM
Please indicate your position in the above named firm:

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For Windows that Float on a Cloud

**DUPLEX**
the only adjustable
FLAT SASH BALANCE

Windows equipped with Duplex adjustable sash balances glide smoothly and silently—without friction, binding or chatter—up or down. Duplex hung sash operate with unbelievable ease at the touch of a finger tip.

**WHY BUILDERS LIKE DUPLEX BALANCES**
Duplex adjustable sash balances are a big sales asset in any home, as you may have discovered. Yet they actually cost less than pulleys, weights and cords—and are quicker and easier to install because...

1. They need only a simple plank frame.
2. A good workman using Duplex Adjustable Balances can hang 65 to 75 windows a day when the sash have been fitted, or he can fit the sash and hang 30 to 35 a day.
3. Just two sizes meet 98% of all residential building needs—an important advantage which simplifies ordering, stocking, installing.

**CONSULT SWEET'S FILES — BUILDERS OR ARCHITECTS**
(Sold through jobbers and dealers only)

---

**Thanks JOBBERS and DEALERS**

Yes, you have done a fine job. Thousands of dealers all over the country have been very patient waiting for delivery of this profitable Cabinet Hardware line, and found their waiting was worth it!

The National Lock Company line is solidly backed by an extensive promotion campaign that enables you to sell this profit-packed merchandise easily and quickly. Write us today if you haven't already taken advantage of a booming sales opportunity.

To keep selling costs down is important to every merchant. Our handsome counter display boards are doing just that for dealers from coast-to-coast. Better get yours now!

---

628 No. La Peer Dr. Los Angeles 46, Calif.

Please send data on Duplex Sash Balances
Hey Mister!

Why use TWO when ONE will do?

NOW-SEAL AS YOU DECORATE
CONCRETE, STUCCO
AND MASONRY

Why waste money on high priced sealers when you can seal and beautify concrete, stucco, and masonry—all in one operation? You’ll get the job done faster, do it better, and at less cost by using Medusa Portland Cement Paint. It seals and beautifies—in one easy treatment.

TEN COLORS AT NO EXTRA COST:
It costs no more for color when you effectively seal masonry with Medusa Portland Cement Paint. This quality paint gives you a choice of ten rich, pleasing colors. Each provides an armor of protection for porous masonry—each gives long years of all-weather service.

EQUALLY EFFECTIVE INSIDE OR OUT:
You’ll find cement-based Medusa Paint is the perfect mate for concrete, stucco, and masonry surfaces. Its deep penetrating and permanent sealing characteristics make it equally effective inside or out—above or below grade. One paint does the job all around. It’s a time-saver—a money-saver—a business builder.

Use Medusa Paint once, and you’ll understand why thousands of painters, builders, and contractors have depended on its quality for 27 years. Why use two when one will do? Use Medusa Portland Cement Paint—it seals and beautifies in one easy operation.

Send for free illustrated booklet describing how to seal and decorate masonry in one easy operation. Ask for “Painting Concrete, Stucco, and Masonry”.

MEDUSA PRODUCTS DIVISION
of MEDUSA PORTLAND CEMENT COMPANY
1002 Midland Building • Dept. “J” • Cleveland 15, Ohio

Gentlemen: Please send me a free copy of “Painting Concrete, Stucco, and Masonry”.

Name ....................................................... (Please Print)
Address ...........................................................
City .......................................................... State ...........................................................
YOU ASKED FOR IT...

and HERE IT IS!

(CAT. NO. J-206-FW)

THE "IRELAND" UTILITY HOIST

Last November we asked the building trade "Can you use the 'Ireland' Utility Hoist as your 'Handy Andy' labor saver?"

The response was an overwhelming "You bet!"—from general contractors, masons, plasterers, roofers, plumbers, heating contractors and many others. They said: "It'll save time on a 'thousand and one' lifting and hauling jobs—hoisting and hauling all kinds of construction and mason's materials... plumbing, heating and roofing supplies."

P. S.—(It doesn’t require any expensive caging or accessory equipment, either.)

So—here is the hoist for your job. It's rugged, sturdy, yet easily portable. It only weighs 290 lbs.—Extremely flexible in use, it has been a proven time and labor saver since 1911. It operates with a 3 H. P. electric motor, gas engine or tractor... lifts 500 lbs. on a single line at 100 ft. per minute. And it costs less than $100.00, you furnish your own power.

How many uses do you have for an "Ireland" Utility Hoist? Write us at 547 Leed Street for illustrated folder describing a variety of uses, sending name of your dealer.

BENNETT-IRELAND INC.
Chartered in 1906
NORWICH, NEW YORK

Finally

A SAFE
GEAR TYPE
EASY TO OPERATE
SWING STAGE

SAF-T-SWING

The New

When the job calls for a swing stage, you can't own a better one than the new Safway Saf-T-Swing. It's the result of years of engineering research and experimentation. Here are a few of its features: Included with each Saf-T-Swing are two specially designed gear-type winches which permit it to be "cranked" either all the way up or all the way down merely by turning two easily accessible, easy-to-operate crank handles. The stage is held securely at any desired working level by an automatic braking mechanism incorporated into the winch design itself. This automatic brake mechanism is a positive guarantee against a sudden drop. The Saf-T-Swing is approved by the Underwriters' Laboratories which assures you a maximum of safety at all times.

FREE . . . Complete Details
Get complete information on the new Saf-T-Swing... including a diagramatic sketch showing the Saf-T-Winch in detail... by writing, at once, for Bulletin No. AB 547. Absolutely no obligation.

Distributors in Principal Cities

SAFETY STEEL PRODUCTS, INC.
MANUFACTURERS OF TUBULAR STEEL SCAFFOLDING AND EQUIPMENT
621E WEST STATE STREET MILWAUKEE 13, WISCONSIN
Thanks to scientific resin sealing, Wheeler Osgood Doors reach you in top-notch condition... ready to do a better job on the job! Just look at these advantages over non-sealed doors—

★ ASSURES SMOOTHER PAINT JOB!
★ INCREASES SCUFF RESISTANCE!
★ REDUCES HAIR CHECKING!
★ PROTECTS AGAINST DIRT!
★ REPELS MOISTURE!
★ COMPLETELY PRIME COATED—INCLUDING TOP AND BOTTOM!

Wheeler Osgood's resin sealing helps doors retain EXACT NET SIZE of original machining... controls grain raising and PROTECTS FACTORY-SANDED SURFACE... PROTECTS AGAINST DIRT, DUST AND SMUDGES... MINIMIZES HAIR CHECKING of panels and assures a uniform surface resulting in a BETTER, SMOOTHER PAINT OR STAIN JOB... imparts SCUFF RESISTANCE to protect door in handling... plus added advantage of having top and bottom of door sealed.

Automatic sprays, as pictured above, put a protective prime coating at high-quality tested resin sealer over every inch—top, bottom, ends and sides—of Wheeler Osgood Tru-sized Doors.

THE WHEELER, OSGOOD COMPANY
Plants and General Office: Tacoma 1, Washington

NEW YORK OFFICE 1226 Empire State Building, New York 1, New York Phone: Penn 6-2934
CHICAGO OFFICE 134 S. LaSalle Street, Chicago 2, Illinois Phone: State 5385-6-7
SAN FRANCISCO OFFICE 3015 19th Street, San Francisco, California Phone: Valencia 2141
LOS ANGELES OFFICE P.O. Box 7668 Del Valle Station, Los Angeles 15, California Phone: Vandike 6326
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INSL-COTTON
Gives plus Insulation because...

Every Fiber is an INSULATOR!

And...
Insl-Cotton Gives These PLUS Advantages
- Flame-proof and fire-retarding
- Easy to install
- Safe and harmless to handle
- Extremely light weight
- Odorless, repels vermin and rodents
- Never packs or settles
- Gains efficiency with age
- Government inspected and certified

The Originators of Flame-Proof, Fire-Retarding Cotton Insulation

Every fiber in Insl-Cotton is an insulator—because every fiber is hollow and filled with dead air. Most other types of insulation depend on dead air spaces between the fibers for insulation. Insl-Cotton has these—plus the great advantage of its additional millions of dead air spaces provided by its tiny hollow fibers. That means Insl-Cotton is all insulation—there is no waste material, making it more efficient and more economical. That's why, too, Insl-Cotton has a lower “K” factor (0.24) than any other type of insulation available today—it exceeds technical requirements for approved insulation in FHA, FPHA and HH-I-528 specifications.

*Certified The Government tests and certifies Insl-Cotton insulation. No other insulation except flame-proof, fire-retarding cotton insulation made under Government supervision can make this claim.

INSL-COTTON DIVISION
TAYLOR Bedding Mfg. Co.

IN GLASS BLOCK CONSTRUCTION
Be Wise and Ventilize with WINCO VENTILATORS

- and WINCO VENTILATING FANS

For homes, offices, and kitchens. Metal frame easily installed in 6” or 8” glass blocks, in openings of 1 or 4 block displacement, or in standard frame walls. Others for 9” to 13” brick walls. With a fan, motor, and automatic door switch.

WINCO VENTILATOR CO. INC.
1435 VERONICA AVE. • ST. LOUIS 15, Mo.
Dexter not only originated the tubular lock and latch, but was FIRST to develop it for screen and combination doors, and other narrow stile installations—thus greatly broadening the uses and "first choice" preference for Dexter Tubulars with builders, dealers, and owners.


