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because Bildrite reduces waste to a minimum and corner-bracing isn't necessary," says Roy Olson, Minneapolis builder. That's just one reason why Twin City builders prefer INSULITE.

See Sweet's File for Builders - 29/In

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These Fenestra Standardized Hollow Metal Doors are in local stocks. Compare the performance, the quality, the complete cost with any door on the market. They're another Fenestra Building Product engineered to cut the waste out of building.

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DOORS . WINDOWS . PANELS

engineered to cut the waste out of building

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CRACKED CEILINGS IN YOUR OWN HOME?

Mr. Carpenter: Follow the Advice of Leading Lumber Dealers

How long since you looked at the ceilings in your own home? Chances are you too have a cracked ceiling that needs attention.

Do this. Prove to yourself once and for all that there is no material like Upson Kuver-Krak Panels for <u>re-covering cracked</u> ceilings. Apply an Upson Ceiling in your own home.

See how quickly . . . how easily the job is done. No muss, fuss, confusion or irritating delays. No seeping, floating white dust to cause an extra housecleaning. Then note the beautiful result and remember this ceiling will give you a lifetime of satisfaction. You'll want to do more jobs the same way.

See your lumber dealer or send the coupon right away.

USE UPSON KUVER-KRAK PANELS

says Fred Ludwig, President, Merritt Lumber Yards, Inc., Reading, Pa., one of America's prominent dealers.

"Having great faith in Upson Panels, developed through the many years we've handled them, prompted me to use them in my own residence for recovering cracked plaster.

"I am glad to report these panels have been most satisfactory and have done everything we expected them to do."

USE UPSON KUVER-KRAN PANELS

says G. E. Carter, well known lumber dealer of Port Arthur, Texas.

Port Arthur, Texas.

"Several years ago, I applied Upson Panels to the ceilings of my home. Today, they look just as good as when they were first applied. I don't think they will ever need repairing beyond an occasional coat of paint."







IN YOUR JUNE ISSUE

IDEAS FOR DEMONSTRATION HOUSES—featuring several types of houses which, from the standpoint of crowd-appeal and salability, can be successfully exhibited in small cities and rural communities during the 1951 National Home Week observance.

NATIONAL HOME WEEK—Described last year as the "greatest industry show ever staged," NATIONAL HOME WEEK, annually, grows in scope and popularity. During its 1950 observance the sales of homes reached record proportions. Don't miss the article which tells how more builders and dealers can successfully participate in NATIONAL HOME WEEK of 1951 to be staged September 9 through 16.

THE HOME OF TOMORROW— Fritz Burns, noted California builder, has again sounded the keynote of design trends in his latest demonstration home recently opened to the public in Los Angeles. Incorporating the most advanced ideas of construction and materials in its design, this house has been tagged by designers as a "contemporary classic." Read the details in your June American Builder.

DESIGN AND COLOR SELL NEW HOMES—Unusual construction features and judicious use of color combine to make a mass-produced housing development in California an outstanding success.

A QUANTITY LIST OF MATE-RIALS AND EQUIPMENT—Starting in June, and to appear monthly thereafter in conjunction with the Gatefold Blueprint House, American Builder will include a complete quantity list of materials and equipment including figures on square footage and cubic footage. Leonard Wayman, an architect new to the readers of American Builder, has designed the June Blueprint House.



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Here's Mrs. Duffy telling her neighbor, Mrs. Coment, that their builder, Mr. Oman, had telephoned and asked whether he could call to discuss her reactions to the all-electric kitchen...said he believed such information from people in the development would be invaluable in planning his future homes.

The G-E sold



Later: "Actually, Mr. Oman, this G-E Kitchen-Laundry sold us on the house," says Mrs. Duffy. "For instance, this G-E Disposall.® It's taken the garbage problem right out of my life. It's wonderful just to wash food scraps away!"



"I'm more enthusiastic than ever about my G-E Dishwasher. I really don't know what it would be like to go back to washing dishes by hand, and I don't want to know. It does a wonderful job! My glasses are so sparkling clean!"



"Another point about my G-E Kitchen. This range is terrific, Mr. Oman. It heats up so fast, and the oven has such even heat! I don't have to think any more about how my foods are going to turn out! They're always perfect!"

Kitchen-Laundry " us on the house!"

Builder Arthur Oman calls on Mrs. E. N. Duffy of Weymouth Heights, Mass., to find out what she particularly likes about the house she purchased from him last year.



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"It's amazing to me, Mr. Oman, to see all the food that can be stored in the G-E Refrigerator, and it's so easy to keep everything in place. Furthermore, it's a thoroughly dependable refrigerator."



"Thanks, Mr. Oman, for selling me a house which included all these fine appliances at a time when they could be put into my mortgage at such low additional cost. All my friends wish they had a G-E Kitchen for only \$3.50 a month!"



Last year Mr. Arthur Oman put up 125 houses and equipped each one with a G-E Kitchen-Laundry. He sold 125 houses within 10 days!

He says: "These houses were a good buy in every way. I'm as sold on the G-E Kitchen-Laundry in new homes as much as Mrs. Duffy is!"

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IT'S PEGGED AND FINISHED
AT THE FACTORY

Publisher's Page



Noted Economist to Write for American Builder

TARTING with the June issue, Dr. Melchior Palyi, world-recognized authority on economics, will author a signed page in American Builder. This page will be devoted to a discussion of economic trends, how they may affect the building industry and what these trends mean for the future. In these unsettled and uncertain times, people, particularly those in management, are puzzled by events of the day, their economic implications and the ultimate results in the future.

Dr. Palyi's page is being inaugurated to provide guidance, authentic information and foresight for the future from the mind of one of the world's foremost authorities. Never before has a publication in the building field brought to its audience such expert thinking on economics as that which will be provided through Dr. Palyi's page, starting in the June issue of American Builder.

Dr. Palyi is a resident of Chicago. He is engaged as financial adviser to banks and other institutions throughout the country, in addition to his active role as author and lecturer. Here are some developments Dr. Palyi predicted which came about as he said they would:

In 1940... That long-term rates might fall and at any rate would be stabilized on a very low level for a foreseeable time to come, the price of the long term government bond staying at or about par for a very long time.

In 1944 . . . That the French franc would progressively lose both its purchasing power at home and its exchange value abroad.

In 1945 . . . That Russia would gradually and systematically bolshevize the countries which her troops occupied.

In January, 1946 . . . That the \$3.75 billion loan to Britain would not last two years (it lasted actually barely 13 months), and would not solve Britain's disequilibrium in international trade.

At the end of 1946... That year 1947 would close with 15 to 25 per cent higher prices than it started with ... that there would be no general recession.



Dr. Melchior Palyi

Early in 1947 . . . That in spite of the general inflationary trend in this country, recession might occur in some individual industries, but would not last long.

In April, 1947 . . . That the then occurring reversal of prices was a very temporary and mild phenomenon that would not affect business trends, and that business inventories would continue to rise.

In May, 1947 . . . That Europe was heading for an imminent and most severe economic crisis, the breakdown of international balances of payments.

In July, 1950 . . . That the Korean War, which started in June, was not a curtain raiser for World War III in 1950 but it would set up a new wave of price inflation.

In September, 1950 . . . That the United Nation's forces in Korea could expect to meet 500,000 "Chinese Volunteers."

Dr. Palyi, an American citizen, was born in Hungary and educated in Switzerland and Germany, receiving his Master's degree from the Graduate School of Commerce and his Doctor's degree from the University of Munich.

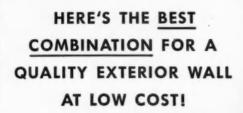
Dr. Palyi's broad and varied career in Continental countries, Great Britain and the United States, combined practical business activities with academic work in some of the leading universities both here and abroad.

In 1928, Dr. Palyi became economist for the large Continental banking institution, the Deutsche Bank in Berlin. In addition, he was adviser to the Reichsbank, the central bank of Germany, from 1931 to 1933, and managing director of its Institute for Currency Research in Berlin. In 1933, he was guest of the Midland Bank, Ltd., in London, and invited as guest lecturer by the University College of Oxford. Dr. Palyi has been a resident of Chicago for the last 18 years.

Dr. Palyi was in Europe in the summer of 1948, and again in 1949, to study conditions in about ten countries, especially their financial problems

Be sure to look for Dr. Palyi's page. You will find his information revealing, answering many questions of the day—bringing them into sharp focus, providing a provocative analysis of events as they may shape up in the future.

The publishers of American Builder are proud to bring you this new feature.



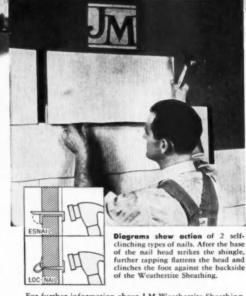
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These large tough boards protect the house where protection is most important. They reduce construction costs, too, because the big sheets are easy to handle, can be applied more quickly and with less waste material. For the exterior finish, use . . .

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Can be applied directly to J-M Weathertite* Sheathing (no building paper needed), using self-clinching or self-locking nails as illustrated. This type of construction is being used on many F.H.A. projects throughout the country.

J-M Asbestos Siding needs no further finishing, cuts annual upkeep expense for the owner. The new J-M Smoothgrain comes in white or soft pastel colors. Surface is smooth but graining is so striking vertical joints and exposed nail heads seem to disappear. These two J-M products give you the best possible combination for exterior walls of lower cost, longer life, and finer appearance.



For further information about J-M Weathertite Sheathing, J-M Asbestos Siding, and Esnail and Loc-Nail fasteners write Johns-Manville, Box 290, New York 16, N. Y.

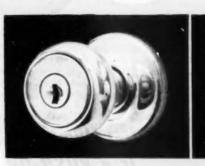
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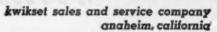


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THE MODERN STYLE IS CLAY TILE

in the Building Field

Building Costs at All-Time High

THIS year's crop of new homes will bear the highest price tags in history. Average price of building materials is up 16 per cent over last spring. Labor rates rose an average of 7 per cent to January 1st and are going higher. Controls will presumably keep prices and wages within bounds, but the system as presently set up is so flexible that there is no certainty that it will be effective.

The lumber items which usually account for one third of the cost of materials in a new house have advanced in price from 16 per cent to 48 per cent over last spring. Interior type plywood is up 48 per cent, red oak flooring 32 per cent, dimension lumber 32 per cent, glazed windows 19 per cent, and interior doors are up 16 per cent.

Masonry items have not increased as much as other materials. There is no change in the price of concrete block and common brick. Masonry cement costs 15 per cent more and ready mixed concrete 9 per cent more.

Outside paint costs 13 per cent more than last spring and inside paint costs 15 per cent more.

Plumbing and heating items cost 12 per cent to 23 per cent more with the exception of gas water heaters which have declined about 3 per cent. A sink costs 26 per cent more than it did last spring, a lavatory 23 per cent more, a bathtub 23 per cent more, a warm-air furnace 15 per cent more and soil pipe 23 per cent more.

Gypsum lath is up 20 per cent, plaster 26 per cent, asphalt shingles 14 per cent, and insulation batts 9 per cent. Nails cost 16 per cent more than last spring.

Union wage scales in the building trades for the nation as a whole rose almost 7 per cent during 1950. On January 2, 1951 union wage scales for bricklayers, carpenters, electricians, painters, plasterers, plumbers, and building laborers averaged \$2.35 an hour in 25 cities combined. Bricklayers averaged \$2.69, carpenters \$2.44, electricians \$2.59, painters \$2.31, plasterers \$2.68, plumbers \$2.58 and building laborers \$1.66.

Lowest union scale for carpenters was Portland, Maine, which paid \$1.65 per hour, highest was New York at \$3.00 per hour. In Nashville, Tennessee, scale for building laborers was 85 cents an hour and in Newark, New Jersey, union scale was \$2.19 an hour, the lowest and highest rates respectively in 85 cities.

The Labor Department's consumer price index rose from 168.2 in January, 1950, to 181.5 in January, 1951, an increase of 7.9 per cent. This is now a very important index and is used by large corporations to adjust the wage scales of millions of workers. It is also used for collective bargaining by other trades, including the building trades.

The average worker in manufacturing in January, 1951 earned \$62,97 a week as compared with \$56,29 in January, 1950, an increase of 11.8 per cent. It is apparent that wage scales in the building industry have not quite caught up with the general trend and that pressure for wage increases will appear this spring and summer.

One element that has increased the whole wage and price structure is higher income taxes. Builders are up against the same situation as manufacturers who, when confronted with higher income taxes for themselves and for their employees, increase the price of their products to preserve the standard of living of their employees and to maintain or increase their profits.

The record shows that corporations in 1950 not only increased the compensation of their employees and paid higher wages but also increased profits after taxes by a substantial amount. The Department of Commerce reports that 200 of the nation's largest corporations had net profits after taxes of \$2.3 billion in 1949, and \$3.1 billion in 1950, an increase of 26 per cent.

A builder is therefore justified in increasing prices on his 1951 buildings not only by the increased cost of materials, labor, and taxes, but also by an allowance for increased profit after taxes, if he follows the pattern set by corporations.

Increases in Prices of Selected Building Materials in the Chicago Area

(Dealer-to-contractor price delivered to the job site)

		Per Cent
Block, Concrete	Each	0
Brick, Common	MA.	0
Cement, Masonry	Bbl.	15.5
Concrete, Ready Mixed	Cu. Yd.	8,8
Dimension, Douglas Fir	M Bd. Ft.	31.8
Door, Douglas Fir Interior	Each	16.4
Window 2'7" x 4'6" Glazed		18.6
Flooring, Red Oak	M Bd. Ft.	31.9
Plywood, interior type	M Sq. Ft.	48.0
Paint, Inside	Gal.	15.0
Paint, Outside	Gal.	13.3
Warm Air Furnace	Each	14.6
Lavatory	Each	23.3
Soil Pipe	Ft.	12.0
Sink	Eoch	25.6
Bath Tub	Each	21.8
Water Heater, Gas	Each	(2.7)
Lath, Gypsum	M Sq. Ft.	20.1
Plaster, Gypsum	Ton	26.1
Shingles, Asphalt	Sq.	14.3
Insulation Batts	M Sq. Ft.	8.8
Nails, 8d Common	100 Lb. Keg	16.1

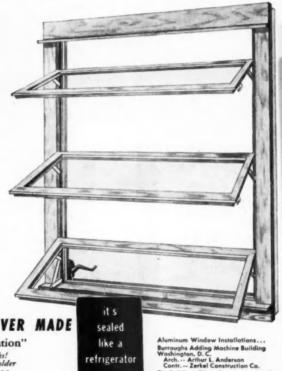
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The Window with the FLOATING SEAL"



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or more on the sale. But when you sell a pound can of ordinary putty, as a rule you only make about 1½c. That's why we say it pays you to sell Nu-Glaze instead of putty. You make bigger profits! You satisfy customers because Nu-Glaze always "stays put!"

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UP • NOT OILY • CLEAN TO HANDLE

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NU-CALK SPEED LOAD enjoys such nationwide
popularity The specially designed cap insures perfect
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SPEED LOADS the user's hands never

SPEED LOADS the user's hands never touch the compound. Always has a smooth, even flow, and easy trigger action.





Here's the other half of this famous salesmaking combination! This SPEED LOADER calking gun retails at a price that paves the way to more calking sales. It's light, sturdy, fool-proof. Retails for only \$1.95. Show it and you'll sell it!

Your order will be shipped same day received!

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STANDARD CG-3 CALKING GUN AVAILABLE



Experienced calking appliers still favor our CG-3 Standard Calking gun's easy trigger action and powerful piston action. Fitted for use with either Nu-Calk Speed Loads or bulk calking.



There are 10 Speed Loads to each carten (Appr. one gal.) and 4 cartons to each case. Please order in sultiples of 4 cartons. Full freight ellowed on orders of 8 cartons.

MACKLANBURG-DUNCAN CO.

"We wouldn't trade our SKIL

say the men behind the saws at the Macon Subdivision being built

demonstration.

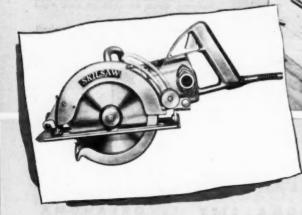
SKIL Saws on the job mean faster, easier cutting. They're job-proved for top performance day in, day out—all day long. Powered for smooth-running, high-torque cutting. Balanced for sawing in any position. Easily controlled with either one-hand or two-hand operation. Light weight.

Accurately cuts many materials. Durable. There's a SKIL Saw to fit your job—10 models—all job-proved to save time and work on an almost unlimited variety of building materials. Call your nearby SKIL Distributor today for an on-the-job

SKIL Saws have the extra power to keep working all day long"

> says R. E. RUMBAUGH, carpenter) on this Macon Subdivision

"I like the extra power you get in SKIL Saws," says Rumbaugh. "Other saws will do a sawing job but when you want to keep that saw working continuously you need the power that SKIL Saws have."



SKIL Saw—Model 77—71/4" saw for general construction use. Cross cuts 2" rough lumber and bevel-cuts 2" dressed lumber at 45°. With suitable blades, cuts metal, stone, concrete, tile and many composition materials. Safety telescoping guard. Speed: 3200 r.p.m. Overall length: 171/4". Weight 151/4 ibs.

Saws for any other make"

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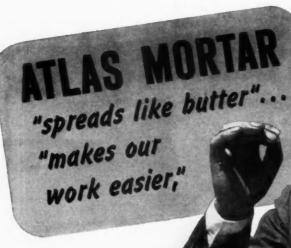






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says EMEL ZANCANARO, mason contractor, pleased with the performance of Atlas Mortar Cement on the big Kenwood Apartment job in Hammond, Ind. Mr. Zancanaro has been an Atlas Mortar booster for 5 years.



INTO THE MIXER goes one of 6,000 bags of Atlas Mortar used to put up 700,000 face bricks and additional concrete masonry work to the Kenwood job.

On the job, and in the laboratory, Atlas Mortar has proved itself. It complies with ASTM and Federal Specifications for

masonry cement. For further information write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Avenue, New York 17, N. Y.

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STANLEY FOSTER, an experienced mason, prefers to work with Atlas Mortar. "Easiest spreading masonry cement I ever used," he says.

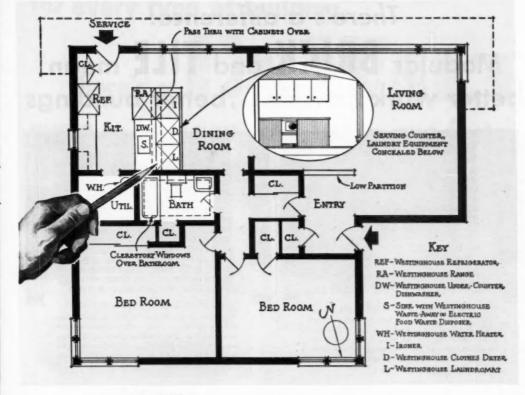


FINISHED PRODUCT, one of 26 two-story buildings, please architect, James McClure Turner, who praises the color, appearance and strength of Atlas Mortar.

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This IDEA concentrates all Plumbing... Cuts installation and material costs!

This small, low-cost home offers a feeling of great spaciousness and the practical advantage of multiple use of space.

Its novel arrangement is feasible because of the design of Westinghouse Appliances.

The pass-through between kitchen and combination laundry and dining room is possible because the Westinghouse Dishwasher does not break the counter surface with a top-opening lid. The Laundromat® Automatic Washer and Clothes Dryer can be neatly concealed in a cabinet with roll-away doors. Moist air from the Dryer may be vented conveniently via the bathroom partition to the roof.

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Gentlemen:
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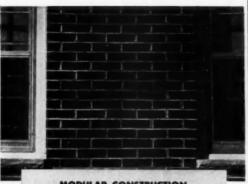


Street





There's a difference! Modular BRICK and TILE mean better workmanship...better buildings



MODULAR CONSTRUCTION

These are typical window details. Note that full bricks are used in every other course. Half bricks, used in alternate courses, are quickly cut with the trawel because of the care design of the brick. Time and cost are saved, appearance is better.



NON-MODULAR CONSTRUCTION

This shows the cutting of bricks required when non-modular bricks are used in a non-modular designed job. The window jamb on the right requires cutting and fitting the bricks in every course. Costly and time-consuming, this results in poor appearance.

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Your good workmanship is made even better with modular coordination and the use of modular Brick and Tile.

Not only do you save considerable construction time and cost, but you build better buildings . . . buildings that are more beautiful, more permanent, less costly to maintain.

That's important to you because the buildings you build are your reputation. They stamp you as a "quality builder" in your community.

Today, there is another fact equally important to you! Brick and Tile are made from "non-critical" clay-and the supply of clay is unlimited. You can help avoid delays due to raw material shortages.

To build the essential structures and defense housing that are vitally needed, use good workmanship and modular Brick and Tile. Together, they will build any building better and faster.

Please call on the nearest regional SCPI office for any information or service. We welcome your inquiry.

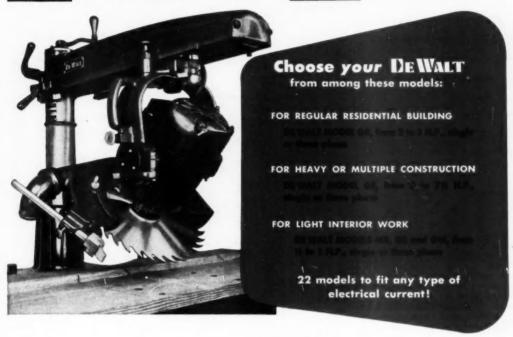
MAIN OFFICE

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for every type of building

there's a DE WALT made to help you do it better and faster!



What are you building now—or planning to build in the next few months? A few single houses? A large project? Defense housing? Military housing?

No matter what—you can build better, faster and at lower cost when you have DE WALT on the job! One —three—or five of them!

DE WALT does all your cutting with speed and accuracy—helps you pre-cut and prefabricate for multiple construction. And you can take it *inside* to finish your houses—interior trim, cabinets, shelving, etc.

Shown above is one of the many new DEWALT models. This model has 5 new features, including low

dead rise motor which permits deeper cut, 2 arm lengths, double-row grease-sealed-for-life bearings, 4 motor capacities, totally enclosed fan-cooled motor. See this DE WALT and other models at your DE WALT dealer! Send coupon below for complete information.

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In quality, dependability and economy...

TWINDOW has the edge!

This stainless steel frame makes handling easier and safer... saves installation time on the job.

W ITH the ever-increasing popularity of large window areas in homes of all architectural styles, builders are more and more turning to Twindow-Pittsburgh's window with built-in insulation-because of its proven high quality, dependability, practicality and economy.

Twindow truly brings the out-

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in heating and cooling costs and permits the use of smaller heating and air-conditioning equipment.

Only Twindow has the exclusive stainless steel frame. This protects the seal and glass edges, makes handling safer and simpler, saves time on the job. There are forty-seven standard Twindow sizes

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PAINTS . GLASS . CHEMICALS . BRUSHES . PLASTICS

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The Big News this Spring is Universal Rundle



Decorator-designed bathrooms in the "Post"...in "Better Homes"?

Have you seen them? "So beautiful that only natural color photography could do them justice!" said a New York Art Director, when he saw the sets. So we photographed them.

Be sure to see the 1951 Universal-Rundle color advertisements based on these decorator-designed bathrooms, in the SATURDAY EVENING POST and BETTER HOMES & GARDENS. Watch for them—14,000,000 others

Watch for them—14,000,000 others will be looking, too! And remember, the beauty of these Ving Smith "Bathrooms for Americans" is no more than the

natural beauty of Universal-Rundle fixtures. See them, touch them, test them. Then only will you know how salesworthy are the brilliant white, the matched color, the top quality and performance of these world's finest bathroom fixtures.

50th Anniversary Catalog — Yours!

Write today on your letterhead for a copy of the U/R 1951 Catalog. Shows the complete line of bathroom and kitchen fixtures—plans, drawings, specifications, and a world of help for everyone who sells, installs, recommends, or specifies bathroom and kitchen fixtures. See our catalog in Sweet's Builders File.

The whitest flatures are U/R—whiter by actual scientific test, than any other leading make.

The strongest band between surface glaze and body in U/R fixtures, means highest resistance to chipping.

"Marder than steel" surfaces are easy to keep clean, scratch-free, and sparkling new in U/R ware.

Who is Universal-Rundle? U/R is the half-century young pioneer of many industry "firsts": colored vitreous china, one-fire tunnel-kiln firing, complete laboratory control of production, and many others.



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MAY 1951

27



There's a good reason WHY ELJER IS THE FASTEST GROWING LINE IN AMERICA!

Plumbing contractors, wholesalers, builders and architects are responsible for Eljer's amazing growth in a highly competitive field . . . why year after year Eljer's share of the nation's plumbing business increases. They have recognized that at Eljer quality comes first, and that when they specify or buy Eljer enameled cast-iron or vitreous china fixtures they're supplying the best.

Yes, Eljer is truly the *quality* line of plumbing fixtures . . . see them at your Eljer Distributors and you'll agree.

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There's a copy of the new Eljer Condensed Catalog waiting for you. It shows complete Eljer enameled cast-iron, vitreous china fixtures and brass goods. Ask your Eljer Distributor for a copy or write to Eljer Co., Ford City, Pa.

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





ASSOCIATIONS

Their Plans and Activities



Ways to Build More Low-Rent Housing To Be Probed by NAHB

Plans for Memphis clinic on low-cost apartments are result of Washington "emergency" meetings

Ways to overcome present financing and design obstacles so that more lowcost rental apartments can be started all over the nation are being studied by the National Association of Home Builders.

W. P. "Bill" Atkinson, NAHB president, has announced that a two-day "round table rental housing clinic" will be held in Memphis, Tenn., May 3-5. He said that builders from all parts of the country would attend and that invitations have gone to Congressional leaders, mortgage brokers, architects and others concerned with the production of an adequate supply of rental housing.

Also expected to attend are topranking government housing officials, including Housing and Home Finance Agency Administrator Raymond M. Foley and Federal Housing Administration Commissioner Franklin Richards.

Atkinson said Memphis was chosen because of its central location and because several Memphis builders already have finished a large number of excellent apartments ranging from \$33 to \$50 monthly. Hosts will be the Home Builders Association of Memphis, of which D. T. Kimbrough is president.

Urge Government Not to Cut 1951 Home Goal of 850,000

The scheduled rental housing meetings are one result of a recent series of conferences in Washington, in which building industry and government leaders took part. Other discussions centered on defense housing requirements, Home builders from nearly every major city attended.

With housing production already reduced to meet a government-set goal of 850,000 units this year, a 40 per cent reduction from the 1950 total of 1,375,000 units, government officials were urged by industry leaders not to cut housing volume any further. Frank W. Cortright, NAHB executive vice president, said that "with a continual housing need of well over 1,000,000 units a year, any further control would produce a drastic housing shortage."

Delegates to the meetings heard experts give the outlook on availability and use of basic building materials. Aluminum production was reported far behind present demands, but output by 1953 is expected to be at least 50 per cent more than at present. This increase, Cortright said, would take care of all military needs with enough remaining for housing requirements.

Copper supply was described as most critical, with most manufacturers prohibited from manufacturing any housing items other than piping and some parts of door locks from the material. Builders are permitted, however, to use any materials they have on hand or can purchase.

Studies are already being made of alternates for materials in short supply. Cortright said that NAHB committees were working closely with the National Production Authority, the Office of Defense Mobilization and other government agencies in efforts to stimulate production of scarce materials.

Also being studied by NAHB and its affiliates are ways to eliminate unnecessary construction costs and to aid some cities in amending outmoded and needlessly costly building codes.

Preliminary studies already indicate, Cortright said, that up to \$1,000 can be saved in construction, labor and land planning costs if builders are required to adhere only to nationally recognized safety and planning standards in codes and zoning regulations, and if labor will eliminate all restrictions over output.

Attendance, Interest High At Retail Lumber Dealer State, Regional Meetings

More dealer interest in exhibits than at any previous meeting was reported by the Hlinois Lumber and Material Dealers Association at its 61st annual convention in Chicago, February 13-15.

Attendance at the meeting, held in the Sherman Hotel, was 4,536, broken down as follows: retail dealers, 2,176; exhibitors, 1,298; guests, including women, 1,162; 154 exhibitors used 190 spaces.

W. Lindley Huff of Decatur was elected president, succeeding John W. McConnell, Woodstock. Paul H. Leach, Joliet, is vice president.

Features of the business program included talks by Clyde A. Fulton, president of the National Retail Lumber Dealers Association, "National Affairs": Edward G. Gavin, American Buildereditor, "The Great Opportunity for 1951": talks on sales techniques by G. F. Hoppe, Insulite Division, Minnesota and Ontario Paper Co.: L. W. Hesse, Keystone Steel and Wire Co.; and J. L. Wood, assistant treasurer, Johns-Manville Corp; and a construction forecast by Robert B. Brooks of Roy Wenzlick and Co.

WESTERN

Maximum attendance at all business sessions characterized the annual convention of the Western Retail Lumbermen's Association, January 22-24, in Spokane, Wash. Theme of the meeting, (Continued on page 32)



NEW PRESIDENT of Illinois Lumber and Material Dealers Association is W. Lindley Huff (seated, center). Seated to right is John W. McConnell, retiring president, to left, Paul Howard Leach, new vice president. Standing (from left) are Henry L. Krumm, chairman of the convention: John D. McCarthy, secretary: John J. Lavengood, assistant secretary



Dealer's Viewpoint

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

Congress No Rubber Stamp for "More Government in Housing"

The refusal of Congress to rubber-stamp the Administratration's \$3 billion defense housing bill is a really encouraging development from the standpoint of the building industry-and of the public which would have had to foot the bill.

Coming on top of an impressive list of cases where local governing bodies and the citizenry have rejected public housing, the defeat of the original Administration bill in the House and its substantial revision in the Senate shows that a majority of the members of Congress no longer are willing to see the private building industry pushed around by the advocates of "more Government in the housing business.

These developments offer good evidence, in addition, that the building industry has succeeded over a period of time in getting the public-or at least a good segment of it-to recognize the soundness of its views. One reason, of course, is the fact that the industry's arguments against socialized housing and the extravagance of the government's housing program have been presented intelligently and convinc-

A second reason is that the request for higher taxes has made the public more conscious than ever of the fact that unnecessary Federal expenditures must be

pared down. Those in the industry who have participated personally in the continued effort against governmental encroachment in the field of housing have done their industry and themselves a good turn.

Another big legislative test still lies ahead—the move to extend rent controls as a part of the emergency "price control" program. Some form of extension may well be passed, but it now appears most unlikely that the Administration will be able to gain approval of the sweeping bill originally planned.

More and more people, including many who live or want to live in rental properties, have learned the hard way that rent control defeats its own purpose -by driving homes off the rental market and by compelling owners to let their properties run down for lack of income with which to keep them in good re-

Rent control can be expected to win a good many votes in Congress, because it is deemed to be good politics to favor it in certain urban districts. But in view of the intelligent campaign of public enlightenment which the building industry has conducted, Congressional support of any extreme rent control bill will be lighter than many people

"Buy Now" Home Builders Urge On Detroit TV Program

Home seekers in the Detroit area were advised to "buy now" by the Builders Association of Metropolitan Detroit on a recent television program.

The audience was told by John Weinhart, association president and principal speaker on the program that the association feels there is no justification for foregoing "the benefits of home owner-ship in anticipation of future price declines" and that "an end to the current prosperity wave is certainly not in the foreseeable future, and many noted economists and market analysts are of the opinion that current conditions may extend throughout the century."

"Too many persons," according to Weinhart, "are still waiting for postwar homes at prewar prices, which is obviously out of the question. Even so, however, comparative statistics show that, on a percentage basis, increases in new homes are still less than those of most commodities."

The TV program was sponsored by Wayne University and patterned after programs presented by the University of Michigan.

Heads Convector Group

Walter Schlichting of the Young Radiator Co., Racine, Wis., was elected president of the Convector Manufacturers Association at a recent meeting in the Leland Hotel, Detroit. He succeeds J. Howard Smart of Tuttle and Bailey, Inc., New Britain, Conn.

W. R. McMahon, Modine Manufacturing Co., Racine, Wis., was elected secretary. McMahon is a past president of the association.

500 Michigan Builders Attend State Convention

More than 500 persons in the building industry, representing 20 Michigan cities, registered for the convention of Michigan Association of Home Builders March 15-17 in Grand Rapids.

The business program for the meeting was opened with a talk on alternate materials and code reforms by Joseph P. Woolf, Detroit building commis-sioner. A panel discussion, "My Plans for 1951," followed, moderated by followed, moderated by Rodney M. Lockwood, past president of the National Association of Home Builders. William J. Guinan, president of the Wolverine Mortgage Co., and former executive officer of the Home Builders Association of Detroit, spoke on "Opportunities to Build under Current Conditions."

Named president of the state group for the coming year was David Satin of Kalamazoo, former NAHB regional vice president. He succeeds Charles A. Bowser, Lansing.

A. W. King was elected first vice president and John D. Harrison, secretary. Both are from Detroit. Other new officers are Harold Albert, Grand Rapids, second vice president: Leroy Lutz, Flint, third vice president; W. O. Edwards, Ann Arbor, fourth vice president; Robert Weller, Battle Creek, fifth vice president; and Daniel Smith, Lansing, secretary.

50 000 See Home Show

Held in conjunction with the convention was the 13th annual Greater Michigan Home Show at the Grand Rapids auditorium. At least 50,000 persons saw the exhibition, according to Stanton W. Todd, Jr., committee chair-man. There were 235 exhibits.

Among other prominent persons who participated in the home builder meeting were W. P. "Bill" Atkinson, new NAHB president; Edward G. Gavin, American Builder editor; and John B. Martin, Michigan's auditor general.

Chicago Builders Hear Report On Washington Conference

Chicago delegates to the recent threeday Washington conference on housing gave detailed reports to members of the Chicago Metropolitan Home Builders Association at a dinner meeting March 13 in the Sherman Hotel. More than 300 persons attended.

The speakers who covered the highlights of the national seminar were A. O. Aldrich, on the status of the Defense Housing Bill; Joseph E. Merrion, availability of materials, and Nathan Mani-low, opportunities in present facilities for mortgage finance.

The meeting was called by E. C. Mahoney, Chicago association president, while he was still in Washington and took place immediately after the delegation returned. Irvin A. Blietz served as moderator.

New Housing Laws Discussed at Mortgage Banker Meeting

New housing legislation was the principal discussion topic as more than 700 mortgage, commercial and mutual savings bankers, life insurance executives, builders and title and trust company and real estate officials met March 26 in New York for the Eastern Mortgage Conference of the Mortgage Bankers Association of America.

Speakers included Senator Everett M. Dirksen (Rep., Illinois): Raymond M. Foley, Housing and Home Finance Agency administrator; Franklin D. Richards, Federal Housing Administration commissioner; T. B. King, director, loan guaranty service, Veterans administration; W. A. Clarke, consultant, Office of Real Estate Credit, Federal Reserve System; and Milton T. McDonald, MBA president.

The MBA—almost alone among large national organizations in the field—is supporting the new housing bills, believing that sufficient defense housing cannot be built under present laws. In testimony before Congressional committees, association spokesmen have urged rapid action on the proposed legislation, asserting that severe shortages have already developed in some places and more can be expected soon in other cities.

Builder-Architect Seminar Held in Chicago

A joint seminar-dinner on builderarchitect collaboration was held recently by the Chicago Metropolitan Home Builders Association and the Chicago Chapter of the American Institute of Architects in the Bismarck Hotel, Chi-

Kenneth Wischmeyer of St. Louis, national chairman of the A.I.A. committee on architect-builder co-operation, was panel chairman. Speakers were Architects John N. Highlands, Jr., Buffalo, N.Y., and L. Morgan Yost, Chicago A.I.A. chapter president, and Chicago Builders Irvin A. Blietz and Laurence H Mills.

Home Show Sponsored by Kalamazoo Builders

The Free Home Show sponsored annually by the Home Builders Association of Kalamazoo, Mich., was held March 6-10 in the Kalamazoo County Center building.

The exposition, probably the only one of its kind in the country, was composed chiefly of local retail exhibits, although all manufacturing concerns in the home building field are invited to participate.

Home Show committee chairman was Wesley D. Graham, association vice president. Making up the committee were Merton Babcock, William Klemp, Dom Walters and Gerald Johnson. Don Wyman of the Wyman Advertising Agency was exposition manager.

Cortright's Column

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



Low Rental Housing Can Be Profitable

During my ten years as administrative head of the NAHB I have witnessed many of our leading builders as they testified before the Congress on proposed legislation important to both home buyer and home builder. The question of government construction, management and ownership of housing inevitably arose. Well-meaning Congressmen have made it a practice to probe into the ability of our industry to produce rental housing for the very low salaried worker.

Too many people in important government positions have taken the view that private enterprise can do a good job in providing housing for middle and high income groups but that private builders and lenders are not interested in housing low income families. They think the profit incentives are not high enough to merit broad action in this field. Because of this misconception, Congress is often prone to provide compromise legislation: measures that provide financing vehicles for the average buyer but which also contain authorizations for added public ownership of subsidized rental housing.

The organized home building industry must show civic leaders, planners, officials and the Congress that we are earnestly endeavoring to stimulate construction of rental housing at rates which lower salaried persons can well afford.

In the past few years builders have been able to utilize the liberal, emergency type financing authorized by FHA under Section 608. Hundreds of thousands of such units have arisen over the country. Many of these were made available to low income groups. Perhaps the shining example of this type of project is to be found in Memphis, Tenn., where a number of builders have erected attractive, efficient, well constructed rental housing, many built specifically for Negroes. Rents have ranged from \$30 to \$50—certainly this is an example of fulfillment of a housing need by private enterprise. Wallace Johnson has done one of the outstanding jobs in this feld.

Nearly every builder has said, at least once in his life, "I can build anything I can finance." When FHA authorizations for 608 financing expired the vast majority of builders were left with no financing vehicle.

However, since the need for more rental housing for low income groups grows greater each day, NAHB is doing something about it. W. P. "Bill" Atkinson, NAHB President, has called a Rental Housing Clinic in Memphis on May 3, 4, and 5. Most of NAHB's 166 affiliated local associations will send a building team to this important conference.

Also invited are members of the Senate and House Banking and Currency Committees, heads of the U. S. Housing Agencies, and other important officials. FHA representatives including Frank Richards, FHA Commissioner, will explain to the delegates the insuring devices now available through FHA in financing rental housing. He will explain in detail proposed amendments and revisions of Section 207. It is felt that an administrative reworking of this FHA Title can result in a substantial decrease in rentals charged in structures financed under this Title.

Builder-delegates will also learn how to operate under FHA's cooperative housing plan, Section 213, which is gaining in popularity every month over the country. Already FHA has approved an estimated 500 separate projects under this Title.

Host at the Rental Clinic will be the Home Builders Association of Memphis of which D. T. "Ted" Kimbrough, Jr., is president. Buses will take visitors to a number of the Memphis builders' low rental housing projects and describe the projects in builders' language.

The builder-delegates will report the facts to their own local associations upon their return from this clinic. Additional construction of many thousands of attractive rental units renting at low rates will be the valuable result of this epoch-making conference.

Dealer Conventions . . .

(Continued from page 29)

the group's 48th, was "It Can Be Done in '51." Approximately 1,200 persons were on hand for the opening.

Covered by convention speakers were national and international affairs as well as specific problems of retail lumber dealers. Harrison Wood, radio commentator and lecturer, spoke on "This Changing World"; H. R. Northup, executive vice president of the National Retail Lumber Dealers Association, "The Washington Picture." John K. Morley, newspaper foreign correspondent, gave a report on the Korean situation.