Dexter Tubulars
first, too, for screen and combination doors

NATIONAL BRASS COMPANY, Mfrs.
Grand Rapids, Michigan

MAKERS OF BUILDERS, CABINET, SCREEN DOOR AND SHELF HARDWARE
NO GAS OR ELECTRICITY NEEDED

EVANS AUTOMATIC OIL-BURNING WATER HEATERS in 20, 30 and 45-gallon models offer you a profitable market today. They meet the demand for more and cheaper hot water in homes, beauty parlors, medical offices, etc. They’re fine appearing, high quality, quiet, clean, automatic. No gas or electric connection needed. Go after these profitable installations with EVANS. Literature on request.

and the Best AUTOMATIC OIL-BURNING GRAVITY FURNACE YOU’VE EVER SEEN!

Today’s—and tomorrow’s biggest furnace market for you is the medium and small-sized home where this EVANS Furnace fits like a glove. It is rated 70,000 B.T.U. and it delivers fast and steady as long as the thermostat calls for heat. Shipped in two packages which one man can handle easily. The furnace can be set up quickly. Handsome Corsican Red baked enamel cabinet. Simple pot-type burner with hi-lo flame. Automatic draft regulator for all-weather efficiency. Excellent economy. Fully approved. Write for complete details today.
FIR DOORS—Builders, and particularly those in the South, want to know where fir doors are going. Part of the answer is that three of the largest manufacturers have produced none since the war. Another part of the answer is low production of fir shop grades. Another part is confused distribution systems brought on by the war, and resulting in unequal distribution. A corollary to the last reason is that some fir doors are getting into the gray market.

DISTRIBUTION HEADACHES—A reputable manufacturer sold a carload of a scarce material to an established builder, supposedly for his own use. Sale was made in good faith. The carload turned up a thousand miles away from the purchaser's operation about a month later, and was offered for sale to builders in the new location by a gray market operator. Investigation showed that original purchaser had sold to gray market source for big profit.

THREE-WAY DEAL—Recently a carload of potatoes, a carload of toilet tissue, and a carload of doors figured in a three-way deal in which a builder eventually got the doors.

INSURANCE AGAINST WANT—An insurance salesman in a midwest city offered dealers and builders quantities of doors, windows, plywood, flooring and other scarce materials at a fancy price. It was reported that he got the materials from a prefab company which got them on priorities, then decided not to make any prefabs.

SALES CONTRACTS—These examples of leaks into the gray market indicate that it might be a good idea for manufacturers to protect themselves against harsh charges, and their customers against speculators' prices, by inserting in the sales contract a clause requiring buyer to use materials himself if a builder, or to sell only to builders having work under way, if a distributor.

DISTRIBUTION AIDS—NAHB local chapters which feel that their members are not getting fair share of distribution of materials might help producers by establishing the percentage of total construction under way in their cities. If city is getting one per cent of production and doing two per cent of total building, producer should be told.

BUILDING ECONOMICS—A lesson in housing economics is found in an announcement by FPFA that 164 temporary units for veterans in Elizabeth, N. J., cost an estimated $279,800. Average cost per unit was $1,450, as follows: demounting Army barracks, $238; transportation, $200; site improvements, $76; re-erection, $3406; other expenses, $530. This is the type of government agency that seeks to tell private builders how to build more economically.

THE SUBSIDY HOAX—Wyatt, holding subsidy payments to be the heart of the housing program he fostered, demanded 600 million dollars for subsidies, got 400 million over vigorous protest of manufacturers and other industry groups. Last month Frank Creedon, Housing Expediter, said his office needed only 65 million, gave 335 million back to the government, said that without subsidy payments building material production had reached an all-time high. Orchids—or at least a good cigar—to Mr. Creedon.

BRICKLAYERS KEEP BOOKS—Local 22 of the Bricklayers, Masons and Plasterers International Union of America (AFL) built a one-story house at 47 Courter Ave., N. Y., to get an answer to the question, "Can a veteran's home be built for $10,000?" Union found that a "substantial" home could not be built for less than $12,000. It is to be hoped that the Union also found some of the reasons why!

PUBLIC HOUSING ETHICS—Timed to coincide with the introduction of the new T-W-E omnibus housing measure, Washington, D. C., Citizens' Council for Community Planning held competition among amateur photographers to picture slum conditions in Washington. Awards totaled $350 in photographic supplies. Result: Columns of newspaper publicity plus a large collection of photos to prove "that private enterprise has failed." Makes as much sense as taking pictures in murderers' row to prove that Christianity has failed, but it does swing public opinion.
EVER THINK OF OPENING YOUR GARAGE DOOR BY SIMPLY PUSHING A BUTTON IN THE CAR?

BARBER-COLMAN
RADIO CONTROL for GARAGE DOOR OPERATORS

The elegant Mrs. Giltrox has a button to buzz for her butler, and the wealthy Mr. Giltrox has a battery of them for his staff of glamorous secretaries — but here is a button that plain Mrs. Bill Jones (and thousands of other Mrs. Joneses and Smiths and Browns) can have. It will bring these charming, hard-working, family-raising folks a sensational service and convenience — and at surprising low cost. It is the button in their car that they push to open the garage doors!

TIME-PROVED — DEPENDABLE
Barber-Colman developed the original model of the Radio Control for Garage Doors over twenty years ago. Through an important period of redesign, simplification, and improvement, the current Model C was evolved and introduced about ten years ago. Hundreds of satisfactory installations have been made, and further refinements added from time to time. Today you can buy this reliable, time-proved, trouble-free unit and count on it to perform properly and accurately for you through many years of satisfactory service.

UNDIVIDED RESPONSIBILITY — SINGLE SOURCE FOR DOORS AND OPERATORS
Another important feature — Barber-Colman makes not only the Radio Control, but also the doors (Barcol OVERdoors) and the Electric Door Operators. So, when planning a garage installation, you can get all the necessary elements from a single source. This means that one well-established firm will assume responsibility for proper construction, installation, operation, and service — a vital factor in the solution of today's home-building problems.

See our Catalog in Sweet's.

FACTORY-TRAINED SALES and SERVICE REPRESENTATIVES IN PRINCIPAL CITIES

BARBER-COLMAN COMPANY
104 MILL ST. • ROCKFORD, ILL.
The Monroe Street restaurant features new designs by Eppenstein and Schwab for the service counters, menu boards, drinking fountain, coffee urns and, for the first time in a Thompson restaurant, booths and wall seats.

The deep-spring seats are upholstered in genuine red leather. All service equipment is constructed of stainless steel, the chairs of aluminum.

A curved glass front enhances the wide, deep-set entrance. Walls of structural glass rise above the windows, and the sign, also of structural glass, is incorporated into the building design, rather than merely attached.

Other features in the design of the new unit include a red terrazzo floor, with a directional design, extending out to the sidewalk. The interior walls are paneled in primavera wood, coated with plastic. Large murals of tropical foliage decorate the walls. Ceilings are covered with sound-deadening material to minimize the usual noises dominant in restaurants. Recreational facilities for employees are in the basement.

Thompson's decision to vary the design of each unit in their chain, which is gaining in favor among chain operations, will mean a call for materials of a larger variety by operators who have a number of units to build or remodel.

Precision-built of service-tested materials. The walls are 14 B & 6 gauge aluminum alloy, finished white baked-on enamel. The receptor is of Armco Iron, one piece and vitreous porcelain enameled. Foot-grip, No-Slip floor surface, jet black with textured green sea shell pattern.

For the first time since the beginning of the war we are able to offer prompt shipment of a Weisway model. This Weisway Standard is available in two sizes without delay through established plumbing-channels. We suggest action now.
For better weather protection: for perfect window operation ... . . .

MASTER NO-DRAFT SASH BALANCE

GIVES SASH FINGER-TIP CONTROL
ELIMINATES WEIGHTS AND PULLEYS
PREVENTS BINDING AND STICKING
PROVIDES PERFECT WEATHER-STRIPPING

Here is the modern, patented and time-tested equipment which provides the most practical and economical protection and operation for double-hung windows. For any window, old or new, Master No-Draft Sash Balance can be installed quickly and easily for life-time service and satisfaction.

Properly tempered, correctly tensioned springs give upper and lower sash perfect balance. Metal housing, self-adjusting to the shrinking or swelling of the wood, provides metal runways for the sash that never need painting. They will not rust. They eliminate sticking, binding and rattling.

Master No-Draft Sash Balances act as a perfect weatherstrip for both sides of the window. For the top, bottom and meeting rail, Master cross strips are recommended as shown below.

For new, plank-frame windows or old box-frame windows of any size, save money, time and labor ... get the facts now about Master No-Draft Sash Balance. Use the coupon below.

MAIL THIS COUPON TODAY

MASTEC METAL STRIP SERVICE,
17720 N. Kilbourn Ave.,
Chicago, Ill.

Please send me, without obligation, complete information about Master No-Draft Sash Balance.

Name:________________________
Address:______________________
City:__________________________
State:________________________

(Continued to page 150)
For bigger profits, sell bigger heating installations. Factories, warehouses, and other industrial establishments. You'll sell them easier with J & C POWERATED Heaters because you can offer these 3-way savings:

- **1. Savings in initial installation costs.**
- **2. Savings in fuel costs.**
- **3. Savings in maintenance and repair costs.**

J & C PoweRated Heaters are available with 380,000 to 3,800,000 BTU output. Hence there is a single, trim, compact J & C PoweRated Heater to meet virtually every heating requirement. No multiple heaters, no complicated auxiliary equipment necessary.

- **1.** Savings in initial installation costs. J & C PoweRated Heaters are specifically designed for heating stores, apartment dwellings, and practically every other type of building as well as industrial processing. All have specified blower systems, all are readily adaptable to controlled humidification and year-round air-conditioning. Get complete facts from your distributor, or write direct.

A PRODUCT OF

JACKSON & CHURCH CO.

SAGINAW, MICHIGAN • WORK WELL DONE SINCE '01
Born with a 2000-year-old reputation...

EAGLE Ready-To-Use WHITE LEAD PAINT

Preferred painting material of American planners and builders since Thomas Jefferson’s day, white lead’s 2000-year-old reputation is still unmatched for durability, beauty and economy.

Now you can specify a new, convenient form of pure white lead. It’s more useful to your clients, easier to use for painters. We give you Eagle Ready-To-Use White Lead Paint, in gallon form, ready to open, stir and apply.

White lead protection that’s extra smooth!

This marvelous new Eagle-Picher paint brings you a new plus—greater brushability, greater smoothness—and until you try Eagle RTU yourself you cannot possibly know what we mean. It covers evenly, leaves practically no brush marks. Its flexible film clings fast despite wear and weather. It dries to a brilliant white gloss that doesn’t crack or scale, but chalks gradually, actually preparing the surface for eventual repainting.

Eagle Ready-To-Use White Lead Paint comes in two forms: Primer Sealer Coat and Outside White Finish Coat. One, two and five gallon pails. Made by a company with 103 years of experience. It is being made available as rapidly as possible.

THE EAGLE-PICHER COMPANY
Cincinnati, (1), Ohio
Member of the Lead Industries Association


(Continued from page 148)

The surfacing is bonded permanently to the plywood by “setting” or polymerizing the material in great presses that apply both heat and pressure. These are the same “hot presses” used in the manufacture of plywood as now produced. In bonding the surfacing as an integral part of the panel, the pressing time is less than five minutes or about the same as in the manufacture of plywood itself.

The two operations are soon to be combined for production efficiency.

Only exterior type plywood, bonded with completely waterproof adhesives, is utilized as a base and the high grade resin used as a binder in the surface likewise is waterproof. Accordingly,

CUTAWAY sample of newly-perfected “Welchboard” revealing construction of the improved plywood products for the industry.

the finished panel of Welchboard is suitable for outdoor as well as indoor use although it is intended to be painted or given other suitable finish. It will withstand repeated wettings, long-time soaking or even boiling.

There is no grain apparent in the surface of Welchboard inasmuch as the outer layer is comprised of the pulverized wood particles bound together as a homogeneous material. The surface completely masks the base panel, and may be applied to either or both sides of the panel.

For the present, officials of West Coast Plywood Co. plan to utilize only what is referred to as “clean waste” —sawdust, sander dust and other small wood particles which result from the manufacture of plywood after the veneer has been dried.

When eventually marketed, Welchboard will demand a price above that of quality grades of Douglas fir plywood, a differential in keeping with the added properties it gives the material in painting and finishing. Tests indicate the surface will take the place of two to four basic paint coats. Because the base of Welchboard is real Douglas fir plywood and the surface as well is wood fiber predominantly, the panel can be cut and fastened with ordinary carpentry tools.

Licensing of other plywood manufacturers to produce Welchboard will be handled by the Plywood Research Foundation of Tacoma, Wash., a non-profit research organization.
WE'RE GIVING YOUR CLIENTS IDEAS!

Take a look at these articles, in Better Homes & Gardens for May:

The Earth Can Heat Your House——
news about the pump that draws heat up out of the earth in the wintertime, pushes the heat into the ground in the summertime.

Is One Bedroom All You Need?——how to get a charming house in a 26-foot square.

Don't Let Moisture Rot Your Walls——telling your client what to do about it.

Informed clients with their minds pretty well made up on most of their problems are a big saving in time to you—and a wharf of a saving in possible misunderstandings and changes. Better Homes & Gardens educates your clients on a big scale every month of the year.
Plan to Include BREEZES

- Increase Sales Appeal
- Increase Your Profits

... with BAR-BROOK BREEZEBUILDER® FANS

While the plans are still on your drawing board, include cooling, flip-of-a-switch breezes in your homes—specify a Bar-Brook Breezebuilder® Attic Fan installation.

You’ll profit, because home buyers like the inexpensive cooling breezes made by this silent, dependable appliance during hot summer weather. It’s FHA approved for large or small homes.

Installation is simple and economical; operates for only a few pennies a day.

Write today for complete details and specifications!

BAR-BROOK FANS

BAR-BROOK BREEZEBUILDERS®

are available in 4 sizes:
B-36—36" 7,500 CFM
B-42—42" 10,500 CFM
B-48—48" 16,000 CFM
B-54—54" 18,000 CFM

The Bar-Brook Windo-Wind Window Fan. Ideal for small homes, apartments, offices. Suitable for permanent installation in many buildings.

BAR-BROOK MFG. CO., INC.
(Formerly Shreveport Engineering Company)
1553 Texas Avenue... Shreveport, La., U.S.A.
Interchangeable, chrome alloy liners
Replaceable manganese steel blades

Heavy duty, double row roller bearings

5 V belt drive - enclosed, 7½ hp motor

Adjustable door lock

Cut tooth, steel bull and pinion gear

Large, quick acting discharge door

These outstanding features, precision-built into Apple's LITTLE GIANT MIXER, make it the perfect mixer for concrete block production! It's another great LITTLE GIANT in the famous Apple tradition!

FOR PROFITS--BUILD QUALITY BLOCK APPLEY ALL THE WAY

J.W. APPLEY & SON
INCORPORATED
829-831 NINTH STREET, NORTH
ST. PETERSBURG 2, FLORIDA
There are so many features for 1 3/4" Paine Rezo doors that it is hard to determine which is most important. Pre-fitted to exact size, light-in-weight with clear flush surfaces that finish fast, they work wonders in trimming down installation time to less than half of that required by common panel doors. That applies whether you’re painting or staining. But this is only the beginning.

Paine Rezo doors do things for rooms, too. Entrance halls, stairways, dining rooms, bedrooms, kitchens, all appear more spacious, more livable when the smooth sweep of walls are complimented by the unbroken, flush surface of this harmonizing door. Other values you and the home-owner like, include a patented air-cell core that provides great strength while it minimizes shrinking, swelling, warping.

Because these advantages never fail, over two million Rezo doors are in service today, the choice of America's leading architects and building contractors. Ask your dealer for Paine Rezo doors*, or write for a factual builders bulletin.

*Because of production limitations, Rezo doors cannot yet be shipped to the Pacific Coast.

* James J. Nance

Work to Begin on Hotpoint Expansion Program

The multi-million dollar expansion program of Hotpoint, Inc., will get under way with the erection of a new range factory on Chicago’s west side, James J. Nance, recently elected president of Hotpoint, has announced.

This will give Hotpoint range factories in Chicago with a production capacity of 12,000 ranges weekly, and a total floor area of one million square feet. Work will be pushed as rapidly as possible, Mr. Nance said, to have the expanded facilities in operation by January, 1948. The site selected covers 38 acres.

Noting that sales records, however great, in the past for ranges and other

JAMES J. NANCE

major appliances would be "shattered by the vast market that the industry must meet," Nance said that Hotpoint was tooing up in machinery and personnel to defend its leadership on ranges, water heaters, and dishwasher sales, and "to build for the top position as the industry's complete electric kitchen manufacturers."

Plans to expand the production of water heaters, dishwashers, and other appliances in the company's complete kitchen and laundry lines will be announced, later, he stated.

Mr. Nance, in assuming the top position at Hotpoint, climaxises a climb in merchandising and management dating back to the early 20's, when he was with the National Cash Register Company. He joined General Motors at the time the Frigidaire was first put into production at Dayton, Ohio, and later was associated with the Easy Washing Machine Company and Zenith Radio Corporation. Prior to joining Hotpoint as executive vice president, he served on the staff of Charles E. Wilson, president of the General Electric Company.

The selection of Chicago as the location for the new plants was determined by its superior transportation facilities and ready accessibility to steel mills, Mr. Nance reported.

The outlook for materials, including sheet steel, was described as "the most favorable since reconversion, with recent moves practically underwriting 1947's extensive needs."
The First 3 steps to Baby’s new home.

So we took the double parlors in Mother’s old house.

For the new walls we used handy panels of fireproof Gold Bond gypsum board.

Decorating was a cinch with the new 3-hour Sunflex Paint.

I’m having my baby in Mother’s front parlor!

“What a panicky feeling when we realized that Bill Jr. was almost here... and still no place for the stork to leave him! And what a lucky break when Mother came to the rescue with her empty front parlor. A little quick planning and some easy-to-apply Gold Bond gypsum wallboard, and we have a beautiful new private apartment where we’ll be snug as three bugs in a rug!”

Maybe your housing problem can’t be solved quite so easily. But this remodeling job is typical of how Gold Bond products are putting waste space to work. Your local Gold Bond Dealer will be glad to offer you, without charge, practical suggestions for any modernizing work you may be planning.

But whether you’re moving into Mother’s parlor or building a dream home, research has created some wonderful things for you. Fireproof Gold Bond gypsum sheathing, for instance, in big panels that add weather-proofing and fire protection under the outside finish of your house whether you use clapboards, shingles, or brick. And at less cost than old-style sheathing! Inside walls and ceilings, too, will have greater strength and more lasting beauty if you use fireproof Gold Bond gypsum lath and plaster.

Heating will cost less, thanks to modern high-efficiency Gold Bond Rock Wool insulation that cuts fuel bills as much as 40% by holding furnace warmth inside. Keeps summer heat out, too. And incidentally, you can have it “blown” right into the walls and roof of your present home!

Remember, Gold Bond Building Products cost no more than ordinary products. Just tell your architect or builder, “I want Gold Bond!” Your local Gold Bond lumber and building material dealer can supply you with over 150 Gold Bond products, each engineered by research to help you build or remodel better. See him first! National Gypsum Company, Buffalo 2, N.Y.
Sell a
Complete home!

One Contract covers House, Land and Major Appliances

The National Life's "Packaged Mortgage" includes, under one contract, your prospective home-buyer's house, land and major new appliances — range, refrigerator, freezer, dish-washer, garbage-disposing sink, and home laundry equipment. He deals with only one lender, has no extra-big bills right at the start. What's more, this revolutionary new plan is actually less costly than conventional installment financing.