I. W. Copeland

Other well-known speakers were James C. Downs Jr., Chicago, real estate analyst, and James V. Jones, manager of the lumber dealer products department of Armstrong Cork Co.

Another convention feature was "The Profit Planning Panel," moderated by F. S. Burt of Dant and Russell, Inc., Portland, Ore. The panel of six dealers, discussed a variety of subjects, including operating costs, discounts, price cutting, materials handling and truck operation, yard housekeeping, application departments and advertising bad accounts.

J. W. Copeland of Portland was elected president for 1951. Named vice presidents were W. L. Johnson, Boise, Idaho; Gunder W. Kjosness, Lewiston, Idaho; Charles R. Cooley, Grants Pass, Ore.; Clayton C. Morse, Astoria, Ore.; Tra E. Snyder Enterprise, Ore.; Xavier Baker, Kelso, Wash.; Roy Sievers, Everett, Wash.; and E. C. Wert, Spokane, Wash.

WISCONSIN

More than 3,100 dealers, exhibitors and guests attended the 61st annual convention of the Wisconsin Retail Lumbermen's Association, February 20-22, at the Milwaukee auditorium. One hundred and seventy-six exhibitors occupied 190 booths.

Elected president for the year ahead was John N. Hamar, president and general manager of the Hamar-Quandt Co., Houghton, Mich., a dealer-director of the National Retail Lumber Dealers Association and former president of the Houghton Rotary Club. New directors are W. W. Fuller, Milwaukee, and R. J. Owen, Jr., Menomonie, Wis. H. P. Mc-

Dallas Builders, Realtors Get Together



NO. I BUSINESS at this point in the recent joint meeting of the Home Builders Association of Dallas and the Dallas Real Estate Board was southern fried chicken. The "good will get-together." an annual event, was held this year at the new Home Builders Auditorium.

Seattle Situation As The Women See It



WOMAN'S POINT of view on building problems is cired at recent meeting of the Women's Auxiliary of Seattle Master Builders Association, Presiding is Mrs. William Johannesen

Dermott is secretary.

A number of prominent persons, both in and out of the industry, spoke at the business sessions. Included were Charles Collingwood, Columbia Broadcasting System Washington correspondent; Dr. George W. Crane, Northwestern University psychologist and author; L. C. Hart, vice president, Johns-Manville Corp.; N. F. Lawler, advertising and sales promotion director, Nash Motors; Frank W. Lovejoy, sales executive, Socony Vacuum Oil Co.; G. F. Hoppe, sales promotion manager, Insulite Division, Minnesota and Ontario Paper Co.; and James V. Jones, lumber dealer products manager of Armstrong Cork

NEBRASKA

The highest convention attendance mark in the history of the association was set by the Nebraska Lumber Merchants Association, February 21-23, when 1,700 persons registered for the 60th annual meeting in Omaha. Of this number, I,186 were dealers and their staffs from Nebraska, Iowa, Missouri, Kansas and Colorado.

There were 114 exhibits.

Featured speaker was Governor Luther Youngdahl of Minnesota, who presented a program for world peace in a talk called "Unity or Else." Points stressed in Youngdahl's talk were: a strong military, additional personnel for the FBI, elimination of non-essentials to strengthen the economic system, reaffermation of faith in the United States, a strengthened Voice of America, and building of good will between all racial and religious groups.

Other speakers included W. A. Keitges, secretary treasurer of Midwest Lumbermen's Inter-Insurance Exchange; E. J. Christensen, Columbus, Neb., architect; John P. Begley, Creighton University, Omaha; Sam Reynolds, Rey-

(Continued on page 160)

Fred W. Wappat

THOUSANDS IN DAILY



MAXAW 6% in. Blade

Cuts 21/4" on a ware cut. At 45° thry 2 in, dressed ghs only 10 lbs. It's utstanding buy of ld for the ho builder.

Only \$69.50



Cuts 2%" on a lare cut. At 45° cuts mber 21/1s in, thick. se adjusts vertically for depth of cut rom 1/4" to 21/4". Blade speed is 3600 R.P.M.

Only \$135



Cuts 3%" on a square cut. At 45° cuts thru lumber 213%" thick. ase adjusts vertically for depth of cut from 1" to 31/4". Blade speed is 3400 R.P.M.

FOR RUGGEDNESS

The frame of every Fred W. Wappat saw is strong, compact, light weight aluminum. Every moving part is mounted on oversize, long life ball bearings. Switch in all models is momentary contact type, with 100% overload capacity. Gears are of finest steel, precision cut and ground for smooth, quiet operation and long life.

FOR DEPENDABILITY

Because Fred W. Wappat saws have been field tested for more than 25 years dependability is assured, resulting from constant engineering and mechanical improvements. Only the finest of machine tool equipment is used for every machining operation to insure precision workmanship.

FOR PERFORMANCE

Model for model you get greater depth of cut on a square cut; larger capacity for bevel cuts at 45° in Fred W. Wappat saws. This added performance enables you to buy a lighter, more compact, easier to handle tool for your work . . . and at a substantial savings to you in initial cost.

red W. Wappat ELECTRIC SAWS OF CUMMINS - CHICAGO CORPORATION

MAYVILLE, NEW YORK . ON CHAUTAUQUA LAKE

In Canada: J. S. Broadfoot Company, Limited, 405-6 Terminal Bildg., Queens Quay West, Toronto 1, Canada

FOR MORE THAN 25 YEARS



Street of new homes in Searthurst Subdivision, Cuyahaga Falls, Ohio. "Century" Siding Shingles used on all 166 homes in this project.

ARCHITECTS: Firestone & Firestone.

CONTRACTORS: Heslop Building & Realty Company.

Color...protection...beauty...economy...

the owner-appeals that sell

"Century".

ASBESTOS-CEMENT SIDING SHINGLES



"Century" No. 57 Siding Shingles give lowcost coverage because of large unit size.

Original manufacturers
of Asbestos-Cement Shingles
in this Country



Build your business and increase your profits with "Century" Asbestos-Cement Siding Shingles! Use these established "reasons why" to appeal to your prospects:

Colors alone close many a sale! The attractive colors in the "Century" selection—SHELL WHITE, SUN-GLO BUFF, SEA GULL GRAY and FATHOM GREEN—give you a range to meet every owner's ideas on architectural appeal, distinctive styling, and harmony with surroundings. And "Century" colors won't weather out—they are built in the shingles for permanent attractiveness!

Multiple protection has real sales value! Just consider: "Century" Siding Shingles protect against weather—won't rust or rot . . . resist rodents and termites . . . can not burn. Any prospect is interested in points like these!

Built-in beauty for lasting good looks! Deep cypress graining a permanent part of the "Century" surface—gives authentic appearance of weathered wood; adds to the beauty and charm of any home. Butt lines can be either straight or wavy to suit customer's preference.

And the two-way economy appeals to all! First, "Century" Siding Shingles are moderate in initial cost—large 12"x 24" shingles go on quickly, easily, inexpensively. Secondly, there's virtually no maintenance cost on "Century" Shingles—they don't even need protective painting to keep their beauty through the years!

These are proved sales facts you can use to build your business with "Century" Asbestos-Cement Siding Shingles. For further information, ask your Keasbey & Mattison dealer, or write us direct.

KEASBEY & MATTISON

OMPANY . AMBLER . PENNSYLVANIA



means more business for you...

... IN REMODELING IDEAS

"The 'Perfect' House That Wasn't Good Enough" is a feature editorial presentation in the June issue. It's a house which, in 1946, was considered perfect according to all standards, yet has been considerably improved during the five-year interim because of the typically American urge for something better. Ten idea-packed pages will demonstrate to your best prospective customers how both comfort and pleasure were increased for its occupants by replacing windows with sliding glass walls, by enlarging and radiant-heating the paved terrace, by "building in" a concealed sound system for maximum music appreciation, by remodeling the kitchen to make it more unified and easier to keep.

Watch for this up-to-the-minute picturization of better living and use it in your Spring and Summer sales program. It's going to provide the progressive residents of your community with plenty of food for thought . . . to provide you with many timely tie-in opportunities.

. IN NATURAL MATERIALS

June House Beautiful presents a house that says MADE IN AMER!CA—a house built in the American tradition of making the most of materials at hand. Rough stone masonry, poplar siding, stained weathered grey, and pine paneling are mixed amiably with modern furnishings and sound-deadening Celotex ceilings. It's a house that's free of prescribed dogma in the true American Style, It's an unpretentious house which blends with the naturalism of the landscape around it . . . which is luxuri-

ous in the American sense of putting comfort of the family and the practical needs of living ahead of superficial appearances.

Is it going to stir up interest among the new home builders of *your* community? We firmly believe that you can count on it.

... IN BRICK

"Naturalistic needn't mean Rustic." says June House Beautiful. And to prove it, the magazine shows how the colors and textures of wood, brick and untamed foliage can give elegance to a house instead of merely country ruggedness. An exciting example of extra use of brick, inside and out, is pictured on page 112—an ideal example for you to display for your customers.



Remodeling of this paved terrace has put it in scale with the house and provided ample elbow room for big parties. Radiant heating in the paving has increased the duration of comfortable terrace living. There is no feeling of sharp demarcation between terrace and space beyond because of skillful use of curving lines.

MORE, OVER THE PAGE I





means more business

... IN PROMOTING BRAND NAMES

Use these practical trade messages for brand promotion ideas . . , built around best-seller names parading across June House Beautiful's advertising pages.

The "Build it Yourself" idea, by which the prospective home owner can build his own home with liberal use of his own labor, is featured in WELDWOOD PLTWOOD June advertisement. Before the state of the properties of the properties

Have you seen the most striking page in the book? That gargeous full-color page featuring The World's Most Beauthuf Flooring - WINGFOOT VINYL. Designed exclusively for GOODYEAR by Raymond Loewy Associates, Wingfoot Vinyl is wonderfully rich, warm, colorful. Desirt need waxing, Boots beauty beyond compare even after years of wear!

WRIGHT RUBBER TILE has the beauty, quiet comfort, ease of cleaning and amazing durability (It's called "the 100-year floor.") desired fo any floor from dining room to super-market, Twenty-one beautiful calors! Wright Manufacturing Company, P. O. Box 3211, Houston 3, Texas.

In selling wall-to-wall carpet, the accent is an beauty beauty in the customer's home. ROBERT'S "SMOOTHEDER" CARPET CRIPPER assures flawless installation, eliminating tack marks and ripples that show when carpet is installed turn and tack. "Smoothedge" is a plus value that helps sell more wall-to-wall carpet.

Custom-mode to fit your windows by EASTERN MACHINE PRODUCTS COMPANY's many custom-manufacturers, PRE-FAB blinds are evail-tom-manufacturers, PRE-FAB blinds are evail-flowers. Plastic finish, Pre-fab venetion, how enclosed all-metal head and one-piece metal bottom rail with snap-on tape clamps to remove the slats for cleaning.

A good house today represents a considerable investment which should bring lasting satisfaction to its owner. In the early stages of its construction the use of CUPRINOL will insure satisfaction by providing freedom from attacks of rot and insects, dimensionally stable millwork and smoother, more beautiful finish on plywood.

WEST COAST WOODS species - Douglas Fir, West Coast Hemlack, Western Red Cedar and Sirka Spruce - or ended for strength, durability and versalish, Write for seller ade - including and versalish, Write for dealer ade - including WOOD, a color pages and HOW TO SULD WOOD, a color pages and HOW TO SULD FARM BUILDINGS THAT LAST LONGER, 16 information-packed pages. Free in quantity.

Shellac is coming into wider use and popularity as a result of vague for natural wood finish on point of the policy of the polic

RUBBER TILE, by the makers of KENTILE, provides quiet, luxurious floors of "cushioned beauty" that won't wear out through years of use. No other Rubber Tile offers all these beautiful colors and exclusive decorative Theme

Color and design receive dramatic new expression in the new 1951 BIRCE LINE. Sparkling versatility . . fine interpretation of authentic designs and exceptional coordination of color throughout . . proclaim this as the finest Birge collection in over a century of wallpaper leadership. Write the Birge Company, Inc., Buffalo 1, N. Y, for name of distributor nearest you.

... IN INFLUENCING PRESTIGE-CONSCIOUS CONSUMERS

Use the attractive display cards and mats for your newspaper advertising, which are available free of charge, to put House Beautiful's prestige as a buying guide to work for your business.

For mounted display cards, check any or all of the top-quality products below (preceded by a number), which are advertised in the June issue.

For the mat, in which product names can easily be inserted, check the square indicated.

Fill in your name and mailing address and mail to: Merchandising Division, House Beautiful Magazine, 572 Madison Avenue, New York 22, N. Y.

- 1. CAREY FIRE-CHEX SHINGLES
- 2. VISQUEEN-X PLASTIC FILM FOR THERMAL INSULATION
- 3. BIRGE WALLPAPERS
- 4. CAREYSTONE CORRUGATED
 ASBESTOS-CEMENT
- 5. MISSISSIPPI BROADLITE GLASS
- 6. MOSAIC TILE
- 7. PC GLASS BLOCKS
 - 8. SUNTILE
- 9. VITROLITE COLORFUL GLASS
- 10. WELDWOOD PLYWOOD
- 11. AMTICO RUBBER FLOORS
- 12. FREMONT RUBBER TILE
- 13. GOODYEAR WINGFOOT VINYL FLOOR COVERING
- 14. KENTILE RUBBER TILE
- 15. WRIGHT RUBBER TILE
- 16. ROBERTS SMOOTHEDGE TACKLESS CARPET INSTALLATION

- 17. CURTIS WOODWORK
- 18. WEST COAST WOODS
- 19. WESTERN PINES
- 20. CUPRINOL WOOD PRESERVATIVE
- 21. AMERICAN BLEACHED SHELLAC MFRS. ASSOC.
- 22. CRAWFORD MARVEL-LIFT GARAGE
- 23. EASTERN PRE-FAB VENETIAN BLINDS
- 24. LORENTZEN LEVOLOR VENETIAN
- (SEEN IN HOUSE BEAUTIFUL) MAT

- 25. PITTSBURGH PLATE GLASS PICTURE
- 26. PONDEROSA PINE WINDOWS
- 27. RUSCO COMB. SCREEN & STORM SASH
- 28. PERMAGLAS AUTOMATIC ELECTRIC WATER HEATERS
- 29. RUUD-MONEL AUTOMATIC GAS WATER HEATER
- 30. GENERAL ELECTRIC DISPOSALL

*	No	card	avai	lable.
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McDERMOTT INSULATION

as currently seen in

House Beautiful

NAME			
ADDRESS			
CITY	ZONE	STATE	
			AR IIINE

for you

Low in initial cost and with practically no upkeep expense, HUNTER ATTIC FAM provides an efficient cooling system for homes in all price ranges. Installation is simple and inexpensive. Fan, motor, suction box and shutter are all in one unit that requires only a ceiling opening in hallway ond 18" clearance in ortic. HUNTER FAN AND VENTILATING CO., P. O. DRAWER 2858-8, MEMPHIS 2, TENN.

2. TENN.

Modern living includes window, flaor, ortic, kitchen fans for greater comfort; cleaner, healthier homes. Soaring fan sales curve can pull your sales up tool VAIRIFIED TAG merchandised in notional advertising helps sales by identifying for consumers air-moving units having quality TORRINGTON components. Request free book showing 113 products, sources.

Kitchens and small rooms must be ventilated at the ceiling level to do a thorough job. TRADE-WIND CLIPPER VENTILATORS come in two types, for installation in a cabinet over the stove or in the ceiling. Both provide complete, quiet ventilation, are simple to install and give years of trouble-free service.

"Zone Control — MINNEAPOLIS-HONEYWELL RECULATOR COMPANY. The new trend in heating of ranch style and larger homes is Zone Control. In the June issue of House Beautiful, Honeywell features an Illinois home that has three zones and three thermostats for comfort and fuel economy."

Every month in House Beautiful, Webster advertising tells your prospects about WEBSTER BASEBOARD HEATING—true perimeter heating with forced hot water. Proven in service in more than 12,000 installations, Descriptive literature on request to Warren Webster & Company, Dept. HAB-6, Camden, New Jersey.

WEST DODD LIGHTNING PROTECTION SYSTEMS provide almost 100% security, when properly installed. Approved by National Board of Fire Underwriters, Concealed Systems can be installed when buildings are under construction. Semi-concealed Systems are for installeding on standing buildings, and are so inconspicuous that they are hardly noticeable.

An all-metal factory fabricated MAJESTIC OUTDOOR FIREPLACE UNIT around which purchaser can build any type or design of fireplace — and of materia to individual preference. Easy to do. Lew cost. Really fun for entire famili Variety of sizes. Also various accessory equipment. Helps to transform yard in

on outdoor living room.

Second successful year coming up for SCUTL, Scatts exclusive dry applied Crebyrous Centrol, kenn hovers will worn to use this serfe, economical, easy-to-use method (no mixing or fussing with sprayer) to kill Crabgrass before it roins their lawn. Several quick treatments and it's done! Display SCUTL now! Box, \$.79 - \$1.95; Bag, \$7.85.



Elegance is added to this house, pictured in a June House Beautiful editorial on naturalistic colors and textures, by an indoor-outdoor use of brick. Note how natural brick paves the traffic way that starts outdoors as a covered walk and becomes an indoor hall. The outside brick wall continues inside to create an entrance foyer.

House Beautifu

. . . IN INFLUENCING PRESTIGE-CONSCIOUS CONSUMERS

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For the mat, in which product names can easily be inserted, check the square indicated.

Fill in your name and mailing address and mail to: Merchandising Division, House Beautiful Magazine, 572 Madison Avenue, New York 22, N. Y.

- 31. IN-SINK-ERATOR ELECTRIC FOOD WASTE DISPOSER
- 32. CHURCH SEATS
- 33. AMERICAN-STANDARD BASEBOARD HEATING
- 34. BRYANT AUTOMATIC HEATING
- 35. CARRIER AIR CONDITIONING
- 36. MINNEAPOLIS-HONEYWELL **THERMOSTATS**
- 37. MODINE CONVECTORS * WEBSTER BASEBOARD HEATING
- 38. WILLIAMS OIL-O-MATIC OIL BURNERS
- 39. HUNTER PACKAGE ATTIC FANS 40. ILGDUALAIRE HOME COOLING FAN
- 4. MIAMI-CAREY VENTILATING FANS
- 41. NUTONE VENTILATING FANS
- 42. TORRINGTON MOVING AIR UNITS
- 43. TRADE-WIND KITCHEN CLIPPER VENTILATOR
- 44. BLACKSTONE AUTOMATIC LAUNDRY
- 45. GENERAL FLOORCRAFT TWIN-12 MACHINE

- 46. HAMILTON AUTOMATIC CLOTHES
- 47. PHILCO HOME FREEZER
- 48. DUO-WAY GAS REFUSE DISPOSAL UNIT
- 49. EBCO DASIS AIR DRIER
- 4. MIAMI-CAREY RECESSED TOWEL CABINETS
- 50. MENGEL DELUXE WOOD KITCHEN CARINETS
- 51. STERLING HARDWARE FOR SLIDING
- 52. SHEPARD HOMELIFT ELEVATOR
- (SEEN IN HOUSE BEAUTIFUL) MAT

- 53. WEST DODD LIGHTNING **PROTECTION**
- 66. VOCATRON HOME COMMUNICA-TIONS SYSTEM
 - * MORTELL NO-DRIP TAPE
- 54. DOWFLAKE
- **62. EXALGAE FOR POOLS** 63. DUBOIS FENCES
- 64. HABITANT FENCES
- 65. RUSTICRAFT WOODEN FENCES &
 - * MAJESTIC OUTDOOR FIREPLACE UNIT
- * No card available.

NAME			
ADDRESS			
CITY	ZONE	STATE	

.

Homes with "up-and-down" heat invite illness, say health authorities!

Anthracite heat is steadier, healthier, more comfortable and automatic anthracite heat saves money for your clients year after year.

EVERY WINTER many families suffer discomfort, colds and other winter illnesses as a result of "up-and-down" heat from non-solid, so-called "modern" fuels. Here's what happens. The thermostat shuts off the flow of heat completely. The warm air rises to the ceiling. Cold areas and drafts are created in the lower part of the rooms!

Your clients don't get "up-and-down?" heat with hard coal. Heat with modern fully automatic hard coal equipment is thermostatically controlled—but the fire is never completely "off."

Big savings! With modern automatic hardcoal equipment your clients get the convenience of automatic heating and, because they burn the cheaper sizes of hard coal, they can save up to \$125 on their yearly fuel bills.

For full information on modern automatic hard-coal heating, write Dept, TA4-5, Anthracite Institute, 101 Park Avenue, New York 17, N.Y.



Your clients can save up to \$125 a year on fuel with this automatic anthracite heating equipment.



■ ANTHRATUBE...A complete boilerburner unit with induced draft. Delivers maximum heat with hard coal. Compact. Completely automatic from coal bin to ash removal. Highly efficient combustion. Provides year-round hot water.

ANTHRAFLO . . . A low-priced, efficient boilerburner unit. Compact. Feeds self from fuel bin. Rugged, simple construction. Completely automatic, including ash removal. Silent, clean. Provides year-round bot water. (Furnace-burner units for warm air systems also available.)



MODERN HARD-COAL
STOKERS...specially designed
complete boiler-burner units (such as Motor
Stokor, Electric Furnaceman and others),
offer high efficiency, are smaller in size and
greater in economy of operation. Completely automatic from bin feed to ash
removal. Stoker automatically feeds the
coal and removes the ashes. Provides yearround hot water. (Furnace-burner units for
warm air systems also available). Modern
conversion stokers can be quickly installed
in present boiler or furnace.

.....

ANTHRACITE INST

101 Park Avenue

New York 17, N. Y.

There's a Reason for the Growing Popularity of BRIGGS Beautyware

IN COLOR



More Builders . . . More Plumbers . . . More Home Owners Prefer Briggs Fixtures than Ever Before!

1950 was the greatest year in Briggs' history. Despite stepped-up production it was impossible to meet the unprecedented demand.

Year after year, the popularity of Briggs Beautyware has been steadily growing with builders, plumbers and home owners everywhere. There are, of course, good reasons for this acceptance. For example, Briggs fixtures are sturdily built for long-lasting dependability, yet all unnecessary dead weight has been eliminated to simplify installation.

They are available in four beautiful pastel colors costing only 10% more than white, when purchased

in complete sets. They offer many saleable features such as the safety bottom bathtub, large capacity lavatory and quiet flush closet—all stain-proof and acid-resisting.

For the second time in as many years, Briggs Beautyware was honored by the American Society of Industrial Engineers with the Merit Award. This award is granted for leadership in research, engineering, design

and manufacture.

As the only manufacturer in this field to be so honored, the award is a testimonial to the quality of Briggs products and the achievement of the Briggs organization. Of this we are proud.

BRIGGS MANUFACTURING COMPANY . 3001 MILLER AVENUE . DETROIT 11, MICHIGAN

TO SELL MORE

OFFER THEM THE BEST!



Just consider the extra-big money's-worth you can offer your customers with Barrett* Rock Wool insulation.

For instance, Barrett Rock Wool in 8-foot batts combines easy application with seamless, vapor-proof, ceiling-to-floor protection. Extra fastening strength is guaranteed by the triple-thick nailing flange. Because Barrett Rock Wool so effectively obstructs the passage of heat and cold, you can confidently promise home-owners that they will enjoy a warmer house with lower fuel consumption in winter, and a cooler, more comfortable house in summer.

And for your own satisfaction, remember this about Barrett Rock Wool. You can *store more*, in *less space*. Careful selection of minerals results in clean, light wool which compresses readily but has sufficient resiliency to return to specified thickness even after long storage.

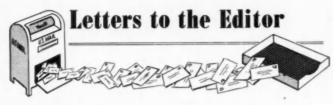
Write to Barrett today. Our representative will give you any information you need. He will also show you the attractive advertising and sales promotion material that is available to you.



THE BARRETT DIVISION

ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.

205 W. Wacker Drive, Chicago 8, III. 1327 Erie Street, Birmingham 8, Alabama 36th St. & Gray's Ferry Ave., Philadelphia 46, Pa.



Zoning Interpretation

Sirs: There has been some dispute and difference of opinion in a local zoning committee regarding what constitutes a one-and one-half story residence distinguished from a two-story residence. My contention is that the term "two-story" refers to the residence which is two stories to the eaves, or with the wall-faced dormers; and that a one- and one-half story residence is one with smaller floor area upstairs, and with roof dormers.

J. Gordon White Trenton Junior College, Trenton, N. J.

The National Bureau of Standards in its report BMS-9r, designates a half-story as "That part of a building situated wholly or partly within the roof frame finished for habitation." That would indicate that a one and one-half-story building would be the one full story plus the half-story that is situated partly within the roof frame. It would also indicate that a two-story building is that situated wholly below the roof framing.—The Editors

Ventilated Closet Doors

Sirs: I have been a subscriber of American Builder for many years and I have often wondered why the industry has not taken to ventilated doors for clothes closets. As you know, garments are usually hung in a clothes closet after being worn and usually carry a certain amount of odor. There is usually a stale odor in all closets which have been closed for any length of time. It appears to me that a door, nicely ventilated with a grille or in some other manner, would serve a very definite purpose.

Okey Miller, The National Stock Yards National Bank, Chicago, Ill.

An Unusual Construction

Sirs: As a recipient of American Builder through the courtesy of the Vickere Lumber Co. of Sheridan, Wyo., we have become familiar with and enjoy reading your publication. The enclosed photograph illustrates a peculiar type of construction. The town of Superior, Wyo., where the



photo was taken, is a coal mining camp in southwestern Wyoming. In the old days black powder was delivered in round, black iron containers for blasting down the coal. These powder cans were accumulated and laid up in mortar for walls of garages and outbuildings. The resulting structures were satisfactory in service, with good insulating properties and reasonable permanence. The building shown in the photograph is over thirty years old.

K. C. Bellows Superior Pumice Co., Inc., Sheridan, Wyo.

Seek Cost Information

Sirs: My father left me a tremendous amount of cost information on building construction for the various trades and units on a production per hour basis, but all dated 1937 and 1938. What I would like to know is what percentage, generally speaking, are building trade mechanics producing today in respect to their production in 1938. That is, for a certain job which produced, say 100 square feet per hour in 1938, what is being produced in 1951?

Otto A. Fusch, director, Newark School of Painting & Decorating, Newark, N. J.

L-Shaped Concrete Block

Sirs: In the December issue I read an article about a Canadian builder who was claiming great construction success with an L-shaped concrete block. Twenty-five years ago I built a gang mold that held 100 of these block and made a lot of block of

(Continued on page 174)

STAY TIGHT WITH KAY-TITE



KAY-TITE CONTROLS WATER SEEPAGE IN POROUS MASONRY

CINDER BLOCK WALLS
CEMENT BLOCK WALLS
STUCCO SURFACES
PUMP AND BOILER PITS
FIELD AND QUARRY STONE
CONCRETE MASONRY
RETAINING WALLS
UGH MASONRY UNGLAZED

ROUGH MASONRY UNGLAZED TILE SWIMMING POOLS CISTERNS SILOS ELEVATOR PITS. CELLARS RESERVOIRS COPINGS BRICK WALLS BRICK PIERS FISH PONDS

KAY-TITE CAN BE USED ABOVE OR BELOW GRADE, INSIDE OR OUTSIDE

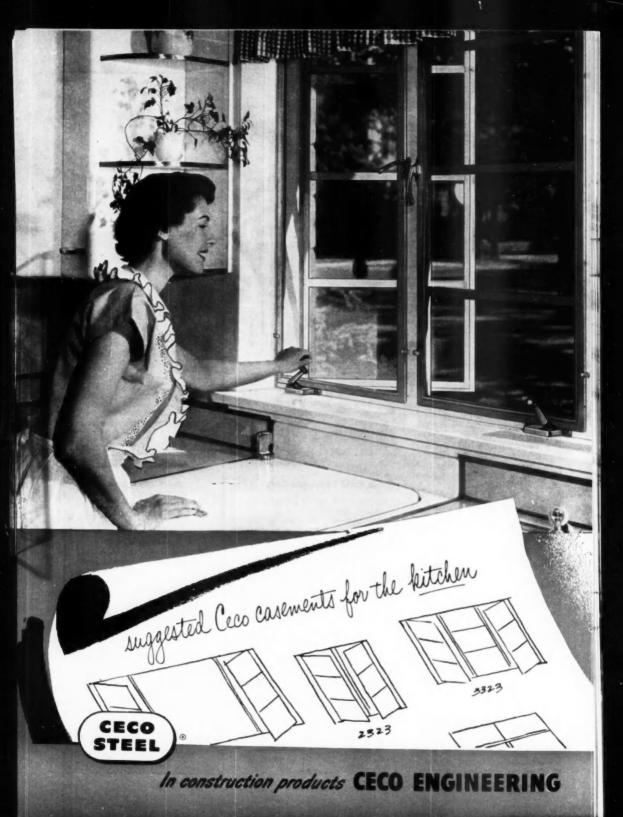
Available in 50 lb. drums White and 9 colors, Write

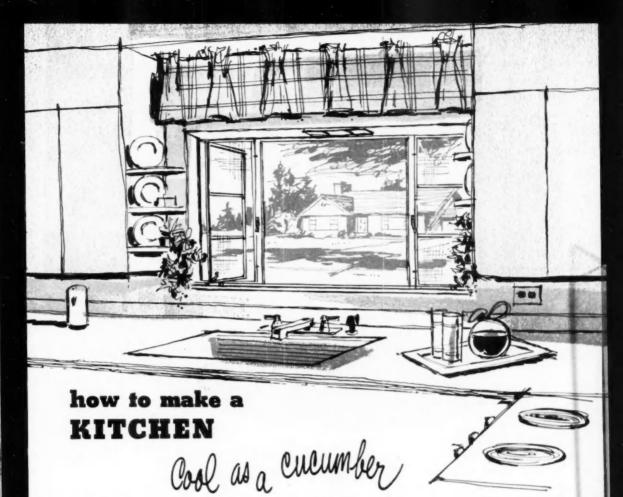
KAY-TITE

COMPANY

BOX 550, West Orange, N. J. ELEVEN FAR WESTERN STATES CONTACT KAY-TITE COMPANY, 1717 WESTLAKE AVE., NORTH SEATTLE 9, WASHINGTON

More than 20 years of satisfactory performance





If you query a housewife about her kitchen, here's one thing she'll tell you:

"It must be a pleasant place to work."

And, right off, she'll say it must be cool-torrid temperatures will not be tolerated in her "workshop."

So, give her a kitchen that's as cool as a cucumber. Use Ceco Steel Casements, specially engineered, with ventilators that literally reach out and scoop in stirring fresh air . . . that provide magic circulation . . . clear out cooking odors . . . bathing the inside with cooling, cooling breezes . . . a welcome, welcome relief.

She'll like the added view she gets through these handsome window creations. She'll be ever so grateful because they won't stick or warp-are easy to wash-add beauty to a room in which she spends so

And remember, when you build with Ceco Casements, you know you've used the very best . . . you're sure of economy too. Send for free booklet detailing window designs for the kitchen and every room in the house.

CECO STEEL PRODUCTS CORPORATION

General Offices: 5601 West 26th Street, Chicago 50, Illinois

Offices, warehouses and fabricating plants in principal cities

makes the big difference

FREE Window Design Booklet

Ceco Steel Products Corp., 5601 W. 26th St., Chicago 50, III.

Rush me a free book on window design titled "New Beauty in

Steel Casements.

Address_

Zone___

Dunator Eblects at Budget Costs—with MENGEL

can do with Mengelux FANCY FACE!

Using Mengelux — bardwood plywood, with one face of lovely, genuine Mahogany, Walnut, Oak and Birch — you can get "decorator interiors" at a cost only slightly higher than plaster and wallpaper.

The installation is completed in hours instead of days or weeks, and you give your client that "something extra" which makes all the difference between conventional and extraordinary jobs.

Mengelux is available in large, 48" x 96" panels, and in other standard stock sizes. It is available through leading distributors and building materials dealers, almost everywhere. Write us direct for local names and addresses.

Mengelbord

Where fancy faces are not required, Mengelbord is

the answer to the builder's prayer! It is 1/4" bardwood plywood, with one-piece face, free from joints and oval patches. No grain-raising. Works and cuts cleanly. Most panels are all-white or nearly all-white. Can be painted, stained or finished natural. And Mengelbord is available through same distributors who handle Mengelux; names and addresses on request.





Plywood Division, THE MENGEL COMPANY, Louisville 1. Ky.

The Mengel Company . . . growers and processors of timber • manufacturers of fine furniture • plywood • flush doors • veneers corrugated containers • kitchen cabinets and wall closets



ON and OFF the Record

News, Views and Comments

A. Z. NELSON—In an article entitled "Do We Need Lumber Price Controls?" published in American Forests, the author points out that while WPB was exerting every influence to increase lumber production, OPA policies were operating to discourage production.

OPA—"It did one thing successfully," says Nelson. "It discouraged all-out lumber production at a time when lumber was among our most critical commodities."

PRICE CONTROL—That, more than anything else, continues Nelson, "dropped lumber production from 36 billion feet in 1942 to 28 billion feet in 1945."

1950—Without price control lumber production jumped to 38 billion feet in 1950.

WHAT IS CONTROL?—Price cannot be controlled without control of the factors that determine cost. That includes not only labor in the woods and mills, but all of the equipment used in production as well as transportation, warehousing and selling costs.

BLACK MARKETS — Without control of costs all the way along the line, production drops and the black market comes into existence. There is no realistic alternative.

WARTIME CONTROLS—The only reason for the partial success of price controls during the war was general public acceptance based on patriotism. Even that wore pretty thin when a man wanted a little more beefsteak or a new tire.

CURRENT CONTROLS — With the unpopularity of the war against Chinese communists, and very lukewarm acceptance of the idea of sending more troops to Europe, price control will not work at present. No law and no conceivable enforcement staff can make price control work if the public does not want it. That is true not only here, but in any country anywhere.

GANGSTERISM—As pointed out in this magazine before, imposition of price control on a public that does not want it, merely opens up a new and more lucrative field of operation for organized gangsterism. KEFAUVER—If the crime investigating committee he heads succeeds in changing nothing, it has proved beyond any doubt that there is a highly organized national, and possibly international traffic in gambling, narcotics and vice.

FINANCE—That this organization for the conduct of illicit business has unlimited funds at its command must be conceded. If its gambling, narcotics and vice activities are stopped nothing would be simpler nor more natural than for it to turn to black market activities. Presumably lumber first, then any or all other building materials. Price controls without a universal freeze of all cost factors for all commodities and services is an open invitation to black market gangsterism to invade and take over the distributive industries.

NO NEED—As Nelson points out price control of lumber succeeded only in curtailing production when production was desperately needed. The same was true of many other building materials. In no small measure was price control during the war responsible for the critical postwar housing shortage. Not only is price control not needed now. It never was needed.

WORLD WAR I—The public was unanimously sold on this war. Patriotism was at a hign point. Price control was not imposed. There was no unreasonable rise in prices. There was no impairment of the production capacity of American industry.

PATRIOTISM — It was equally high in World War II, because the public was sold on the war. It could have been won more quickly without the inhibiting effect of OPA.

FIRST THING—To get things in gear and keep prices in line government first must sell the public on its foreign military policy. If the policy is salable prices will stay in line. If the policy cannot be sold government will do well to abandon it. All the regulations that can be written will avail nothing if the public is not in sympathy with the need for them. And, axiomatically, if the public is in sympathy there will be no need for regulations. How long will it take government to stop selling decency and patriotism short?

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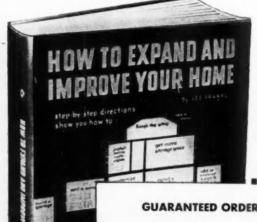
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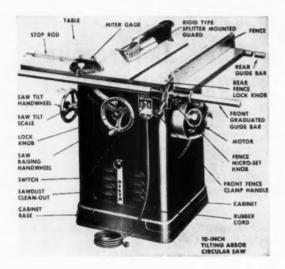
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TECHNICAL GUIDE for Builders and Craftsmen



Things to Know About the Circular Saw

Suggestions offered enable the operator to perform all the functions of mitering, dadoing, resawing, rabbeting and many other duties with ease and skill

Description of Saw

The circular saw consists of a base, a table mounted on the base, and a saw arbor within the base. One end of the arbor carries the saw blade which protrudes through a slot in the table; the other end is fitted with a pulley. The saw is fitted with a fence. This can be set at any distance from the saw blade to act as a guide when cutting boards lengthwise. The circular saw has two grooves into which a miter gauge can slide to use as a guide when cutting boards crosswise.

Uses of Saw

Like other woodworking machines, the circular saw has a variety of uses. Basically it is used with a saw blade for cross cutting, ripping, and mitering. By adding certain accessories, the saw can be used to cut dados, cut mouldings, resaw, rabbet, joint, etc. The size of the circular saw is based on the diameter of the saw blade, such as a saw with 8-inch blade is called an 8-inch saw, and a 10-inch diameter blade is a 10-inch saw.

Dado Head



A dado head has two outside cutters and three or four inside cutters as shown above. The outside cutters are filed like hollow ground blades and can be used by themselves. The inside cutters, however, are filed

(Continued on page 50)

TABLE OF COMPOUND MITERS

Tile	Equivalent	4-51	DE BUTT	4-51	DE MITER	6-510	E MITER	8-SIDI	MITER
of Work	Toper per inch	Tille	Miter Gage	Tile	Miter Goge	Tile	Miter Gage	Tile	Miter
5°	.087	1/2	85	443/4	85	293/4	871/2	221/4	88
10°	.176	11/2	801/4	441/4	801/4	291/2	841/2	22	86
15°	.268	334	751/2	431/4	751/2	29	8134	211/2	84
20°	.364	61/4	711/4	41%	711/4	281/4	79	21	82
25°	.466	10	67	40	67	271/4	761/2	201/4	80
30°	.577	141/2	631/2	373/4	631/2	26	74	191/2	781/
35°	.700	191/2	601/4	351/4	601/4	241/2	713/4	181/4	763
40°	.839	241/2	571/4	321/2	571/4	223/4	693/4	17	75
45°	1.000	30	5434	30	54%	21	673/4	15%	733
50°	1.19	36	521/2	27	521/2	19	661/4	141/4	721/
55°	1.43	42	50%	24	503/4	163/4	643/4	121/2	717
60°	1.73	48	49	21	49	141/2	631/2	11	70%

Figures in table are degrees to nearest quarter-degree, and are for direct setting to miter gage and tilt scales providing miter gage reads 90° and tilt scale 0° in normal position. Taper per lach given in second column applies only to front elevation and only to a 4-side figure.

What wall space height has least flue action?

aboratory tests at Massachusetts Institute of Technology and elsewhere reveal that reducing the HEIGHT of 4" and thinner air spaces below 3 ft., increases the flow of heat and reduces the space's insulation value.

Increasing the height of the wall space increases the amount of surface resistance to convection currents, until at 36" this resistance is greater than the convection. Beyond 36", there is little change.

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the least heat loss by convection. "A". e shortest, has e greatest loss.



TECHNICAL GUIDE for Builders and Craftsmen

(Continued from page 48)

square across and cannot be used without the outside cutters as they will tear the work.

The dado head cuts cleanly in any direction. Grooves varying in width from $\frac{1}{8}$ inch to $\frac{13}{16}$ inch can be made by using different combination of cutters.



Saw Blades

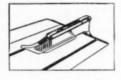
1. Combination saw blade. This is similar to the ripsaw, except that its teeth are finer and are beveled on the back.

2. Cross-cut saw blade. This blade cuts across the grain and is useless for ripping. Only the tips of the teeth are set.

3. Ripsaw blade. The teeth are filed to many different patterns. The point of each tooth must be strong. 4. Hollow ground saw blade. This blade is used where a fine, smooth finish is required. The blade does not require set, since it is tapered from the edge to the center for clearance.

Guard and Splitter

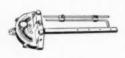
The circular saw guard is a metal basket which covers the saw blade without impairing the view of the work. This guard moves up and down with the work. On a tiltingarbor saw the guard tilts with the blade.



An additional aid to better work and safety, the splitter is the metal plate just behind the saw blade. It holds the saw-cut (called "keri") open so that the wood will not rub against the saw to cause burning and binding. A splitter usually has anti-kick-back fingers which grip the work and prevent it from being thrown back.

Miter Gauge

The miter gauge can be set to cut angles up to 60



degrees right and left. It has individually adjustable index stops, and 5/16-inch diameter stop rods with two clamps for repetition work. Since work usually tends to creep slightly as a

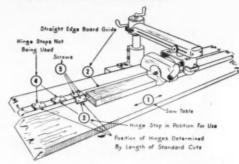
miter cut is being made, using the miter gauge clamp attachment helps assure greater precision. The miter gauge can be used on either side of the saw blade.

In operating the circular saw the following safety suggestions are offered. 1. Have plenty of light on your work.

2. Keep guards in place. 3. Pull master switch or electric cord. before changing saw blades or other cutting tools.

4. Lock table and blade securely. 5. Use push stick on small work. 6. Do not talk while working. 7. Turn off power when finished. 8. Clean off table when finished. 9. Keep table and floor clear of all scrap wood. 10. Keep cutting tools sharp. 11. Never use fence as stop when cross-cutting. Data and illustrations by Delia Power Tool Div., Rockwell Manufacturing Co., Milwaukee, Wis.

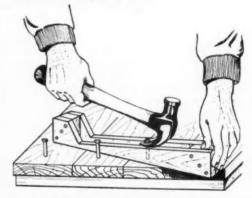
Hinges for Saw Table Stops



Ordinary hinges make useful stops on a saw table where fixed lengths of lumber are cut in large quantities. Hinges with straight, parallel sides are best for this type of work.

One side of hinge is screwed to straight-edge board guide (2) at a point that will stop the piece that is in work, when the loose end of hinge is lying against the top of saw table. When not in use and other cutting is being done, the end of the hinge is flipped back over the straight edge guide (2) as shown in figure (4). As many hinges as needed may be cut in place to take care of all standard cuts that are made. These remain up and out of the way until needed when the required one is flipped down into position on the saw table. Sawdust and splinters will not gather in front of hinge and obstruct their passage.—Submitted by Warren H. Howe, Longview, Wash.

A Nail Pulling Accessory



Shown in the drawing above is a special nail pulling jig that can readily be made up from hardwood and kept at the bench or in the tool shed. The shape of the two pieces that form the jig are clearly shown. They are fastened together with glue and screws, with thin spacer blocks sandwiched in between. This allows space for the largest spikes to be pulled to pass between the hardwood pieces. Before using this jig as a hammer support, draw the nails to be pulled above the surface of the material. The jig is then set in place over the partly drawn nail and is moved progressively along as the nail extends farther out of the board until the nail is fully drawn.—Submitted by John E. Hyler, Peoria, Ill.

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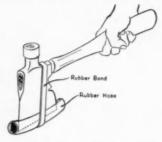
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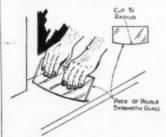
TECHNICAL GUIDE for Builders and Craftsmen

How to Make a Hatchet Boot



To make a hatchet boot take a piece of rubber hose about 3½ inches long. Split one side of the hose to receive hatchet blade. Use rubber band over the hatchet head to hold hose in place.—Submitted by Dean W. Cornett, Wytheville, Va.

How to Make an Emergency Scraper

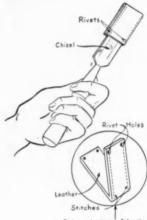


To make an effective scraper that can be used in an emergency, snap off several pieces of double-strength glass and make a slight curve on the bottom edge as indicated in the sketch above. This can then be used to scrape off finger marks and lead pencil marks from new woodwork.—Submitted by M. J. Hiland, Lansing, Ill.

How to Make a Pencil Pointer

Take a small pasteboard box. Cut two tongues, each 1½x2 inches. Glue a sandpaper strip on one and a flannel strip on the other tongue. Press tongue tip ¼-inch downward.— Armas Esti, Helsingfors, Finland.

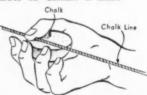
How to Make a Chisel Boot



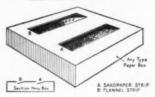
Enlarged view of leather strip before Riveting

To make a chisel boot take a piece of leather five inches long, fold in the center and fasten the upper end with two split rivets. Sew along edges on both sides.—Submitted by Dean W. Cornett, Wytheville, Va.

How to Chalk a Line



The chalk should be held with the round side in the palm of the hand and the line between the flat side of the chalk and thumb. With a rotary movement the line is guided with the thumb and fingers so that chalk wears evenly.—Submitted by Edward G. Lachapelle, Canterbury, Conn.



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GOOD WORKMANSHIP

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



When dabs of mortar are spotted on the corners of the brick, the mortar does not completely fill the head joint, and voids are still left.

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All head joints in both face brick and back-up work should be completely filled with morter. If head joints are not completely filled, water may penatrate to the incide of the wall through openings in the joints. Date of merier sported as the corners of the brick are not nearly enough to fill the joints.

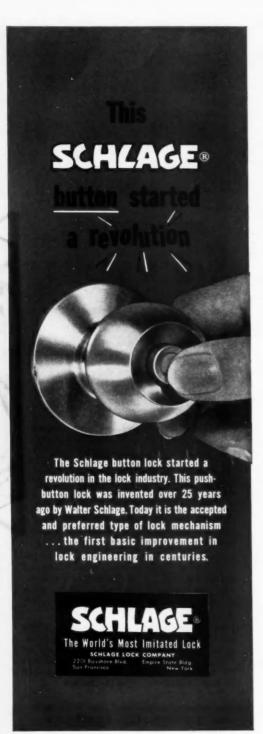
Take a look at the two examples shown at the left, and you'll instantly see why full head joints are an essential part of good workmanship in bricklaying.

No mortar material alone, not even Brixment, can make watertight masonry walls, so long as open crevices and pockets are left in the mortar joints.

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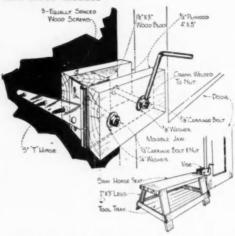
Brixment mortar has greater plasticity, higher water-retaining capacity and bonding quality, greater resistance to freezing and thawing, and freedom from efflorescence. Because of this combination of advantages, Brixment is the leading masonry cement on the market.

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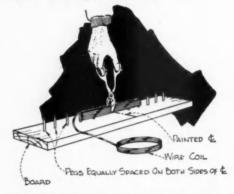


Combination Work Bench and Door Holder



Drawing above illustrates a combination work bench and saw horse with an adjustable door holder secured to end of saw horse with T hinge. Hinge allows mechanic to alter position of holder and door for setting door locks and hardware. The ¼-inch carriage bolt and nut are left loose enough so that clamping crank can draw both sides of clamp to door.—Submitted by F. W. Gruber, Lindsay, Texas.

Jig for Cutting Form Wire



A handy jig for cutting form wire can be quickly made with a heavy board and some large nails.

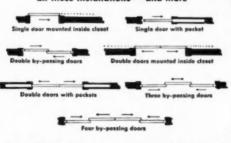
Draw a center line on the face of board. The large nails or bolts are driven or bolted through drilled holes equal distances on each side of center line. These pegs are so spaced that when wire is wrapped around opposite pegs and cut with wire cutters along center line two pieces of desired length will be the result.—Submitted by Warren W. Howe, Longview, Wash.

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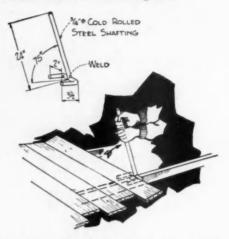
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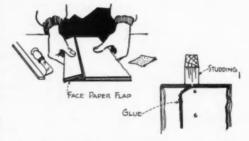
How to Make a Wrecking Bar



The drawing above illustrates a wrecking bar that is useful in ripping up flooring and decking in connection with remodeling work.

Bar is made of 34-inch cold rolled steel shafting. The U part of bar is shaped by heating and tempering. The vertical bar is then welded to U.—Submitted by F. W. Gruber, Lindsay, Texas.

A Simple Way to Cover a Plaster Board Joint

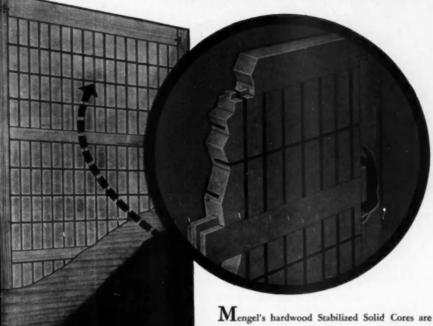


This is a simple way to take care of a short plaster board joint. Score the board on the back approximately 1½ inch from the edge, break board and remove from paper by bending the board down slightly and forcing upward with finger tips. This leaves 1½ inch of face paper extending from the edge which should be feathered on the back with fine sandpaper. When plaster board is applied to the studding this feathered edge is cemented to the adjoining board.—Submitted by M. G. Miller, South Williamsport, Pa.

Plan NOW for National Home Week

SOLID-CORE Flush DOORS

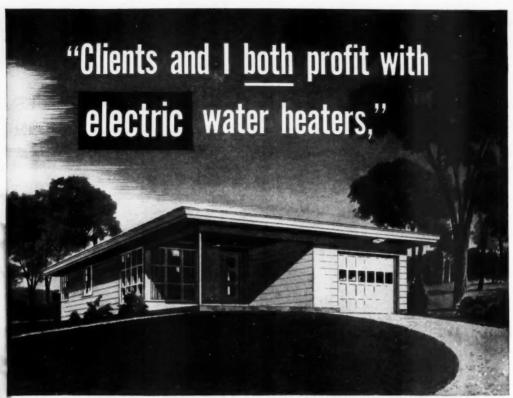
have this exclusive STABILIZED CORE



deeply slotted both with and across the grain to absorb expansion and contraction internally without changing the dimensions of the door. The entire poplar core assembly is tongued-and-grooved into the dove-tailed wedge-locked hardwood frames, with enough tolerance to absorb stresses,

Designed and built to withstand severest conditions, Mengel Solid-Core Flush Doors are better. Get all the facts. Write today for new full-color A.I.A. descriptive catalog, including specifications,

Plywood Division, THE MENGEL COMPANY, Louisville 1. Kentucky



says Mr. F. L. Kasper, builder, of Monessen, Pa.

One of the homes built by Mr. F. L. Kasper of Monessen, Pa., including Electric Water Heaters as well as adequate wiring and range circuits. These homes will not be uniform in appearance or plan, and will sell in the \$15,000 class.

"I believe I was the second person in this area to use an Electric Water Heater. And I figure there is no reason why my clients shouldn't profit from electrical living as much as I do," says Mr. Kasper.

Builders and clients alike profit from this type of equipment because *Electric* Water Heaters are completely automatic. They're built for long life. They're economical in operation. They keep water at the desired temperature in their fully insulated tanks. And their all-electric, dependable temperature control assures safety. There's no flue or vent, so installation can be made anywhere. This shortens hot water lines, cuts piping cost, prevents water waste.



electric water heaters

THEY'RE WHAT
PEOPLE WANT!

ELECTRIC WATER HEATER SECTION

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

ALLCRAFT - BAUER - BRADFORD - CRANE-LINE SELECTRIC - CROSLEY - DEEPFREEZE - FARBANKS-MORSE - FOWLER - FRIGIDAIRE - GENERAL ELECTRIC HOTFORNT - HOTSTREAM - JOHN WOOD - KELVINATOR - LAWSON - MERTLAND - MONARCH - NORGE - PEMCO - REX - RHEEM - SEPCO A. O. SMITH - THERMOGRAY - TOASTMASTER - UNIVERSAL - WESTINGHOUSE



THE CONFUSION that always attends government imposition of regulations again prevails in Washington.

NO SOONER is a regulation issued than it becomes necessary to begin issuing a continuing series of interpretations, clarifications and changes. In a short time these accumulate into a baffling array and often introduce contradictions,

THAT IS NO REFLECTION on the ability of the authors of the regulations. It is just impossible to foresee unintended imbalances and injustices. Only experience with a regulation can bring these to light.

FOR INSTANCE, just what is meant by "actual date such credit is extended" in Sec. 6 of Regulation X? There is no specific answer that applies to all cases.

ONLY A GENERAL criterion can be advanced. It is that the phrase means the date on which the borrower first receives funds or has funds made available to him, or the date on which a note or other credit instrument was executed. The one to use is the one which occurred last.

ANOTHER QUESTION arose regarding the phrase "appraised value as determined in good faith." The question came up in connection with cases where there is an existing structure on the property, a structure such as a residence, garage or servants' quarters.

THE RULING is that where the existing structure and proposed construction are to be so located that separation in case of resale would be possible or likely, appraisal should include only the land area on which the new construction is to be located.

AS AN EXAMPLE, where an owner has a tract of land consisting of several adjacent lots, on some of which there are structures, and the owner proposes to build a new structure on one of the lots, only the vacant lot on which the new structure is to go should be appraised.

CERTAIN EXEMPTIONS from the provisions of M-4 have been authorized. M-4 is the order prohibiting construction of amusement, recrea-(Continued on page 61)



Zarco OVERdoors RESIDENCE GARAGES

THE HDEAL DOOR FOR TODAY'S HOMES

People building today like lots of VALUE. The Barcol OVERdoor for the garage offers—distinctive cam-controlled closing action, tailored twin counterbalancing springs, strong wood sections (in special designs if desired), rugged metal parts, careful engineering, accurate installation by factory-trained men, easy operation without sticking, very low maintenance cost, weathertightness, matched Electric Door Operators, various types of switch controls, and the amazing Radio Control—all backed by over 20 years of specialized experience in the design and manufacture of improved overhead-type doors. So, for the greatest VALUE (and at a reasonable cost!)—specify Barcol OVERdoors.



BARBER-COLMAN COMPANY

104 MILL ST., ROCKFORD, ILL.

AMERICAN BUILDER



(Continued from page 59) tion and amusement buildings costing more than \$5,000, and requiring special authorization for construction of a long list of buildings which includes practically every commercial structure.

NO AUTHORIZATION is required, says NPA, to construct schools, libraries, churches and medical clinics. No authorization is needed for post offices if no space is provided for any other use or for live stock judging building at state fair grounds, provided the structures are not used for recreation or entertainment.

RADIO AND TELEVISION stations need no authorization, nor do buildings for publishing newspapers, magazines and books, provided that the principal use is not job printing.

A RESTAURANT in a factory for the exclusive use of factory personnel needs no authorization. Restaurants for public use do.

STORAGE BUILDINGS for manufacturing, processing or whole-saling food products are exempt—need no authorization. Buildings for manufacturing or repairing business machines need no authorization.

WAREHOUSES AND GARAGES used exclusively for gasoline distribution are exempt, and so are garages adjoining new apartment houses, if the garage is used exclusively for the cars of tenants and does not render commercial services.

RELAXATION of terms of Regulation X have been announced for the Savannah River area of South Carolina and near Paducah, Ky. Under certain limitations laid down by HHFA, including the provision that all such housing shall be available only to AEC personnel.

FHA-INSURED financing for one to 4-family units for non-veterans in these two areas is as follows: 90 per cent of value of family unit where unit value is not over \$7,000; \$6,300 plus 65 per cent of value over \$7,000 for values between \$7,000 and \$11,-000; \$8,900 plus 55 per cent of value over \$11,000 for values between \$11,000 and \$15,000; \$11,100 plus 14 per (Continued on page 63)

THESE HOMES HAVE
AN IMPORTANT SALES FEATURE!



Here's a favorite visual sales feature with thousands of builders and architects throughout the country . . . Dura-seal Combination Metal Weatherstrip and Sash Balance! Dura-seal provides complete weather protection that saves fuel and prevents the infiltration of dust, dirt and soot. It assures smooth, easy window operation and window beauty. It eliminates paint-stuck windows, old-style pulleys, cords, weights and box frames. And with Dura-seal, plank frames are used, thereby permitting the use of narrow mullions and trim.

All this ... in one unit ... at a cost no more than weatherstripping combined with any other type of sash balances!

Builders! Ask your lumber dealer about Dura-seal or see
Sweet's File, Builders, Section $\frac{3g}{Ze}$ Architects! See Sweet's File, Architectural, Section $\frac{19b}{Ze}$





KENTILE FLOORS

reduce labor costs and increase profits



Low-cost Kentile Floors go down tile by tile, quickly and economically. The machined precision of Kentile's edges guarantee that each tile is perfectly flush against the neighboring tiles. No time is lost in trimming . . . a maximum of flooring can be laid in every working period.

The wide range of 26 decorator colors assures perfect compliance with any color plan specification ... any design or decorative scheme. And the light, bright colors can't wear off ... because the colors go all the way through to the back of each tough tile.

Kentile can be installed practically any place ... over any smooth, firm metal, wood or concrete interior surface... even below finish grade over concrete on fill in direct contact with the earth. It's ideal for walls, too, because all of the famous Kentile advantages: color ... durability ... ease-of-maintenance make Kentile perfect for walls with interior decor.

Prospective builders or buyers know Kentile Floors because they are advertised in the magazines that sell American consumers the building products they prefer.

KENTILE.

The Asphalt Tile of Enduring Beauty



KENBASE completes the job



Kenbase bridges the dirt-catching and often unsightly gap between floor and wall. It never needs painting and scuff and mop marks can't show.

KENTILE, INC., 58 Second Avenue, Brooklyn 15, New York • 350 Fifth Avenue, New York 1, N. Y. • 705 Architects Building, 17th and Sansom Streets, Philadelphilo 3, Pennsylvania • 1211 NBC Building, Claveland 14, Ohio • 225 Moore Street, S.E., Atlanta 2, Georgia • 2020 Walnut Street, Kansas City 8, Missouri • 1440 11th Street, Derver 4, Colorado • 4532 South Kolin Avenue, Chicago 32, Illinois • 1113 Vine Street, Houston 1, Texas • 4501 Santo F & Avenue, Los Angeles 58, California • 95 Market 51., Oakland 4, Calif. • 452 Statler Building, Boston 16, Mass.



(Continued from page 61) cent of value over \$11,000 for values between \$15,000 and \$25,000; 50 per cent for values over \$25,000.

DEFENSE WORKERS who are veterans and who purchase homes in the areas with G.I. loans are allowed from 95 per cent for not over \$5,000 to 55 per cent for over \$25,000.

CONSENSUS of a number of builders is that relaxations are not liberal enough.

THE GUARANTY SURVEY, issued by Guaranty Trust Co. of New York, points out that continuation of easy money as official government policy, when a check rein on inflation should be applied, shows up a contradiction and dilemma.

"AN ESCAPE from the dilemma," says the Survey, "would seem to be through higher interest rates, including higher yields on government securities . . .

FNMA, in January, purchased 10,242 mortgages amounting to \$81,000,000. Of these, \$21,000,000 were over-thecounter transactions, and \$60,000,000 were made on the basis of commitments previously issued.

HHFA RESEARCH states that as of April, 1950 there were 45,875,000 dwelling units in the United States. Of these, 39,390,000 were non-farm, and 6.485.000 were farm. The totals include everything from penthouses to tarpaper shacks. Vacancy rate of the non-farm units was 1.7 per cent.

SOWING THE SEEDS of the greatest revolution since 1776, is the way a television addict recently referred to the televising of the Kefauver hearings in New York. It's the first time, he said, that a great segment of the public has ever seen momentous news made, and the first time a dramatic, nation-wide expose of gangster holds on local government has ever been presented.

IF THE PUBLIC gets the full significance of what the Kefauver committee is exposing, the New York hearings might well bring about a popular revulsion, capable of instituting sweeping changes in government morals.

Say goodbye to the hard-to-get lead pan Lor Tile Showers

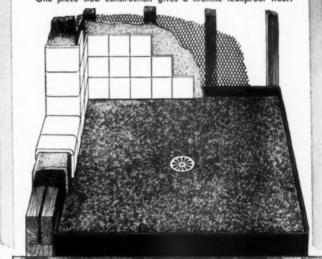
FIAT PRECAST TERRAZZO RECEPTORS



make a definite saving in building tile showers.

Save money . . . Save time . . . Make a better tile shower floor

One piece slab construction gives a lifetime leakproof floor.



Available for prompt delivery See your plumbing contractor

STANDARD SIZES:

Square type 32" x 32" - 36" x 36" - 40" x 40" Corner type 36" x 36" - 40" x 40"

The Fiat one piece precast receptor slab will not be affected by settlement of the building as would the old-fashioned "multilayer" construction of fill, lead pan, grout and tile. The rustproof metal receptor flange encases the tile walls making a leakproof connection.

FIAT METAL MANUFACTURING COMPANY

Three Complete Plan (Chicago area plant) Franklin Park, III.

Long Island City 1, N. Y. Los Angeles 33, Calif.

Fiat showers are made by Perceloin and Metal Products, £td., Orillia, Ontaria



Opportunity is knocking for builders within 500 miles of Peoria, Illinois! Distribution of BEST homes is now practical in this area, with overnight truck delivery. Two-bedroom and threebedroom sizes and many elevations available, priced from about \$7,000 . . . A. F. of L. built . . . accepted for FHA and GI financing.

BEST homes are available with an exclusive franchise to dealers who are financially responsible . . . are qualified builders and developers. Thousands of BEST homes have proven themselves already-and dozens of dealers are making volume sales, avoiding delivery, procurement and financing headaches at the same time! Get all the details now!

BEST home features

- . Built with or without basements
- · Fast accurate construction no expensive delays
- 2 layer cedar shingle construction, applied at factory
- Thin wall rigid conduit for wiring already in wall sections
- · Large size panels, easily assembled
- Interior wall (waterproof Upson board) applied at factory
- Doors and windows weather-stripped at factory
- · Equipped with fully automatic oil-fired furnace
- · Powerful sales and advertising support
- Youngstown or American sink and kitchen cabinets
- · Choice of colors in "Kentile" asphalt tile floors
- · Low down payments and low monthly cost to your customers
- · Trained fieldmen to assist you

There's sales magic in the name "BEST"—the proof is that BEST dealers have tripled in the past 2 years. Here's a real opportunity for profit, whether you build 10 or 1000 homes a year. For details write, wire or phone:





The Priceless Ingredient is Quality ...and You Set At "All Trom 1 Source"

NATIONAL LOCK

Quality has been a guiding principle at National Lock since the founding of the company in 1905. Down through the years extensive facilities and skilled personnel have been blended in a happy combination that has consistently produced fine hardware to appeal to those who want the best. • Cabinet hardware, builders hardware, furniture trim, cabinet locks, casters, shelf hardware, screws and bolts . . . all reflect National Lock's reputation for quality . . . all assure the utmost in customer satisfaction. • Price, like quality, is important in bringing about steady sales and substantial profits. National Lock prices are competitive. They represent outstanding value in each hardware item made by National Lock. • Whether you sell or specify hardware, look to National Lock for the ultimate in distinctive hardware for a wide range of jobs . . . it's available "all from 1 source."



NATIONAL LOCK COMPANY

ROCKFORD, ILLINOIS

MERCHANT SALES DIVISION



SANDER

Model 105

GIVES WOOD SURFACES THAT "HAND-FINISHED" LOOK

In Guild orbital-motion sanding, thousands of grits on the abrasive pad move in a %6 circular path at high speed—regardless of the direction you sand. Result: A beautifully blended, uniform smooth surface that produces that "handfinished" appearance — 10 times faster than hand sanding!

POWERFUL, RUGGED FOR HARD USE

It's a sander that really sands. This new Guild Sander is vibrationless—lightweight (only 5 lbs.)—handles as easily as a sanding block. It is not a vibrator-type machine, but a motor-driven, counterbalanced, ruggedly-built tool designed for long, trouble-free operation.

A QUALITY TOOL-POPULAR PRICED!

Yes, this new Guild is a quality tool—priced for builders and carpenters who take pride in perfect work. Sold separately with standard pad at \$59.50. Accessories include sponge rubber pads for curved work; carrying case (extra). See it—try it at your Guild Tool Dealer's. Or write for complete information and name of nearest dealer.



Deep corrugated heavy gauge steel with extraheavy bright galvanized finish and full rounded top and wide flanges in a full range of sizes, straight and round type. A top quality well for permanent construction.



Works into corners, up to moulding. Ideal for cabinets. built-ins, furniture.



Smoothes rough plaster, plaster patches, dry wall taped joints.



Sands rounded surfaces, concave or convex, with sponge rubber pad.

The USF Standard

A truly low cost window well featuring streamline-corrugated steel, full crimped top and generous flanges, bright galvanized finish in a highly adaptable round style. Good for years of service at the lowest practical initial cost.



Made of heavy gauge expanded metal with angle frames for both Custom and Standard wells.

PRODUCTS

- Hollow Metal Doors and Frames
 - Prefabricated Metal Buildings
- Corrugated Metal Window Wells
 - · Highway Guard Rail
 - Structural Plate
 Bridge Flooring
 - Corrugated Metal Pipe



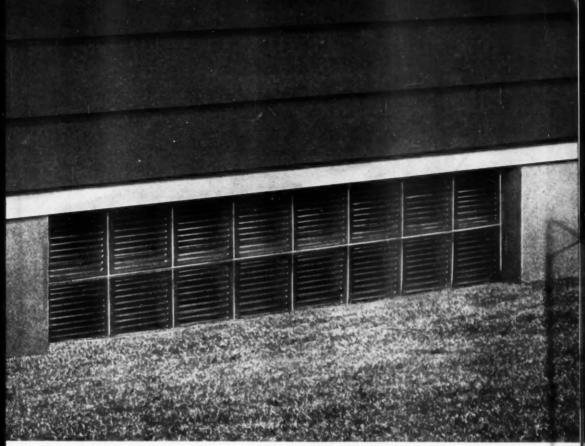
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NITED TEEL ABRICATORS, INC.

PORTER-CABLE Machine Co.

7005 N. Salina St., Syracuse 8, N. Y.
Manufacturers of SPEEDMATIC and GUILD Electric Tools

In Canada write: Strongridge Ltd., St. Catharines, Ont.



Installed in place of sash, Insulux Glass Block hides outside

Daylight Engineering with Available GLASS BLOCK



A typical example of the millions of damaged or loose-tifting

Here's a way to end forever complaints about broken or damaged basement windows! Use panels of Insulux Glass Block.

A panel of Insulux Glass Block makes a sound, weather-tight, insulating wall that lets in light but blocks out sight. It is extremely hard to break and it can't ever tust or rot.

Supplies of Insulux Glass Block and all the installation materials are non-critical and immediately available. Installation can be made at the time the mason puts in the foundation (the 8" sizes fit 8" concrete blocks perfectly) or as replacement for oldfashioned sash in houses already built. In either case, installation is simple and easy . . . requires only ordinary mason's tools.

One Insulux Glass Block job in a home can lead to others. In fact, anyone who wants light but not sight is a customer for Insulux Glass Block. Applications are practically unlimited.

Want more information? We'll be glad to send you all the details. Just write Daylight Engineering Laboratory, Department A. B. 5, Box 1035, Toledo 1,

Ohio. American Structural Products Company, Subsidiary of Owens-Illinois Glass Company.



INSULUX "WALLS OF DAYLIGHT"

—by the pioneers of Daylight Engineering

Cut building costs on every job!



12 with everage I H.R. motor, less with larger motors

DEEPER CUTS WITH SMALLER BLADE. Only the Walker-Turner "900" Radial Saw cuts 31/6" deep with 9" blade — more than most machines with a 14" blade! You get greater capacity with smaller blades (which require less power) . . . and more rim force at the saw tooth, resulting in higher cutting efficiency.

WALKER-TURNER **NEW "900"** RADIAL SAW

designed for fast, accurate cutting and ease of operation on the job site



ALL CUTS MADE IN CON-VENIENT TABLE AREA - Rip and crosscut through center of table — with "CENTER-PIVOT" offset yoke and simplified mounting.



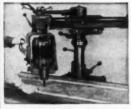
EXTRA PROTECTION - New type guard with anti-kick-back pawls and splitter for ripping pro-tects operator. Drop-leaf side guards for added safety.



THIS BOOKLET TELLS HOW Walker-Turner's new "900" Series does all the radial saw jobs easier, faster, and at less cost. Speed wood and plastic cutting fime . . . make more profit on each job. Get the whole cost-cutting story! Mail coupon for booklet.



ELIMINATE POWER WASTE and voltage drop with exclusive off-center drive motor—also cuts expense of big blades and heavier extension cables.



THRIFTY IN FIRST COST and operation — light enough to move from job to job. Easy clearance through doorways — only 24" wide with wood table removed.

WALKER TURNER WOLKER TUTTE KEARNEY AND TRECKER CORPORATION PLAINEIELD M. J.

		Firm.
OLD ONLY THROUGH	AUTHORIZED DEALERS	

Walker-Turner Dept. AB4, Plain	livision, Kearney & effeld, N. J.	Trecker Corp.
Name	***************************************	
Firm	******************************	
City	Zone	State



"The smaller the bore The stronger the door"



The Sargent 4500 requires only a 114" crossbore

 \bullet Another reason why the Sargent 4500 leads among bored-in locks — the 4500 requires only a $1\frac{1}{4}$ " crossbore.

Quick and easy to install, it can be used

in metal doors without reinforcing.

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

Ask your supplier or write us for full information.





Sargent and Company

New York

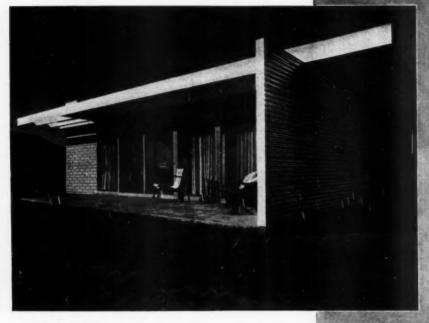
NEW HAVEN, CONN.

Chicago

Builders Hardware and Fine Tools since 1864



IN TMIS desert home at Palm Springs, California, Kaiser Aluminum corrugated roofing is used in the living room ceiling to diffuse sound and carry the attractive exterior corrugation design inside the house. The corrugations deflect and hinder movement of sound waves.



KAISER ALUMINUM corrugated roofing is used on wing walls to reflect heat from patios and to provide wind shelter. Horizontal corrugations blend with the roof design to give a lower, wider effect.

KAISER ALUMINUM ROOFING helps keep interiors cooler during hot days by reflecting up to 60 per cent of the sun's rays. At night, when desert temperatures fall, the aluminum helps retain interior warmth to give this beautiful home a more uniform temperature over each 24-hour period.



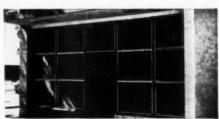
KEEP ALUMINUM IN YOUR PLANS



KAISER ALUMINUM SIDING is used for fire-resistant curtain walls in R. H. Macy's San Francisco store. In several instances siding was locked together but most often was set vertically at an angle several inches apart to permit circulation of air. The lightweight panels permit overnight remodeling. Architects: Gruen & Krummeck, San Francisco.



DUCTWORK MADE OF Kaiser Aluminum cut installation and fuel costs in this Richland, Washington, housing project. Architects and engineers J. Fletcher Lankton-John N. Ziegele, Peoria, Ill., decided on Kaiser Aluminum because, uninsulated, it delivers as much heat as insulated galvanized material. Aluminum's lightness enabled crews to install units faster, with less worker fatigue.



KAISER ALUMINUM SHADE SCREENING was installed in the doors and windows of this medical office to lower interior temperatures on hot days, and enhance the beauty of the exterior. Tiny louvers block sun's heat rays, but admit comfortable, glareless light. Additional benefits: Privacy, an effective insect barrier, protection from fading.

Kaiser Aluminum is now helping to meet the critical demands of national security, but a limited amount of some aluminum building materials is still available.

We suggest you check with your sources of supply before deciding upon any substitute material.

When you are planning for defense purposes and have government approval. aluminum building materials will usually be available in the quantities required.

What about the future for aluminum building materials?

Kaiser Aluminum has started work on new facilities that will increase its production by 80 per cent. As soon as possible, this additional aluminum will be shared by the building industry for civilian uses.

This prospect for a plentiful supply helps spell a bright future for aluminum in the building industry. So, when you plan for the future, we urge you to keep aluminum in your plans.

Aluminum building materials offer exclusive advantages

They offer advantages in beauty, design and quality that are found in no other building material. We feel they deserve your consideration for the present and the future. Representative applications of Kaiser Aluminum building materials in use today are shown on these pages.

For full information about any of these Kaiser Aluminum building materials, including AIA files, write: Consumer Service Division, Kaiser Aluminum & Chemical Sales Inc., 552 Kaiser Building, Oakland 12, California.

Kaiser Aluminum

A major producer of building materials for farm, home and industry

SOLD BY KAISER ALUMINUM & CHEMICAL SALES, INC., KAISER BUILDING, OAKLAND 12, CALIF... OFFICES IN: Atlanta * Boston * Chicago * Cincinnati * Cleveland * Dallas * Denver * Detroit * Houston * Indianapolis * Kansas City * Los Angeles Milwaukee * Minneapolis * New York * Oakland * Philadelphia * Portland, Ore. * Rochester, N. Y. * Seattle * Spokane * St. Louis Wichita * Export Office, Oakland, California * Warehouse Distributors in Principal Cities





DECORATIVE PLASTIC WALLBOARD

saves time, money and trouble!

The architect, the builder and the home owner
who know Arborite know that this
high quality, MELAMINE-surfaced, laminated plastic board is not

high quality, MELAMINE-surfaced, laminated plastic board is not only the finest material available for lasting beauty under hard service, but also that it saves TIME, TROUBLE AND MONEY because it is fast and easy to install ON THE JOB.

Arborite does not stain or discolor . . . is unaffected by moisture, grease, oil, mild acids, alcohol and alkalies . . . is cigarette-proof . . . wipes clean with a damp cloth.

DOZENS OF USES

Arborite comes in builder-size panels—4' x 8' and 2'6" x 8'—
which are readily applied with mastic adhesives and trim mouldings. Its ½-inch
thickness gives it wallboard strength. It is ideal for kitchen drainboards
and counters... for walls and ceilings in bathrooms and kitchens...
for walls, ceilings and counter areas in clubs, bars, hotels, hospitals
and other buildings. Available in 30 different patterns and
colors, it can be selected to harmonize and
blend with any color scheme.

BIG PROFIT OPPORTUNITY

In handling Arborite, dealers have a rare profit opportunity—an easy-to-sell product, a generous profit margin and effective sales literature, samples and displays. Ask your building supply, plywood or floor covering distributor for complete information—or write direct to us.

WHOLESALERS: Attractive territories still open.
Write or wire for full particulars.

J. A. DAVIES & COMPANY

314 STRAIGHT AVENUE, S. W., GRAND RAPIDS 3, MICHIGAN
Sales Representative of
THE ARBORITE COMPANY LIMITED, MONTREAL, CANADA



WINDOWALL specified by Humphrey & Hardenbergh, Inc., Architects

Windowalls
COMPLETE WOOD WINDOW UNITS

PICTURE WALL captures a beautiful view with a single wide Andersen Gliding Window Unit. It's a WINDOWALL. It provides the crowning touch to a kitchen which shows interesting use of materials throughout.

This WINDOWALL floods light and air into the room that needs lots of both. It adds comfort and

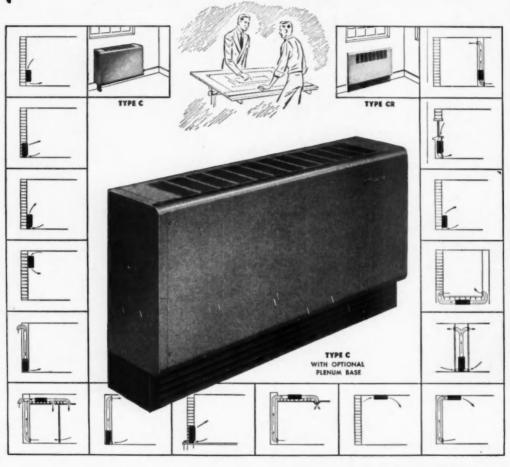
beauty to a kitchen work area which too often is needlessly drab. And because it is a WINDOWALL, it is efficient both as window and as wall.

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

TRADEMARK OF ANDERSEN CORPORATION

Andersen Corporation . BAYPORY . MINNESOTA

Solve your heating and cooling problems with new Modine Cabinet Units

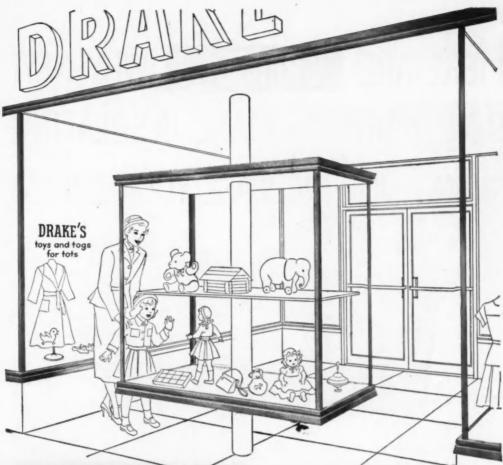


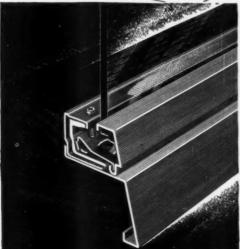
Whatever your heating and cooling problems — there's a new Modine Cabinet Unit to fit your needs. A single unit for forced hot water heating, chilled water cooling. Steam models for heating only. Smartly designed and easy to clean and service. Quiet operation and quick response make Modines ideal for modern commercial and public buildings. Two basic types in five sizes... with optional equipment for meeting a wide range of application requirements.

WRITE FOR NEW BULLETIN 550 TODAY! Your Modine representative is listed in the classified section of your phone book. Or write Modine Mfg. Co., 1501 Dekoven Ave., Racine, Wis.



U-1087





ENGINEERED

FOR FAST INSTALLATION FOR LONG-TERM EFFICIENCY

You can solve current store front remodeling problems by adapting modern Kawneer Assemblies to your specific requirements.

Not only have individual Kawneer units been engineered for trouble-free, labor-saving installation, they have also been developed to fill a wide variety of structural purposes and conditions,

For further information, write the Kawneer Company, Dept. AB-72, 1105 N. Front St., Niles, Mich., or Dept. AB-72, 930 Dwight Way, Berkeley, Calif.

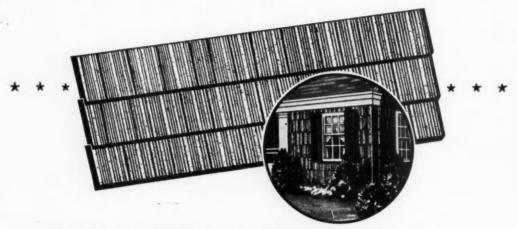
Kawneer

ARCHITECTURAL METAL PRODUCTS

Store Front Metals • Modern Entrances

Aluminum Fadina Materials • Aluminum Roll-Type Awnings

HERE ARE 7 REASONS WHY NEW BIRD NARROW SHAKE INSULATING SIDING WILL INCREASE YOUR SALES!



It is F. H. A. accepted for new construction, opening a whole new market for you!

It is distinctive, architecturally perfect... meets design requirements for *new* and old houses!

The 11" exposure of Narrow Shake is perfectly proportioned... handsome and authentic in appearance.