Hailed by architects, realtors, builders and buyers as the first real innovation in home-financing in years, National Life's "Packaged Mortgage" makes houses easier to buy... easier to sell.

Send coupon below for full details now.

NATIONAL LIFE
INSURANCE COMPANY

HOME OFFICE - VERMONT

A Mutual Company, founded in 1850, "Solid as the granite hills of Vermont"

--- CLIP AND MAIL THIS COUPON NOW ---

NATIONAL LIFE INSURANCE CO., DEPT. B-9, MONTPELIER, VT.

Please send me full information on your new, low-cost, all-inclusive plan for home-financing, and address of your nearest loan correspondent.

Name

Business or Home Address

--- See pages 4-5 ---
DIFFICULT MITERS — Left hand as well as conventional right hand miters are cut with ease. Simply turn the center pivoted track to the desired angle — if bevel miter is wanted merely tip the motor.

CROSS-CUTTING, RIPPING, DADOING, PLOUGHING AND OTHER OPERATIONS — A single MULTI-PLEX will perform almost any wood working operation quickly, accurately, safely.

DRILLING, ROUTING, CIRCULAR ROUTING, SHAPING, TENONING, PLANING, CARVING — These and many other added operations are possible with the drill press attachment available as optional equipment with the 30A and 40A saws.

CONTROLS — All controls on front of machine for safety and convenience — no dangerous space wasting overhanging parts. Speeds up output and lowers operating costs.

Write for further information and name of nearest dealer.

MULTIPLEX
Radial-Arm Saws

RED STAR PRODUCTS INC. 3455 VEGA AVE., CLEVELAND 13, OHIO U.S.A.
WHERE QUALITY IS IMPORTANT...
install RITE Surface Bolts. If it’s a matter of strength, you can secure RITE Surface Bolts with sliding rods up to ½” wide and up to 48” long. If it’s appearance that’s paramount, RITE hardware has a look about it of classic simplicity that fits with any architecture, old or new. Choice of 9 standard finishes, 4 types of strikes, 19 sizes, all of extruded brass.

RITE BALL LATCHES
Adjustable for shrinkage or warpage. Two sizes, small enough for cabinet doors, large enough for all standard doors.

RITE SLIDING DOOR HARDWARE
Includes Flush Pulls, Edge Pulls, and Jamb Bolts—all available in a number of styles and finishes.

RITE JAMB BOLTS
In two styles—of solid brass. Mount in rear stile of door to positively lock a door from inside only. Useful on windows.

QUALITY HARDWARE FOR NEARLY HALF A CENTURY
ADAMS-RITE MANUFACTURING CO.
540 WEST CHEVY CHASE DRIVE, GLENDALE 4, CALIFORNIA, U.S.A.

(Continued from page 156)

it has been one of the builder’s most serious headaches. He might plan a house to sell for $7,000, for example, only to find that when he finally got all his materials after several months delay his increased costs might run the price of the house up to $8,000 or more.

“The building industry has been seriously handicapped by this inability to determine costs, and this factor has, to some extent, been more of a deterrent to new construction than have high material prices. The builder has naturally tried to protect himself against increasing material costs by adding on a substantial sum to his original estimate to cover this contingency. Thus in many cases this uncertainty has undoubtedly resulted in higher prices to the home buyer.

“If the builder can be assured of a firm price on materials he will be in a much better position to make true and accurate cost estimates and adhere to them.”

When informed of E. L. Bruce Co.’s new price policy, Frank W. Cortright, executive vice president of the National Association of Home Builders, made this comment:

“Home construction is being priced out of the market in high cost areas because labor and materials costs are too high. Firm prices by manufacturers will reduce present contingencies and this step by the E. L. Bruce Co. is certainly a splendid move in the right direction.”

Double FOR THE MONEY
See pages 4-5
REDUCE SANDING TIME 
AND FINISHING COSTS

PORTABLE ELECTRIC SANDER

Sterling Sander quickly produces a smooth, uniform surface. Eliminates tedious hand sanding.

EASIER SANDING
Lightweight (only 8 lbs.) vibrationless and well-balanced, the Sterling Sander is easy to operate even in hard-to-reach places, on flat or curved surfaces.

$ANDS (Coarse or Fine) ON WOOD, COMPOSITION OR METAL

- For dry wall (plasterboard) construction
- For constructing and finishing built-in cabinets
- For smoothing plaster cracks and patches
- Sands doors, frames, sills, stair treads
- Sands undercoats, fillers, primers and finish coats.

WRITE FOR FOLDER

--- STERLING TOOL PRODUCTS CO., 370-D EAST OHIO STREET, Chicago 11, Illinois ---

--- STERLING SANDERS
PORTABLE ELECTRIC AND AIR-DRIVEN
AFTER 4 YEARS

LUMITE screens first installed on homes four years ago show not a trace of wear. Sills and side-walls are untouched by streaks. You know how “bleeding” from ordinary screens can mar the beauty of the homes you build. Specify LUMITE—it’s guaranteed never to rust or corrode in any weather or climate.

NEVER NEEDS PAINTING—LUMITE requires no painting or protective coating of any kind. Will not “rust out”—will never change color. LUMITE saves your clients money in the long run because it eliminates screen upkeep.

MORE DURABLE BY TEST—Tests prove LUMITE, made of Dow’s Saran, can’t be harmed by salt air, rain, sun, heat or cold. A year’s soaking in sulfuric acid failed to corrode LUMITE. A 5-pound steel weight couldn’t dent LUMITE in 42,300 blows. LUMITE has greater impact strength than metal!

Write for our A.I.A. 35P folder and free sample. Sold through Hardware and Lumber Dealers and Screen Manufacturers

LUMITE DIVISION
Chicopee Manufacturing Corporation
47 Worth Street, New York 13, N.Y.

LUMITE QUALITY INSECT SCREEN CLOTH

NEW WOODMASTER

HESTON & ANDERSON, Fairfield, Iowa, offer practically a complete woodworking shop in their new table. Light weight, with polished aluminum alloy top, it can be carried anywhere on the job and operated from any 110-220 volt, 60 cycle outlet.

Because the saw is pulled through the wood instead of pushing the wood through the saw, the table offers maximum safety. Another feature is the table center which separates, giving easy access to arbor. Depth of cut is quickly adjusted, saw blades and cutters easily changed, and the left side of the table can be lowered and accurately set to any angle for bevel crosscut, bevel rip and compound cutting operations. A sawdust shield protects all parts.

CONCRETE BUILDING PRODUCTS EQUIPMENT

Complete line of modern, low cost units, including:

- CONCRETE BRICK MACHINES
- CONCRETE BLOCK MACHINES
- BATCH MIXERS—12 cu. ft.
- UTILITY MIXERS—2½ cu. ft.
- CONVEYORS
- HOPPERS
- PALLETS
- CURING RACKS
- ELECTRIC HAMMERS
- "PACKAGED VIBRATION"

Immediate Delivery

For complete information and prices, check the items above that interest you, clip out and send us this ad.

R.S. Reed Corporation
OUTSIDE...INSIDE

Lightness...Beauty...Strength

THE "AERO"
ALL ALUMINUM GARAGE DOOR

Different from anything you've ever seen!

- The Aero door, because of its construction, the simplicity of its hardware and the fixtures accompanying it, can be accurately installed in approximately 30 minutes per opening one man. Almost the entire door is inside the garage when door is open.

This door is perhaps the finest made in this country, from the standpoint of appearance, strength, durability and additional ability to withstand normal operation as well as extraordinary conditions. The finest aircraft manufacturing techniques have been used in developing this door, and the engineering as well as its final operation leave little to be desired.

The nominal cost, impressive appearance and extremely well engineered sections of the Aero door have made it the first choice of architects, designers and discriminating homeowners wherever good building technique is of prime importance.

...
HomeOla Promotes Two

DIRECTORS of The HomeOla Corp., Chicago, announce the election of Robert J. Willis to the post of executive vice president, and of Jack Dietrich as vice president and general sales manager.

Mr. Willis is one of the original founders of HomeOla. Under his leadership, in 1946, the company shipped over one thousand HomeOla houses into twenty-six states, and a national dealer organization developed.

Mr. Dietrich has been director of purchasing since the organization of the company. He was a retail lumber dealer and residential building contractor before serving in the North African theater as first lieutenant, Army Air Corps.

In building, as in every industry, any tool that makes the most of the user's skill is a money-maker. Stanley Tools are famous for this—correctly designed—well-balanced—durable.

Stanley No. 51½ Nail Hammer is a prime example: head is drop forged from selected steel, heat treated and hardened for toughness. The face has a two-degree toe-in to meet nail squarely. Seasoned, young hickory handles are treated to prevent shrinking or swelling and are permanently wedged into the tapered eye.

To make the most of your skill, buy Stanley Tools. Stanley Tools, 133 Elm Street, New Britain, Conn.
Their forefathers built homes of wood—the building material of the ages. And today, this young couple is secure in the knowledge that wood is a better building material than ever! NDMA standards of toxic preservation for woodwork such as doors, screens and windows have helped to make it so—have added further assurance of lasting value to wood's natural qualities of endurance.

NDMA Toxic Preservative Standards are backed by the integrity of a great industry—and by the utmost resources of science. Behind the NDMA seal of approval stand the six measures which this non-profit organization maintains in the public interest.

1. An efficient test for measuring effectiveness of toxic preservatives.
2. Minimum standards governing the toxic preservative treating of woodwork products.
3. A seal identifying products treated in conformity with NDMA Toxic Preservative Standards.
5. Laboratory check-tests of preservative solutions.
6. Educational effort in the public interest.