Over-lap method of application gives added insulation.

Each panel is wrapped in deeply penetrating, weatherproof asphalt...a protective blanket that will last many years.

Pays for itself by cutting heating and painting bills... only house trim will ever need painting.

Bird Narrow Shake Siding is available in an attractive choice of colors.

See your distributor or Bird salesman now ... and build sales and profits with this versatile new Insulating Siding... another quality product by Bird... famous for quality since 1795! We'll be glad to send you more information ... write us at Bird & Son, inc., Dept. AB-5, East Walpole, Massachusetts.

East Walpole, Massachusetts



Chicago, Illinois New York, New York It's Lighter... It's Tougher
It's the NEW

HOMELITE

ONE MAN Chain Saw

Pays for Itself in No Time Clearing Out Wooded Land

4 Horsepower
More Power Per Pound
than any other saw

Remember, you can't start any building or construction job until the location is properly cleared. And with this new Homelite One Man Chain Saw, you can do your clearing in less time . . . with less labor . . . and at less cost. It's the fastest cutting, easiest handling saw ever developed. And it's a rugged, dependable saw that needs less maintenance, fewer repairs, than any other saw.

Weighing only 27 lbs . . . and perfectly balanced, with most weight close to operator's body . . . a Homelite handles perfectly on all types of cuts. Any man can operate it easily. Send for new, complete bulletin.

It's a one-man saw that does the work of other two-man saws. Cuts an 18 inch tree in 16 seconds. Cuts trees 48 inches or more in diameter. Has simple, safe controls; automatic clutch; automotive type carburetor; rainproof magneto and chrome-plated, perma-sharp, narrow kerf chain.

CARRYABLE
PUMPS • GENERATORS •
BLOWERS • CHAIN SAWS



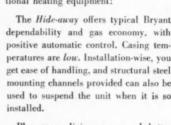
This heating unit sells more *living* room

Hide-away Gas Forced-Air Furnace adds real value and appeal to a house. It can be tucked away in the attic or suspended from ceiling or under the floor, releasing for storage, utility or living all the valuable space usually occupied by conventional heating equipment!

A truly great space saver like the Bryant

The Hide-away offers typical Bryant dependability and gas economy, with positive automatic control. Casing temperatures are low. Installation-wise, you get ease of handling, and structural steel mounting channels provided can also be used to suspend the unit when it is so

Plan more living space and better heating for your homes at the same time. Plan to use the Bryant Hideaway Forced-Air Furnace! For complete details, contact the Bryant Distributor nearest you or write direct. Bryant Heater Division, Dept. 82, Affiliated Gas Equipment, Inc., 17825 St. Clair Avenue, Cleveland 10, Ohio.





Your single source of supply for everything in gas heating equipment!

Bryant Model 324 Forced-Air Furnace, with Hevigage 12-gauge steel heat ex-changer. For all gases. A.G.A. inputs: 65, 85, 100 and 125 thousand Btu per hour.





Other Features That Make Comet Saws Your Best Buy

The Comet radial arm rides on eight fully enclosed permanently Ine Comet radial arm rides on eight fully enclosed permanently lubricated ball bearing rollers. Precision ground bearing tracks assure smooth, easy operation. Heavy oiled felt wipers seal radial arm bearings from dirt and dust. All weather exposed parts are chrome or cadmium plated or heavily enameled to perts are chrone of caumain placed of heavily enameted to prevent rust. Power cables are protected by flexible metal con-duit. Comet saw motors give full rated horsepower and provide 100 percent overload capacity.

With all these features, Comet saws cost no more—yet do more work and last longer. They require little maintenance— practically no parts replacement. Comets are your best buy! Over 50 different combinations to fit your individual needs. See your building machinery dealer or write for specific information.

Speed and Safety

When you buy a power saw you want to increase production - make more cuts per man-hour and reduce labor costs. You also want a saw that will give you increased production without increasing your accident rate. Here are some reasons why a Comet saw will give you both speed and safety.

GROUPED CONTROLS

All Comet saw controls are in front and to the right of the operator. There's no awkward reaching over the saw assembly to make adjustments. Controls adjust quickly and smoothly for different cuts. You get increased production and added safety.

FULLY RETRACTING ARM

The Comet radial arm retracts with the saw assembly, leaving the work area in full view. Layout marks are easier to follow – the saw blade can be seen at all times. Operator is not endangered by working around the obstruction of a fixed arm.

BUILT-IN SAFETY FEATURES

Comet's exclusive safety return spring protects operator—allows cut-off stroke to be pre-set—stops forward travel of saw blade and helps return saw assembly to starting position. Comet saw guards are fully adjustable—cover mandrel nut and most of saw blade for maximum safety. Positive anti kick-back dogs that grip work before it enters saw blade protect the operator when rip-ping. All control handles are large, easy to grip and lock the saw assembly firmly for safe, accurate

THERE'S A COMET SAW DESIGNED FOR



THE COMET JUNIOR Up to 1½ h.p., cuts 4" deep, 19" wide, rips material 25"



THE COMET CLIPPER Up to 5 h.p., cuts 4% deep. 19" wide, rips material 29" wide.



THE COMET SENIOR Up to 7½ h.p., cuts 6" deep. 22" wide, rips material 40"



THE SENIOR 8" Cutoff Saw—up to 71/2 h.p., cuts 8" by 10" timbers.

Comet Senior 8"

Comet Junior

City

CONSOLIDATED MACHINERY & SUPPLY CO., LTD.

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Please rush me prices and dope on:

Comet Clipper



THE TIMBER CUTTER Up to 10 h.p., cuts 16" by 16" timbers.

Comet Timber Cutter

Comet Senior

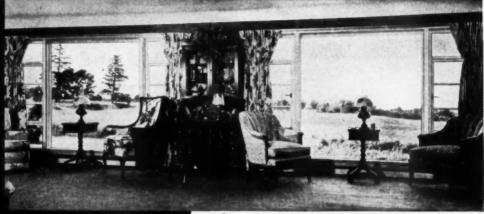
Send coupon for free information and literature on the Comet that fits your need.

METS Cut Quicker

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modern wood BEEGEE WINDOWS



for any style home!

Beautiful Bee Gee Modern Wood Windows...styles for every type home...prices for every budget. Bee Gee Windows are complete units consisting of frame, pre-fit glazed sash with glass embedded in putty, copper screen and all hardware installed at the factory... ready to set in the wall.

Picture windows available with Thermopane or Twindow. Prompt delivery assured on all sizes.



BROWN-GRAVES CO. Akron I, Ohio

Write now! Get the complete, beautifully illustrated Bee Gee Window Catalog.

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Award Winner..."for excellence in design"*

THE CRANE CRITERION LAVATORY

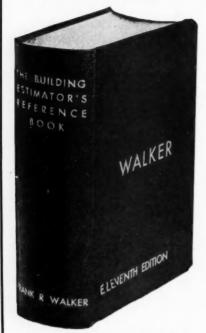
*The Annual Gold Medal Award of the Architectural League of New York "for excellence in design of industrial products for architecture" was awarded to Henry Dreyfuss, noted industrial designer for his design of the Crane Criterion Lavatory. Crane leads again with the award-winning Criterion counter-top lavatory. This new idea in bathroom fixture styling is typical of Crane progress—and one reason why Crane is the "Preferred Plumbing."

The Crane Criterion lavatory is solid slab vitreous china in white or a choice of eight Crane colors. Designed for installation in a counter-top or as a free-standing unit. The spacious rectangular basin has the overflow at front. The smart new Criterion trim is brush-finish chromium with clear lucite handles and exclusive Dial-ese controls that operate at finger-tip pressure. Size overall: $30\frac{1}{4} \times 22$ in. Basin: 16×12 in. See the Crane Criterion lavatory at your Crane Branch or Crane Wholesaler. For sale by Crane Dealers.

CRANE

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5 VALVES • FITTINGS • PIPE • PLUMBING AND HEATING

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1790 pages, 1000 tables, 1000 illustrations, 28-page cross index, 4½ x 6½, flexible cover

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By Frank R. Walker

Production methods have changed greatly within the past few years. New building materials have come on the market. New tools have improved construction methods. Costs are way up on many items. These changes have made previous estimating data obsolete.

The Eleventh Edition contains up-to-date estimating and cost data on all classes of building construction. Information on house and other light construction work is complete. Thousands of items that enter into estimates are logically arranged and tabulated for ready reference.

Since the first WALKER appeared 35 years ago more than 106,000 have been published. Kept abreast of developments in the industry by frequent revisions it became the leader in its field. It has long been recognized as the only complete compilation of estimating and building cost data available in one book. Whether you build houses, do remodeling, alterations or repair work you will find in it the information you need to prepare accurate, dependable estimates.

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- 1. Increase your profits with more accurate estimates
- 2. Stop losses by checking out costly omissions and mis-
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- Increase your daily volume and reduce labor costs on the job by adoption of the most economical methods and utilizing some of the new tools that are pictured and described

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Send for your copy of the new Eleventh Edition of THE BUILDING ESTIMATOR'S REFERENCE BOOK today. Then you can take advantage of the many new methods and ideas in it for increasing your profits through better estimates.

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With Your Copy You Will Receive FREE a Copy of the

Vest Pocket Estimator

This 220-page 2½ x 5-inch book is not sold separately. It is the most popular vest pocket reference ever used by contractors. Estimating and cost data most frequently referred to is herein presented in condensed tabular form. Rough cost figures on small jobs can be worked out and submitted within a few minutes.



My <u>TV</u> <u>Repairman</u> Gave Me the Sales Idea of the Year!

I was puttering around the yard when the TV man came; so we went into the house together. We were walking through the utility room when he stopped suddenly.

"Now, what in the world are those vacuum tubes for?" he asked, pointing to my Honeywell Electronic Amplifier. "That isn't a radio."

"It's part of the Honeywell electronic temperature control system," I said.

"Well, that's a new one on me. How does it work?"
So I told him about the Outdoor Anticipating
Thermostat that senses weather changes, and the
electric clock thermostat that precisely measures
indoor heating requirements. And I explained how
the amplifier interprets signals from these thermostats, and operates the furnace. Well, you should
have seen his eyes light up.

"Man, I'll bet this system is really sensitive with those tubes in the circuit."

"Up to 100 times as sensitive as conventional systems," I said. "So we keep mighty comfortable."

"Must be quite a selling point for a house. Electronics have a lot of glamor nowadays."

Well—that pulled me up short. Here I'd been putting Moduflow into a lot of the houses I'd built, and I knew it made my customers happier and more comfortable. But I'd never thought about it as a sales feature. "Brother, you've been sound asleep on your feet," I said to myself.

I didn't waste any *more* time. Since then, we've been featuring Moduflow in our sales talks and advertising. And the results have been *wonderful*.

For my money, Moduflow is the sales idea of the year - it's going into all the houses I build from now on.

章 章 章

Honeywell offers other, lower-priced controls that help you sell houses, too. The famous Chronotherm keeps temperatures remarkably uniform, turns heat down at night, up in the morning—all automatically. The Time-O-Stat automatically turns heat up in the morning. For more of the why's and how's, call your local Honeywell office. Or write Honeywell, Dept. AB-5-77, Minneapolis 8, Minnesota.

Honeywell

First in Controls

MAXIMUM SIZE, STRENGTH and INSULATING VALUE

combined with

LIGHT WEIGHT

No matter what the emergency, Weatherproof Homasote always plays an important part in the construction picture. This famous insulating-building board—combining unusual strength with sizes up to 8' x 14'—meets all types of military and civilian construction, temporary or permanent ... barracks, warehouses, housing, field and ammunition shelters, field kitchens, camouflage, map mounting and road signs. Homasote's light weight makes it easy to handle; its strength and compactness permit easy portability without breakage.

For new home construction, Homasote provides the strongest insulation-board sheathing available. For interior, dry wall construction, the big sheets provide crackproof walls and an ideal base for either wallpaper or paint. The average room wall is covered with one piece—8 feet high and up to 14 feet in length! With its high resistance to air infiltration and moisture, Homasote has successfully withstood the greatest extremes of snow, hurricanes, tornadoes and floods—from the Aleutians to the Antarctic.

For modernization and repairs, Homasote finds many uses in all types of buildings...to finish an attic or add a room; for renovating porch ceilings; for factory office partitions; for storage and construction sheds, garages, play houses, tool houses, barns, roadside stands, dog houses, bath houses; for outdoor advertising signs; for boat and trailer interiors.

Write for literature and specifications folder showing how to use this outstanding product. Please give us the name of your lumber dealer!

HOMASOTE COMPANY, Trenton 3, N. J.





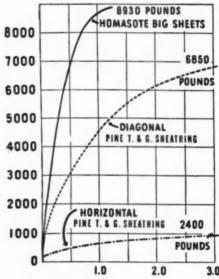
. in Big Sheets up to 8' x 14'

NO NEED TO FEAR

HURRICANES TORNADOES TWISTERS



- ... for the Emergency
- ... for New Home Construction
- ...for Modernization of homes, offices, factories, farm buildings



RACKING TESTS prove Homosote Sheathing 33.6% stronger than diagonal wood sheathing and 272% stronger than horizontal wood sheathing.

... oldest and strongest insulating-building board on the market



Nova Sales Co.—a wholly-owned Homasote subsidiary—distributes the Nova Roller Door, Nova-I. P. C Water-proofing Products, the Nova Shingle and Nova-Speed Shingling Clip and the Nova Loc-Nail. Write for literature.





ways to use GLASS

"to enhance the living comfort and salability of low-cost houses"

Comfort and salability. These primary considerations led the judges to award the \$2,500 prize for the "Best Use of Glass" to Architect Seymour R. Joseph, of Joseph & Vladeck, New York, in the NAHB-Forum House Design Competition.

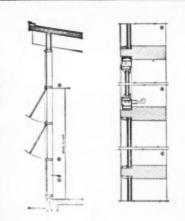
The plans and details show how practical and economical Mr. Joseph's ideas are. Also, how appealing to home buyers because of the excellent daylighting, adequate ventilation, a feeling of spaciousness, personal privacy and a view outdoors.

Especially notice the walls. Their 48" modular construction takes standard size materials. Without change in the uprights or cross members, walls can have more fixed glass or ventilating windows, or more panels, as taste prefers.

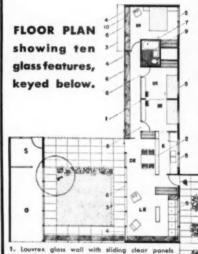
And what a feature this is!

For comfort, fuel economy and maximum usability of floor space, Thermopane* insulating glass is specified for all windows. The modular window wall makes Thermopane easily affordable for low-cost homes.

For answers to any questions you may have, write Libbey. Owens Ford Glass Co., 1151 Nicholas Bldg., Toledo 3, Ohio.



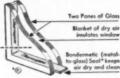
Details of living room window wall. $2'' \times 6''$ wood frame. Standard projected sash are $45\%'' \times 25\%''$ take standard Thermopane units $42\%'' \times 22\%''$. Fixed units are standard $45\%'' \times 25\%''$ throughout house. Insect screens are attached inside.

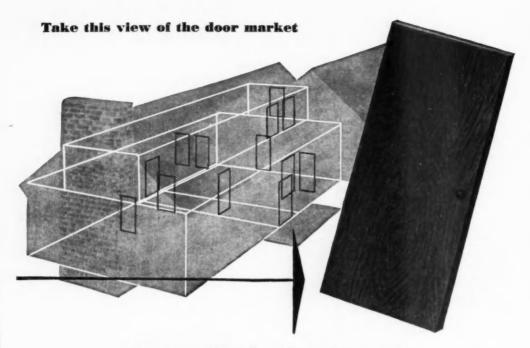


above for ventilation 2. Counter bar passit with sliding Flutex glass panels. 3. Aklo* (heat absorbing) Skytex wire glass sunshades to diffuse light. 4. Projected sash with clear Thermo 5. Projected sash with Thermopane sandblasted for privacy. 6. Fixed sash with clear Thermopane for view. 7. Floor-to-ceiling mirror. 8. Mirror doors, room side. 9. Sliding Luminex glass enclosed tub-shower. 10. Built-in vanity mirror.



FOR BETTER VISION SPECIFY THERMOPANE MADE WITH POLISHED PLATE GLASS





See the Profits Possible with **Roddiscraft Housemart Hollow Core Doors** and Roddiscraft Solid Core Doors

Look at the number of doors in this low-priced home. Everyone of them can mean money in your pocket. Flush doors - even in a small home - add up to a big item and big profits for you.

With Roddiscraft Housemart Hollow Core Doors and Roddiscraft Solid Core Doors, you not only sell the finest flush doors available, but you deal with a company noted for customer service. It's the kind of service that means so much to dealers-on time deliveries, warehouses near at hand, company standing behind the product and dealer at all times.

Dealers everywhere are cashing in on the Roddiscraft line of flush doors. They are real profit items these days.

Roddiscraft warehouses serve key markets from coast to coast. Check the list below for the Roddiscraft warehouse nearest you.

NATIONWIDE Roddiscraft WAREHOUSE SERVICE







A. S. I. E. says

Coleman is the best of its kind

The American Society of Industrial Engineers has given The Coleman Company unusual recognition—a special Merit Award for the high quality of Coleman heating equipment. The Society has named it

the outstanding line in America. Also noteworthy—this is the first time the Merit Award has been made to any manufacturer in the home heating industry. We are proud to be the first to receive it.

Comfort costs so little with a



America's leader in home heating

THE COLEMAN COMPANY, INC., WICHITA 1, KANSAS



FLOOR FURNACES



BLEND-AIR



SPACE HEATERS



GAS WALL HEATERS



WATER HEATERS

Take it from this SUCCESSFUL builder!



Mayer I. Blum's New 91-Acre Apartment Community at River Park, Philadelphia, to Feature 1792 New Kelvinators!

MAYER L. BLUM, Builder



1792 Apartments-1792 Kelvineters! New Presidential Apartments are ideally posi-Type Appartments—If ya Kevinetors: New Presidential Apartments are ideally posi-tioned on a heautifully landscaped 91-acre site overlooking the Schulykill River and Fairmout Park, Philadelphia. There will be a new Kelvinator refrigerator in each of the 1792 kitchens. Engineered and designed by Mayer I. Blum and Sons; Architects, John E. Sweet and Milton Schwartz; General Contractors, Turner Construction Company.

MAYER I. BLUM, known as "The World's Most Perfect Landlord." has done it again! All his past accomplishments in a lifetime devoted to building outstanding apartment projects are surpassed by his latest, the beautiful new 1792 unit Presidential Apartments at River Park, Philadelphia. Here the far-sighted planning for comfort and efficiency that has made Mr. Blum's projects so famous will reach a new peak. Each building will be fully staffed with lobby desk and service facilities. Restaurants, beauty salons, super marketseverything from toy repairs to theaterticket buying-will be right at hand!

This magnificent project is to be equipped 100% with Kelvinator refrigeratorsabout two-thirds of which will be large, de luxe 8 cu. ft. models with across-the-top freezer chests. "I've been buying Kelvinators exclusively for 35 years," Mr. Blum says. "And I could not ask for lower maintenance costs and greater tenant satisfaction than they have afforded over this long period of time. Many Kelvinators I bought 22 years ago are in excellent condition today."

For lower costs, greater user satisfaction, why not specify Kelvinator in your next project! For full information, write to Dept. AB, Kelvinator, Division of Nash-Kelvinator Corp., Detroit 32, Mich:



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

Division of Nash-Kelvinator Corporation

RIGERATORS, RANGES, HOME FREEZERS, WATER HEATERS, AIR DRIERS . . . Electric, of course! AMERICAN BUILDER

The Biggest Week in 1951

NATIONAL HOME WEEK, conceived, proposed and initially promoted by American Builder's editor, has become known as the greatest merchandising and public relations activity ever developed in the home building industry. Results in hundreds of communities where the event has been conducted in the past three years have earned the Week that enviable reputation. On site sales during the Week are unprecedented, and firm prospects for future sales are obtained easier than in any other way. Confidence in the industry and its ability to produce good houses in every price bracket has been re-established principally through National Home Week which provided a medium with which to combat attacks.

In accomplishing that the Week fulfilled its primary purpose. It was not expected that the public would react as quickly as it did and immediately purchase new homes in such great volume. The effectiveness of the Week is attributable principally to its simplicity. It merely takes advantage of the always present curiosity of the public about a new building, the fact that a building is the only major product manufactured or produced in plain sight of anyone who wishes to watch the operation, and the fact that a building is the only major product used on the site of its production. All that is necessary is, with appropriate publicity, to invite the public to watch the construction and to visit the finished house, or to visit a lumber yard if there is no house to demonstrate.

National Home Week in 1951 opens on September 9 and continues through the 16th. Until this year the Week has been an event confined principally to larger cities and the suburban areas surrounding them. In 1950, however, American Builder encouraged a number of small towns to organize demonstrations for National Home Week. Many did, and the results prove that no community is too small to participate. Even communities with no home builders and no new houses to demonstrate can participate with profit to lumber dealers and realtors, and promote better housing standards and remodeling work.

While there is some doubt about what effect government regulations and material supply may have on both home building and remodeling in the second half of the year, there is a new and great need for National Home Week in 1951. Home building will continue throughout the defense mobilization period, and it must continue if there is a war. The business of the industry is to house the public in war or in peace, to find ways to proceed within the fabric of government and other limitations, and to demonstrate to the public both its intentions and its abilities.

National Home Week is the made-to-order vehicle for assuring the public and retaining its confidence. American Builder will gladly provide a simple, workable and inexpensive plan for promoting National Home Week in any community, regardless of its size or the presence or absence of an organization in the community.

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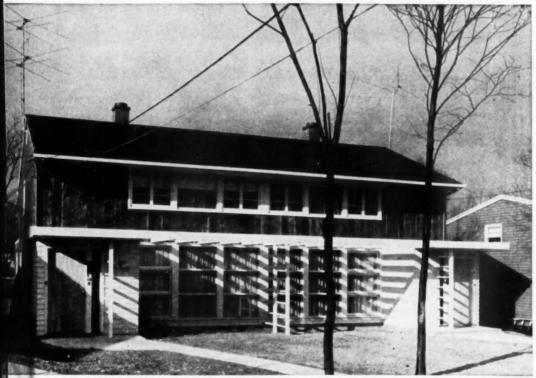
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n E. Co



FRONT VIEW of one of the duplex rental units near the highway and entrance to The Highlands project

How Costs Are Cut



FIRST FLOOR PLAN of duplex unit. Each unit has separate furnace



SECOND FLOOR PLAN. Each unit has two bedrooms and one bath



MOVABLE CARPENTER SHANTY. This unit carries a generator, electric hand saw, nails, and tools for a six man crew



COMBINATION TRENCHER and front end loader. This machine is used for digging foundation walls, footings, sewer, water lines



CATERPILLAR D-6 mounted on a two wheel trailer being towed by Dodge dump truck to site of a new 192-house Zamore project



HIGH DUMP BODY mounted on a G.M.C. 6 x 6 chassis unloading cinders on metal chutes at building site, helps speed completions

with Power Tools

Mechanized equipment is the builder's bestanswerto the rise in laborand materials cost in the opinion of New Jersey builder OWER EQUIPMENT not only saves labor costs, but enables a building organization such as ours to avoid the delays which so often eat up wages." This was the reply of David P. Zamore to an American Builder editor when questioned in regard to the practical value of power tools by builders.

David P. and Richard W. Zamore are associated with their father, Birger V. Zamore, under the firm name of Zamore Builds, Inc. This firm is currently building a subdivision in Waldwick, N.J. called "The Highlands" where 192 houses are now completed with others in process of construction.

The fact that senior Zamore began building in Toledo, Ohio, 35 years ago, places him in a position to know the value of power equipment. At that time the hammer and saw were his basic home-building tools, with the pick and shovel used for the ground work.

Today the equipment of Zamore Builds includes more than 20 gasoline driven machines for outside use, and a woodworking plant complete with band and circular saws, planers, drills, sanders, and the other standard electrically driven tools of a cabinet or millwork shop.

Barring unforeseen weather conditions, such as an excess of rain or snow, this building firm always keeps the various operations in pace with each other. There are always building sites cleared, graded and trenched ready for pouring footings and floor slabs. There are always floor slabs poured and set ready for carpenters to start building. There are always shop-assembled plumbing layouts ready for the plumber to install. When



FRAMING LUMBER BANDED ready for delivery to house site



HOIST on Dodge power wagon picks up banded lumber



POWER POST HOLE AUGER operated by two men does the work quickly and neatly



CONCRETE VIBRATOR used around the load-bearing edges of the floor slabs

the carpenters get to the attic level there are always prefabricated end gables ready to be set in place . . . and a crane to lift them. There are always shop-assembled stairways, door and window frames, and other portions of houses ready and waiting to be installed.

An inventory of equipment all owned by this firm include one slate saw, one concrete vibrator, used for vibrating the concrete around the load-bearing edges of the floor slab making it more dense, strong and waterproof. Four sizes of bulldozers for clear-



FORD DUMP TRUCK unloading concrete block at building site



THREE YARD CARRYALL used for site leveling







LUMBER IS DROPPED from tilt-top trailer pulled by power wagon

ing and leveling ground, one power post-hole auger, one gasoline chain saw, one rototiller, one combination loader and trencher for digging footings and sewer lines. One tractor with power lift, two dump trucks, one high dump, a power wagon with four trailers, two lumber trucks, two pickup trucks, one station wagon, one power mortar mixer, one crane for raising and placing shop-built house parts and a complete woodworking mill. With this equipment, 100 men on the

direct Zamore payroll and another 100 men working for the subcontractors, houses are completed at the average rate of four a week.

The basic two-story house which was shown in the June 1950 issue of the American Builder, contains five rooms, bath, attached garage and utility room. This house is now selling for \$11,710. It would appear at first glance that the house is now priced approximately \$1,000 above the price of a year ago. The house of today, however, is placed on a larger lot, has Thermopane in the picture windows, cork kitchen flooring, a 550 gallon

buried fuel oil tank and many other refinements so that the actual cost difference is only \$390. This is considered to be a record along the Atlantic Seaboard area where rising costs have forced up prices of many development homes by \$1,000 or more.

Dave Zamore, who has a keen appreciation and affection for mechanical tools, attributes much of the economy in the construction of the basic house to maximum use of this equipment. The men in the organization who operate the mobile units likewise share this appreciation and take excellent care of all machines.

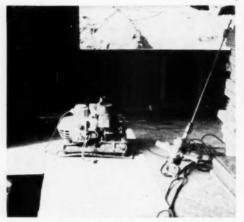
To illustrate his point on the mat-



TERRATRAC BULLDOZER useful in leveling garage floors and spreading top soil



ROTOTILLER used to break ground before seeding



ELECTRICAL GENERATOR and electric drill with extended bit



SKILSAW making bevel cut. Handy power equipment used on site



METAL PUMP BRACKETS for scatfolds, operated on vertical wood posts for wall surfaces

ter of economy, this member of the firm brought out records on the operation of a combination loader and trencher. He then contrasted the results with a tabulation of the same piece of work done by manual labor. See chart on opposite page.

Another example is the Mall chain saw which, when cutting trees of 12 inch diameter or more, requires the services of three men for 4½ hours, two on the saw and one for making adjustments, to remove one large tree.

This same operation requires three men for 12 hours by hand sawing. Until the tree is on the ground the operation is the same in both cases. A saving of \$10.00 per tree multiplied into a considerable sum for the Zamores because of the wooded nature of their development.



SPRAY GUN AND COMPRESSOR applies prime coat of paint



16-INCH DEWALT POWER SAW will cut eight stude at one time



MALL CHAIN SAW gasoline powered, used in wooded areas



POWER MORTAR MIXER blends materials to proper consistency

TRENCHER

	TRE	NCHER	
Original cost \$6,084.54	life	Cost per Year \$2,028.18	No. of houses 192
Cost of	rencher p	er house	\$ 10.56
House F	oundation	:	
hour per h	day or 2- ouse	uses per 8 2/3 hours	
		by 2-2/3	
rubble	, average	1/3 hour \$3.00	
by 1/	3 hour .		1.00
Septic to	ink latera	ls:	
		per house	
		per by 3 hours	9.00
Payroll to	.86		
		00 per year houses	1.93
Repairs,	\$604.80	per year houses	3.15
		e cost of	\$ 34.50
A	AANUA	LLABO	R
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Laterais,	average	4 men ane	
Loading	fill and	cleaning	44.80
hours	8.40		
Payrell		\$120.40	5.78
of tro	on account encher (m 12 inch w	re of con- it of width ien cannot ide trench)	16.13
2. 4.			
Savinas	Per House	Total	\$142.31



ELECTRIC ROUTER working on a template for stair stringer



DELTA SHAPER used for cutting moldings



DELTA JOINER and table saw

P O W E R Equipment Builds a City

A full-scale city springs up almost overnight in California and wide use of power tools--from site preparation to finish trim--plays a major role in its development



AKEWOOD PARK, a city with an ultimate goal of 17.150 homes and around 65.000 people—probably the largest planned housing development in history—is rapidly taking shape in the Los Angeles area.

The site, which will cover about 10 square miles, is being developed by Aetna Construction Co. and Biltmore Homes, two long-established contractors, as a joint_firm, the Lakewood Park Corp. Albert C. Martin and Associates are supervising architects. By February 24 this year more than 8,000 homes had been sold and 4,605 families had moved in. The first foundation was laid in February 1950.

Because of the large scale of the project, close co-ordination of work and top efficiency are vital. Power tools and equipment are used in nearly every phase of operations, from initial site preparation to completion of the houses. The wide variety of power devices includes heavy machines like graders, ditchers and concrete mixers, several types of saws and drills, routers, planers, sanders, pipe cutters and threaders, concrete buggies and vibrators, as well as many others.

Lakewood homes range in price from around \$8,000 to \$10,000. There are 39 different styles, 13 basic floor plans with three or four variations of each. Each house has a one-or two-car garage.

Construction is frame and stucco with wood siding and shingles on some models. Roofs are wood shingle. The



TRENCHER (left) digs a foundation in 15 minutes. Tractor spreads dirt. Concrete mix truck (right) pours foundation



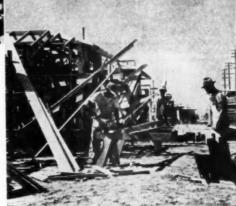
acre shopping center, now under construction, superimposed

houses have plastered walls and ceilings, hardwood flooring, double sinks with stainless steel drain-boards.

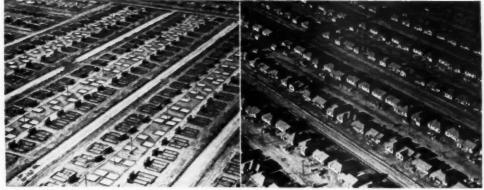
No Garbage Man

An unusual feature of the community is that the garbage man will never come around. Every house is equipped with a mechanical food waste disposer.

The company has its own carpenters and laborers; subcontracts all other operations. In direct charge are a general superintendent and his assistant. Next in the organizational chart are the carpentry superintendent, concrete superintendent and materials expediter. Starts and com-



HAND SAW is used to notch and cut rafters at site



FOUNDATIONS, left, with initial plumbing installed. Lumber packages are stacked at site. Right: View of finished homes



SELF-LOADING machines, pushed by tractors, are important equipment in the Lakewood Park project's extensive grading



BATCH PLANT measures materials, dumps dry mix and water into trucks. Materials firms installed two batch plants at job



VERSATILE TOOL in action here tamps concrete, puddles and compacts it, rods it off. Machine is pulled over walk by two men



ESCALATOR delivers bundles onto endiess belt which carries them in steady stream to ridge of roof, ready for application. Belt is reversible, to permit the return of surplus bundles



POWER DRILL with long bit speeds tieing on of concrete forms

pletions have averaged 50 per day for long periods and at times have reached 100.

To meet the extremely large concrete requirements, three building material companies teamed to set up two batch plants at the site, moving in huge quantities of sand and cement. At one plant the materials are poured into the hopper with a big crane; the other employs a conveyor system. Ready-mix trucks deliver dry mix and water to foundation sites.

After the foundations are poured, a truck-trailer deposits a complete materials package at each house, with the load arranged in order of use—mudsills, first needed, on top, roof sheathing, last used, on bottom. Studs are cut to length at the mill, other lumber is sized on the job.

The Lakewood carpenters use 350 power hand saws and 15 radial saws, the latter mounted on trailers and moved from house to house to cut headers, blocks and cripples. The hand saws are used chiefly for cutting subflooring, notching study for diagonal bracing and notching rafters. Rafters are marked on a templet before being notched.



POWERFUL DRILL, left, is used in plumbing pipe installation. Autometic nailer, right, operated by compressed air, speeds application of subfloors, enabling one workman to nail seven a day

Power drills are used to bore mudsills for foundation bolts. Bolts are embedded in hard concrete with a tool powered by a small explosive charge, a time-saver in placing porch posts since location of bolts can be determined after the concrete has set. A pneumatic nailer is used for subfloors, enabling one man to nail seven per day.

Door hangers use power planers and routers; tops and bottoms of the doors are cut to rough size with power hand saws and planed to exact dimensions, with the router routing out for butts. Building paper is applied over studs with an automatic stapler.

Specialized Carpentry Crews

Rough carpentry at Lakewood is done by 12 separate crews, each supervised by a non-working sub-foreman, with a general foreman in charge of the over-all operation. The crews are: mudsills, subfloors, cutting, layout, raising, rafters, cornice, roof sheathing, frames and jambs, exterior trim, pick-up and labor (carrying lumber, moving scaffolds, etc.).

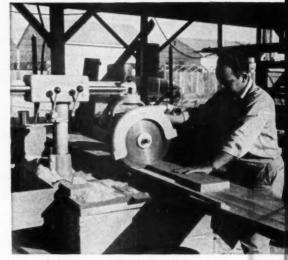
Nine specialized crews handle the finish carpentry, under a general foreman and two sub-foremen. They are: plywood (for kitchen and bath floors), doors, sash, interior trim, exterior trim, base, hardware, pick-up and garage doors.

An additional responsibility of each sub-foreman is the maintenance of power equipment. He issues and checks in the tools, stores them in a convenient locker, inspects them daily, replaces dull blades. A tool shop in the main yards is equipped for sharpening blades and minor adjustments. Major repairs are made on the outside.

Radio Used in Operations

Trucks used by key men in the organization are equipped with two-way radios and there is a station in the yard. If a shortage develops at any place an order can be placed by radio. The sets are also handy for quick location of personnel.

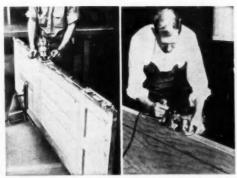
The 8,000 home sales in Lakewood Park were accomplished in less than 12 months, spurred by a heavy schedule of advertising. Full-page ads were run in all metropolitan newspapers and in many suburban publications for several months during the beginning of the project. This was supplemented by wide use of billboards, radio, direct mail booklets. A large force of salesmen was always on hand for the Sunday afternoon crowds.



RADIAL SAWS are mounted on trailers for easy moving



FLOOR PLAN



SPEEDING UP operations at Lakewood Park: Routing jig (left) is used for placing of door hardware while door is held in upright position by clamp; and (right) trimming door with power plane



POPULAR MODEL at Lakewood Park two-bedroom home, with floor plan above. Thirteen basic floor plans are used, with three or four variations of each. 8,000 homes have been sold



UNIQUE pattern system of marking pieces to be cut permits Builders Wilkinson. Snowden and McGehee to cut materials for as many as 30 houses α day on Keesler Air Force base, in Biloxi, Miss. Here, base plates are being marked for mill operation

New Precutting Versatility and Speed with

Patterns and Power Tools

"YOU GET the most out of power tools and equipment when you use prefabrication methods—use simplified plans, precut as much as possible, and keep the job centralized..."

These were general ideas Contractors Wilkinson, Snowden and McGehee had when they were awarded part of the \$10,000,000 contract to build homes at Keesler Air Force Base, Biloxi, Mississippi, Since the project is financed under the Wherry housing bill (1949 version), and aver-

age cost of each unit could not exceed \$9,000, they turned immediately to power tools and equipment as a means of speeding the job. But the homes (they chose a duplex plan) to pass Air Force requirements, had to vary in design—so much that it seemed at first that prefabrication methods would be impossible. Then the job superintendent, Scott Grant, and his assistant. H. E. Howell, designed and developed a pattern system for varying designs of completely precut houses,

so simple any layman could follow it. With this idea, the building firm devised a materials handling system that has now grown into one of the smoothest mill-precutting operations in the country.

The operation revolves around the use of patterns for marking all pieces to be cut for a house, and a method of filing pieces once they are cut, developed by Robert G. Snowden of the building firm.

The pattern system is based on the

assumption that power tools are most profitable when they are the most busy. In other words, if a power saw is cutting material 100 per cent of the time, then it is the most profitable to the owner. Its profitability diminishes in proportion to the time it is kept idle. The patterns system, used in a precutting mill, is designed to keep a radial arm saw going almost continuously.

The radial arm saw is mounted at one end of a long table that resembles an assembly line. On the Keesler project it is situated lengthwise in the center of an old roller rink that was converted into a mill. The saw is near a wide doorway, where uncut materials are unloaded from trucks. The materials are stacked near the saw according to their dimensions, then placed on the long table for marking,

One man who acts as shop foreman knows the dimensions of each piece of lumber used in framing a particular house, since he has a sheet of plans for each phase of framing—from 2x4 plates that go on concrete slab floor perimeters, to top plates and porch beams. A roll of plans for a typical house in the project has 22 sheets. In addition, the shop foreman (or construction superintendent) has wood patterns marked for each framing member to be cut.

Before a member is cut, it is marked by one of more than 80 patterns (made with 2x4's, 2x6's, or exact sizes, to proper lengths), all kept in a single bin in the materials "filing system." In the Keesler operation, enough material for as many as 30 houses is cut in one day.

As each piece is cut, it is dipped in wood preservative (if necessary for that piece) and placed immediately into a "file," or one of the many bins built along each side and down the center of the shop. Each framing member is marked according to the pattern used, and is filed in the bin with the corresponding number.

To select materials for a given house, a trailer, pulled by a Willys Overland jeep, is taken through the shop, and one piece of material is taken from each bin. By the time a piece has been taken from each bin, the trailer is fully loaded, has enough material to frame one house, and is ready to be pulled to the building site.

Significant feature of the pattern system is that it could be used by a builder who builds no more than three or four houses a year. And home designs can be varied merely by making a new set of plans and making patterns to fit them. Another important aspect of the system is that twould enable a builder to cut all the lumber for a given number of houses



RADIAL arm saw. placed at one end of the long marking table, is kept busy almost continuously. All plates (base, raiser and top) and studs are cut to length for 30 buildings at a time. This precutting system saves company over 15 per cent on materials



PIECES cut to length, marked and bored, are stored in these bins for delivery to job in complete sets. When construction crew is ready for base plates, a set all these is delivered to job. Raiser and top plates next in order of use are then delivered



JOISTS and rafters, on Keesler job, are precut at a portable mill on the site, which is moved as construction progresses. Precutting of parts is also done in the mill





PLUMBING fits perfectly in holes bored in studs by use of patterns and power equipment before erection

FOLLOWING the markings, openings are bored or sawed out at the mill as needed to receive plumbing

during bad weather, and erect them in suitable weather. Dimensional stability of lumber could be maintained by proper storing, or, if necessary, by using proper wood preservatives.

Cost Savings Breakdown

The pattern, power tools and equipment, and materials handling systems have enabled Wilkinson, Snowden and McGehee to realize a saving of more than 15 per cent in materials alone, since waste amounts to no more than about three to five per cent. And there are other savings right through each step in construction.