THE OHIO HYDRATE & SUPPLY CO.
WOODVILLE, OHIO

for Better
PLASTERED WALLS AND CEILINGS

There are no finer finishing limes than the original Ohio White Finish and its famous twin, Hawk Spread. Both are scientifically processed from rock quarried from the heart of the world's purest deposit of dolomitic limestone... Both are always fresh, work cool, spread far.

- For your protection both brands are always packed marked with distinctive Red Zig Zag Stripes.
If You
INSULATE
You Must
VENTILATE
To Avoid Condensation
When You
Ventilate
Install
Arr-O-Line Louvers
and You Install the Best!

Your customer will be better satisfied if you install Arr-O-Line, and you can sell at least two on every job! Materials are rustproof, acid resisting and corrosion proof. Face frame is Masonite Plywood, no seams, spot-welded, rivets or screws. Well screened, dipped and sprayed, neutral gray finish. Arr-O-Line gives unobstructed air travel, and their construction allows for expansion.

Standard
Arr-O-Line
Louvers
are good for the life of any standard building. Can be installed from the inside. Made in 11 sizes.

Special
Arr-O-Line
Louvers
These louvers are especially designed for new construction. They make a neat job—no exposed nails—and are easy to install. Just remove louver, nail frame to sheathing, replace louver, and the job is done!

Holland and Graebner
Promoted by Masonite

EUGENE HOLLAND, president of the Masonite Corp., has announced the appointment of Earl W. Hadland as manager of dealer sales, and of Elmer R. Graebner to succeed Hadland as manager of the Chicago Division of the Masonite Corp.

In announcing these changes, Mr. Holland said, "The appointment of a manager of dealer sales ties in with our sales policy announced last year. We have developed a more closely knit sales organization through a program of decentralization of control which will enable our representatives to better serve our customers. We are doubling our efforts to make up, through service, for any inconveniences our customers may be encountering as the result of the unprecedented demand for Masonite brand products."

* * *

Landscape Architects

GABRIEL C. HARMAN and Robert M. O'Donnell have opened offices at 628 Fifteenth St., Denver 2, Colo., for the practice of landscape architecture and land planning.

Their services include consultation, plans, and reports on the development of residential subdivisions, shopping centers, garden apartment sites, institutional grounds, parks and town planning.

Mr. Harman, who is well known nationally as a land planner, has appeared on NAHB panels.

Western Kitchen Ventilators
IMMEDIATE DELIVERY
The Builders Favorite for Twenty Years

DELUXE MODEL
125,000 now in use
PRE-WAR QUALITY
All exposed parts heavily chromed.
EASY TO INSTALL
Western Appliance, Inc.
5650 Grand River Ave., DETROIT 8, MICH.

Monsanto
CHEMICALS and PLASTICS
SERVING INDUSTRY WHICH SERVES MANKIND

GALS PLASTICS

REZ makes fine wood finishing easier... quicker... more economical

This ready-to-use amber-clear sealer and primer protects floors, doors, sash, millwork, and plywood. It is a synthetic resin, especially formulated to penetrate the wood fibers—leaves a tough resinous deposit, thereby minimizing moisture absorption, grain raise and decay. Also, it acts to assure dimensional stability.

Rez provides an ideal base for any type of finish—paint, stain, varnish.

See Your Dealer or Jobber
If Rez is new to you, or if you want current supply information on this easy-to-apply, quick-drying sealer and primer, see your dealer or jobber today. MONSANTO CHEMICAL COMPANY, Western Division, Seattle, Wash... District Sales Offices: Los Angeles, San Francisco, Portsmouth, Va.


NOW THAT it is more important than ever to save on labor wherever you CAN, why not start right at the foundation... Use Atlas SPEED Forms—the all-steel forms that are easy to set and strip with wedge bolts and clips—a hammer is the only tool needed. Interchangeable for use on walls or floors. No studs, joists or heavy bracing needed.

ATLAS LABOR-SAVING SPEED FORMS

LOW APPLIED COST — NO WASTE!

No batten strips...no rips...no tears...no time lost — that's the reason why Sisalkraft matches all other building papers in low applied cost. Whether it's a cottage or a mansion, Sisalkraft gives every home an extra measure of protection against moisture, wind, dirt and dust.

The SISALKRAFT Co., 205 W. Wacker Drive, Chicago 6, Ill.

Manufacturers of Sisalkraft for sheathing, Copper Armor Sisalkraft for all concealed flashing, Sisalation for reflective insulation and moisture barrier.
Hewitt Named General Sales Manager of Mueller Furnace

HAROLD P. MUELLER, president of the L. J. Mueller Furnace Co., Milwaukee, Wis., has announced the appointment of C. L. Hewitt, Jr., as general sales manager.

Mr. Hewitt, who returns to the company after an absence of nearly five years, was, prior to that time, eastern sales manager of the company for over twenty years. For the past year he had been associated with the Rheeem Manufacturing Co. as manager of sales.

A veteran of both wars, Mr. Hewitt as colonel in the Army Air Forces, commanded an Air Service Group on Saipan with the 73rd Wing, famous for its B-29 raids on Japan.

C. L. HEWITT, JR.

Universal Lifetime Vitreous China Sinks are now in their sixth year of ever-increasing popularity. Over three-quarter million housewives have approved their distinctive advantages —features which mean so much in the appeal of the homes you build:

- Acid and Alkali Proof
- Stain and Rust Proof
- Will not discolor or chip
- Tough resistance to shock
- Retains lustrous finish for a lifetime!

UNIVERSAL SANITARY MFG. CO.
New Castle, Pa.
Camden, N. J. Redlands, Cal.

OWNER MANAGEMENT
Guarantees the true spirit of Hospitality
...it always prevails in every perfect detail of the service and atmosphere you’ll enjoy at

The Drake
Chicago

Edwin L. Brashears
PRESIDENT

IMMEDIATELY AVAILABLE
For All Types of Fire-Safe Building. For small homes, apartments, schools, hospitals, or any type of commercial or industrial buildings, the Lith-I-Bar system will provide greater speed, simplicity, minimum in field work, therefore economy.

Lith-I-Bar method utilizes the exclusive I-Bar machine made and the exclusive Lith-I-Bar method of electrically welded reinforcing. Wide range of sizes and lengths up to 36 feet.

Wire, write or call today for location of your nearest licensed manufacturer.

GET THIS FREE LITH-I-BAR CO.
BOX 810A HOLLAND, MICH
Has Everything You Want—In a Power Saw

It's Portable

Easily carried by two men—weighs only 340 pounds. Gasoline engine provides power for operation in localities where electric service is not available. Electric motor available if desired.

Has Speed

The rotating table gives this saw unusual speed for changing cutting angles. Saw soon pays for itself from savings in time and labor.

Makes All Cuts

Will make cross, rip and miter cuts, tenons, grooves and rabbets. Twelve-inch blade rips 4" deep and 40" wide and cross-cuts a 3" x 12" or 4" x 4".

Nordberg-Buday Portable Power Saw

NORDBERG MFG. CO., MILWAUKEE 7, WIS.


This new saw fills a long-felt need for a speedy, really portable, money-saving power saw for lumber cutting operations. If you are looking for a saw better adapted to your needs, investigate the merits of the Nordberg-Buday Saw. Write for Bulletin 132.

Nordberg-Buday Portable Power Saw

NORDBERG MFG. CO., MILWAUKEE 7, WIS.

FOR ANY TYPE ROOF

PRIMED FOR PAINTING

DOUBLE IS 1-PC CONSTRUCTION

MECHANISM MOUNTS ON JAMB

THE BETTER DOOR YOU HAVE WAITED FOR

Arrow-Craft

ALL-STEEL, WELDED CONSTRUCTION

NOW AVAILABLE FOR NATIONAL DISTRIBUTION

Sets a new standard to judge all garage doors by. Arrow-Craft doors have trim beauty that "makes" the garage, backed up by rigid truss construction. The mechanism mounts flush on the jamb for both high and low ceilings making them practical for any type of garage and providing for finger lift operation. Distortion and twisting resulting from wind whip are avoided because they recede into the ceiling where they are protected. Thousands of new and replacement installations prove freedom from service problems and high owner satisfaction.

70: ARROW-CRAFT MACHINE CO.
9071 SOTEPEL AVE., DETROIT 4, MICH.
We are interested in a distributorship on the Arrow-Craft door. Please forward details.
FIRM.
STREET.
CITY STATE.
BY.
Contractor Combines Appliance Business

(Continued from page 113)
cerns. Asserting that a “family” of mechanics is the first requisite in efficient remodeling work, he said that he planned to have enough kitchen remodeling to keep several crews busy the year 'round. He will proceed as follows:
In his new building at 2853 Parke Avenue he has installed a meeting room where builders and appliance dealers can meet. He will supply appliances to builders, with or without installation service, and he will offer installation service to appliance dealers.
The Carlson firm is among the few building concerns that will offer women consumers home economic advice on the use of modern equipment. For this service he has installed an auditorium in the basement of the new building. Also, electric commercial cooking equipment will be on display with a course of instruction for heads of home economic service in schools, hospitals and commercial cooking establishments.
A staunch believer in the “complete” home, Mr. Carlson says that the justification of a good contractor today is in how much he can deliver to a customer—not how cheaply he can do it. Each piece of added equipment should be part of the real estate and
(Continued to page 170)
Weatherproof

HOMASOTE

for DURABILITY and APPEARANCE

Over the past 30 years, letters from hundreds of home owners have repeatedly testified... Homasote keeps its structural strength, keeps its insulating efficiency, keeps its fine appearance. This performance record is made possible by the fact that Homasote is in every way a quality product... a product combining great structural strength and high insulating value in one material.

The big sheets of Homasote (up to 8' x 14') add to appearance by eliminating unsightly wall joints and batten strips. Again for good looks—Homasote has a pleasing texture; provides a perfect base for paint or wallpaper. And it is permanently crackproof, too.