For example, based on a duplex with four rooms for each unit, including two bathrooms, mill operations cost \$79.72. This covers handling and precutting all materials, such as studs, rafters, plates, porch canopies, concrete forms, furring for cabinet overhead, ceiling joists, cornice blocking and finish soffits, closet shelves and rods. Also, this includes fabrication of corners and T's, window and door bucks, column assemblies, canopies, layout and drilling of all plates for different phases of operation to receive ceiling joists, roof rafters and attic fans and access assemblies. Included in this cost is dipping of base plates in wood preservative and the spraying of paint on closet shelves and poles.

Erection of this typical duplex costs \$423.38. This includes erection of plates, stud walls, wall sheathing, ceiling joists, roof rafters, roof sheathing, cornice framing, cornice finish, aluminum sash, and roof framing. Interior trim application for the duplex costs \$45. This includes hanging of exterior doors, setting interior doors, kitchen cabinets, picture mold, base, base shoe, attic and ventilating fan scuttles, closet shelves and rods,

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CUTTING lists of materials shown here appear on sheets of special plans drawn for precutting. A separate list is made, along with detailed assembly plans, for bottom and raiser plates, top plates, and door and window bucks. Patterns match list



BASE plates are laid out on concrete slab and fastened with bolts and nails using a Drive-It. No sawing has to be done as all pieces have been cut to length. Installation time: 45 min.



COMPLETE wall sections are assembled on a concrete slab, using precut members and fabricated window and door bucks. After wall is raised, plumbed and corner-braced, next building is ready



HOME negring completion at Keesler Air Force base, where Briggdier-General James F. Powell, base commander, stated accommodations for 4.295 families are required to fulfill housing needs



SERGEANT and Mrs. Edward K. Lynch and their son move into one of Keesler units of Wherry Housing Program. New precutting system and use of power tools give them extra comforts

window screen and screen doors, sash locks, lifts, door stops and wood thresholds.

Each unit in this typical duplex rents for \$56.50 a month. The homes are brick veneer, built on concrete slab floors with hardwood block flooring laid in mastic on the slab. Hip roofs have 2-foot overhanging cornices.

The builders are turning much of the profit made in the Keesler project back into the houses in the form of nationally advertised products. For example, Hunter Package attic fans are used, as are Kohler bath fixtures, Higgins block floors. Schlage locks, Frigidaire refrigerators, Youngstown kitchen cabinets and sinks, Enterprise ranges, Panel Ray wall heaters, Rockwool insulation, Sheetrock gypsum wall board. Celotex Weatherwood

sheathing, Carey Fire Check Asbestos roofing, and Mosaic Ceramic tile. The Hill potential pipe system for termite protection is installed.

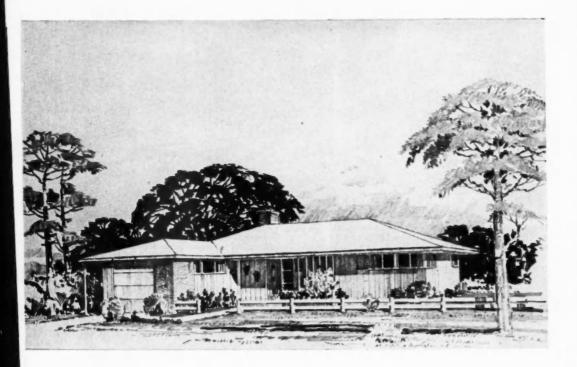
There are nine different sizes and plans of duplexes used in the project. ranging from 1-bedroom units renting for \$45 to 4-bedroom units renting for \$120. Included in the rentals are lawn maintenance, water, garbage pickup, sewage disposal, fire and police protection.

A unique feature of the duplexes is that, although designed for two bedrooms to each apartment, they can be converted to three bedrooms on one side and one bedroom on the other. This is possible through merely closing a door in the duplex.

Sponsors of the Keesler project are Military Housing, Inc., and owners are Russel S. Wilkinson, Snowden, James E. McGehee and Max Ostner, all of Memphis, Tennessee. The construction superintendent is Scott Grant. Architect is Everett Woods.

Materials and Equip Used on Keesler Joh

- DeWalt radial arm saw
- Skilsow power hand sows
- Skilsow radial arm saw
- DeWalt power hand saw
- Willys-Overland Jeeps
- 12 rubber tired trailers
- 3/4-ton Stoke Body Chevrolet truck ton and a half dump truck, Chevrolet
- D-4 Tratavator earth mover
- **Hunber Grader** Ford Tractor



Meeting the Demand for Space

THE REQUIREMENTS of an average American family having one or two children are well met in this month's blueprint house designed by Matern and York, architects, Jamaica, L.I.

The plan contains 1258 square feet of livable area, not including garage or outdoor play space. These units add 324 square feet to the total.

The plan is also arranged into three zones of activity, such as quiet, living and service. Each zone is closely integrated with the other creating a flexible grouping of units. Circulation to all areas is controlled from the entrance foyer without any overlapping.

The location of the bedroom which adjoins the living room makes it available as a possible study. If used for that purpose, a door leading directly to the living room would increase its value. The triple-use-bath is an economy feature designed for use where space is at a premium and cost of an extra bath prohibitive. This arrangement greatly increases the effectiveness of this room and yet adds only one more fixture as

against a standard bathroom setup.

An unusual feature of this house is the outdoor-indoor play area. This portion is an extension of the garage with a large sliding door on one side wall which, when completely open, becomes a porch. The large kitchen window which opens onto this area permits supervision of children while at play.

Stairs leading to the basement are placed convenient to the front hall and kitchen. This makes the basement recreation space readily accessible to both occupant and guest. The basement extends the length of the house, but does not run under the

The simple, effective lines of the exterior represent a concerted effort on the part of the designer to conform to the present day trend toward economy of construction, holding to standard units and avoiding excess ornamentation. The beauty of the exterior lies in the excellency of the proportions of the wall surfaces to the window and roof lines. The use of brick on corner pier of garage provides a necessary color accent.

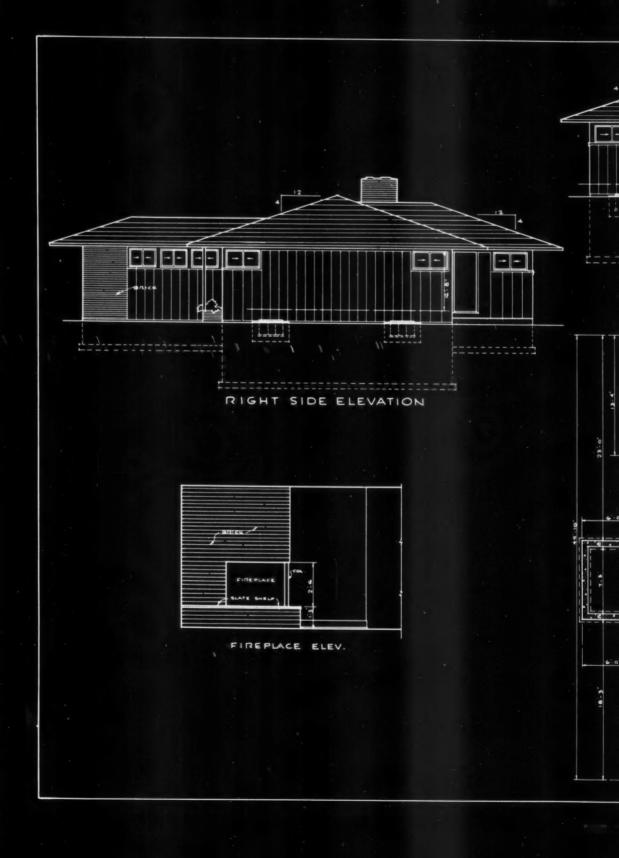
AMERICAN BUILDER Blueprint House Number 53

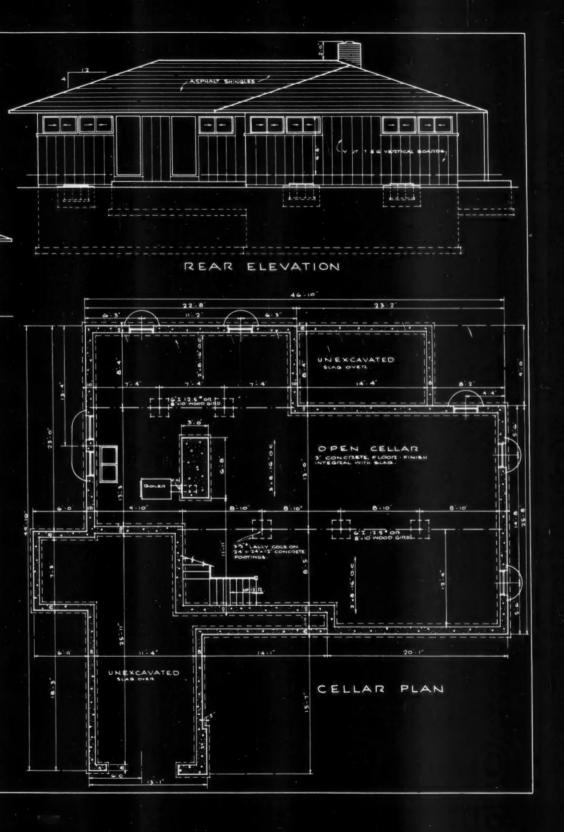
Matern and York, Architects

Starting in June

of Materials and Equipment
On Every Gatefold Blueprint House

This popular monthly feature of American Builder will be expanded with the June issue by the addition of another page. The additional space will be devoted to a complete quantity and equipment list, along with figures on square footage and cubic footage. The lists will be prepared by experts on the staff of the Hines Lumber Co., Chicago.

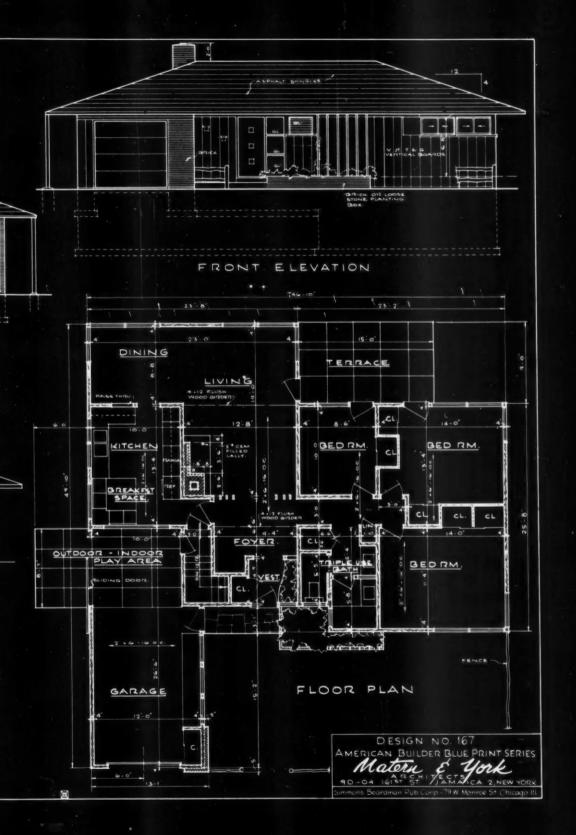


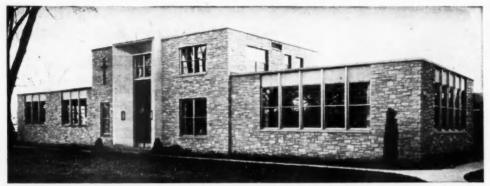




CROSS SECTION

NOTE- ALL SASH HAVING ARROWS ON ELEVATIONS ARE SLIDING ALUMINUM SASH.





GRAY FIELDSTONE was used for the exterior of the 102 x 130-foot school building which has full basement and penthouse

Building for Pre-School Children

Accommodations in new school structure designed specifically for comfort and education of four- and five-year-old children

ST. JOSEPH'S Academy's new nursery school at Des Moines, Iowa, is primarily for the children of working mothers. The youngsters are brought early in the morning, and called for at the end of the working day. The central problem in planning the building was to provide space for teaching, eating, recreational, and dormitory facilities for 100 four- and five-year-olds so that they could be handled as easily as possible. By uniting these requirements with great architectural beauty and structural safety, Dighton H. Smith and Grant W. Voorhees, Des Moines architects, have achieved a landmark in school design and construction. General contractors were Kucharo & Associates, also of Des Moines.

This is a low, one-story and basement building with a four-room penthouse for the pastor's use. Over-all dimensions are 102 by 130 feet. The axis runs east and west. The school occupies part of a 20-acre tract that slopes south to a wooded area where the tots are taken for walks and nature study. The structure is H-shaped to admit the maximum amount of air and natural light. Two blacktop-paved play areas occupy the cut-out portions of the "H." The one at the west end is roofed over to enable the children to play outside even in rainy

(Continued on page 135)



H-SHAPE was used to bring a maximum amount of natural light and air to the interior



CANOPY at east end allows children to be discharged from automobiles under cover

CARRIER moves lumber from cutting shed to individual building sites in project



RAFTER-NOTCHER attachment on saw speeds work of preparing all rafters

Power Tools Cut Price

Value and quality of model house designed by California builder are acclaimed with prizes in national and state competition

WILLIAM BLACKFIELD of San Francisco did something about it. Most builders of the nation were just talking about producing economy homes in 1949 when he built a house to sell for less than \$7,000—the first builder in the San Francisco Bay area to do so—and the plan and quality were so good it won first prize among builders of northern California for the best economy home.

Within a year when Blackfield took first prize in a NAHB neighborhood development contest for economy homes, it became apparent that here was a builder who knew how to cut corners without sacrificing too much value and quality.

Power tools helped and are still helping him to cut those corners.

When Blackfield starts a new project he sets up a cutting yard at the site, approximately 100 by 200 feet, and encloses it with a wire fence. Into the yard are moved four radial arm saws, three with five-horsepower motors and one with a three-horsepower motor.

Lumber is received in random lengths, but the saws make quick work of cutting all studs, fireblocks, and joists for as many as 100 houses at one site. All lumber to the top plate is bundled with steel straps and taken to each individual home site in one load—by means of a lumber carrier—and roof rafters are taken in a second load.

A rafter-notcher attachment on each of the saws simplifies the work of preparing these pieces for use in the roof structures. Sheathing for the roofs comes directly from the mill to a central spot in the rear of a group of houses where it is to be used.

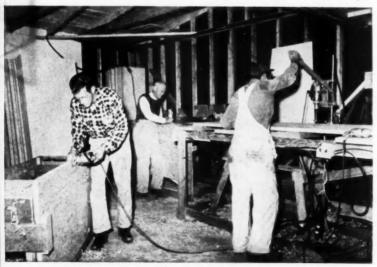
Footings are dug with a ditch digger, but this operation is sublet to another contractor as also is the job of applying gypsum board for the interiors of the homes.

One of the important economies worked out by Blackfield is his handling of doors. He has a door shop in his cutting yard where doors are completely assembled in jambs so that all the carpenter has to do is nail the jambs in place. Power tools which he uses in this shop include a door plane, screwdriver for screwing butts on, drills for boring the doors, and a router for routing out for butts.

Two experienced men in this shop enable Blackfield to get his doors hung at about half the cost of performing all the operations in the conventional way. In all phases of his construction Blackfield uses this specialized crew method rather than having all-round carpenters work on first one thing and another.

Blackfield was trained as a civil engineer, but was always interested in building and in design, and he got his contractor's license about 13 years ago. He designs his own homes and supervises both the construction and sale of them.

Within 15 months after Blackfield had originated his prize-winning economy home he had built approximately 1,200 of them in several northern California cities and he is still doing it, using the same basic plan and construction. Prior to August, 1950, his two-bedroom homes having 811 square feet of area and with a two-car garage sold for \$6,-975. The three-bedroom homes with 898 feet and two-car garage sold for \$7,575. Closing costs of \$230 to \$250



INDOOR shop of cutting yard, workman at left uses door plane; at right, door is drilled for lock hole, and third workman cuts butts with zouter. Cutting yard is 100 by 200 feet



ONE of several subdivisions in northern California developed by William Blackfield, inset, with homes which, in 1949, sold for less than \$7.000. Good land use helped Builder Blackfield win a top prize in the National Association of Hame Builders' contest

were added to these figures. Since last August rising costs have forced Blackfield to increase his prices, but he still has both feet in the economy market for homes.

His houses are of frame and stucco construction with rustic siding used occasionally for variation. They are built on concrete slabs and have roofs with very low pitch, permitting use of tar and gravel covering which is mopped on over half inch insulation board. Three by four inch roof rafters are exposed on the inside and together with the underside of the roof deck are stained brown.

The concrete slab, which is four

inches thick, is laid over four inches of sand, over which have been applied two layers of felt. The floors are covered with asphalt tile throughout. Warm air heat is provided by gas heaters installed in central locations in the homes.

Blackfield's first prize in the NAHB neighborhood development contest was won for his Lafayette, Calif., subdivision. An "ingenious street pattern" solved an awkward shape of land and other unfavorable surroundings, the NAHB stated. The individual homes were "well planned, especially for the California coast climate, with sufficient variation of de-

sign to avoid monotonous neighborhood character," NAHB judges said.

EQUIPMENT AND BRAND NAME PROD-UCTS USED: Delta and Comet saws; Hyster lumber carrier; Signode steel straps; Stanley door plane; Skilsaw screwdriver; Black and Dacker drills; Stanley router; floors, Kentile asphalt tile; locks, Kwikset; kitchen cabinets, General Electric and Cresley; screens, Tensionitier; plumbing fixtures, Alliance; cement, Permanente; walls, U. S. Gypsum Sheetrock; plaster and cofling. Keysteme Stucco wire and Celotex insulation; sliding doors, Glide-Master; heating system, Royal Ges heaters; Stanley butts; Ford and

Studebaker trucks.



PLAN of prize-winning economy home MAY 1951



PRIZE-WINNING HOME paced economy construction in San Francisco area



Building

Available in unlimited supply, structural clay products are receiving more attention today than ever before. American Builder has condensed where and how-to-use information from the clay products industry to get basic facts every builder can use in today's housing

STRUCTURAL clay products are the oldest manufactured building products in existence. The potter's art dates back to the Stone Age, and clay units were used in Pharaohs' tombs as early as 5000 B.C. On the other side of the world, the Aztecs made terra cotta before the birth of Christ, while the Romans, first great engineers, put burned clay products to work in aqueducts and bridges.

But the versatility of structural clay products has kept them prominent in construction through the centuries. Architectural styles changed a hundred times, but brick and tile, in their convenient and adaptable sizes, have fit in with every building innovation. In our own time, manufacturing plants are turning out their capacity—around ten billion brick yearly—and bricklayers have seen few idle days since the end of World War II. New defense preparations,

requiring many scarce building materials, have focused attention on clay products, in unlimited supply.

Generally speaking, a structural clay product is a chunk of clay which has been cleaned, screened, dried and burned to an intense heat. This treatment gives the unit the strength not only to support its own weight in a wall, but also makes it capable of supporting heavy additional loads, like roofs, joists and floors.

From earliest times until late in the 19th Century, clay products were pressed or moulded by hand. The invention of brickmaking machinery revolutionized the manufacturing process, and made possible the production of hollow units in lighter and more useful shapes and sizes.

Clay suitable for brick and tile is dug from a pit or mine and moved to a screen where large stones and other impurities are withdrawn. The clay is then cleaned and mixed with water, making it plastic. The mass is worked in a "pug mill," then squeezed through a die like tooth paste, from which it emerges in a long rectangular ribbon. A wire cutter then slices it to the proper length. The wet but firm clay is then dried at about 400 F., and finally burned in a kiln at temperatures up to 2400 F. The firing makes the clay hard, solid and practically non-absorbent. When cooled, the brick and tile are ready for the job site.

Some clays are so soft that they must be moulded in individual units. Others are stiff enough that they can be pressed like cookies. All must be dried and burned in production. Most clays burn to a red or buff color, but widely varying shades are produced by the addition of chemicals. Glazed finishes can be obtained by flashing units during the burning with salts, or by spraying them with ceramic materials before burning.

Types and Classification

There are three general types of structural clay masonry units: solid masonry units, hollow masonry units and architectural terra cotta.

Solid masonry units are those whose volume of cores, cells, or hollow spaces does not exceed 25 per cent of the total for the unit. Brick are included in this classification and most solid masonry units produced commercially are marketed as a type of brick. Brick fall into two general classifications: Building brick or facing brick. Building brick (or common brick) are used primarily as a structural material where appearance is not an important factor. Facing brick are used both as a structural material and for decorative purposes,

THIS ARTICLE, first in a series of two on structural clay products, offers an historical background of the oldest manufactured building material; explains types available, discusses the proper preparation and use of mortars, describes the common wall types and their uses, and offers detailed construction technique information.

Because of the wide scope of this subject, only facts American Builder believes are of most importance to builders are presented. For this reason, much space is devoted to specific how-to-do-it drawings and data. The second article on structural clay products, to appear in an early issue of American Builder, will cover farm construction with brick and clay. And, since more research with these products has been done in the past few years than ever before in history, the latest results of important research work will be given.

Illustrations and data for this article were supplied by the Structural Clay Products Institute, Washington, D. C.

with Brick and Clay



USED ALONE, or in conjunction with other materials as illustrated here, structural clay products keep abreast with designs

where color, texture and freedom from defects which detract from appearance must be considered.

Building brick are graded by American Society for Testing Materials Specification C62-, which covers three grades based on resistance to weathering. Facing brick are graded by ASTM Specification C216-. This specification covers two grades of brick based on resistance to weathering and three types based on factors affecting the appearance of the finished wall.

Hollow masonry units are those whose volume of cores, cells or hollow spaces exceeds 25 per cent of the total volume of the unit. Structural clay tile are included in this classification and include such types as load-bearing tile, non-load-bearing tile, facing tile, floor tile, etc.

Load-bearing tile are used in walls designed to carry superimposed loads and are graded by ASTM Specification C34- which covers two grades based on resistance to weather-

Non-load-bearing tile are used in walls which support only their walls which support only their tions carrying no superimposed load. Non-load-hearing tile are covered by ASTM Specification C56- which includes only one grade, since such mits are not intended for use where they will be subjected to weathering.

Facing tile may be either a loadbearing or a non-load-bearing unit designed to be left exposed and where surface appearance is of great importance. Therefore, they must combine such physical properties as strength and durability with such appearance properties as color, texture, small dimensional variations and freedom from surface defects which would detract from the appearance of the finished wall. Facing tile finishes include ceramic color glaze, ceramic clear glaze, salt glaze and unglazed, the latter available in both smooth and rough textured surfaces.

Structural clay facing tile are graded by two specifications: those of the Facing Tile Institute and ASTM Specification C212-.

Structural clay tile are produced in two general types depending upon the manufacturer: Side-construction tile designed to be laid with their cells in a horizontal position, and end-construction tile designed to be laid with their cells in a vertical position.

Architectural terra cotta is a

custom-made product and is both handmade (moulded or pressed) and machine-made. The latter, shaped by extruding the plastic clay through a die is often referred to as ceramic veneer and is available in large sizes up to 48 inches in one dimension. Terra cotta is used extensively in veneering and ornamentation and is available in an almost unlimited variety of colors, both glazed and unglazed.

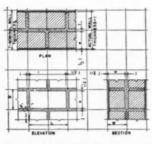
Use the Proper Mortar For Structural Masonry

In selecting a mortar for any use it is advisable to evaluate the desirable properties of the mortar in light of the use requirements. For this reason it is impossible to specify a mortar that is "best" for all purposes. Certain properties are desirable in all mortars, but it will be found necessary in most instances to emphasize one or more properties at the expense of others. The properties of mortar which are of particular importance are:

1. Workability and Water Retentivity: Workability and high water retentivity, which to a degree is a measure of workability, are essential properties of mortar for all types of masonry in which resistance to moisture penetration and strength are important considerations.

2. Bond: Bond between mortar and brick is affected by the water retentivity of the mortar, the rate of suction of the brick or tile when laid, the workability of the mortar and the technique of forming the joint.

3. Durability: For relatively dry masonry which resists the penetra-



NOMINAL DIMENSION of α masonry unit is equal to standard dimension plus thickness of mortar joint, as shown here. It nominal length of unit is 12 inches, actual length would be 11½ inches if unit is laid with α ½-inch mortar joint

tion of excessive moisture, the resistance of mortar to alternate freezing and thawing does not appear to be a serious problem. For masonry subject to severe exposure, however, the durability of the mortar is important.

4. Strength: The strength of mortar affects both the lateral and compressive strength of masonry and, in some mortars, may be considered a

measure of durability.

5. Volume Change: Mortars composed of cementitious material (cement and lime) and aggregate (sand) in proportions of 1 to 2 or more by volume, show very slight volume change due to alternate wetting and drying. For that reason, mortars richer in cementitious materials than 1 to 2 should be used with caution. Volume change due to unsound ingredients may be sufficient to cause disintegration of the masonry. Therefore, ingredients containing reactive chemical compounds should not be used in masonry mortars.

6. Efflorescence: Mortars containing large amounts of soluble salts will contribute to efflorescence if excessive water penetrates the ma-

Desirable mortar properties may be found in mortars consisting of a wide variety of ingredients and proportions. Mortar which can be produced from locally available materials is, as a rule, satisfactory for use with most clay masonry units.

Recommended Mortars

Type A: 1 part portland cement, ¼ part hydrated lime or lime putty, and not more than 3 parts sand, by volume. This mortar is a high strength mortar suitable for general use and recommended specifically for reinforced brick or tile masonry and plain masonry below grade and in contact with earth.

Type B: 1 part portland cement, 1 part hydrated lime or lime putty, and not more than 6 parts sand, by volume. Type B mortar is a medium strength mortar suitable for general use in exposed masonry above grade and recommended specifically for parapet walls, chinneys and exterior walls subjected to severe exposures and also for load-bearing structural clay tile construction.

Type C: 1 part portland cement, 2 parts hydrated lime or lime putty, and not more than 6 parts sand. This is a low strength mortar suitable for non-load-bearing walls of solid masonry units, for interior non-load-bearing partitions of structural clay tile, and for load-bearing walls of solid units in which the loads developed do not exceed 100 psi and where exposures are not severe.

NOMINAL MODULAR SIZES OF BRICK

Thickness, in.	Face Dimension in Wall			
	Height, in.	Length, in		
4	2	12		
4	2 2 3	8		
4	2 2 3	12		
4	4	8		
4	4	12		
4	5 1 3	8		

(1) Nominal sizes include the thickness of the standard mortar joint in all dimensions.

NOMINAL MODULAR SIZES OF STRUCTURAL LOAD-BEARING TILE

	Backup Tile			Wall Tile			
Thickness, in.	Face Dimens	ion in Wall~	Thickness, in.	Face Dimension in Wall			
	Height, in.	Length, in.		Height, in.	Length, in.		
4	2 2/3	8 or 12	4	5 1/3	12		
4	5 1/3	12	4	8	8 or 12		
4	8	8 or 12	4	12	12		
4	10 2 3	12	6	5 1/3	12		
6	5 1/3	12	6	12	12		
6	8	12	8	5 1/3	12		
6	10 2/3	12	8	8	8, 12 or 16		
8	5 1/3	12	8	12	12		
8	8	8 or 12	10	12	12		
8	10 2 3	12	12	12	12		

(1) Naminal sizes include the thickness of the standard mortar joint for all dimensions.

NOMINAL MODULAR SIZES OF STRUCTURAL FACING TILE1

Thickness, in.	Face Dimension in Wall		
	Height, in.	Length, in	
2, 4, 6 and 8	4	8 or 12	
2, 4, 6 and 8	5 1 3	8 or 12	
2, 4, 6 and 8	8	12 or 16	

(1) Nominal sizes include the thickness of the standard mortar joint for all dimensions.

Structural Clay Masonry Wall Types, Uses

Here is basic information every builder should know about walls made with clay products. For many builders much of the data is new

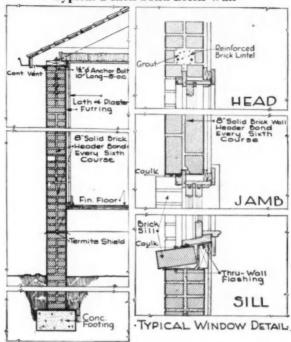
Structural clay masonry walls are usually classified according to types of construction, as solid masonry walls, hollow masonry walls, cavity walls, faced or composite walls and veneered walls.

Solid masonry walls consist of masonry units laid with the joints between the units filled with mortar. They may be built of either solid or hollow masonry units in any required thickness for both load-bearing and non-load-bearing construction. Solid brick walls are perhaps the oldest type of masonry construction known to man. Such walls are highly fire resistive and are capable of carrying extremely heavy loads—both compressive and lateral.

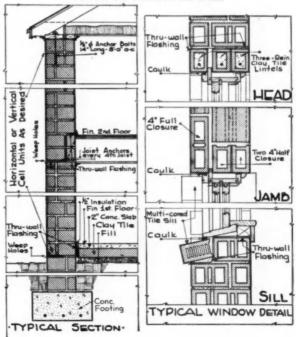
Hollow masonry walls are built of masonry units so arranged as to provide air spaces in the wall and in which the facing and backing are bonded together with masonry units. Such walls are usually constructed with solid units, although hollow units may be used. So-called "Rolokbak" and "All-Rolok" walls are examples of hollow masonry wall construction. Their advantages are that they are relatively light in weight, highly fire resistive, and yet may present the same exterior appearance as solid masonry walls.

Cavity walls are built of either solid or hollow masonry units so arranged as to provide a continuous air space within the wall. This air space should not be less than 2 inches nor more than 3 inches in width. The facing and backing are tied together with rigid corrosion resistant metal ties. The continuous cavity reduces the heat transmission of the wall below that of solid masonry walls and provides an effective barrier against moisture penetration. This type of wall is becoming increasingly popular for residential, light commercial and farm building construction, par-

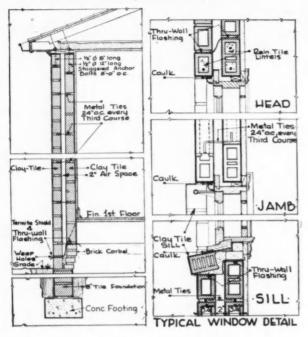
Typical 8-Inch Solid Brick Wall



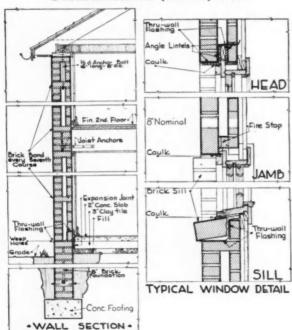
12-Inch Bonded Tile Wall



10-Inch Clay Tile Cavity Wall



8-Inch Rolok-Bak (Hollow) Wall



ticularly in areas where resistance to rain penetration may be a problem.

Faced or composite walls are walls in which the masonry facing and backing are of two different types, but so bonded as to exert common action under a load. In other words, the facing material is considered as part of the structural wall in determining the wall thickness. This is perhaps the most common type of wall construction in use at the present time and is usually built with the exterior facing of brick and backup of hollow masonry units.

Veneered walls are walls having a masonry facing which is attached to the backing but not so bonded as to exert common action under loads. The facing in veneered walls is not considered as being part of the structural walls. Masonry veneering may be brick, facing tile or architectural terra cotta. Masonry veneer may be attached to walls of masonry, reinforced concrete or frame construction.

Tile Partitions

In the discussion and illustrations that precede this, the emphasis has been on exterior wall types. Structural clay products are also used extensively for interior load-bearing and non-load-bearing walls and partitions.

In addition to their fire-resistive qualities, non-load-bearing partitions of structural clay tile are light, strong, durable and economical to erect. Partition tile, unless otherwise specified, are furnished with a plaster base finish which may be smooth, scored, combed or roughened (wirecut). The finish will be in accordance with the manufacturer's standard.

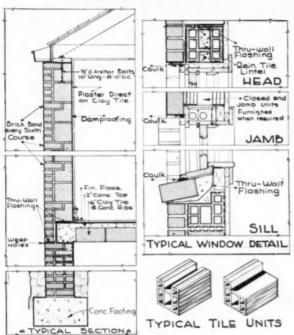
Partition tile are available in thicknesses of from 4 to 12 inches. Their nominal face dimensions are 12x12 inches. It is not generally practicable to use 2-inch tile for partitions, except for closets, shafts, etc., provided they do not exceed a height of 9 feet with an unsupported length of 6 feet. Partitions of 3-inch thickness can be safely used up to 12 feet in height and corresponding increases in height may be obtained for additional thicknesses as shown in the illustration.

Double partition walls are used extensively where it is necessary to provide space for soil pipes and other utilities. In such cases, the walls are constructed with a 4-inch cavity.

Facing Tile Partitions

Structural clay facing tile are used widely in interior partitions or as load-bearing exposed facing material

12-Inch Brick and Tile Wall





HOW MORTAR is properly spread, uniformly



PARGING between brick and backing offers high resistance to water penetration

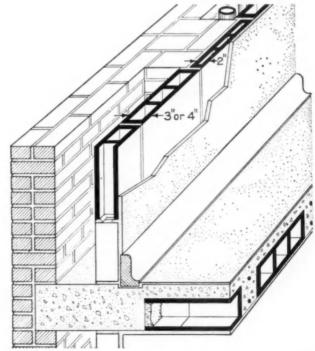


POORLY filled mortar joints make leaky walls

to backup exterior walls. While smooth or textured unglazed facing tile is used in both exterior and interior work, glazed units are used primarily for interiors where color, sanitary finishes and low maintenance are required.

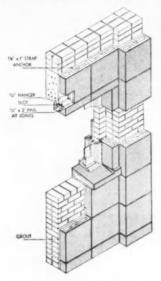
Facing tile manufacturers produce standard fittings and special shapes to meet the requirements of practically all job conditions.

Most of the high grade, lightburning fire clay facing tile units are furnished in the nominal 4-inch thickness, while the "soaps," or nominal 2-inch thicknesses are used principally for lining or veneering. However, the soap or furring units are particularly adaptable for jobs located at great distances from the plant, where it is usually more economical to use local backing materials, rather than to utilize the facing tile in the full load-bearing capacity as a portion of the structural wall as ordinarily recommended.



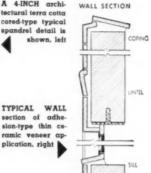
PERSPECTIVE showing 3-inch or 4-inch free standing furring with 2-inch partition tile or furring at brick pilaster

Terra Cotta Cored Spandrel



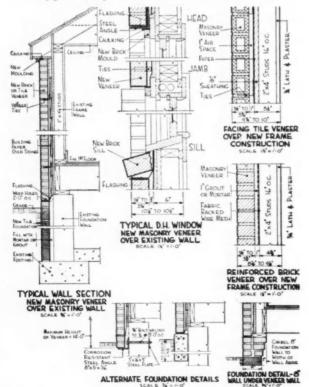
WOOD FURRING STRIPS used in residential construction generally consist of 1 x 2-inch or 2 x 2-inch strips applied vertically to inside face of wall at 16-inch centers. Drawing at right shows several satisfactory methods of attaching wood furring to brick or tile walls

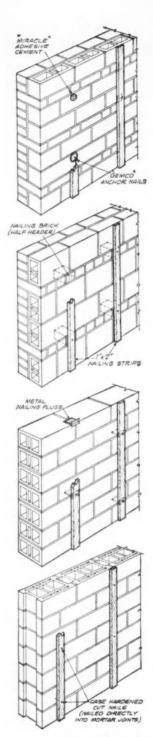
A 4-INCH architectural terra cotta cored-type typical spandrel detail is shown, left



plication, right

Typical Clay Product Installation Details



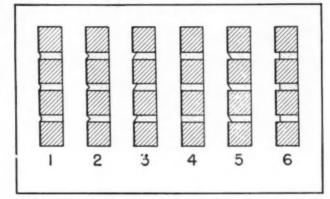


How You Use Clay Products Makes The Difference

Tests conducted by the Bureau of Standards reveal that poor workmanship is greatest cause of leaky masonry walls

Brick or tile customarily recommended for exterior wall use is not appreciably susceptible to moisture penetration. Neither is mortar, if it is properly prepared. Yet, two brick or tile walls, constructed with the same materials, may differ greatly in water-tightness. There are several reasons for this, and one of the most important is workmanship.

Data obtained from tests on 140 wall sections representing 39 kinds of units. 14 kinds of workmanship, and 10 kinds of mortar, led the Bureau of Standards to report that typical "commercial" workmanship, characterized by deeply furrowed bed joints and only partially filled head joints, produced walls most susceptible to water penetration. On the other hand, when mortar for bed joints was spread to a uniform thickness, and head joints completely filled by heavily buttering the ends of the stretcher brick and sides of the header brick before they were placed, the walls were highly resistant to water penetration (Building Materials and Structures Report BMS82 of the National Bureau of Standards). Parging, providing continuous mortar within the interior of the wall, helps produce masonry walls of satisfactory water penetration resistance, according to Bureau of Standards' investigations. This, together with solidly filled head joints, provides great resistance to water.



TOOLED JOINTS, as illustrated by 1 and 2 above, produce best resistance to water penetration. No. 3 is the "weathered" joint, and is satisfactory. No. 5 and 6 are not recommended for watertightness. No. 4, the "flush" or "plain cut" joint is not as desirable as No. 1, 2, and 3 in preventing moisture penetration into wall

One of the most common methods of obtaining well-filled head joints is that in which ends of the stretchers and sides of the headers are well "buttered" with mortar before being laid in place. Another is the "pick and dip" method, in which a sufficient amount of mortar is placed on the bed just prior to the laying of each brick so that when shoved in place the brick will force the excess mortar up between it and the adjacent units, completely filling the vertical joints.

How the exposed mortar joint is finished is important to water penetration resistance. Tooled joints, which compress mortar tightly against the masonry units, offer the best resistance to moisture penetration, "Raked" joints are not recom-

mended for use in exterior walls since their weather resistive qualities are inferior to other types of joints.

Another reason why masonry walls may accept moisture penetration has to do with the suction rate of the masonry units used. This is defined as the amount of water, in grams, absorbed by 30 square inches when the masonry unit is placed in water to a depth of 1/8-inch for one minute. A masonry unit with a high rate of absorption will separate water from the mortar before hydration is complete, or before the mortar has reached its ultimate strength, thus weakening the bond between the mortar and the unit. The suction rate of brick should not exceed 20 grams. If it is greater, the brick should be wetted before being laid.

How To Use Flashing

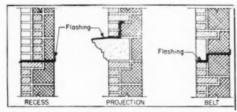
Proper flashing is the best insurance against efflorescence. Drawings on these pages show recommended methods for maximum protecion against moisture There are two general types of flashing used with structural clay masonry, called external and internal. Both types are usually formed of sheet metal or bituminous membrane materials or combinations of both. Because of its permanence, 16 to 20-ounce sheet copper is generally preferred for the best work, although lead, zinc, and aluminum are suitable if they are protected from corrosion with a bituminous coating or a coat of lacquer.

External flashing is used to prevent the absorption of water which accumulates on relatively flat intersecting surfaces. This type of flashing usually consists of two members, the base which forms a part of the covering of a flat surface and turns up against the intersecting vertical surface, and the cap which is built into the vertical surface and turned down over the base.

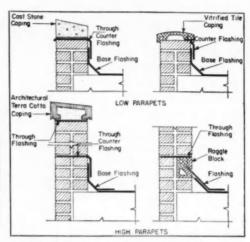
Internal flashing is built into and usually concealed within the masonry to control the travel of moisture and direct it to the exterior surface of the structure.