For extra strength—as well as insulation—use Homasote for interior and exterior walls, for roof and sidewall sheathing, for subflooring and ceilings. You make a contribution of permanent value to any structure when you select Homasote for modernization or new construction.

We invite architects and builders to send for a copy of our new booklet describing some of the many uses for weatherproof Homasote. The book gives physical characteristics, performance charts, specification data and application instructions. Write for your copy today.

HOMASOTE COMPANY, Trenton 3, N. J.

---

Door Hanging Problems?

... Not when you use STANLEY-CARTER EQUIPMENT!

Door hanging ceases to be a problem when you equip yourself with Stanley-Carter Electric Tools. You can hang doors in a fraction of the time necessary with hand tools... and do the work better and more accurately.

For fitting, the powerful, 18,000 R.P.M. Carter J-5 Plane gives you smooth edges and bevels. Cuts equally well with or against the grain.

For hinges and lock faceplates, a Carter Hinge Butt Router with T3 and T1 templates makes perfect mortises every time in a matter of seconds. The Carter Lock Mortiser—lightest one on the market—cuts clean lock mortises in 30 seconds per mortise.

Write for full information on these proven time savers. Stanley Electric Tools, Stanley-Carter Sales Department, New Britain, Connecticut.

Carter J-5 Power Plane. Fully adjustable for straight or bevel cuts up to 45°. Cuts paper thin or up to 3/16". Mounted in bench bracket it becomes a high speed joiner.

Hinge Butt Router HB4A. With door and jamb template this 3/8 HP 18,000 R.P.M. router can mortise 75 doors and jambs a day, accurately. No shimming or recutting. Also used with lock face template.

Lock Mortiser. Simple, self-centering adjustments quickly adapt for all doors and locks. Height rod permits succeeding doors to be mortised without further adjustment.

STANLEY

Hardware - Hand Tools - Electric Tools
Vapor Condensation

but RUINOUS
WITHIN WALLS

When moisture vapor "streamed up" windows it does no harm, but if it condenses within building walls it can be a four-way evil. Yes, "in-wall" condensation can make insulation soggy and inefficient, cause wall stains, paint peeling—even structure rot. One sure way to beat this building bugaboo is with a separate vapor barrier. Standard with architects everywhere is Bird Neponset Black Vapor Barrier. Applied on the warm side of insulation, Bird Neponset Black repels vapor, keeps insulation at peak efficiency, ends all other "in-wall" condensation evils. Only about $20 buys life-long protection for a $10,000 building. Specify the standard—Bird Neponset Black Vapor Barrier. See Sweet's Architectural file, 9b-2, or write for sample to Bird & Son, Inc., 171 Wash. St., East Walpole, Mass.

(Continued from page 168)

should be financed under the original mortgage, he believes.

"We saw a period when few young folks were interested in establishing themselves in their own homes, a condition that resulted in diminishing new home construction and lowering valuations on all real estate. Now the nation has re-awakened to the fact that one's own home is a fundamental part of American life. We must make every effort to give them homes that they will enjoy living in and that they can afford to own," Mr. Carlson said.

In addition to the profit opportunity that Carlson sees in the complete kitchen business, he views his prominent retail store as a trademark that will attract home seekers for his contracting business. He said that all-electric kitchen customers will bring him his new construction business, and new homes will be the principal outlet for his kitchens.

* * *

Washington Builders Developing Community—
(Continued from page 95)

furnace, automatic gas-fired hot water heater, gas range and electric refrigerator. Oak flooring is used throughout except in bathrooms, where floors and walls are tiled, and in kitchens where the floor is covered with linoleum. Steel casements are used in all window areas, placed to insure maximum light and ventilation.

As a result of Clipper Blower consumer advertising more than 20,000 housewives asked about the Clipper last year.

These patented small room ventilators are specially designed for kitchens, bathrooms, dens or any small room. They are mounted in the ceiling between joists and vented outside—they trap and expel unwanted air, heat and odors the instant they rise.

Unlike other equipment, the Clipper is a complete packaged ventilator with the motor entirely removed from the air stream. This means greater efficiency longer life and easier servicing.

Available through leading electrical dealers everywhere. Write us for Bulletin 660-B just off the press.

The Clipper is hidden in the ceiling with only an inconspicuous "dippler" ceiling grille visible. Motor and blower instantly removed without tools for service.
Sager "Artists in Metal" have preserved in imperishable brass and bronze the spirit of classic design. Yet, with master craftsmanship, they have provided generously for the practical aspects of fine Builders Hardware: strength and durability, ease of installing—and, of course, dependable operation. Such is the basis of enduring charm, of sound satisfaction... for both home-owner and builder alike.

Rilco Buildings
Look Better - Are Stronger

- Rilco glued laminated trusses, arches and tied rafters are widely used in airplane hangars, warehouses, stores, garages, factories and dairy barns.

Wherever wide post-free spans and economical construction are desired, Rilco framing offers unusual value.

Rilco glued laminated framing is four times stronger than arches or rafters that are nailed. Rilco framing is engineered for great load bearing strength and wind resistance.

It's no wonder that more and more new commercial structures are being built the Rilco way. Rilco framing makes buildings that are modern and attractive in appearance—strong—easy to erect. There's a Rilco Rafter for every type of building.

Rilco Laminated Products, Inc.
A Weyerhaeuser Institution
1667 First National Bank Building • St. Paul 1, Minnesota
MODERN KITCHENS SELL MODERN HOMES

Guiberson STEEL CABINETS WITH FORMICA TOPS HAVE HIGH-QUALITY SALES APPEAL

That all-important room, the kitchen, is the heart of the modern home, and that's why Guiberson steel cabinets are such a big factor in the sale of any home. Their beauty, durability and utility have an appeal that will sell the homemaker. Made of steel to last a lifetime, handsomely styled Guiberson cabinets are finished in baked-on white enamel for enduring beauty. They have long-lasting Formica tops and incorporate many exclusive features to please the homemaker. Installation is simple, fast, and requires no high-priced labor. With Guiberson cabinets in your plans, the kitchen will sell the home.

MATCHED UNITS FOR MANY COMBINATIONS

The popular Guiberson Sink Cabinet, made of extra heavy sheet steel with Formica tops and precision roller bearings for drawers and shelves. Flat, durable hardware and heavy insulated drawer and door fronts.

SEE THE NEAREST GUIBERSON DISTRIBUTOR OR WRITE TO

THE GUIBERSON CORPORATION P.O. BOX 1106 DALLAS, TEXAS

With Western Pines, distinctive beauty can be economically achieved throughout the house. And long after these soft-textured, fine-grained woods have been shaped into charming exteriors, clear or knotty pine paneled walls, fine woodwork and cabinets, they delight the home owner and do credit to the architect and builder who recommended them.

All over the nation, architects and builders specify and use Western Pines with confidence for both exteriors and interiors of homes. For these fine woods are well manufactured, thoroughly seasoned, and rigidly graded.

HELPFUL LITERATURE—FREE!

Do you want ideas and detailed information for using Western Pines for interiors? Just send us a postcard requesting the following literature free:

"Beautiful Paneled Walls of Genuine White Pine"
"Treatments for Finishing Knotty Pine Paneled Walls"
"Bunk Bedroom Details"

Address—Western Pine Association, Dept 7B, Yeon Building, Portland 4, Oregon.

*Idaho White Pine *Ponderosa Pine *Sugar Pine

THESE ARE THE WESTERN PINES

Well-manufactured—thoroughly seasoned—rigidly graded—by all Association member mills
CONTRACTORS and BUILDERS
Start the New Year right
with
THOROSEAL

THOROSEAL fills and seals cracks and all other defects in the surface, equalizes the absorption of each individual unit comprising the surface without checking or cracking.

The surface of any type of old or new stucco walls, manufactured block, brick or tile can be waterproofed and protected with THOROSEAL.

Contractors, homeowners and every type building owner have water problems, wet basements and defective exterior walls, which need sealing and protection.

An example of disintegrated stucco surface on an otherwise well-built home and how the stucco was sealed, waterproofed and interior of home made dry with one heavy application of THOROSEAL.

The above photograph shows the same stucco home after it received one heavy application of THOROSEAL, which, after being applied for one year, shows no leakage or dampness on the interior of the building.

Finish coat of SNOW WHITE QUICKSEAL will be applied during 1947.

Have your local lumber or building supply dealer order for you.

Standard Dry Wall Products, Inc.
BOX X
NEW EAGLE, PENNA.
If completion of your jobs is being slowed down by scarce materials—get in touch with your Tile-Tex Asphalt Tile Contractor. He is equipped to offer fast, expert installation of a flooring material that's perfect for new home, store, office—and many other types of construction.

Tile-Tex is made to give exceptional wear; and delivers long years of service. It's available in a wide range of smart, attractive colors and patterns to permit greatest possible design freedom. We will gladly send you the name of the Tile-Tex Contractor in your area, plus a copy of "Floors That Endure." Write The Tile-Tex Company, Inc., Chicago Heights, Illinois.

SHIELD TILE-TEX

TILE-TEX
ASPHALT TILE

Hydrotalm

Automatic Gas Fired
Central Heating Plant
for Hot Water Heated Homes

MORE heat
from
LESS space

SMALL
in size....

MIGHTY
in performance!

- Long-life cast iron construction
- Lightweight, easy installation
- Highly efficient patented design
- Ideal for panel and radiant heating
- Approved by American Gas Association
- Space-saver in basement, playroom

Write for new descriptive booklet AM-5

Hook & Ackerman, Inc.
18 East 41st Street, New York, N.Y.
GREATER SALES POSSIBILITIES WITH WRIGHT FLOORS

The ever increasing demand for Wrightflor brings an ever increasing opportunity for sales and profits to Wright dealers. And now, as an added help, we announce the resumption of the manufacture of Wrightex, a rubber tile of softer surface, that will round out your rubber tile flooring department—provide you with greater sales and profit possibilities.

WRIGHTFLOR—A superior quality rubber tile that has become an outstanding leader... noted for its unusually long wearing qualities. Because of its many built-in features, Wrightflor has an exceptionally wide market... it is flexible... will not dent or chip... is highly resistant to grease, acids, stains and fire... its colors go all the way through. Another important quality of Wrightflor is its dense, hard surface that reduces the time and cost of cleaning and maintenance to a minimum.

WRIGHTTEX—A quality rubber tile that has been proved by years of actual use. Wrightex possesses all the long wearing characteristics of Wrightflor— but its softer surface has a special appeal to those who desire a more resilient flooring.

Both Wrightflor and Wrightex are now available in 1/8" and 3/16" thickness—and in a wide range of colors that can be arranged in individual patterns. These two quality rubber tile floorings will meet your every flooring demand. Write for complete details, prices, colors.

TAYLOR MANUFACTURING CO.
Wright Rubber Products Division
3050 W. MEINECKE AVENUE • MILWAUKEE 10, WIS.

WRIGHT RUBBER TILE
Flooring of Distinction.
SAVE CUTTING DAYS
3 WAYS
Using VERSATILE FRED W. WAPPAT PORTABLE ELECTRIC HAND SAWs

PRACTICAL DESIGN. Fred W. Wappat saws are over-powered for fast cutting, yet give thorough operator protection. Their light weight, even balance permit fatigue-free one hand operation—more of the awkward cutting jobs are done quickly. Blower keeps cutting line always visible at the blade, sawdust being kept from operator's eyes by a guard—cuts can always be accurate to the layout and the job done right the first time. Both models feature the famous Fred W. Wappat telescoping blade guard.

MANY USES ON THE JOB. Fred W. Wappat saws operate perfectly in any position, save time by trimming wall or roof sheathing already in place. They can be hung upside down for ripping or, fitted with suitable blades, can cut light gauge metals, stone, brick, tile, cement block, etc.—no need to take the tough or unusual cutting jobs away from the scene of the work.

DEPENDABLE—DAY IN, DAY OUT. Off-the-work repair time and general maintenance is minimized. The special Fred W. Wappat-designed gears are produced under rigid standards. Permanently-lubricated motors are kept cool-running by turbine-driven air currents. All mechanical parts are easily accessible, are lubricated from a single point. Write today for free literature. And if you have a chance, talk to a user of Fred W. Wappat Portable Electric Hand Saws.

FRED W. WAPPAT • 135 Valley St. • MAYVILLE, N.Y. On Chautauqua Lake.
When Trouble Hits the Ceiling

Water vapor condensing on roof members causes trouble aplenty if building materials used there can't stand moisture. Upkeep costs skyrocket.

Use Wolmanized Lumber* and another of your worries disappears. It's standard structural lumber, pressure-impregnated with Wolman Salts* preservative, making it highly resistant to decay that's fostered by the presence of moisture.

FOR FLOORS, TOO

You head off decay, reduce maintenance costs, by setting your floor on Wolmanized Lumber subflooring and nailers.

Wolmanized Lumber gives the builder all of wood's advantages—speed of erection, light weight, resilience, high insulating value, paintability, low first cost—plus long life.

AMERICAN LUMBER & TREATING COMPANY

COMETS BOOST Profits

Comets save on all wood cutting operations. They save in time, in accuracy and by reason of their versatility. They save in their amazingly rugged field performance. On hundreds of big jobs Comets are worked around the clock, weeks in succession. Indeed, such service boosts profits, wins friends, builds demand. Comets are the saws to own. Order from your dealer or write direct.
New Wage Increase Demands Curb Long Island Home Building

WITH labor wage increase demands running as high as 69 per cent greater than rates prevailing less than 18 months ago, optimistic expectations of an increased volume of housing construction in the Long Island area are being revised downward by members of the Long Island Home Builders Institute, according to O. J. Hartwig, executive secretary.

Major trades demanding increases which will affect construction costs are:

Plasterers: An increase from $2.25 to $3.00 per hour, plus 6 paid non-working holidays a year, and a continuance of a 6-hour day, 30-hour week.

Plasterers Tenders: An increase from $1.76-2/3 to $2.50 per hour, plus 6 paid, non-working holidays; continuance of 6-hour day.

Painters: An increase from $1.85 to $2.50 per hour; plus 3 per cent payroll tax for insurance fund; plus a demand that working hours be reduced from 7 to 6 hours daily.

Laborers: Increase from $1.46-3/7 to $1.75 per hour.

Carpenters: Increase from $2.10 to $2.50 per hour.

Lathers: Increase from $2.16-2/3 to $2.50 per hour. Notice of increase received February 11th; increase to become effective February 17th; payable retroactively to January 15th.

These new wage rates coupled with current labor conditions, productivity, and a shorter work week will price homes out of the market, the members believe. Accordingly, construction plans for veterans' and other housing are being drastically curtailed, and in many cases completely abandoned.

Among the factors on which the builders base their views is the low productivity of on-site construction labor. Last year the yield from this group was from 50 to 66-2/3 per cent that of standard production in prewar years. The result was increased costs. Since conditions (Continued to page 180)

JOHNSON OIL BURNERS bring HEATING costs down!

In hotels, hospitals, factories, office buildings all over the world, Johnson Oil Burners are producing smaller fuel bills, lower maintenance costs, and wage savings. For 44 years, our pre-eminence in the field of heavy-duty heating has grown steadily. Ask your heating engineer to tell you how Johnson Burners can cut heating costs for you.

P.S.—If you are engaged in house building or planning you should know about our completely packaged house-heating units and our water heaters. There's a size and type for every need. May we send you further information?

JOHNSON OIL BURNERS
S. T. JOHNSON CO.
940 Arlington Ave., Oakland 8, Calif.
401 No. Broad St., Philadelphia 8, Pa.
YOU BUILD TODAY

THE OWNER BUYS FOR TOMORROW

Blo-Fan Ceiling Ventilation adds very little to the cost of a house—but it makes a whale of a difference in the value of a home.

For real "plus" value, include Blo-Fan, the modern ceiling ventilator, in Kitchens—over the range where a ventilator belongs—also in Bathrooms, Game rooms and Laundries. Blo-Fan eliminates odors, steam, smoke, and greasy cooking fumes, as they rise—before they spread.

"Blo-Fans make friends"—for you, too!

combination fan and blower
—more than a fan
—more than a blower

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A COMPLETE CARPENTRY GUIDE
FOR EVERY USE

Send for Delmar Carpentry series today! For the first time a clearly written, easily understood, practical series of five large, well-illustrated texts for Carpentry students, apprentices, craftsmen, construction foremen, teachers, home owners and hobbyists! Material is prepared by skilled craftsmen and teachers in the order that fundamental carpentry operations are performed. Used by trade and vocational schools in the U.S. and overseas, this series is perfect for approved apprentice training programs! Write for full details on Modernfold—it's fabric covered for beauty...metal framed for rigidity and strength. Available in approximately 30 to 45 days after receipt of your order at factory.

NEW CASTLE PRODUCTS
New Castle, Indiana
Dealers in all principal cities in the United States and many foreign countries
Builders say an easy, low-cost installation of a modern Vent-A-Hood Kitchen Ventilator works magic in selling kitchens to women—and SELLS HOMES FASTER.

*Touch of Magic*

**Sells Kitchens**
**Sells Homes**

Builders say an easy, low-cost installation of a modern Vent-A-Hood Kitchen Ventilator works magic in selling kitchens to women—and SELLS HOMES FASTER.

*Touch of Magic*

**Sells Kitchens**
**Sells Homes**

Designed for beauty with glistening white baked enamel finish, all chrome trim, splash panel to protect walls and utility light. Engineered for efficiency with patented centrifugal exhaust unit and grease-trap to remove food odors and greasy vapors. Venting is direct to flue or through simple metal ducts.

Investigate Vent-A-Hood for homes you’re building or planning.

Write for descriptive literature, quotations.

**Vent-A-Hood**
**The Modern Kitchen Ventilator**

The Vent-A-Hood Co., Plantation Drive-Hines Boulevard, Dallas, Texas

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*(Continued from page 178)*

show no signs of improvement, this remains a major problem to builders in trying to reduce costs.

How multiple rental housing construction will be affected was not determined, Mr. Hartwig stated. The increased costs may result in higher rent, in which case, Mr. Hartwig said, "it will be economically unsound to build such projects."

Efforts of the Long Island Home Building Institute to meet with individual trade unions to discuss the conditions and effects of the proposed new wage scales have been largely unsuccessful. The Institute has placed the entire problem before the Building Trades Council of Nassau-Suffolk with the statement that "unless something effective and constructive is evolved, we can see nothing but a practically complete cessation of housing construction on Long Island by union builders."

**Lumber Prices Rise 47.3 Per Cent In Four-Month Period**

A HOUSE which in 1939 had required $1000 worth of lumber in February, 1947, would show a lumber cost of $2,828, according to the March Lumber Industry Report of the Department of Commerce.

This wide divergence in lumber costs, the report states, is due to a steady rise in prices. For the four-month period, October to February, the increase was 47.3 per cent.

"During late February and early March," the report continues, "there were encouraging signs that prices had begun to stop rising. The real test will come with the seasonal resumption of building activity in April. Were lumber prices the only problem they might be absorbed, since they do not represent the major part of the cost of a building; other factors, however, must be expected to influence the net effective demand for lumber during 1947."

January lumber production of 2,547 million board feet was one-third more than for the same month last year.