Where to use either internal or ex-

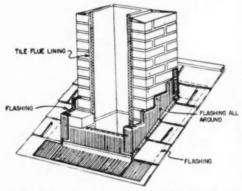




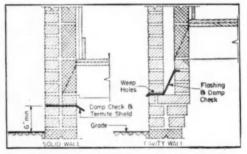
PROJECTIONS and recesses from exposed face of a wall tend to hold rain water and snow. Recommended flashing is shown above



ROOF FLASHING occurs at highly vulnerable places from a standpoint of watertightness, should be installed with great care



FLASHING and counterflashing at intersection of chimney and roof should allow for any vertical and lateral movements



ALL FLASHING should be drained to outside. One method is by "weep-holes" 2 feet o.c. in mortar joint where flashing is placed

ternal flashing depends upon where points vulnerable to moisture appear in the structure. Damp checks should be placed about six inches above grade to prevent moisture absorbed from the ground by exterior foundations from traveling upward by capillary action into the wall above. If a termite shield is required to protect floor joists, the damp check can serve as the shield, and should project past the inside face of the wall at least two inches and be bent down at an angle.

Through flashing should be placed under and behind both masonry and wood sills. Ends of sill-flashing should extend beyond the jamb line on both sides and be turned up at least one inch into the wall. The ends of flashing under cast stone sills should be turned up the full height of the sill.

For steel lintels, flashing should be placed under and behind the facing material, and over the top of the angle. The outer edge of the flashing should be bent down over the edge of the steel angle to form a drip. For reinforced tile lintels, the flashing is placed above the lintel.

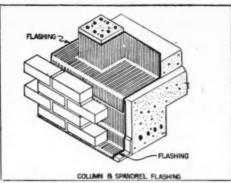
Spandrels in skeleton-framed structures should be flashed continuously at the beams except when cavity-curtain walls are used. In conventional curtain wall construction, flashing should start under the exterior facing withe, extend upward behind the facing and over the top of the spandrel beam (which is usually the rough floor level) and be turned up one inch at the inside face of the wall. Where columns occur above the beam, flashing should be turned up about six inches around

the columns, allowing ¼-inch clearance between column and flashing, with tight bottom joints and the top sealed with mastic.

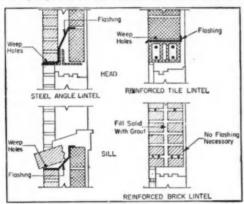
Projections and recesses should be designed with a slope or wash on top for drainage, and a drip to keep the water away from the wall surface below should be provided. They should also be flashed, preferably over the top, with the outer edge of flashing bent down and folded to form a drip. The back edge should be turned up against the inner face of the wall.

Some of the most vulnerable places in a structure, from a standpoint of moisture threats, are areas where roof flashing is installed. These areas should receive maximum attention.

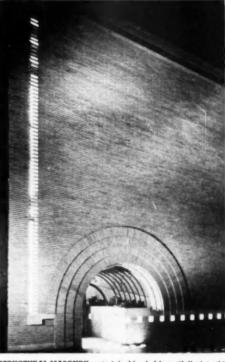
Designs of flashing used for parapets and roofs depend on the type of roofing material used. Where the base



SPANDRELS in skeleton-framed structures should be flashed continuously at beams except when cavity curtain walls are used. In conventional curtain wall construction, flashing should start under exterior facing withe, extend upward behind facing and over top of spandrel beam, and be turned up 1-inch at face of wall



UNLESS SILLS are made of impervious material, in one piece, through flashing should be placed under and behind them



STRUCTURAL MASONRY materials, blended beautifully into this Frank Lloyd Wright design, deserved (and got) careful workmanship to protect against efflorescence due to excess maisture

Efflorescence Can Be Prevented With Careful Workmanship

flashing is metal, the counter flashing should also be metal, extending into the wall and overlapping the base flashing. If the vertical surface is a chimney wall, the counter flashing should be imbedded securely in the mortar joints of the chimney wall. "Raggle," or flashing blocks, may be used in parapet or other vertical walls intersecting the roof. These blocks permit flashing to extend into them, and eliminate the necessity of counter flashing. Through flashing, however, must be placed over the raggle blocks.

With built-up roofs, where there is an intersection with a vertical surface, the roofing material may form the base flashing, and may be extended into raggle blocks; or it may be bent down so that it overlaps base flashing to form counter flashing.

Efflorescence is an indication of unwanted moisture present in the wall, and if permitted to collect, may eventually contribute to the deterioration of the masonry. There are two general conditions necessary to produce efflorescence which is recognized by a white, powdery substance that often appears on the surface of walls. These conditions are: 1—soluble salts present in the materials used to construct the wall, and 2—moisture in sufficient quantities to carry these salts to the surface.

These two conditions suggest preventive measures for efflorescence. For instance, soluble salts present in masonry might never cause any damage to the structure if moisture could not get to them. Though tests prove that about 90 per cent of all struc-

tural clay products are free from soluble salts in sufficient quantities to cause efflorescence, the safest procedure is to keep moisture out of masoury by the best construction methods possible.

If efflorescence is discovered, the first procedure is to examine the structure for possible places where moisture has access to the masonry. Often, defective flashings, or the lack of flashings at vulnerable points, or defective gutters and downspouts, faulty copings or improperly filled mortar joints cause wet walls and contribute to efflorescence. If evidence of efflorescence appears on walls, it does not necessarily mean that water is entering the wall at that point. White, powdery streaks down from the top of a wall, or patches of



Pointers for Building in Cold Weather With Structural Clay Products

How to properly store materials, prepare mortar, heat materials, apply them, and protect walls during construction period

efflorescence near the top of the wall may indicate defective copings, gutters, or roof flashings. These places should be immediately examined for faulty construction. The appearance of efflorescence under windows is evidence that sills or caulking around the window frame may be defective. A single patch of efflorescence on a wall, with no apparent relation to masonry openings, copings, or gutters, may mean a defective mortar joint or a projecting course of masonry forming a water table.

If efflorescence appears as a result of excess moisture in the walls, it is usually because of a fault in construction, and it is the builder's responsibility to find the area where moisture is entering and make the repairs necessary to stop it.

Faulty flashings, gutters, and downspouts should be repaired. If the copings are at fault, they should be taken up and relaid with thin, but well-filled mortar joints with rodded tooling. Non-corrosive metal or bituminous flashing should be placed directly under copings, cornices, chimney caps, sills and any projecting courses of masonry. Mortar joints in exposed walls, if improperly filled, should be raked out and repointed with a plastic mortar of about the same mix as used in the original work. To eliminate shrinkage as much as possible tuckpointing mortar should be prehydrated by. mixing with a portion of the mixing water one or two hours before using, then remixed with more water to satisfactory workability.

If caulking around door or window frames was omitted, all cracks should be filled with a good elastic caulking.

To remove the white, powdery efflorescence, after the walls have been made watertight with good flashing installations, a stiff scrubbing brush with water may be used. Sometimes it may disappear after several rains. If neither rain nor plain water removes the substance, the wall should be wetted, then scrubbed with water containing not more than one part of muriatic (hydrochloric) acid to nine parts of water. All frames, trim, sills or other installations adjacent to the masonry should be carefully protected against contact with the acid solution.

In cold weather masonry construction, five items are listed by The Structural Clay Products Institute as being of prime importance. These are 1—proper storing of materials, 2—preparation of mortar, 3—heating of materials used, 4—laying precautions, and 5—protection of walls.

1. Storing: All masonry units and mortar materials in cold weather should be thoroughly covered with tarpaulins, sisalkraft or felt paper. Loose plank coverings should not be permitted. Masonry units should be stored in a high, dry location, preferably on plank platforms of adequate size. Planks should be of sufficient thickness or raised to prevent absorption of moisture from the ground. Masonry units and mortar materials should never be permitted to become coated with ice or snow.

2. Preparation: Batch concrete mixers for mixing all types of mortar recommended on all larger jobs, and they are sometimes economical on smaller jobs. These modern mixers are equipped with a skip hoist, water tank and water measuring device which control the mix. Steel mortar boxes may be used on smaller

jobs, and these should be raised about one foot above the ground on piers built of brick laid dry. Waste building wood or steam may be used to keep the mortar warm after mixing.

The mixing water and sand should be heated not to exceed 160 degrees F. And it is important that mortar sand be heated uniformly. Sand that is scorched should never be used in mortar. To prevent scorching of sand, it should be heated slowly and evenly. This can be done by piling sand around an old metal smoke stack section laid horizontally, in which a slow fire is built, or through which steam pipes may be run.

In freezing weather, both water and sand should be heated. The temperature of the mortar when used should not exceed 120 degrees F., or be lower than 70 degrees F. Salt should never be used to lower the freezing point of mortar.

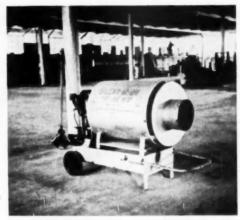
3. Heating: To prevent the sudden cooling of warm mortar in contact with cold units, it is recommended that all hollow masonry units be heated when the outside temperature is below 18 degrees F., and that



SO THAT MORTAR between joints of masonry wall may reach proper strength, it must be protected from cold weather during curing



SALAMANDER used in partially opened building, will protect clay products when temperature is between 32 and 25 degrees F.



OIL BURNING portable heat unit, used in a Denver job, can be placed wherever there is greatest need for heat

all solid units be heated when the outside temperature is below zero. Brick having rates of absorption above 20 grams per minute should be sprinkled with warm water just before laying, and those with lower rates of absorption can be laid dry.

4. Laying Precautions: Masonry should never be placed on a snow or ice-covered base or bed, because of the danger of movement when the base thaws and the total lack of bond between the mortar bed and the supporting surface. All walls should be properly protected against collections of ice and snow on new work, but in the event they are not protected, ice and snow may be removed with live steam. The steam should be applied long enough to dry out all parts of the exposed wall.

5. Protection: Tarpaulins over masonry, with warm mortar, may be sufficient when temperatures are above 25 degrees F. on a rising thermometer. But in severe weather, enclosures with artificial heat by salamanders are recommended. Walls should not be baked on one side with no protection on the other. Enclosures should allow circulation of warm air on both sides of the wall.

The following recommendations are for the protection of mortar materials and walls for winter construction with structural clay masonry units. They are offered in various literature available from the Structural Clay Products Institute.

1. Construction with 1:¼:3 (Cement-lime-sand by volume) mortar. When outside air temperature is be-

low 40 degrees F., the temperature of masonry when laid should be above 40 degrees F. and an air temperature above 40 degrees F. should be maintained on both sides of the masonry for at least 48 hours. With high-early-strength cement, the protective period may be reduced to 24 hours.

2. Construction with 1:1:6 (Cement-lime-sand by volume) mortar. When outside air temperature is below 40 degrees F., the temperature of the masonry when laid should be above 40 degrees F. and an air temperature above 40 degrees F. should be maintained on both sides of the masonry for at least 72 hours. With high-early-strength cement, the protective period may be reduced to 48 hours.



CANVAS ENCLOSURES, with salamanders or steam, will protect masonry when temperatures are between zero and 18 degrees F.



COMPLETE CANVAS enclosures, with steam heat, will protect masonry materials when temperatures are below zero



WAR ON WASTE! What a fascinating thought! The longer we ponder the subject the more interesting it becomes. The possibilities are unlimited.

Actually, if we could reduce only a part of the waste that has become our greatest besetting economic sin, we would go a long way toward balancing the national budget that already has gotten completely out of hand.

Instead of urging over-burdened taxpayers to pay more and more through the nose, if Uncle Sam would declare open war on waste and apply the same worthy principles to the operation of the Government it would not be long until we would be paying off the national debt in mighty bits and at the same time reducing taxes to the point where life would again be without the worries which accrue as a result of dishing out huge sums to be spent as though the supply of money were endless.

If it were possible to become as concerned at every act of waste as you are when you see a home burning, or a town being destroyed by the ravages of a flood, or a set of farm buildings being blown away by a cyclone, you would immediately become interested in the development of ways and means to prevent it. You not only would try to put out the flames that are consuming the house and to urge wage legislation to prevent floods but you would turn your attention in other directions. And everywhere you looked you would find waste at work.

Build Against Cyclones

Don't assume either that there is nothing that can be done to reduce the damage caused by cyclones, hurricanes and tornadoes for in the field of construction a golden opportunity exists to erect better buildings at spectacular savings in cost.

The big winds that once raised havoc with farm buildings no longer can push them over like structures of straw. Engineering principles have replaced the "b'-guess-and-b'-gosh"

methods that were responsible for leaning barns with sagging roofs that are monuments to inefficiency, even though twice as much lumber was used in their construction as was necessary.

But before we go any further in our discussion of waste as it applies to construction, let's pause for station announcement and explore a channel or two that run in other directions.

Waste at its Worst

Take Washington, as a prime example of waste at its very worst... especially at the present time when war and all-out defense plans have given countless bureaus and thousands upon thousands of men an opportunity to spend and spend and spend ... and tax and tax, and tax.

We are not questioning the soundness of the concept of the objectives. Far be it from such. We merely are pointing to the unbelievable wastes that occur when an entire nation starts hell-bent down the road on the greatest spending spree ever known to mankind. We shudder to think what will happen when the careening vehicle attempts to take the first curve at a speed which is threatening to tear it apart on straight away stretches.

No patriotic American objects to taxes that are spent efficiently for worthy causes. What raises their blood pressure is the hysterical manner in which dollars are being tossed out of the window in every state, city and hamlet throughout the nation.

When you go to Washington you come away with a heavy heart for in all your futile contacts you have encountered little else than a seemingly uncontrollable desire to buy more and more of everything without the slightest idea of how much it actually takes and with little concern as to its proper use . . . if it is ever used at all.

Harsh words? Sure thing. But true ones, too, as every honest citizen knows who has come in contact with the appalling wastes of bureaucracy and of war.

Wars are not won by virtue of our

ability to waste our assets but in spite of our bungling and fumbling in the handling of the hard earned taxpayers' dollars. The man who is trying to make both ends meet on the home front, protests mightily, and in vain, when he sees the specifications that are written covering material with which he is familiar. He wonders what is going to happen in the end to a nation that permits an individual to order more of a certain type of cooking ranges, for example, than exist in the entire nation, for a single camp that needs less than half a dozen.

Protests usually are met with a shrug of the shoulders and the truthful observation that "War IS Waste" and so it takes an order for a dozen carloads of plywood for a job that needs not more than one or two at the most

That, of course, is exactly what war does for a nation and what it will continue to do until austerity stalks within our midst. Then we will struggle to exist on a few ounces of neat per week instead of several pounds per day. There is many a tear in austerity!

Naturally it is futile to hope for efficient spending when it comes to carrying on a war... and in preparing for still greater conflicts. Wars are not built that way. Neither are defense programs.

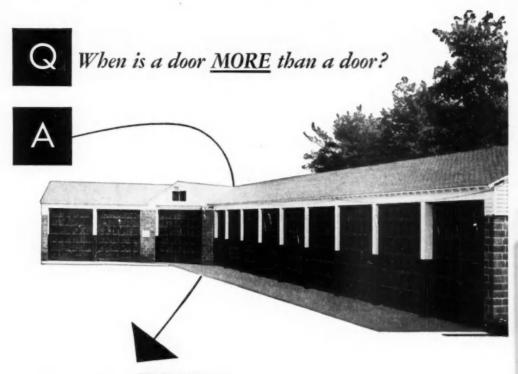
The word "futile" is chosen advisedly. How can we hope to apply efficiency and economy to war spending when we never have been able to do so in such simple things as the construction of houses.

How to Save Lumber

All right, you say, but let's have some specific examples of waste in construction. Take homes for example.

Lumber comes close to the top of the list since it represents approximately 20 per cent of the cost of the house. Here we find users and specifiers paying little attention to standard sizes and proper grades in the

(Continued on page 140)



When it's a Ro-Way

A Ro-Way Overhead Type Door is far more than just a means of entrance and exit. For one thing, it's a handsome complement to the building design—with its clean, simple lines blending beautifully with the architecture. It's often an integral part of the building itself—forming a "wall" as illustrated above. It's a lasting investment in smooth, easy operation—with exclusive features like Power-Metered springs, friction-reducing track, ball bearing rollers with Double-Thick Tread.

It's always a guarantee of owner satisfaction—with its smoothly finished, selected lumber, its heavy gauge hardware that's Parkerized and painted, and its solid construction in every detail.

When you want a door that's more than a door—for commercial, industrial or residential application—specify Ro-Way. It's all you could ask for in an overhead type door.



ROWE MANUFACTURING COMPANY 784 Holton Street, Galesburg, Illinois



Nationwide sales and installation service. See your classified telephone directory for names and addresses of Ro-Way distributors.

there's a Ro-Way for every Doorway!

New Cape Cod Development PICKS CORROSION-PROOF SCREEN CLOTH



Mashnee Village on Buzzards Bay, new low-cost 100-unit housing project in Bourne, Mass., is Lumite-screened throughout. Lumite screen cloth was chosen because Cape Cod's high humidity and corrosive salt air can't harm it, and because of its low cost. Builder: Ellis G, Williams. Architect; Lloyd M. Hendrick.

IT'S RUSTPROOF LUMITE SARAN SCREENING the ideal screen cloth for every exterior use!

Stainproof! Lumite Screening can't cause unsightly, costly stains on the screen frame, sill or side of house.

Long-Losting! An independently conducted accelerated weathering test proves Lumite Screening superior to all other types of screening. Replacement and maintenance are held to a minimum with corrosion-proof Lumite Screening

Never Needs Protective Painting! Lumite Screening can't rust, rot or mildew. And—it's non-inflammable ... easy to handle ... low in cost.



building supply dealers and screen manufacturers.

• Registered Trade-mark



	SEND	FOR	F	REE	
	SAMPLE	AND	AD	DITIONAL	
ı	INFOR	MATI	ON	TODAY!	

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L 40	UMITE DIVISION, Chicopee Mfg. Corp. of Ga. Worth Street, New York 13, New York	A	В	-4
In	ENTLEMEN: I am interested in the rustproof, stainproosting qualities of LUMITE Saran Screen Cloth, Plese FREE sample and further information.	f, l	on ser	g-
N	AME			
C	OMPANY			
A	DDRESS	ce e		
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No. D-78 Garden Trellises

THREE TYPES of trellises that can be used effectively in the development of home garden and landscaping plans are shown in the detail plate on opposite page. Each of these units is quickly and easily constructed and when completed becomes an outdoor living room.

The unit at the top of the page shows an eggcrate sun shade formed of 1x4 and 1x6 inch redwood members supported by 2x6 inch posts. Corrugated background material may be translucent glass or transite. This trellis would be effective in the corner of a rear lot development.

The trellis in the center of page opposite is a spectacular sun screen designed in the modern mode. The diagonal wood members that extend from the vertical posts to form the interesting architectural pattern provide the leverage for the cantilevered roof. This gives the necessary protection to the area without the inconvenience of supporting posts. Note that the horizontal roof members, sawn from 2x6's, are tapered toward the outer end. Horizontal braces placed between the vertical uprights can be used as shelves for potted plants. Top of horizontal roof members are covered with 1x1-inch strips spaced approximately 11/2 inches apart. Terrace floor is made of common brick. Sand is brushed over the bricks to fill voids.

Another outdoor room is provided through the use of sheltered roofs and sunscreens as shown at the bottom of page. In this arrangement the architect employs bamboo poles placed over a redwood frame. The frame in turn is supported by 4x4inch posts and 4x6-inch horizontal beams. To obtain a pitch in the redwood roof frame, the members are placed above the beam at front and below the beam at rear. A novel method for support of posts is indicated in connection with long flower box at one end. In this case the flower box extends over the top steps and wood vertical posts are nailed to the sides of the box. Provision is made for shadow boxes in the rear of background wall for potted plants. When garden embellishments are painted it is suggested that their colors be the same as the sidewalls or trim of house.

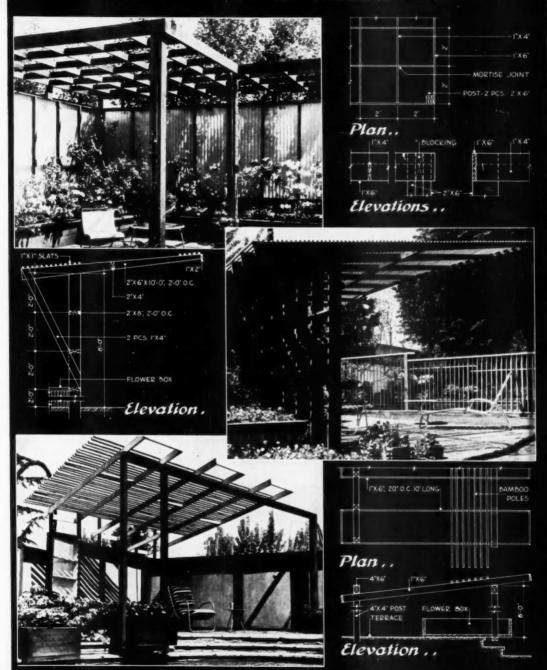
For a complete list of manufacturers of power tools and equipment see the April 1951 issue of American Builder.

AMERICAN BUILDER

AMERICAN BUILDER'S BETTER DETAIL PLATE

Detailed by K. Roderick O'Neal A.I.A. for American Builder

NO. D-78 GARDEN TRELLISES . . .



Make Your Homes a Better Buy with PC Foamglas ONG LIFE INSULATION



Your new homes will be more readily salable when you include efficient, economical insulation in your plans. And many successful builders have found PC Foamglas the ideal insulating material for modern homes.

Because Foamglas consists largely of still air, it reduces heat losses, thus helps maintain comfortable temperatures. Because its still air content is enclosed in glass cells, Foamglas has high resistance to many destructive elements, retains its original insulating value.

Those are the main reasons why so many builders will tell you that Foamglas is an exceptionally effective, an exceptionally economical insulation—a guarantee of greater comfort, less expense for home owners—a potent advantage in closing a difficult sale.

You will find a lot of helpful information on Foamglas in our authoritative booklet. Just send in the convenient coupon and your free copy—and a sample of Foamglas—will be mailed promptly.



THIS MAGNIFIED DIAGRAM SHOWS that PC Foamqlas is composed almost entirely of still dir, which is scaled in minute glass cells. The black areas indicate glass, the white areas air. The insulating properties of still air and the unusual resistance of class to moisture, chemicals and other elements that acuse insulation to deteriorate, made Foamqlas an exceptionally effective, long lasting insulating scateriol.

Pirtsburgh Corning Corporation Dept. A-51, 307 Fourth Avenue Pirtsburgh 22, Pa.

Prisorgin 22, re.
Please send me without obligation, a sample of Foamglas, and your FREE booklet on the use of PC Foamglas Insulation for homes of all sizes and types.

Address....



FOAMGLAS Cellular INSULATION

When you insulate with FOAMGLAS ... the insulation lasts!

No. G-18 Store Front Details

IN THE PLANNING of the store front shown on the opposite page the designer was confronted with several problems. The first was an unusual set of merchandising problems; the second was an intense desire on the part of the client to produce an architectural effect in full harmony with the location.

The merchandising requirements demanded an opportunity to display the combined contents of two specialized fields of merchandise—infants wear and teen-age clothes. In meeting this problem a cantilevered window about 30 inches above the floor was provided. This was recessed into an angled wall and scaled to provide the proper background for the infants wear.

On the opposite side of the store front a high window was provided with a continuous service passageway alongside the wall to service a boys' and girls' section, which in turn is scaled for teen sizes.

The third and rear window was designed in a sweeping curve and is integrated with the stairs leading to the Girls' Teen Age Dept., on the second floor. A split-level show window platform is designed to carry the shopper upward in thought. The only separating element between the stair platform and the show window is a pivoting plant box.

Section A-A on the detail plate indicates the construction of the extended awning box. This is constructed of a steel channel, angles, steel plates, and porcelain enamel. The plant box at one side is built integral with awning bar. Top of awning provides a ledge for the support and projection of the feature name sign. Above and to the rear of the sign is the open glass second story for display of teen-age merchandise.

The intent in the choice of materials is to create a sophisticated and clean looking front with the merchandise taking precedence over the architectural treatment.

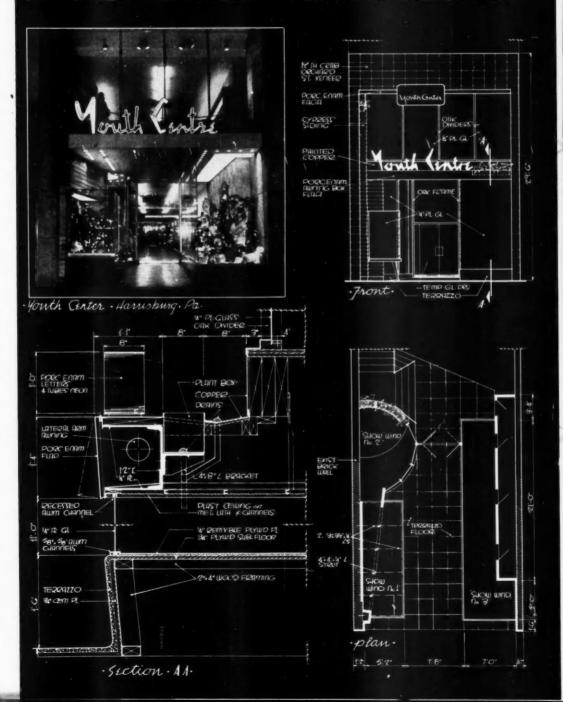
• To create a rural atmosphere the designer selected natural cypress siding for the left wall of the store front. This is combined with a forest green terrazzo in the floors and bulkheads on the right side of front. The entire front is then framed in a veneer of Crab Orchard stone. The ceiling is painted an off-white color. The lighting is a combination of incandescent and fluorescent fixtures.

AMERICAN BUILDER

AMERICAN BUILDER'S STORE FRONT DETAILS

Designed and detailed by Louis J. Gluskin for American Builder

nº C-18 · STORE · FRONT · DETRILS ·





NEW PRODUCTS

Offered by Manufacturers

PACKAGED AWNING

AB55131

AB55117 CONDENSATION ELIMINATOR AB55139

A new "home package" aluminum awning and doorway canopy is now being manufactured by the Coal Ray Metal Awning Co., Dept. AB, Youngstown, Ohio. Made with baked-on lasting enamel finish. Each package contains complete and simple illustrated instruction sheets.

ACOUSTICAL TILE

AB55118



Nu-Wood, with a new pencil-thin beveled edge, is featured by Wood Conversion Co., Dept. AB, First National Bonk Bldg., St. Paul, Minn. The tile fiber contains thousands of sound deadening cells in addition to the surfaced-drilled holes. One of the four types of application may be used to apply Nu-Wood adhesive, Nu-Wood clips, mails, or screws. Tiles are 12x12-inch, ½-inch thick.

CONVERTIBLE BURNER

AB55107



A new addition to the "Ranchief" line of the Cance Engineering Works, Dept. AB, Mendota, Ill., is a standard Ranchief Hi-Boy, with conventional bottom inlet, top discharge. It is furnished with either an oil-fired vaporizing burner, pressure burner, or gas-fired gas burner. It can be installed in a utility room or closet as small as 24x30 inches, offerareduced clearance to combustible materials.

CIRCUIT BREAKER

A plug-in type, TQL, circuit breaker for 15 to 50 Ampere services, has been introduced by The Trumbull Electric Mfg. Co., Dept. AB, Plainville, Conn. The TQL has a strong main operating spring which rapidly opens and closes the contacts, avaiding excessive burning or arcing of the contacts due to improper operation.

PORTABLE SPACE HEATER

AB55124



A fully automatic, oil-fired portable steam space heater, suitable for heating large confined spaces where men are working. It is manufactured by Quiet Automatic Oil Burner Corp., Dept. AB, 33 Bloomfield Ave., Newark, N. J. The burner guns are equipped with Cotomic Adjustable Turbulators. It burns and a half gallons of No. 2 fuel oil per hour and its self-contained fuel tank holds thirty gallons. Fully equipped with thermostat on extension card. Mounted on rubber tired castors, is easily moved. Operates on electrical outlet of 110 volls.

WATER REPELLENT

AB55122

Flexseal, a colorless water-proofing compound, used on cement, brick, stone, tile and various insulating materials, can be either brushed, sproyed or poured on, regardless of surface or in temperature. In sproying, only 10 psi pressure is required. On flat surfaces, treated with Flexseal, the water instantly forms into a mercury-like ball, preventing pitted surfaces and mortar joints from collecting and absorbing the water. One gallon will cover approximately 200 to 300 square feet depending on the surface. Flexrock Co., Dept. AB, 36th & Filbert Sts., Philadelphia 4, Pa.

1300

Check-Drip, designed to end sweating of toilet tanks, has been announced by Dudgeon Distributing Co., Dept. AB, Omaha, Neb. Automatically meters in warm water from hat water supply each time the toilet is flushed, bringing the cold surface closer for room temperature and preventing condensation. Supplied with unit fittings for copper tubing and rigid pipe connection. Easily installed.

TRENCHER

AB55119



The Blackhawk Trench Hog manufactured by the Arps Corporation, Dept. AB, New Holstein, Wis., may be equipped with three lengths of booms to permit digging depths of 31/2, 51/2, and 7 feet. I'wa types of cutters are available for different applications. The standard cutters, recommended for ordinary or sticky soils, are termished in widths of 6 through 20 inches. Super-Service cutters, designed for hard or rocky soils and frazen ground, are supplied in widths of 7 through 18 inches. Accessories offered include a high speed sprocket which offords an operating speed of as much as 80 feet an hour on narrow, shallow digging jobs.

CARTOON AD-SERVICE

AB5513



"John - we just HAVE to remodel the attic for 'e rumpus room for the children;"

Lymber dealer advertising mat service consists of 104 cartoons in both one and two column sizes. Some tie-in- copy suggestions are furnished with the cartoons. Gag lines may also be changed to fit special copy needs. Lili-Ad Features, Dept. AB, R.F.D. 3, Santa Ana, Colif.

New Products continued page 132

AMERICAN BUILDER

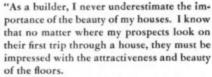
Beauty-minded buyers demand







the most beautiful flooring material



"When a housewife looks at an empty room, she visualizes her furniture in it. And when she sees oak flooring in my houses, she knows that her room will be attractiveno matter what style or type of furniture.

"But beauty's not all. And that's where oak excels. In addition to its versatile beauty, oak is the most economical and durable flooring material on the market.

"That's why 85% of all prospective home owners want oak flooring. That's also why I insist that every one of my homes has oak flooring." National Oak Flooring Manufacturers' Association, Sterick Building, Memphis 3, Tennessee.

No other feature helps sell a house faster than a good oak floor.





Special type rack, designed to eliminate individual block handling and make multiple handling practical in drying and curring, is manufactured by the Equipment Manufacturing, Inc., Dept. AB, 21550 Hoover Rd., Detroi S, Mich. Rack is of welded structural steel construction and halds 12 steel or wood pallets of the size used for casting four blocks, a total of 48 blocks. Bottom level is raised from floor to permit lifting and transporting by fork truck or platform from casting to storage. Rock holding the 48 blocks can be loaded an trucks for movement to the job without removing blocks from casting pallet.

WATER AND STAIN REPELLENT AB55134



Cor-Q-Pel, an invisible silicone base, for use on natural and artificial stone, cement, concrete, cinder block, stucco, brick, and unglazed tile, is featured by Con-Cor Paint Co., Dept. AB, 46th & Main, Whitton Manor Bildgi, Konsos City, Mo. Recommended application is by spray gun at not more than 20 to 25 pounds pressure. Cor-Q-Pel may be applied at any temperature; however the surface must be bone dry. Recommended for above-grade application only.

FIREPLACE UNIT

AB55123



A scientifically designed steel form, complete from floor to flue, around which any style fire-place can be built. Draws air in at floor level, heats it and circulates it throughout the room. All heating surfaces are of 3 ½-in-inch steel. Heatilator, Inc., Dept. AB, 661 E. Brighton Ave., Syracuse S, N. Y.

FAMILY HOME

AB55138



A low-cost three-bedroom family home is being featured by Best Homes, Inc., Dept. AB, 628 W. Lake Sr., Peoria, III. Has ample kitchen, dining and storage space, plus bath and living room. With a without basement. Called the "Independence," the home meets building code requirements, is accepted and approved by union labor and for F.H.A. and V.A. financing.

GLASS INSULATION

AB55136

Longer rolls of Fiberglas insulation are now being produced by the Owens-Corning Fiberglas Corp., Dept. AB, Toledo 1, Ohio. Requires less cutting and filting, affords an improved continuous vapor barrier. When unrolled and installed the insulation springs back to its natural density. Fiberglas is also available in the form of batt blankets, utility batts and pouring and blowing wool.

OIL BURNER

AB55111



The Combustioneer law pressure burner, Model dLP, features a newly-designed compound air and ail-metering pump which provides an easy method of changing pump capacities. To change gallon-per-hour capacities the pump does not have to be removed and there are no pistons or parts to exchange or replace: an index adjustment screw is simply turned to obtain any desired capacity from .65 to 3.00 gph. This adjustment can be made while burner is operating. Combustioneer Div., The Steel Products Engineering Co., Dept. AB, Spring-field, Ohio.

DOOR LATCH



An easily installed latch for doors from $\frac{3}{4}$ -inch to $1\frac{1}{6}$ -inch in thickness has been announced by the Stanley Works, Dept. AB, New Britain, Cann. Made in steel, No. 1280, or bross, No. 1280 $\frac{1}{2}$, and has easily operated trip lever which lacks doors securely. Operates smoothly by pull-push action.

PLASTIC WALL TILE

AB55105

AB55112



A new design in plastic wall tile, an interlocking, bevel-edged tile made of plastic styron, is being mode by Jones & Brown, Dept. AB, 439 Sixth Ave., Pittsburgh, Pa. Comes in 22 different colors. A special ridge designed on back of the tile 'lock' the mastic in, praviding a maximum grip. The tile is also designed to withstand temperatures up to 165 degrees F.

HEATING SYSTEM

AB55102

A new "In-The-Wall" gas-fired heating system, designed to heat completely 3½ to 6½ room, one-floor, low-cost homes or apartments as well as small business places of equivalent size, has been introduced by The Coroaire Heater Corp. Dept. AB, 1422 Euclid Ave., Cleveland 15, Ohio. Some of the features are campactness, simple installation, and fully automatic controls. A.G.A. and F.H.A. approved for recessed wall installation, zero clearance with any type building material.

New Products continued page 146

INSERT NUMBERS AND MAIL COUPON FOR INFORMATION

American Builder, 79 W. Monroe Street, Chicago 3, Illinois

 Name
 State

 Address
 State

 No.
 No.
 No.

 When you address inquiries direct to manufacturers concerning a new product

described here, please mention that you saw it described in American Builder

Profitable short cuts for cost-conscious builders

Here's a trio of time-saving Stanley Electric Tools designed to boost profits for builders. They make tedious jobs easy, increase operator output, and turn out work of consistent accuracy. See them at your local distributor's. For literature or complete electric tool catalog, write Stanley Electric Tools, 400 Myrtle St., New Britain, Conn.

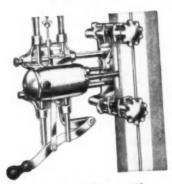
Short cut to speedy drilling



STANLEY ELECTRIC DRILL NO. 24A

A handy, lightweight drill designed especially for continuous duty and rough day-in, day-out use. Stanley 24A is sturdily constructed with ample power for most portable drill requirements. Drills hole diameters up to ½" in wood or ¾" in steel.

Short cuts to fast,
accurate door-lock fitting



STANLEY DOOR LOCK MORTISER, LM1

The Lock Mortiser, LM1, does a complete mortising job in about 30 seconds. Capacity to 5½," long and 4¾" deep. Easily adjustable for size changes. Automatic feed permits easy operation by inexperienced operators. Full 1 hp. motor assures smooth, flawless cutting.

STANLEY LOCK FACE TEMPLET, T-1

For the builder who already has (or plans to get) a Stanley HB8 Hinge Butt Router. Permits quick, easy mortising for lock faces. Insures smooth, flat surfaces and perfect fit. Self-centering clamps automatically locate templet in center of door. Adjustable to any size lock face plate.



Rep. U.S. Pat. Off

HARDWARE . TOOLS . ELECTRIC TOOLS

STEEL STRAPPING . STEEL

The Answer is BASE-RAY!

By Scientific Test there is No Better Heat for



IN ranch type homes, particularly those erected on concrete floors good heating calls for BURNHAM BASE-RAY* Radiant Baseboards. Here are two compelling reasons: 1. WARM FLOORS—Scientific tests have shown α variance of less than 2° from 3 inches above concrete floor to the 30° level. Also with an indoor-outdoor temperature difference of 70°, the concrete slab itself ranged between 70° and 68°. This means warm floors—real comfort. 2. LOW INSTALLATION COST—BASE-RAY eliminates up to 50% of the pipe and fittings when the series loop system is used. (Note the diagram shown and see page 10 IBR Installation Guide #5.) This reduces costs, saves scarce materials; cuts down installation labor better than 50%. This means hot water

heat at surprisingly low cost.



Burnham Corporation

TEEKS OF KADIAITI BASEBOARD HEATING

IRVINGTON, N. Y., Dept. AB-51

FREE! NEW, REVISED "Ratings and Installation Guide on BASE-RAY Radiant Baseboards." Send for it today.



Catalogs and HOW-TO-DO-IT INFORMATION

921—INSTALLATION MANUAL—An illustrated 46-page manual on the installation of drainage products has been published by Armeo Drainage & Metal Products, Inc., Middletown, Ohio. The manual discusses handling, location, proper excavation and preparation of base in various types of foundation soils and rock.

922—HOME BOOK—A 40-page booklet describing and illustrating heating and plumbing fixtures has been published by American Radiator and Standard Sanitary Corp., P. O. Box 1226, Pittsburgh 30, Pa. The booklet shows installation in a variety of modern settings.

923—"MORE HOLES IN A HURRY"—is the title of a new 36-page booklet giving information on the care and operation of portable electric drills, and how and where to use them. Tables and charts giving the various drill sizes and speeds are also included. Mall Tool Co., 7737 S. Chicago Ave., Chicago 19, Ill.

924—RADIAL ARM SAW—A 12-page, two color catalog has been issued on the Delta-Milwaukee radial arm saw by the Delta Power Tool Div., Rockwell Mfg. Co., 600 E. Vienna Ave., Milwaukee 1, Wis. The center spread is devoted to illustrating some of the 125 different operations of this tool.

925—SECTIONAL SCAFFOLDS—New 12-page bulletin entitled "Trouble Saver" has been published by The Patent Scaffolding Co., Inc., 38-21 Twelfth St., Long Island City 1, N. Y. Forty-eight photographs and line drawings give detailed information.

926—"SHELLAC—HOW TO USE IT"—Illustrated booklet gives information on how to obtain the best possible finishes to wood furnishings, floors and other items requiring protective coats. An eighteen-page booklet offered by the Shellac Information Bureau, 65 Pine St., New York 5, N. Y.

927—"ELECTRICAL PLANNING FOR THE MODERN HOME"—A 20-page booklet published by the Westinghouse Electric Corp., Better Homes Bureau shows photographs, diagrams and sketches acquainting the builder with the latest advances in home design for maximum use of electrical facilities.

928—GYPSUM WALLBOARD AND SHEATH-ING—A new catalog covering gypsum sheathing and wallboards, their advanatges and uses, has been published by Certain-teed Products Corp., Ardmore, Pa. The 20-page book gives detailed instructions for applying sheathing and various types of gypsum wallboard.

929—MOVABLE METAL WALLS—Practical facts for architects, builders, and contractors, are given in a 48-page book published by the Mills Co., 975 Wayside Rd., Cleveland 10, Ohio. The Mills line of movable walls, partitions, wall linings, ceilings, railings, counters, cabinets, accessories and hardware is described and illustrated.