Decades Of Beauty

No bulging, cupping floors; no open joints, no grain raising. The permanent water repellency of WOODLIFE assures surface beauty. WOODLIFE toxicity assures freedom from rot, termites and powder post beetles.

WOODLIFE — The Original Toxic Water Repellent adds immeasurably to life, serviceability and wood beauty. Ask your dealer.
Built-In Wall Heaters... not even NEO-GLO HEETAIRES*—can’t “close” a sale...

**But they sure help!**

**AUXILIARY HEATERS**—in bathroom or kitchen—aren’t major equipment—but they are part and parcel of those little essential “extras” that can make smoother SELLING.

NEO-GLO HEETAIRES, the only built-in recessed wall-heaters that give your customers what they want—WARM COMFORT QUICKLY—any time—any place! And built right into NEO-GLO HEETAIRES are what you want—quality built-in auxiliary heaters that are easy to install—that are trouble free, that are guaranteed for one year, and that are built to last a lifetime!

ASK YOUR SUPPLIER for special quantity drop-shipment prices!

WRITE US for catalogue showing complete line of Built-In Heaters.

**LA SALLE LIGHTING PRODUCTS, INC.**
**MARKEL ELECTRIC PRODUCTS, INC.**

151 Seneca St.  
Buffalo 3, N.Y.

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**RECOMMEND**

**Kitchen-Aire**

**TO YOUR CLIENTS**

Because you want to recommend the best, recommend KITCHEN-AIRE! It’s the most versatile kitchen ventilating fan on the market, because it can be located anywhere—in any kitchen! Over the cabinets, in the ceiling, on an inside or outside wall—it makes no difference to KITCHEN-AIRE.

KITCHEN-AIRE is sound design-wise, too! A neat appearance, fit, flush-mounted, is all that shows. Fan and motor units are mounted on outside of home, housed in aluminum as illustrated.

Less cleaning bother, wall switch operation, less noise, full efficiency... that’s KITCHEN-AIRE. Electrical rating: 1/25 horsepower, 110 volt, 60 cycle, A. C. Rated Capacity, 400 CFM, Free Air Delivery.

For Complete Technical Information and Details:

**STEWART MANUFACTURING CO.**

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**BUILD STURDY SCAFFOLDS**

**WITH**

**KNIFE-GRIP BRACKETS**

Save lumber, labor, time. Build solid scaffolding to any desired height with Knife-Grip Brackets and Braces, ordinary dressed 2 x 4’s and 4 x 4’s and a hammer. No nails or bolts required. See your building supply dealer or write for illustrated literature.

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**LOOK! A GUARANTEED SCREEN TACKER**

**FOR MAKING OR REPAIRING SCREENS**

Equipped with a set of universal reentable claws, used in either pull or push screen wire tight. The plunger drives a 3-prong steel staple into the frame, holding screen wire firmly. A handy TACKER for numerous other applications.

Write today for a 3-day free trial.

J. B. CROFOOT CO.  
217 Evergreen Avenue Mt. Prospect, Ill.
Mix up to 50 yards a day with JAEGER 3½'S "AUTO LOADER"

Machined steel drum, tracks.

Many other advanced features.

Loads while you mix and measures, as you load.

NAKES load into the drum by power.

Automatic Shaker-Batcher loads QUICK-AS-A-FLASH

Loads and measures while you mix, then shakes material into drum by power. Fast as a power loader. Mixes more batches a day. Ask today for our latest Catalog M-5.

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For Greater Fireplace Efficiency

Majestic FORMED STEEL Dampers

"FORMED STEEL"
The heavy-gauge formed steel units developed by Majestic to meet war-

tival needs prove the advantages of this advanced con-

struction — which is now featured on the regular Majestic line, including Cir-

culator Fireplace Units, Underground Garbage Receivers, Home Incinerators.

The Majestic Co.
634 Erie Street
Huntington, Ind.

Rugged and Long-Lasting

Fireplace construction and mod-

erizing are simplified by using Majestic Formed Steel Dampers. They maintain proper ratio of heat area to fireplace opening; assure correct height of throat and other dimensions. Built-on finish — no angle iron required. No fitting necessary; damper rests flat on rough masonry. Valve closes tightly, and operates easily with an ingeniously simplified poker control. Built to get highest efficiency from every fireplace. Majes-

tic dampers also withstand years of exposure to rust, smoke, soot, and heat without impairment. For safe draft control and permanent smoke-free satisfaction, install Majestic Formed Steel Dampers.

Nationally Known and Advertised for 40 years.

Manufacturers Producing Labor-Saving Tools (Continued from page 81)

Rich Pump and Ladder Co., 1038 Depot St., Cincinnati, Ohio.
Richmond Screw Anchor Co., 814 Liberty Ave., Brooklyn, N. Y.
Safeway Steel Prod., Inc., 4238 W. 52nd St., Milwaukee, Wis.
Sasgen Derrick Co., 3101 W. Grand Ave., Chicago, Ill.
Silent Hotol and Crane Co., 875 63rd St., Brooklyn, N. Y.
Simonds Saw and Steel Company, Pittsberg, Mass.
Skillaw, Inc., 5033 E. 1st Ave., Chicago, Ill.
S. L. Smith Co., 2835 N. 32nd St., Milwaukee, Wis.
Speedway Mfg. Co., 1894 S. 32nd St., C. Ave., Ill.
Stanley Works, New Britain, Conn.
Star Paper Fastener Co., Norwalk, Conn.
Sterling Tool Products Co., 363 E. Ohio St., Chicago, Ill.
Sterling Wheelbarrow Co., 7036 W. Walker, Milwaukee, Wis.
Stone Manufacturing Co., Manlius, N. Y.
Syntron Co., Homer City, Pa.
R. K. Tyra Co., Tyrone, Minn.
Universal Form Clamp Co., 1238 N. Kostner Ave., Chicago, Ill.
Walker-Turner Co., Inc., 639 South Ave., Plainfield, N. J.
J. D. Wallace and Co., 134 S. California Ave., Chicago, Ill.
Wapap and Co., Mayville, N. Y.
Waterston's, 28 E. Lanned, Detroit, Mich.
David White Co., 319 W. Court St., Milwaukee 12, Wis.
Wiemold Co., Station A, Hartford, Conn.
Wodack Electric Tool Corp., 4627 W. Huron St., Chicago, Ill.
XL Products Co., 4617 Airport Way, Seattle, Wash.

** * **

Power Equipment Plays Big Part (Continued from page 115)

another 9 ft. by 10 ft. 6 in., and a third 7 ft. 6 in. by 10 ft. All closets have individual sliding doors. A 4 ft. 6 in. by 8 ft. storage room is also provided. Other features of the houses are metal casement window frames, metal baseboards, and a central utility room. The fully-insulated hot water tank is placed in the attic.

Besides stucco, a variety of exterior finishes, including redwood, asbestos and aluminum siding and brick veneer, is available. The use of color and different elevations, plus landscaping and curvilinear street layout, eliminates any monotony.

RECLAIM LUMBER

with Bord-Pri

Boosting the value of salvaged lumber is one of the ways Bord-Pri pays for itself over and over. This amazing new tool removes more lumber in one hour than is possible in three to four with old-style methods and leaves the wood undamaged, ready for re-use. By its swift, simple lever-action, Bord-Pri cuts time and labor costs to a minimum. Use this handy device for reclaiming lumber. You can add extra profits to every razing job.

TYPICAL COMMENT FROM BORD-PRI USERS:

"Will say Bord-Pri is one of the finest material-and-labor-saving tools I ever bought." (Signed) C. E. Morse, Gen. Supt., THE CARMICHAEL CONSTRUCTION CO., Akron, Ohio.
when you build it around the PROVED HEATILATOR!

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Highlight of the trip was a visit to Bryant's new water heater plant located at Tyler, where production lines are already in operation, and quantity production anticipated for the year ahead.

In his address, Lyle C. Harvey, president of Bryant, told his listeners that it is the intention of the company "to put into production and keep in production the most complete line of gas heating equipment in the nation."

First models of new Bryant products were displayed. Among them were conversion burners, circulating room heaters, panel wall heaters, steel unit heaters, and steel furnaces of gravity, forced air and floor types.

GORDON RILEY, first row, eighth from left in the photograph, a general manager of the Texas plant. Lyle C. Harvey, president, and J. N. Crawford, vice president and sales manager, fourth row, first and second respectively, were principal speakers.
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March 12, 1947

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Gentlemen:

We have recently completed a housing project consisting of 32 - 5-room houses that sold for $8,000 each.
These are frame houses with frame and plastered partitions and we used your Aetna FR Frames exclusively.
It was the first time that we had used your frames and we were interested in knowing how the cost compared with conventional wood frames and casings. We are glad to be able to tell you that our cost analysis indicates that we made a saving of $4.50 to $5.00 per opening or better than $50.00 per house. This was the actual saving, just how much more we saved in the actual saving, the advantage having our frames set as the stud partitions went up, it is hard to say, we do know that there is a decided advantage.

All of our houses sold before they were finished and it was surprising to us that so many of the owners and prospective owners noticed and admired the steel frames.

We used wood sash and we had a little difficulty in getting our mill man to fabricate for us a casing to match the contours of the steel casing. It is our intention to use your frames from now on and for every inside opening where we will hang a door.

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National No. 85 Storm Sash Adjusters are made entirely of steel. Two sizes, 5-inch and 10-inch. Furnished in cadmium finish. When closed, Adjuster locks sash securely in position. The slot in the bar, which holds sash open, is wedge-shaped and keeps the sash firmly in open position. The more pressure on the bar the firmer the slot is fixed in position. Packed one pair—one right and one left—in an envelope with 1 x 7 screws. Instructions for installation are printed on envelope.

See your National dealer for quantities available.

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Sterling, Ill.