930—"VENTING OF GAS APPLIANCES"—Is the title of a pamphlet furnished by the Metalbestos Div., William Wallace Co., Belmont, Calif. Various phases of the venting problem are described and illustrated.

(Continued on page 136)

School Building . . .

(Continued from page 109)
weather. The east area is open to the
sun, except for a shallow canopy surrounding two sides of the building.
This canopy extends over the driveway, so that automobiles can come
up through the front grounds and discharge the small scholars under cover
in inclement weather.

Exterior walls are natural gray fieldstone, backed up with 8" clay tile. The skeleton of the building is structural steel. Vermiculite plaster on metal lath was applied 1" thick on partitions and suspended ceilings. Steel columns are protected with 1½" of vermiculite plaster over metal lath, the plaster being pushed through the lath to the flange faces. Ceilings throughout are finished with vermiculite acoustical plaster. ½" thick, applied in two coats to the vermiculite plaster brown coat.

There is a great deal of glass area. In the three class rooms, placed in the rear of the building to command



CHILD-SIZE FURNITURE and facilities were used in all areas for the children

the sunniest exposure and pleasantest vista, windows are continuous. Clear glass set in aluminum sash extends rfom about 1 foot from floor to an eyebrow, above which are glass blocks to keep out direct sunlight. In the dormitory and dining rooms, the glass ends at the ceiling level also, but the sills are higher. Natural light is supplemented with fluorescent fixtures.

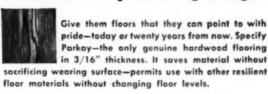
Floors are concrete finished with asphalt tile of different colors and patterns. Corridors and class rooms have a wainscoating of glazed tile.

The roof is a structural steel deck insulated and fireproofed with vermiculite concrete fill, 1:6 mix (1 part Portland cement to 6 parts vermiculite concrete aggregate). The fill is covered with a built-up roof of pitch and gravel. The steel deck was designed dead level, drainage slopes being provided by varying the thickness of the lightweight concrete. The roof over the outside play area is of similar insulated construction. The canopies at the east end are also vermiculite concrete.

The building has an adequate ven-(Continued on page 137)



Warmth and Lasting Beauty of Parkay Hardwood Floors Within Reach of Every Building Budget



Parkay comes to the job ready-finished—an important time-and-money-saving feature. It is applied quickly with special Parkay Adhesive over any sound subsurface—cement or wood. Final result—beautiful, enduring hardwood floors that cost little or no more than ordinary strip finished on the job.

Parkay flooring made of choice American Oak, is offered in two styles—9" x 9" Tiles and 9"-wide Broadboard in random lengths. Both styles may be used for attractive wall paneling. Also available—Parkay Haddon Hall Pattern (basketweave) Flooring. For complete details see Sweet's Architectural File or write direct for free literature and sample. Parkay, Incorporated, Louisville 9, Ky.



READY-FINISHED HARDWOOD



"The proof of Har-Vey's superior performance lies in the fact that architects, builders and mills are using it over and over again," says Clyde Varney, Hardware Jobber of Detroit, Michigan.

*Their complete satisfaction with the ease of installation and smooth, trouble-free operation is in turn winning more and more new users for Har-Vey Hardware wherever rolling doors are being installed."

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Hardware and an increasingly tight supply situation, Metal Products Corporation is making and will continue to make every effort to satisfy the requirements of its many customers, old and new.

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Please send m	ne your free folder on	rolling doors & Har-Vey Hard	dware
COMPANY			
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Catalogs

(Continued from page 134)

931-ELECTRIC TOOLS-A 4-page folder on Thor Silver Line" tools has been published by Independent Pneumatic Tool Co., Aurora, Ill. The folder contains a number of photographs and includes specifications and features

932-FANS-A colorful 32-page catalog giving design and construction specifications on various types of desk and stand fans, air circulators, ceiling fans, kitchen ventilators, exhaust, attic, and window fans. Offered by Emerson Electric Mfg. Co., St. Louis 21, Mo.

933-SIGN ADVERTISING-Information on sign advertising service offered by Active Display Advertising, 1702 W. 19th St., Chicago 8, Ill., is given in a recently published 3-page folder.

934-STEEL FLOORING AND SAFETY TREADS-A new catalog describing various types of open steel flooring and armoring is available from the Dravo Corp., Machinery Div., National Dept., 5th & Liberty Aves., Pittsburgh 22, Pa.

935-HEAVY-DUTY FORK LIFT TRUCKS-Bulletin No. 77 describing the improved heavy-duty fork lift truck is offered by the Silent Hoist & Crane Co., Inc., 841-877 63rd St., Brooklyn 20, N. Y. Illustrations and specifications are given.

936-LIGHTING FIXTURES-A 32-page catalog containing full color photographs and descriptions of lighting fixtures for every room in the home is published by Markel Electric Products, Inc., Buffalo 3, N. Y.

937-METAL LATH-Line of metal lath and plastering accessories of the Penn Metal Co., Inc., 205 E. 42nd St., New York 17, N. Y. is illustrated and described in a 24-page catalog. Included are installation data and specifications

938-PERFORMANCE DATA ON ASPHALT SHINGLES-Applied to new roofs with Bostitch Model H4 stapling hammer is given in a booklet issued by Bostitch Inc., Westerly, R. I. Includes photographs of actual installation.

939-FLEXIBLE PIPE-Features of Johnsonite plastic pipe, along with characteristics and applications are given in an 8-page catalog published by the Johnson Plastic Corp., Brown Rd., Chagrin Falls, Ohio,

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OCCUPATION					

School Building ...

(Continued from page 135)

tilating system, which provides a complete change of air every fifteen minutes. The heating system is steam with convector-type radiation.

The floor plan was designed to use every inch of space efficiently. To the right of the large combination reception and play room (which also doubles as an auditorium), is the children's dining room with a seating capacity of between 75 and 100. Opening from this is a small, well-equipped serving kitchen. Food is



COVERED PLAY area has insulated

prepared in the main kitchen in the Academy's High School a short distance away, and brought to the auxilliary kitchen in heated trucks through a covered passage-way.

The dormitory is at the left of the reception room. It is known as the "whisper room" because talking out loud is not permitted. Before taking their morning and afternoon naps, the children have a quieting-down period in the reception room.

A stairway from the entrance lobby leads to the second-floor apartment penthouse.

A small room off the entrance corridor is used as a garage for wagons, tricycles, and little cars. This corridor runs through the center of the building to the class room corridor in the

Each class room has a project area at one end of the class room proper, a hat and coat room, and two toilets. The child is allotted a cubby hole under the wall counters in which to keep his own possessions. This teaches orderliness and responsibility for keeping belongings in their proper place, as well as respect for the possessions of others. Individual space is identified by cut-out dogs, geese, airplanes, trains, etc., selected by the child himself, since the children cannot yet read.

Furnishings, toilet facilities, sinks, and drinking fountains are scaled down to child size. The diminutive modern chairs molded to fit small spines, tables, china and silver, double-deck dormitory bunks, and low classroom counters, chests, and cup-

(Continued on page 139)

NOW! Earn Better Pay This Easy Way

CARPENTRY ESTIMATING

...QUICK...EASY...ACCURATE with this simplified Guide

You can earn higher pay when you know how to estimate. Here is everything you need to know to "take off" a bill of materials from a set of plans and specifications for a frame house. Saves you time figuring jobs, protects you against oversights or mistakes that waste materials and cost money. Nothing complicated—just use simple arithmetic to do house carpentry estimating with this easy-to-use ready reference handbook.

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Shows you, step by step, how to figure materials needed for (1) foundation, (2) framing, (3) exterior finish, (4) interior finish, (5) hardware, and (6) stairs. Gives definite "take-off" rules, with many helpful quick-reference tables and short-cut methods that simplify the work.

SPECIAL FEATURES: Lumber Checking List. Millwork Checking List. Hardware Checking List. Materials Ordering Information. Quick-Figuring Tables for estimating concrete footings and walls, concrete piers, window frames, door and window areas, sash weights, nail quantities. How to figure labor hours per unit of work. Rules for linear, area and volume measurement. Mathematical reference tables, including decimal equivalents, lumber reckoner, conversion of weights and measures, etc.

TURN TO CHAPTER 8

and see the "Estimating Short Cuts" for quick figuring of board footage. Here are simplified ways to estimate lumber needed for floors, walls, ceilings, roof, door and window frames, inside trim for these frames, inside trim for inside doors, and drawers and cabinets. This chapter alone can be worth the entire price of the book to you!

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Just fill in and mail coupon below to get "Simplified Carpentry Estimating" for 10 DAYS FREE TRIAL. If not fully satisfied, return the book and owe nothing. If you keep it, send only \$3.50 plus few cents postage in full payment. You take no risk Mail coupon now.



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WHEN CUSTOMERS complain that cellar windows are continuously being broken, frames rotted, wind and rain driven inrecommend replacement with Insulux Glass Block!

Make the comparison! Figure it out for yourself! Compare the cost of sash, screen, storm window and maintenance against that of a lifetime panel of maintenance-free Insulux Glass Block.

A panel of Insulux Glass Block can't rust or rot; never needs painting. Glass block is extremely hard to break . . makes a sound, weather-tight, insulating panel. And glass block lets in all the light, yet blocks out sight.

Supplies of glass block and all of the accessories needed are non-critical and immediately available in quantity. Installation is simple and quick . . . requires only ordinary mason's tools.

Want more information about this use of Insulux Glass Block? Just write: Daylight Engineering Laboratory, Dept. AB5, Box 1035, Toledo 1, Ohio. Insulux Division, American Structural Products Company, Subsidiary of Owens-Illinois Glass Company.

INSULUX

"WALLS OF DAYLIGHT"

-by the pioneers of **Daylight Engineering**

Announce Improvements For Insulux Glass Block

Two improvements designed to cut installation time and costs for Insulux glass block were recently reported by American Structural Products Co., a subsidiary of the Owens-Illinois Glass Co.

The first is a new finish applied to the exposed faces of the block during manufacture. It is water-repellent, preventing adhesion of mortar to the



NEW FINISH applied to faces of glass block in manufacture simplifies cleaning

faces during the laying operation, and permits easier and faster cleaning of the panels. It also eliminates the need for strong acids commonly used for cleaning masonry, the manufacturers said.

The second improvement is an electronically applied gold stripe on the top mortar-bearing edge of each block, designed to facilitate the lay



GOLD STRIPE on top mortar-bearing edge of Insulux block guides correct placement

ing of units in correct position. If all block in one course have been installed properly, the gold line will be unbroken, while a broken line indicating improperly placed block can be easily detected.

Blocks are inspected and striped automatically at the factory by a special machine which makes use of an electronic unit in order to eliminate the possibility of human error.

> National Home Week September 9 thru 16



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with less work by using these 104 "Tim-ber-e-" cartoons in YOUR newspaper and vertising. YOU owe it to yourself to find out how these cartoons will SAVE your advertising follers and help YOU SELL. Do yourself a favor and ask to see the other 103 cartoons. Mats available in 1 or 2 column size.

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- You Can Get the Exclusive on Them for Your City (If Open) at Small Cost, Don't Delay-Write Ta-

LILAD FEATURES

RFD 3, Box 150, Santa Ana, Calif.

School Building . . .

(Continued from page 137)

boards were all made to order.

Great care was used in selecting bright, cheery colors for the interior. Most are pastel combinations, except in the dormitory, where a dark, restful green was used for the walls, and a pale green for the ceiling. In the southwest corner of the dining room is a large mural depicting Christ, the Teacher, surrounded by children of all nations.

The basement is divided into a maintenance shop and garage, living quarters for three yard and maintenance men, boiler and mechanical rooms, and an elaborate laundry to take care of the tremendous quantities of table linen and bedding used

Cost of the structure was \$230,000, not excessive considering the facilities provided. A building of this type cannot be compared with the ordinary school because of the great dif-

ference in requirements.

"The entire building has one purpose, and one only," Architect Voorhees summed up, "and that is to handle little children. The shape of the building, the space arrangements, and everything in it were needed for their care. We aren't putting the children there to take care of the building. Much the same facilities could be provided for public schools. They have enlarged their teaching program in the last twenty-five years to include children of kindergarten age, for which it has become quite evident extra facilities are necessary. With foresight in planning new buildings, public schools can expand further and fulfill a position in the community they haven't been able to before, which will be particularly valuable if mothers work in war plants again.'

Smith and Voorhees specialize in elementary school buildings.

Stairway Manufacturer Builds New Plant

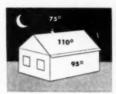
With new machinery installed to meet increased production demands, Minnesota Wood Specialties Co., which manufactures a complete line of folding attic stairways, has moved into a new plant in Newport, Minn. The firm, formerly located in St. Paul Park, Minn., will retain its plan and warehouse facilities there as an annex, according to Warren Bjorklund, president of E Z Way Sales, Inc., sales division of the firm.

Herb Dillon and Sons, South St. Paul contractors, erected the new

building, a completely fireproof steel and cement structure

Low-Cost Home Cooling

HERE'S HOW ATTIC VENTILATION COOLS A HOME

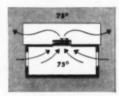


It's cooler outside at night.

All day long a home absorbs heat from the summer sun. At night when outside temperatures have fallen to 75°, for example, the dead hot air in your attic may remain as high as 110°. This keeps the rooms below at an unbearable temperature of up to 95° or more.

Attic fan pulls the cool air inside.

A Hunter Attic Fan pulls the cool fresh outside air into the house, driving out the oven-like heat. In a few minutes after the fan is started, room temperatures drop 10° to 20° lower. An automatic time switch can be used to shut off the fan while occupants sleep.



NEW HUNTER PACKAGE FAN IS INEXPENSIVE AND EASY TO INSTALL IN OLD OR NEW HOMES



A Hunter Package Fan is the most practical and least expensive method of keeping a home comfortable on hot summer nights. This compact unit is easily installed in any new or old home. Furnished complete with fan, motor, suction box and ceiling shutter-with a choice of four sizes, to fit any home.

Cool comfort for a few cents a night.

This efficient attic fan is quiet and powerful, requires little or no maintenance. It costs only a few cents a night to operate and will last for many, many years. Backed by Hunter, exclusive fan makers since 1886. Mail coupon below for complete information on comfort cooling with Hunter Fans.



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How many times have you wished for easy-touse, low-cost levels and transits? Instruments ideally suited to light or rough construction work - basement excavating, landscape grading, trenching, tiling, concrete work, laying out building lots, etc. Here's your answer. These instruments are fully guaranteed. Small contractors have successfully used them for years. Big contractors often supply their individual crews for on-the-job service. See them at your nearest David White dealer or write us direct for literature. DAVID WHITE COMPANY, 311

W. Court Street, Milwaukee 12, Wisconsin.

We offer complete, prompt repair service on all makes of in-struments — levels, transits, theodolites,

Saberson . . .

(Continued from page 124)

planning of their homes. Cutting and fitting on the building site is not only highly inefficient but wastes needlessly a substantial amount of material. Little attention is given to the application of preservatives that protect lumber from decay and termites and make it last three to five times longer. Green lumber is used in critical areas even though it is a wellknown fact that it will last only a few years instead of several decades as would be the case if protected. Over-designing is a common practice in an effort to achieve good construction through the use of quantity rather than by correct engineering principles. Precut pieces bear the stigma of "standard" in the minds of many planners, who discard economy and efficiency in favor of a highly expensive luxury called "freedom of individual expression.'

But of course lumber is not the only sufferer. The same thing applies to practically every other material that goes into the construction of a home.

If, perchance, there is any question in your mind concerning the widespread confusion which exists concerning the manner in which building materials should be used it merely is necessary to study the building codes of the cities of this fair land of ours. No two are alike and most of them do not come within an Irish mile of agreeing as to what should be done to achieve good construction at the lowest possible cost.

Next let's consider the farms of America where waste looms large on every side. . . unprotected farm machinery, over-sized, poorly designed farm buildings, inadequately housed livestock. The list of waste includes practically every farm operation.

The dairy barn provides an excellent example as revealed in the story of the Doane Agricultural Service ("D.A.S.") which appeared in a recent issue of Fortune magazine.

"Some years ago," says the article, "D.A.S. had to answer the question. 'How can a barn be a paying investment?' and, as the first step in solving it, D.A.S. asked a question in turn. 'How much barn can your cows pay for?' After a seven-state survey of 21,000 dairy cattle, D.A.S. came to the disturbing conclusion that on most farms cows pay for only about half the capital investment in the dairy barns. D.A.S. set about designing a paying barn, and since the cow was going to pay for it, they in effect asked the cow, as every good architect asks his client. What do you de-

(Continued on page 142)

SAMSON BAR CUTTERS

- All Steel Construction
- Unbreakable Frame
- Easy Operation
- Immediate Shipment



Metal Working Equipment

CAPACIT	Y 1	No. 20	No. 23	No. 26
Rounds		%"	3/4 **	7/0"
Squares		1/2"	5/0 "	3/4 "
Flats	2	"x1/4"	21/2"x5/16"	21/2"x3/8"
Concrete	Bars	3/8"	1/2 "	3/6 "
PRICE	\$	44.90	\$60.30	\$68.50

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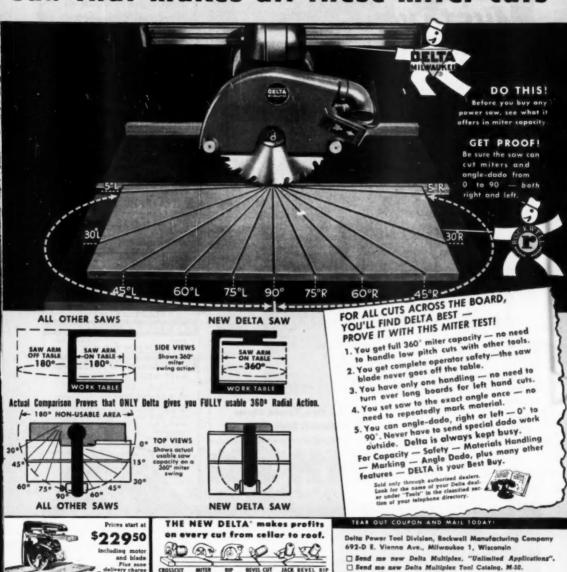
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The four most popular siding colors as revealed by a survey made among architects, lumber dealers, contractors, are the new granular tan, green, coral and blue Mustang asbestos siding shingles.

Granular Mustangs are permanent as granite. A special process prevents ceromic granules from rubbing off. Each Mustang shingle is embossed showing the natural grain with all the beauty of weathered wood. Your customers will like these four new Mustang colors!



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P. O. Box 1082 • Houston 1

Remember! IT PAYS TO SELL MUSTANGS!

Saberson ...

(Continued from page 140)

sire in the way of shelter, comfort, and working conditions?"

"The result of the research was a stanchionless barn, adaptable as a beef-cattle or dairy loafing barn, built high on the north side for hay storage, low and wide-open on the south so the cows can walk in and out at will. It is equipped with a movable fence, or feed bunks, separating the cows from the hay. As winter advances, more and more loafing area is provided as the cows eat back into the hay, pushing the fence along as they go. D.A.S. has also designed a milking parlor to go with this barn. It is based on the theory that it is simpler to let the cow carry milk to the equipment than to carry the equipment to the cow. Because the barn requires no foundation or scaffolding-it is held up by chemically treated poles-no notching, and very few sawed lengths, it can be built for around \$2,000, half the cost of the less efficient conventional barn.

"Much of the same kind of job has been done by D.A.S. on hog houses—a Quonset-type design with movable sections that provides shelter from the cold at farrowing time, and large shady areas for the hogs in summer—corneribs, trench silos, machine sheds, etc. All the buildings are designed as tools to save labor, all are first constructed and tested on Doane-managed farms."

It is too much to hope for the widespread application of such economy on the farms of America. And it is equally futile to hope that the time will come when all building codes will be uniformly efficient.

But is it not pleasant to contemplate how much happier everybody would be if it were possible to live in a world without waste!

Liquid Gas Trade Show In Chicago, May 7-10

Arrangements have been made to receive nearly 2,000 persons at the Liquefied Petroleum Gas Association's 20th anniversary convention and trade show in Chicago May 7, 8, 9, and 10, Roy R, Johnson, Fuelane Corp., Liberty, N.Y., chairman of the arrangements committee, has announced.

The speaking program will include talks on latest developments in the national liquefied petroleum gas promotional program, an insight into the probable effect of the present international emergency on the LP-gas industry, and Washington developments affecting the industry.



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You can protect your family from forced liquidation of your business in case of your death to pay debts and inheritance taxes, through the proper use of a Business Purchase Agreement.

Whether your business is a sole proprietorship, a partnership or a close corporation, you should know the facts about Business Purchase Agreements.

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"The Importance of Business Purchase Agreements" clearly explains the dangers of failing to provide a plan for the continuation of your business in case of your death; and shows you in simple terms how a Business Purchase Agreement can protect your interests and those of your family. Address: National Life Insurance Company, Dept. E, Home Office, Montpelier, Vt.

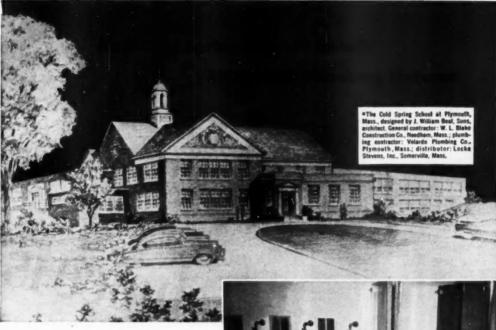
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plumbing fixtures have been chosen for quality, low-cost operation and easy sanitary maintenance by the School Board, the architect and the builder. Attractive Richmond vitreous china is acid-resisting and long lasting.

By providing better sanitation, Richmond fixtures promote better health. Always remember—when quality and economy count...count on Richmond.



Section of Cold Spring School wash room showing the batteries of Richmond Delton Washout Urinals (Plate No. G-353) and the Richmond Spaulding Syphon Jet Water Closets (Plate No. G-220).

Be sure to see the RICHMOND exhibit—Booths 222-228 at N.A.M.P. show, Chicago, May 26-31.





AMERICA'S Number I HARDWARE

YALE hardware!

 $W_{\text{remember this...}}^{\text{HEN YOU specify the hardware for your next job,}}$

In America's great, new buildings the choice is YALE hardware. And with good reason!

No other hardware has so thoroughly demonstrated its ability to save management money—and at the same time maintain the highest standard for security, performance, appearance!

You'll find the proof in case history after case history from buildings of every size and type. YALE hardware cuts replacement and servicing costs to next-to-nothing. YALE hardware is easier to live with—makes doors open easily, close firmly, lock surely. YALE hardware keeps its beauty year after year.

Good reasons for you to choose YALE, too!

Consider these advantages for the job you have on the board now. We'll be glad to cooperate with you in planning, or to send you detailed information. Just write The Yale & Towne Manufacturing Co., Dept. S-45, Stamford, Conn. (In Canada: St. Catharines, Ontario.)

YALE 8656. Gives excellent security for doors opening inward or outward. Small trigger bolt deadlocks latchbolt. Bronze front and bolts. Key changes practically unlimited, master key systems registered.

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BRADFORD NEW PRODUCTS

ELECTRIC SAWS



- 6" Saw Model 160 Vertical depth of cut 2" Bevel cut at 45°: 11/4 Net weight 10 lbs. 4 oz.



Model 180 - 8" Saw

Vertical depth of cut 2 29/32" Bevel cut at 45°: 13/4 Net weight 17 lbs. 8 oz.

These new 6" and 8" Bradford Portable Electric Saws are ruggedly constructed and fully powered to take on the toughest sawing jobs! They're better designed - inside and out for easier handling, smoother sawing, more accurate work. You can feel the difference in the Bradford design! _

And Bradford Saws are built to last. Ball bearings with permanent lubrication are used throughout. Gears are helical cut to give maximum driving power. A powerful 110 volt AC/DC motor drives the blade with quiet, cool-running efficiency.

Own a new Bradford Portable Electric Saw - they're the choice of craftsmen everywhere. See your Bradford dealer for a demonstration. Write for bulletins giving specifications and prices.

THE BRADFORD MACHINE TOOL CO.

654 Evans Street Cincinnati, Ohio Precision since 1840

(Continued from page 132)

PERPLOTRATOR

AB55126



An addition to the new Universal Refrig-A-Dor line of the Refrigeration Sales Co., Dept. AB, 91 Lexington St., New Britain, Conn., is the 14 cubic foot Model 14 HMD with 100 pound freezer. Holds almost a month's supply of frozen foods. Equipped with an automatic defroster, chill tray, two large crisper drawers and a butter keeper. Its width is 293/4-inches.



The Speed-Barrow, Model G-12, equipped with pneumatic tires for quiet operation and to prevent harm on any surface is being featured by American Conveyor Co., 1115 West Adams St., Chicago 7, III. Requires no lifting when unloading. Has a capacity of 12 cubic feet and holds up to 1,800 pounds of material. Made of extra heavy gauge steel throughout.

HEAT RESISTANT PAINT



Heat-Rem H-170 capable of withstanding temperatures up to 1700 degrees F. is featured by Speco, Inc., Dept. AB, 7308 Associate Ave., Cleveland 9, Ohio. The paint is said to set in four hours and dry completely overnight on hot surfaces. It is recommended for use on heat lines, condensors, compressors, ovens, engine heads, mufflers, radiators, and exhaust manifolds. Packaged in quart, gallon and fivegallon cans

(Continued on page 147)



It allows you to sell more than just a can of paint-you offer your customers factory fresh paint at no extra charge. And no stirring is required. The live-action of this patented conditioner as it puts pigment back to work is a regular traffic-stopper, so feature related Red Devil items near it and watch paint profits soar. Also your standard equipment for blending "store-mixed" paints.

Display this two-color decal to identify yourself with Red Devil's national advertising - the sign of fresh conditioned paint.

NO. 30 PAINT CONDITIONER PAINT CONDITIONER
Red Devil's exclusive patented eccentric-action develops 700 vigorous shakes a minute. Thoroughly freshens point in less than 2 utes. Complete with automotic t 7964 See Your Jobber

Red Devil Tools.

FOR BUILDINGS OF ALL SIZES

You can build better for less with both



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USE SISALKRAFT: Under all concrete slabs; as sheathing-paper; for curing concrete; under all flooring; for closing-in...and many other user USE SISALATION: As reflective insulation and moisture-vapor barrier combined.

WRITE FOR FREE SAMPLES and practical data or see your Lumber or Building Supply Dealer

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Dept. ABS - 205 W. Wocker Drive - Chicago 6, III. New York 17, N. Y. - San Francisco 5, Calif.

Manufacturers of SISALKRAFT, SISALATION, COPPER ARMORED SISALKRAFT

AMERICAN BUILDER

NEW PRODUCTS

(Continued from page 146)



New plastic finish, M-67, for Monowall predecorated hardboard wall and ceiling panels. is now being featured by the Armstrong Cork Dept. AB, Lancaster, Pa. Hardened by a special manufacturing process. Smooth finish provides attractive surface and ease of clean-The material is available in 27 different color and design combinations.

RADIAL ARM SAW

AB55104



The DeWalt R-2 is a receding arm saw manufactured by DeWalt, Inc., Dept. P-5, Lancaster, The machine is available in 3 and 5 hp sizes, and the recommended sow blade sizes are 12 inches for the smaller models, 14 inches for the larger. The R-2 motors have thermal overload and manual push button starting switch. A.C. Motors of this model are totally enclosed, and Universal A.C./D.C. motors used on this model machine feature a pro-

GRAVITY FURNACE

AR55116



New series 502 warm air gravity type gas-fired furnace in overall sizes of 50x27x27 and 55x33x33 inches, is now being manufactured by Thatcher Furnace Co., Dept. AB, Garwood, N. J. The furnace has an attractive round cornered slip-joint maroon cabinet with a 12 gauge steel body and radiator. Comes in three sizes with B.T.U. inputs of 75,000, 105,000, and

(Continued on page 148)

philippine mahogany

low-cost tropical hardwood for the

BUILDING INDUSTRY



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COMMERCIAL



INDUSTRIAL

The most beautiful and practical of the fine tropical hardwoods, Philippine Mahogany is a versatile wood, suitable for a wide variety of uses

Satisfying the demands of home owners for luxurious interiors at low cost, Philippine Mahogany has won widespread acceptance for paneling, fixtures and trim in residential construction.

The exceptionally fine widths and lengths of this quality hardwood, combined with the consistent uniformity of grain and figure, make it most practical for offices and commercial installations.

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- 2. 4-color booklet showing 12 beautiful finishes. (Including finishing specifications)
- 3. Technical finishing data. 4. 16-page folder showing many uses.



ASSOCIATION, INC. 111 West Seventh St., Los Angeles 14, Calif.

Beautiful - Permanent - Economical



4 new performance improvement features

NEW DESIGN INCREASES PERFORMANCE AND SAVINGS



1 The 1951 ES-nail is distinguished by a design change which positively eliminates danger of loose shingle corners at nailing points where sheathing is backed by studs or wood members. As shown by the adjoining sketch, when the driving leg penetrates a stud, the new design permits a bellows-like expansion into the sheathing material...
allowing the nail head to flatten completely without distortion.

2 New longer, wider locking-foot increases holding power of the 1951 ES-nail more than 30%

when used with gypsum sheathing and up to 50% with insulation sheathing. Redesigned locking mechanism provides a tight clinch regardless of variations in sheathing, paper, and shingle thicknesses.

3 New, sharper ES-nail point assures quick, clean penetration of sheathing-prevents rupture of sheathing back.

4 New ES-nail head can be driven home with approximately 25% less force—automatically provides a complete clinch of the locking foot even with wide variations in shingle quality and nail-hole size.

Try the new 1951 ES-nail on your next side-

wall shingling job!

For complete information write to Elastic Stop Nut Corporation of America, 2330 Vaux-hall Road, Union, New Jersey.



Corporation of America



Available through Johns-Manville Sales Corp.,
National Gypsum Co., WeatherNational Gypsum Co., Inc.,
Keasbey and Mattison Co., and
American Stained Shingle Co.

Approved by the Red Cedar Shingle Bureau, Seattle, Wash-ington, representing manufac-turers of Certigrade Shingles. @Trade Mark Reg. U. S. Pat. Off,

NEW PRODUCTS

(Continued from page 147) MAMMER TACKER

A855113



A revised heavy duty Duo-Fast hammer tacker, Model HT-755, is featured by Fastener Corp., Dept. AB, 860 Fletcher St., Chicago 14, III. A snap-off Jiffy Jaw, has been added to provide fast, easy cleaning. Also a constantly-engaged plunger and cam mechanism has been designed which gives greater driving power as required on the heavy 3/8-inch, 1/2-inch, and 9/16-inch staples used in this machine.

MATERIALS HANDLING LOADER AB55109



A new wheel tractor loader, the TL-10, featuring a hydraulic torque converter drive and a new design clutch-type transmission manufactured by Tractomotive Corp., Dept. AB, Deerfield, III. The TL-10 is mounted on rubber tires, has a 3/4-cubic yard, hydraulically contralled bucket and weighs 10,650 pounds. There is ample bucket clearance and reach to load average size dump trucks.

AUTOMATIC TACKER

AR55128



Pocket-size tool for use on such jobs as tele vision, radio, burglar alarms, intercommunica-tion systems, and other wire installations has been developed by the Heller Co., Dept. AB, 2149-M Superior Ave., Cleveland 14, Ohio. Both tacker and staples are designed to A. T. and T. specifications, and used for low voltage telephone wiring. Front and rear guides circle the wire and permit rapid drawing around difficult angles or corners, along baseboards, plaster walls, window frames, ceilings, door jambs and rafters. Staples are made in several different colors.

(Continued on page 150)

CONTRACTORS—save money!

Mix plaster and mortar in a MULLER 3 FOOT MIXER



An investment that will give you better plaster and mortar at far lower costs than old hand methods. Ideal for both inside and outside use. Holds full bag batch of most mixtures.

PRICE \$300 (with electric motor)

\$320 (with air-cooled engine)

FOB Metuchen, N.J.

Also available in 6 (2 models), 9 and 12 cubic foot sizes Write for name of nearest distributor.



MULLER MACHINERY COMPANY, Inc.

Metuchen 4, N.J. Coble Address MULMIX

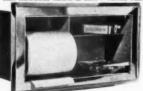
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Potent Pending
M-2 Model List 521,95
Hagarines, Ash Trays, Cigarettes, Tollet Tissus, ets.
arry Steel Construction
coussed Fixters o Benderlard Steel
rome (Heary Finted) Frame
laft Pinted) Frame
15" 20'2" o Cabinet 12" by 17'4"
gth 4'h." o Easy to Install
M-4 Model List \$16,95

- te letion features as above . Painted frame



- ily Hospitality, Jr. List \$12.95 Construction as Model M-2 to 13%" x 8½" net 12" x 6½" e Bepth 4%" Manufactured by

House of Hospitality 11544 Ventura Blvd. North Hollywood, Calif.

Big Money in ... with



Just cover old walls with building paper and apply pre-stained cedar shakes in the regular way. Over-walling with cedar shakes adds strength, insulation.

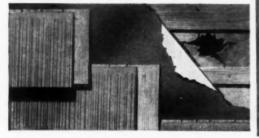
Wide weather exposures permit economi-cal recovering of worn stucco walls by the simple use of nailing strips. What other remodeling material permits this work on "hard" walls?

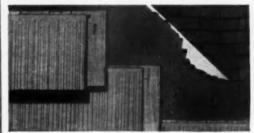


OVER STUCCO



Cedar shake remodeling is ideal for bringing back the look of newness to virtually any type of worn walls. The finished result looks new-not "repaired."





One GREAT PRODUCT hits both markets... **New Construction and Remodeling**



This year, the market for remodeling is going to be of vital importance to everyone in the building materials business. Pre-stained cedar shakes are the outstanding product to give you a successful year because they cover your markets for new construction and remodeling too! Modernized walls of cedar shakes are improved in beauty, in insulation value, in structural strength. Home owners have proved their preference for pre-stained shakes by doubling sales of the entire shake industry in the past year. There is big money in this product for you too!

STAINED SHINGLE & SHAKE ASSOCIATION

5527 WHITE BUILDING

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Dodge REPORTS

Construction News Division F. W. Dodge Corp., 119 W. 40 St., N.Y. 18

NEW PRODUCTS

(Continued from page 148)

DIAPHRAGM PUMP

AB55115



New light-weight Mud Hog pump will lift from levels 25 feet below the pump and handle liquids almost heavy enough to shovel, according to this manufacturer, Marlow Pumps, Dept. AB, Bax 566, Ridgewood, N. J. The pump is powered by a two hp Model 8-R6 Briggs and Stratton Engine, equipped with a 6 to 1 geared speed reduction. Power is transmitted to the pump crank shaft by an oil lubricated chain drive. There is no overhanging drive shaft.

HAULING TRUCK

AB5510



This $1/l_2$ -ton stake truck is one of the new Dodge 8-3 series, constructed for a wide range of agricultural, industrial and other hauling uses. Increased horsepower and torque, lower loading height, new styling and improved brakes are among the features of this model. Gross vehicle weight ratings in the new 8-3 series range from 4,250 to 40,000 pounds, and gross combination weight ratings range up to 60,000 pounds. Dodge Div., Chrysler Corp., Dept. AB, Detroit 31, Mich.

ORNAMENTAL SCROLLS

AB5513

AR55120

"Scroll-etts," for wood or all-metal storm or screen doors, are mode by Beoux Arts Crafts, Dept. AB, 2015 Brookfield Rd., Pittsburgh 16, Pa. These ornamental cast aluminum scrolls are finished in standard baked-on white enomel, or polished aluminum. Packed in sets, with mounting screws, for easy installation. Can also be used for trims, such as ready-made arches between kitchen cabinets, built-in book shelves, whot-not corners, and window trim. Eight different designs are furnished.

SLIDING DOOR HARDWARE



Single type aluminum track for single, multiple or by-passing doors has been announced by Harris, Inc., Dept. AB, 200 E. Long St., Columbus 15, Ohio. Roller is nylon. Four screws are used to fasten tapping plate, providing maximum security and rigidity. A 916-inch pendant bolt has fine threading for easy adjustment. Is recommended for doors of any size or thickness weighing up to 100 pounds.

(Continued on page 152)



are chemically treated for resistance to rot, fungi, termites...for long lasting durability.

Tight closure time-tested through eleven years satisfactory performance in every type of building, in every section of the United States.

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MAY 1951

151

KENCO **Utility Pump**



New-amazing Kenco Submersible Electric Utility Pump always operates as long as there is electric current. Operation is completely automatic. Requires no installation time or expense. A pump every home builder and plumbing contractor should have avail-

It has no equal as a sump pump! It requires no attention—no servicing. It may be en-tirely concealed to operate in sumps as shallow as one foot in depth, with the floor area above the sump entirely free of obstructions because nothing protrudes from the sump except the electric cable and the discharge line.

Operation is completely automatic with the exclusive Kenco Liquid Level Switch rated at over one hundred thousand off and on cycles. There is no float to stick, warp, corrode or leak. The Liquid Level Switch is protected against fouling by debris or silt. Manual Switch control for starting pump at any water level less than that required to start pump automatically is obtained with a hand witch

A Kenco Utility Pump, because of its compactness, can be used where it would be im-possible to install conventional type pumps. Immune to power failure. When power is restored, pump with its hermetically sealed motor instantly resumes operation. Capacity: 3300 G.P.H. at discharge head of ten feet. Constructed of corrosion resistant bronze. Order Kenco Utility Pumps through your building supply dealer or plumbing contractor.

KENCO, INC. 1125 N. RIDGE ROAD

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Please send Catalog 51 on Kenco, Automatic, Submersible, Electric Utility Pumps.
Name & Title
Сотралу
Kind of Business
Street
City & State

NEW PRODUCTS

(Continued from page 150)

POWER DIGGER



An addition to the excavating machi of Sherman Products, Inc., Dept. AB, 3200 W. 14 Mile Rd., Royal Oak, Mich., is a power digger in which all digger motions are hydraulically operated. Heavy-duty digger works behind tractor. Has a below ground surface reach of eight feet and a 10-foot digging reach behind the tractor with a 140-degree swinging arc. The bucket can be raised high enough to load any standard size dump truck. Standard hoe-type shovel cuts an 18-inch wide trench and has a capacity of 3.5 cubic feet.

SURFACE LEVEL

A855127

AB55137



Model 600 level made of heavy sheet alumi has a rolled and stamped body designed to stand up under unusually rough usage. Indicates level when set on 3-inch long base or suspended by line hooks. The E. A. Stevens Level Co., Dept. AB, Newton Falls, Ohio.

ELECTRIC SAW

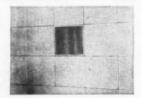
ARS5101



Model 800 for power sawing on house-building and carpenter jobs is featured by Cummins Portable Tools Div., Cummins-Chicago Corp., Dept. AB, 4740 N. Ravenswood Ave., Chicago 40, III. Weighs 14 pounds, has an 8-inch blade, cuts 25/a inches on a square cut, and saws through 23/18-inch lumber at 45 degrees. No-load speed is 4600 rpm.

CEILING AIR OUTLET

AB55121



A Uni-Flo outlet, designed and sized to match standard acoustical tile and blend with ceiling pattern, made by the Barber-Colman Co., Dept. AB, Rockford, III. The air supply can be adjusted from vertical to horizontal after installation and set to discharge air in one, two, or three directions, or to provide full 360-degree distribution. It can also be used as a return air opening. A variety of finishes are available to match installation surroundings

(Continued on page 154)

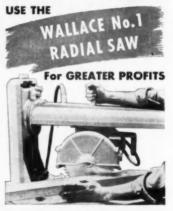


Absorbs moisture—the cause of rust, warping, mildew in workshops, darkrooms, closets, playrooms, storage rooms, vaults. Built to last for years. Big capacity. Works fast, absorbs up to 31/2 qts. per day. Compact, inexpensive, clean, safe, odorless. Thousands in use. Write for booklet and name of your nearest dealer. Not available on Pacific Coast.

Dont. 34-5.

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Portable Powerful Accurate

Designed for the building trade, this fast-cutting, versa-tile saw cuts rafters without marking or handling material twice. It can save you from \$200 to \$400 on small home jobs. You ove it is yourself to get full information on the speedy, accurate, cost-awing WALLACE NO. 1.

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1. PROTECTION . . . of valuable crops, livestock and machinery against elements. Galvanized roofing covers more than 1/2 of all U.S. farm buildings today!

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When material shortages threaten to limit new construction and replacement, careful maintenance of present structures is essen-tial. A few simple steps with very little labor can make galvanized roofing a lifetime mate-rial. The valuable booklets described below will show you how.

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Without cost or obligation, send the illus-trated booklets I have checked.

- T Facts About Galvanized Sheets List of Metallic Zinc Paint Mfra.
- Directions For Applying Galvanized Sheets
- Repair Manual on Galvanised Roofing and Siding
- Use Metallic Zinc Paint to Protect Metal

NAME

ADDRESS.

TOWN AND STATE.

Send for FREE Booklets

NEW PRODUCTS

(Continued from page 152)

SHINGLE BASE MATERIAL

A855114



Insulite Shingle-Backer, designed to take the place of low-grade under-course wood shingles, is a new product of the Insulite Div., Minnesota and Ontario Paper Co., Dept. AB, 500 Baker Arcade Bldg., Minneapolis 2, Minn. It is manufactured from 5/16-inch asphalt treated Graylite insulation board, and is available in two standard sizes, 131/2×48 inches for use under 16-inch shingles and 151/2×48 inches for use under 18-inch shingles. It may be used directly over Bildrite insulating sheathing without furring strips by use of grooved nails.

JOINTER-PLANED

AB55104



The Atlas-Power King 4-inch jointer-planer has an easily removable rear bearing cap so the entire head can be quickly detached and the blades resharpened without disturbing their setting. Other features include: 25-inch precision-ground grey-iron table; exclusive 21x3 inches easy-to-position fence, rigidly supported at two points close to cutter head; stationary rear table; permanently sealed bearings; heavy solid steel cutter head for smoother finishes; blade guards on both sides of fence. Recom-mended motor; 1/3 hp, 1725 rpm. Atlas Press Co., Dept. AB, 2539 N. Pitcher St., Kalamozoo,

HEATING CONTROL

AB55133



Type W Sarcostat, a weather-controlled steammodulating valve for controlling the volume of steam to heating systems in relation to the outside temperature, is featured by Sarcotherm Controls, Inc., Dept. AB, Empire State Bldg., New York 1, N. Y. Automatically feeds steam to the building, heating zone or convertor to balance heat loss. Provides night shutdown and quick morning pick-up at any predetermined time. For housing projects, institutions, schools, hotels, offices, apartments, industrial buildings, and similar installations.

(Continued on page 158)



READYBUILT

FIREPLACES

Adds beauty, cheer and comfort to any home, old or new

The modern fireplace that fulfills all modern day requirements—used with gas or electricity.

Large variety of attractive models in brick, stone, wood, etc., available. Furnished complete—ready to be in-stalled by a handy man—shipped anywhere.

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STEELCRAFT



Royal W. Jackson, Cincinnati, Ohio, builder of hundreds of modern low-cost houses, is a successful project contractor who finds that buyers prefer the modern convenience of Steelcraft Steel Casement Windows.

STEELCRAFT STEEL CASEMENT WINDOWS OFFER THESE PLUS FEATURES

- 1. Special STEELCRAFT Specification STURDY, HOT ROLLED, SOLID STEEL SECTIONS. Designed to give more light area and neater appearance. Insure against warping, twisting, bending or distortion.
- 2. BONDERIZING and Special FLO-COATED PAINT FINISH — baked on. Gives excellent base for finish paints. Minimizes maintenance.
- 3. Extra Long, REINFORCED EXTENSION HINGES, with bindproof bushings. Make swing out type ventilator easy to operate, easy to clean from inside.
- 4. Extra heavy, DIE-CAST OPERATING HARDWARE. Attractive, Trouble-free.
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Yes! Modern building contractors find that STEELCRAFT "Steel" Casement Windows make houses easier to sell. Steel Casement Windows, made from man's strongest and most durable material, have so many basic advantages. Neat and handsome, they add beauty both outside and inside. Sturdy and durable, they are easy to open and close, stay tight, are rattle-proof, never warp, swell, shrink or splinter. Convenient to use, they

give more light, are easy to clean and screen.

And STEELCRAFT Engineers enhance and step up these basic advantages with advanced engineering design and extra quality of finish.

Send now for complete information and installation details of STEELCRAFT Steel Casement Windows - together with information on the complete line of windows.

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Manufacturing Company, Rossmoyne, Ohio (In Greater Cincinnati)

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BOOK REVIEW



A man who knows books once said that good books like old soldiers never die, they just fade away. Perhaps that is true. However, the two building books we have before us this month, although first published some years back, are showing no signs whatever of fading away. In fact they have just been republished in brand new expanded editions that makes us suspect that their usefulness to the building trades will continue on forever.

TIME-SAVER STANDARDS

884 pages. 8 inches by 11 inches. F. W. Dodge Corp. \$12.50. See No. 29 in adjoining columns.

If there is one thing that will make a particular book stand out above similar books, it is that vital quality called authority. TIME-SAVER STANDARDS has authority, first because the material it contains has appeared as monthly features in the pages of that fine magazine Architectural Record, and, secondly, because thousands of builders and architects throughout the country have bought this book in its earlier edition and have heartily endorsed the standards by using them constantly in their daily work.

The word "standard" in the title of this book as well as in the title of the book below means rules set up by authorities for measuring sizes, weights, designs and requirements in the various construction fields. The following sample subjects picked at random from the pages of the book show its exceedingly broad scope: Garages-Residential, Household Kitchens, Dry Wall Construction, Fireplace Design, Apartment Unit Layout, School Design, Plumbing, Air Conditioning, Remodeling Construction, Store Fixtures, Factory Lighting, together with literally hundreds of other equally important building and architectural topics. The book now contains 884 large pages, thousands of illustrations and diagrams, and a well-planned table of contents and index for easy reference. The price of \$12.50 may seem like a lot of money to anyone who has not seen and worked with this volume, yet it seems likely that the builder who uses the book intelligently will receive more than \$12.50 worth of value on the first two or three jobs where he uses the standards as his guides.

ARCHITECTURAL GRAPHIC STANDARDS

by Charles G. Ramsay and Harold R. Sleeper. 4th Edition, 610 pages, 914 inches by 1134 inches. Price \$9,50. See No. 30 in adjoining columns.

It is an interesting coincidence that the other great work on architectural standards, Charles Ramsay's and Harold Sleeper's volume, has also just been reissued in a revised and enlarged edition. Here the book has grown from a compilation of 315 large-size plates to a huge work of 566 plates, 368,of which are completely new. The total number of pages is today well over 600.

The feature of the book that will most appeal to builders is the practical sequence in which standards for each building step are presented in logical construction order, thus making it ideal for ready reference. Every standard included here has been derived either from common building practice or direct from manufacturers' specifications and instructional data. On the basis of this authoritative information the authors made their drawings from which the handsome plates used in this book were reproduced.

A SPECIAL

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

ESTIMATING

- THE BUILDING ESTIMATOR'S REFERENCE BOOK and Vest Pocket Estimator (not sold separately). By Frank R. Walker. Contains latest estimating and cost data on everything that goes into house construction. Most complete compilation of estimating and cost data available. \$12.00.
- SIMPLIFIED CARPENTRY ESTIMATING. By J. W. Wilson
 and Clell M. Rogers. Everything needed to "take-off" a bill
 of materials from set of plans and specifications for a frame
 house—with many helpful quick-reference tables and shortcut methods that simplify the work. \$3.50.
- THE BUILDING TRADES HANDBOOK. Ready reference on building subjects—mathematics, architectural drawing, structural design, materials and methods, \$1.75.
- CONTRACTOR'S MATERIAL LIST. A 10-column take-off form for complete listing of materials and labor costs. \$1.00.
- SPECIFICATIONS. Full set of detailed house specifications (and item index), with spaces for inserting the pertinent description data. 5.50.

CARPENTRY AND BUILDING

- HOUSE CONSTRUCTION DETAILS. Compiled by Nelson L. Burbank. Exact working guide on every detail of house construction from foundation to finish. Tells dimensions, materials, processes, step-by-step working methods. 54.50.
- HOUSE CARPENTRY AND JOINERY. By Nelson L. Burbank. Every step of carpentry in and around a house, clearly explained and illustrated. Covers every job from foundation forms to interior trim. \$3.98.
- PRACTICAL JOB POINTERS. More than 850 "tricks of the trade," short cuts, kinks and modern methods of doing all kinds of carpentry and building repair jobs. Cross-indexed for quick reference. Fully illustrated, 34.00.
- FRAMING. SHEATHING AND INSULATION. Easy-to-use illustrated guide of proper ways to do house training, sheathing and insulation jobs. Good self-teacher. \$4.68.
- INTERIOR AND EXTERIOR TRIM. Practical how-to instruction book for all basic carpentry, steps in interior and exterior trim work. \$4.68.
- FUNDAMENTALS OF CARPENTRY. By Walter E. Durbahn. Complete house carpentry course in two volumes. Outstanding value. \$7.50.

THE STEEL SQUARE

- STEEL SQUARE. By Gilbert Townsend. This how-to-do-it steel square instruction book provides fundamentals plus step-by-step house construction problems solved by proper steel square use. \$2.25.
- SIMPLIFIED STAIR LAYOUT. By J. Douglas Wilson and S. O. Werner. Basic work book presenting easily understood fundamentals of stair building. \$1.80.
- STAIR BUILDING. By Gilbert Townsend. Fully illustrated explanation of every problem in design and construction of stairs. \$2.50.

BOOK ORDER SERVICE—

PLAN BOOKS

- AMERICA'S BEST SMALL HOUSES. Exterior and interior views. floor plan sketches. material specifications and descriptions of 40 new low-cost homes. \$3.95.
- 16. SUNSET WESTERN RANCH HOUSES. Authoritative book on the California ranch house, with thorough pictorial descriptions and around floor and site drawines, \$3.00.
- 17. DUPLEX AND APARTMENT HOUSES. By J. W. Lindstrom. Floor plan sketches and brief descriptions of 35 duplexes. 11 4-apartment buildings. and 5 larger ones ranging from 6 to 12 apartments. Cubic footage given. \$1.00.
- PREMIER BOOK OF GARAGE PLANS. Full-scale working blueprints and pictures of one and two-car garages. Not new, but only book supplying plans. S.50.

HEATING AND PLUMBING

- HEATING, COOLING AND AIR CONDITIONING HAND-BOOK. A handy reference manual and practical instruction book. 706 pages, 351 illustrations. \$4.00.
- HOW TO DESIGN AND INSTALL PLUMBING. By A. J. Matthias, Jr. Every step in the design and installation of the plumbing system to fulfill requirements indicated in blueprints and specifications, explained and illustrated. 5350.
- STANDARD PLUMBING DETAILS, By Louis J. Day. Excellent 119 full-page detail plates covering every phase of best modern plumbing practice. No text. \$7.50.

PAINTING AND DECORATING

- PRICE GUIDE FOR PAINTERS AND DECORATORS. Tables covering practically every type of work done by the painter and decorator, with suggested prices based on various wage scales, \$1.25.
- PAINTING AND DECORATING CRAFTSMAN'S MANUAL. Sponsored by the Painting and Decorating Contractors of America. \$2.00.
- THE ART OF BRICKLAYING. By J. Edgar Ray. Basic bricklaying job instruction. many illustrations. glossary, special scaffolding and cement block chapters. \$4.00.

BRICKWORK AND MASONRY

- THE MASONRY HOUSE. By Lee Frankl. Training-Thru-Sight Associates. Inc. Step-by-step guide to complete house construction in brick and tile. Excellent self-teacher. \$2.95.
- 26. MASONRY SIMPLIFIED. Vol. II. Practical masonry procedures in the various phases of construction, from building forms for concrete to constructing fireplaces and septic tank systems. Includes discussion of handling new products such as glass blocks, waterproofing mixtures and insulating blocks. \$5.00.

ELECTRIC WIRING

- INTERIOR ELECTRIC WIRING AND ESTIMATING. By Albert Uhl. A. L. Nelson and C. H. Dunlap. How-to-do-it book on interior wiring and cost estimating, \$2.75.
- 28. WESTINGHOUSE HOME WIRING HANDBOOK. By A. Carl Breddhl. A guide for planning the wiring of moderatepriced homes. with emphasis on safety, effectiveness and efficiency. \$1.00.

MISCELLANEOUS

- TIME-SAVER STANDARDS. Provides hundreds of basic measurements and drawings to simplify all types of building construction. \$12.50.
- ARCHITECTURAL GRAPHIC STANDARDS, By C. G. Ramsay and H. R. Sieeper. Nearly every standard used in modern construction is illustrated and specified in this authoritative work. 59.50.
- HOME BUILDERS MANUAL FOR CONTRACTORS. Provides convenient data and check lists to follow all operations connected with construction of a home. Looseleaf binder permits additions of special material pertaining to project being constructed. \$5.00.
- PRACTICAL ACCOUNTING AND COST KEEPING FOR CONTRACTORS. Complete instructions and examples showing proper methods of keeping time and compiling costs on all classes of construction work. \$3.50.
- BOOK OF SUCCESSFUL FIREPLACES. Best available book on how to construct indoor and outdoor fireplaces. \$.50.
- LUMBER DATA. Lefax Data Sheets. Handy pocket-sized handbook containing all kinds of important data having to do with lumber and timber. \$1.00.
- 35. HOW TO EXPAND AND IMPROVE YOUR HOME. By Lee Frankl. An excellent home remodeling guide written for the homeowner but invaluable for builders and lumber and building supply dealers. \$5.95.



Get better concrete thru "Dual-Mix" action

- with JAEGER 31/2-S Tilter

Exclusive Jaeger V-bottom mixing drum gives double the mixing action of ordinary tilters guarantees higher quality, higher strength concrete. A side-discharge half-bagger. Compact and perfectly balanced. Hitches easily, tows fast. No feet or legs on either side - barrows get in and away without jockeying.



Cut placing costs with JAEGER Hoist Tower

Goes to jobs on truck or transporter. Assembles on the ground in a couple of hours. Its 17-hp hoist raises it to 37, 47, 57, 67 feet. Hoists 1-ton loads. Material platform is 5'6" x 5'9"

and there's a 1/2-yard concrete bucket - automatic discharging. Saves time. Saves waste of wooden towers. Eliminates hodders. Places materials faster, safer, cheaper,

Also 6-S, 11-S and 16-S Power Loader Mixers.

THE JAEGER MACHINE CO., 521 Dublin Ave. Columbus 16, O. . Distributors in 130 Cities of the U.S. and Conada



NEW PRODUCTS

(Continued from page 154)

MOISTURE DETECTOR

AB55108



New Model G moisture detector is used for measuring moisture content of any wood prod uct, and for determining the maisture content of plaster and concrete surfaces prior to point ing. Small in size, 41/2x7x31/4 inches, weighing 31/4 pounds, the instrument features an extra large meter dial measuring 41/2-inches wide from which moisture content can be read directly in percentages within a range of seven to 35 per cent. Delmhorst Instrument Co., Dept. AB, Boonton, N. J.

DEEP FREEZE

AB55140



Knotty pine deep freeze, a new product of Stephen Nemes, Dept. AB, 2631 N. Lehmann Ct., Chicago 14, III., is made in all standard sizes in maple, birch, walnut, mahagany, and imed oak. Food compartment is 32 inches long, 16 inches wide, 17 inches deep. Right-hand drawer contains motor. Drawer on left has additional storage space. Has approximately four cubic foot capacity.

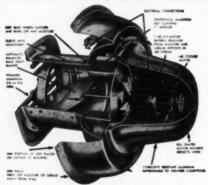
For Drying Kitchen Towels

What to do with dish towels after the dishes have been washed and wiped is a problem that gently irritates most housewives. Of course one can mount a towel rack on the wall on which the towels can be hung, but it cannot be said that this procedure adds much to the fastidious housekeeper's esthetic enjoyment of her kitchen.

The National Warm Air Heating and Air Conditioning Association suggests a way to solve this problem as follows: Install a warm air register in the floor of the cabinet under the sink. Damp tea towels hung in this cabinet will be out of sight, and the warm air flowing in will dry them quickly as well as provide abundant ventilation for this area.

One important point to remember in following this suggestion: Be certain that the cabinet or cabinet doors are equipped with grilled openings

HOME BUYERS LIKE THE KITCHEN-AIRE EXHAUST FAN BECAUSE IT'S DIFFERENT



Different, because it is FIRE-SAFE, greeze laden air is NOT drawn over motor;
Different, because intake grill may be mounted above cooking range even on inside wall;
Different, because andinary of save pipe will serve for making connection between intekt
and exhaust fan.
Different of the control of the co

Yes, the Kitchen-Aire is different. Electrically operated, easily installed, the Kitchen-Aire adds that plus-value which makes new homes salable. It is the last word in Kitchen ventilation, a feature your buyers will like. Underwriters Approved. Advertised in Better Homes and Gardens.

STEWART MANUFACTURING CO.

3204 E. Washington Street,

Indianapolis, Indiana

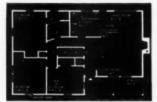
'Tele-Vention Home' Puts Video on Turntable For 3-Room Viewing

Television viewing from any part of the living room, dining area, or kitchen is provided in the new "Tele-Vention Home," an exhibit model of which has been completed by Bradford W. Stiles for the Rollingwood community in West Hills, Huntington, L.I.

The living room, dining area, and kitchen are so arranged that they



EXTERIOR of "house built for video"



TURNTABLE placed in key location of new home provides 3-room televiewing

form an L at one end of the new home and the video set is placed on a turntable at the angle of the L where it can be rotated to provide viewing from any part of the three rooms.

"This does away with the 'coach car' furniture arrangement that TV has brought to many living rooms and allows time-saving intermittent watching during other home activities, which many people have wanted." Stiles said.

"The video set," he continued, "has captured a place in household equipment along with the modern refrigerator, dishwasher, and laundry machine. It is changing American home life and living habits and its accommodation therefore was bound to bring changes in the house itself. Our turntable plan is, we believe, a highly practical solution of that accommodation."

Stiles' "Tele-Vention Home," a three-bedroom and hasement structure, will sell for \$17,850 on lots of at least one third acre. The home includes an expansion attic, large living room, open fireplace, full tile bath, master bedroom with private lavatory, and dual purpose den or third bedroom.



Quicker Quicker QUONSETS

IDEAL FOR FACTORIES, WAREHOUSES MACHINE SHOPS OR STORAGE BUILDINGS

For additions to your present plant—or for new plants— Quonsets mean fast completion, economy of materials, adaptability to any use. Also, should plants need more expansion later, you can add Quonset to Quonset, according to the need.

STRAN-STEEL AND QUORSET REG Q 8 PAT OFF.

Made of N-A-X HIGH-TENSILE steel, Quonsets provide non-combustible construction and permanence far surpassing less modern buildings. They require little upkeep—are easily maintained. Let Quonsets serve you now. Write us today.

GREAT LAKES STEEL CORPORATION Stran-Steel Division, Ecoroe, Debuil 29, Mich.



Expansion Completed in 32 Days! Quanset 40 by 240 feet increased facilities quickly for General Gas Corporation Baton Rouge, La.





ACOUSTICAL TILE NAILS ... designed for the job



When installing acoustical tile choose a job-designed noil that combines ease alpaplication with these special features: a head end which allows the noil to be driven home without damaging the tiles ... a collor which holds the tiles firmly in place...annular threading which gives superior holding power. The noils are furnished with a plated finish to prevent rust streaks where moisture is present. Send for free samples and descriptive literature.



JOHN HASSALL, INC.

182 Clay Street Brooklyn 22, N. Y.

Association News, cont'd

(Continued from page 32)

nolds-Updike Coal Co., Omaha; M. V. Coffey, general sales manager of the 4 hilip Carey Manufacturing Co.; and G. F. Hoppe, sales promotion manager, Insulite Division, Minnesota and Ontario Paper Co.

Émil L. Coufal of the Higgins and Coufal Lumber Co., Schuyler, Neb., was elected association president, succeeding Paul Ely of North Platte, Neb. Coufal served in 1950 as vice president, has been a member of the board of directors for mine years. R. M., Carhart, Carhart Lumber Co., Wayne, Neb., was elected 1951 vice president.

VIRGINIA

The Virginia Building Material Association celebrated its silver amiversary at this year's convention, held at the John Marshall Hotel, Richmond, February 14-16. Attendance by members, their wives and guests, was \$25, with 497 present for the annual banquet, concluding event on the program.

Elected president of the group for the next year was: L. R. O'Hara, Yorktown, president. Vice presidents are Forrest G. Brice, Ashland; Maurice R. Large, Farmville; William N. Neff, Abingdon; and E. R. Woolridge, Roanoke, Craige Ruffin, Richmond, is treasurer, and Harris Mitchell, Richmond, secretary. Among convention speakers were E. H. Libbey, secretary, National Retail Lumber Dealers Association; Arthur A. Hood, editor American Lumberman magazine; Don A. Campbell, secretary, Kentucky Retail Lumber Dealers Association; C. T. Parsons, editor Southern Lumber Journal; and Stanley F. Horn, editor Southern Lumberman magazine.

W. Albie Barksdale was cited for 25 years service to the industry, which began with his presidency of the Virginia association in 1926.

INDIANA

John C. McCormick of Lawrence was elected president of the 67-year-old Indiana Lumber and Builders Supply Association at the group's annual convention, held February 27-28 at the Murat Temple, Indianapolis.

McCormick, who was vice president in 1950, is secretary-treasurer of the McCormick Lumber Co. of Lawrence and Indianapolis. He is also a member of the Indianapolis Real Estate Board and Marion County Residential Build-

Named vice presidents were Delmar Martin, Attica, and Dave M. Puckett, Princeton. New directors are Edward Justice, Indianapolis; Mott M. Uitts, Kokomo, and Frank Taylor, West Lafayette. Carl W. Nagle is secretary treasurer of the association.

INTERMOUNTAIN

Charles Bohrer of the Pocatello Lum-(Continued on page 162)

FOR LOW COST HIGH SPEED TACKING BUILDERS NEED BOTH



HAMMER TACKERS

Top speed. Built for hard service and foolproof operation builders find the Duo-Fast Hammer Tackers the fastest and most serviceable—and so very easy and quick to load. Ideal for low cost, high speed tacking of in-

sulation, building paper, felt, roof underdecking and dozens of similar tacking jobs.



Accuracy with power and speed. In close, awkward places, overhead or in corners, Duo-Fast Gun Tackers make it easy to drive staples with pin point precision. Use this type stapler for easy,

safe tacking of ceiling tile, screen wire, insulation and glass substitutes.

Write for free literature

FASTENER CORPORATION

PROTECT YOURSELF

WITH DUO-FAST

FREE SERVICE POLICY

888 FLETCHER STREET . CHICAGO 14, ILLINOIS

BIL-JAX

Tubular Steel Scaffolding





NEW, exclusive brace lock! You can attach or remove braces on Bil-Jax without removing wing nuts. Versatile, re-usable Bil-Jax scaffolding saves time and money on all building jobs. Affords maximum safety. Easy to set up, take down. Stores compactly. U. L. tested, approved.

Also rolling trestles . . . sldewalk bridges . . . sectional ladders . . . for sale or rent!

Write for free catalog No. D-5.

BIL - JAX . INC. . ARCHBOLD

AMERICAN BUILDER



Build More SELL Into Your Homes With LOW-COST FAWSCO Line



Shed Type

Low

Less Than On-The-Job Construction



SHUTTERS

Many Styles

A Design For Every House



Gobie Type

Beautiful Colors

Infra-red Baked Enamel Finish



Six Styles
PORCH RAILING

Sturdy Construction

Last A
"Housetime"

PORCH COLUMNS

Added Beauty

Makes A House Look Like A Home

Three Styles

Quick Delivery

Orders Shipped From Stock



Ventilating

Adds To Your Profits

Profitable

Steel and Aluminum
FLOWER BOXES

Pre-Packaged

For Compact. Easy Handling 200

Indoor LAUNDRY DRIER Many

Fit Most Any Need AA

Pienie TABLE LEGS Easily Installed

By Unskilled Labor



Two Sizes
WINDOW VISORS

Year 'Round Utility

Spring, Summer, Fall, Winter



Aluminum STOVE HOODS National Distribution

If Your Dealer Doesn't Have It. Write Direct Department M-5



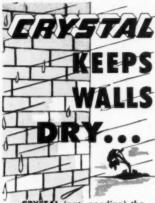
FAWSCO

WRITE FOR CATALOG AND PRICES

FALLS STAMPING & WELDING CO.

1701 FRONT STREET

CUYAHOGA FALLS, OHIO



(pat. pending) the invisible silicone masonry water repellent keeps brick, stone and concrete walls bone dry. It stops dampness dead. A single application (sprayed on quickly at low cost) keeps moisture out indefinitely vet allows your walls to breathe. Also retards staining, prevents efflorescence, protects masonry joints and safeguards interior decorating.

Little wonder CRYSTAL, furnishing low cost protection, is specified by leading architects, used on great building projects as well as on thousands of small homes, apartments, schools, churches, hospitals and industrial plants.

there is no water repellent to equal CRYSTAL ... none ... none in all the world!



Send for ERYSTAL **New Comprehensive Manual** - How to Keep Walls Dry

4956 Fy	CK CHEMICAL CO. ler Ave., St. Louis 9, Mo. me your NEW comprehensive on Crystal.
Name	
Name Firm	
Firm Address.	



4956 Fyler Ave. . St. Louis 9, Mo.

Association News, cont'd

(Continued from page 160)

ber Co., Pocatello, Idaho, was elected president of the Intermountain Lumber Dealers Association, succeeding W. Arthur Jones of Cedar City, Utah, at the group's meeting in Salt Lake City, March 1-3

Registration at the convention, the eighth annual, totalled 813. There were 50 exhibitors

New vice presidents are Lincoln F. Hanks, Salt Lake City, and M. A. Mc-Entire, Clearfield, Utah, Melbourne Romney, Jr., of Salt Lake City, was named secretary-treasurer.

Convention speakers included Ralph W. Carney, The Coleman Co.; Arnold Seiler of the U.S. Department of Commerce; G. F. Hoppe, Minnesota and Ontario Paper Co.: and H. R. Northup. National Retail Lumber Dealers Association.

NORTH DAKOTA

Walter E. Will of Stanley was elected president of the North Dakota Retail Lumbermen's Association at the 43rd annual convention in the city auditorium in Fargo. He succeeds E. A. Tuftedal of Crosby, who was appointed a director.

Attendance at the meeting was 520 and there were 40 exhibitors.

Also named to office were Henry F. Lund. Hillsboro, vice president: John F. Alsop, Fargo, treasurer; Maynard A. Finch, Fargo, secretary; and Arthur G. Sahr, Mott, and O. T. Olson, New Rockford, directors.

Speakers and their subjects included Gates Ferguson, Celotex Corp., advertising director, "The Customer is King"; John B. Egan, Hoo-Hoo supreme scrivenoter of St. Paul, Minn., "Why Hoo-Hoo?": and Henry E. Polk, president of the National Reclamation Association, "The Need for Reclamation."

High School Athletes Fight Construction Site Vandalism

Support of high school athletes has been obtained by the Builders Association of Metropolitan Detroit in its campaign against vandalism.

John Weinhart, association president, said he believed that appeals by teen-age "letter men" would have a greater effect on young vandals than similar appeals from parents, juvenile authorities or builders, though co-operation by the latter groups was essential.

The athletes will visit grade schools in several areas of the city. Weinhart said they would seek to impress the students not only with the moral and legal error of damaging property, but also with the actual physical danger of playing near construction sites.

The vandalism annually costs local home builders \$2,000,000 in damages, Weinhart said. The problem has already been recognized by the city council, which held a hearing in January attended by school board heads, civic leaders and parental organizations.

GILSON



For Value Buy Gilson

- Quality Built
- Dependable Performance Best Price on the Market

Since 1911 manufacturers of quality concrete and mortar mixers from 2 to 16 cu. ft. capacity. Write for illustrated bulletin and name of your Gilson distributor

GILSON BROS. CO. FREDONIA. WIS.

SEAL-ALL



A simple sturdy clip designed to interlock shingle sections and prevent raising of asphalt shingle tabs. The perfect clip for hexagonals, 3 in 1 strips and individuals laidup Dutch Lap method.

• Made of solid copper wirepliable yet strong enough to anchor single sections.

- · Cannot rust out.
- · Hammer is only tool necessary.
- · Easy to handle.
- · Beauty of roof unmarred.
- · Perfect on repair jobs to correct leaky, unsightly roofs
- Millions in use since 1935.

BUILDERS AND DEALERS! For complete information and free samples, write today.

SEAL-ALL CLIP COMPANY

BOX 302B

FLINT 1, MICH. AMERICAN BUILDER

THE '51 PACESTEE R HOUSE

featuring PACESETTING CAREY Products!



Here's Magic in Asbestos-Cement! It's Careystone Corrugated asbestos-cement highlighting the charm and beauty of the PACESETTER House! A natural for interior and exterior walls, partitions, fences, planting boxes, garden sheds. Takes paint readily. Resists rot, decay, vermin, weather, firel



The Winning Fan Combination for Year 'Round Comfort!

Miami-Carey kitchen ventilator whisks away odors, smoke, greasy fumes. Keeps greasy deposits off walls, floors, furniture! In the attic—A Miami-Carey attic fan to draw out sun-scorched air; fill every room with cool, fresh night air. There's a whisper-quiet, economical, long-lived Miami-Carey fan for every ventilating and installation need.

SEE SWEETS BUILDERS FILE FOR COM-PLETE IDEA-INSPIRING INFORMATION ABOUT THE COMPLETE LINE OF CAREY PRODUCTS FOR BUILDING AND REMOD-ELING-OR ASK YOUR CAREY DEALER.



Builders and Architects Agree!

Convenience sells! What is more convenient than glamorous, roomy Miami-Carey recessed towel cabinets, with fulllength crystal mirror, sparkling glass shelves, and snow-white baked enamel on all-steel interior? Miami-Carey makes a complete line of bathroom beautifying cabinets and accessories for every budget and installation needl

> THE PHILIP CAREY MFG. COMPANY LOCKLAND, CINCINNATI 15, OHIO

Canada: The Philip Carey Company, Ltd., Montreal 25 P. Q.

From the House of Carey-

Architect Julius Gregory and the editors of House Beautiful selected many Carey products for the PACESETTER House . . . to help bring into reality their new ideas for contemporary design and construction!

Here before you are a few examples to show how well Carey products fit the PACESETTER pattern ... create an atmosphere of luxurious beauty and comfort, with maximum convenience and safety.

Whether you specialize in design, new construction or remodeling, you will find the complete Carey line of clientsatisfying products a ready source of inspiration . . . to bring your ideas into practical reality!

FIRE-CHEX SHINGLES for Pacesetting Beauty, Protection!

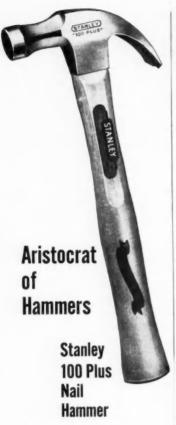


Only Carey Fire-Chex come in rich solid colors, or striking shadow-blends that create root designs copy-righted as "works of art!" Add husky 325 lb. construction for top resistance to wear and weather—plus Underwriters' Laboratories, Inc. Class A° rating for fire-safety (only Fire-Chex have it) and you've got the Pacesetting shingle of the century!

#Without ashestes underlevment



Buthroom Cabinots and Accessories . Ventiluting Funs . Coruma Siding . Corrugated Aci Ashestes Plastic Shingles . "Fire-Guard" and Rock Wool Insulation . Other Famous Products for Hame, Farm and Industry



HE "tops" in nail hammers. Made especially for those who take pride in owning the best tools. Fine alloy steel head is drop-forged, scientifically heat-treated and polished. Comfortable, selected hickory handle has distinctive octagon-shaped neck. "Evertite" handle processed for permanent tightness. Exceptional design gives extra striking power. Perfect balance makes work easier, faster.

The best hammer you can buy, the best you can use . . . heft the Stanley 100 Plus and "feel" the difference. See the complete display of Stanley Tools at your nearest hardware dealer's. Stanley Tools, New Britain, Conn.

THE TOOL BOX OF THE WORLD



Reg. U.S. Pat. Off.

HARDWARE * TOOLS * ELECTRIC TOOLS STEEL STRAPPING * STEEL

Association News, cont'd

Dayton Builders Hear Talk on Taxation

Guest speaker at a recent meeting of the Montgomery County Builders Association, Dayton, Ohio, was Barnes J. Snyder, economics professor at the University of Dayton and an authority on taxation. He gave an analysis of corporations and alternate organizations in respect to taxes.

The program was arranged by Glenn Smith, chairman, Al Jossi. Tony Wenzler, Bill Hoefler. Ralph Frost, Emerson Deck, Dick Brainard and Jack Dempsey.

See Continued High Volume of Low-Cost Home Building

Home building, at least in the lowprice brackets, should continue to flourish this year, was the consensus of a discussion panel, sponsored by the Stark County Home Builders Association at Canton, Ohio, March 6.

The panel was composed of local builders, mortgage finance men, lumber and building material dealers and appliance distributors. In predicting a good volume of low-cost homes, members said they felt that current and anticipated material shortages would be offset by an adequate supply of substitute products.

Gus Dannemiller, president of the association, presided at the meeting and Clarence Swallow served as moderator for the panel discussion.

Vitreous China Officers

E. O. Brady of Briggs Manufacturing Co. was elected chairman of the Vitreous China Plumbing Fixtures Association at a recent Chicago meeting. Other officers named were: vice chairman, David J. Crane, Eljer Co. and treasurer, L. A. Drouhard, Mansfield Sanitary Pottery, Inc.

Takes Forest Products Post

Wilson B. Sayers, former state forester of West Virginia, has joined American Forest Products Industries. Inc., Washington, D.C., as administrative assistant to Charles A. Gillett, managing director.

Owners Outnumber Renters

A greater number of American families attained the goal of home owner between 1940 to 1950 than in any other 10-year period in the history of the United States, According to the Bueau of Census, home ownership increased by 54 per cent. on 8,200,000 units in that period, and owners exceeded renters in 1950 for the first time since information on tenure was first collected in the 1890 census.



helps you

SELL & RENT FASTER!

The "Lifetime"

SHAMPOO SPRAY

Every woman who sees a "Lifetime" Shampoo Spray permanently mounted on the wall of your model house or apartment, will want to live with its beauty and enjoy its convenience.

Home hair care, permanents, tinting, etc., have grown enormously re-

cently, creating a demand (unsatisfied up to now!) for a good looking, easy to use, professional shampoo spray. The "Lifetime" is the perfect answergleaming, stainless steel hose, triple chromium plated brass spray head and holder hook (holds spray in "no-drip" position when not in use) . . . instantly available . . . nothing to screw on, take off, get out of order or wear out . . . performance proven by years of use by professional beauticians AND, the "Lifetime" is sold with a written five year guarantee! The "Lifetime" is wonderful for the whole family — even the pup!

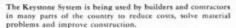
Write today for complete details—The "Lifetime" Shampoo Spray will pay off handsomely for youl SPECIFICATIONS: four foot hose (longer lengths available). Wall hook tapped out with \(\frac{3}{2}\) i. P.S. female inlet, hose screen directly to outlet. Water feed controlled via diverter valve on washbowl or both tub fixtures, or separate controls for spray can be installed. Consumer list price \$13.50 (spray unit only). SPECIAL DISCOUNT TO BUILDERS!

Dealers:

Territories open write for our liberal sales plan









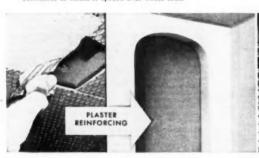
By using Keymesh in stucco applications, speed and economy are combined with lasting beauty. Keymesh reinforcing assures all of the advantages — an attractive, low-cost, durable exterior.



Simulated stone finishes are made structurally sound. The application of base coats is faster. By using Keymesh reinforcement resistance to strain is spread over wider area.



Overcoating with Keymesh reinforcing gives homes and commercial buildings insulation advantages and a "new-look" that stays attractive for the life of the building.



Interior Plaster can not be any better than the base to which it is applied. Keymesh helps counteract stresses — guard against cracks. Angles, arches and corners are reinforced at the danger



points yet worked in without bulky laps or seams.

Reinforcing Interior Tile and Terrazzo with Keymesh adds durability. Is also used as reinforcement for insulation and roof-deck.



YOU SHOULD "KNOW" THIS BOOK

If you don't have a copy of this procedure guide, write for it today. It illustrates and describes approved methods for the application of siding and surfacing materials where open mesh steel reinforcing is required.

Reymeth, made of heavy gauge wire, is galvenized—rolls 3 ft. wide, 150 ft. long.

KEYSTONE STEEL & WIRE COMPANY Peoria 7, Illinois



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QUALITY PRODUCTS TO HELP

Cut your Costs with INSULITE

Profit from INSULITE leadership

INSULITE DIVISION . MINNESOTA AND ONTARIO PAPER COMPANY MINNEAPOLIS 2, MINNESOTA



INSULITE Structural Boards

BILDRITE SHEATHING—the leading wall sheathing for frame construction. Used in combination with wood siding, shingles, stucco or brick veneer. Economical goes up fast; practically no waste; no building paper needed; with 4-foot widths no corner bracing required by FHA. by FHA.

by FHA.
Bildrite is integrally treated throughout with asphalt
by the exclusive Graylite process. That means maximum moisture protection, yet free passage of vapor.
Large Board: Thickness: ½". Sizes: 4' x 8', 9', 10', and
12'. Square edges.
V-Joint Board: Thickness: ½". Size: 2' x 8'; V-Joint

on long edges

on long edges.

GRAYLITE LOK-JOINT LATH—a highly efficient plaster base that combines plus features of insulation and sound deadening—also a thorough vapor barrier when Sealed Lok-Joint Lath is used. Made from genuine asphalt-treated Graylite board, this is the only plaster base with the famous 'Lok-Joint' that provides a firm, even base with no snap-back under trowel pressure. Sealed Lok-Joint Lath has a continuous asphalt vapor barrier coating on back side of '½' and '½' thicknesses and between the two layers of 1" thicknesses: '½', '¼', 1". Size: 18" x 48".

Unsealed Lok-Joint Lath has no vapor barrier. Thickness: '½', 'Size: 18" x 48".

SHINGLE-BACKEE—rovides a firm, even undercourse

SHINGLE-BACKER—provides a firm, even undercourse for shingled sidewalls. Faster and easier to apply. Shingle-Backer adds new beauty at the shadow lines. Made from waterproofed Graylite for dependable dur-ability. Length: 48°. Two widths: 13½° for 16° shingles; 15½° for 18° shingles.

GRAYLITE SUILDING BOARD—the all-purpose insulating board, long acknowledged for superior moisture resistance, strength and durability ... asphalt treated throughout. Graylite is made to take it. And performance on thousands of jobs proves it! Thicknesses: '4 ", 4 ", 1". Sizes: 4' x 6', 7', 8', 9', 10', and 12'. Square edges.

GRAYLITE WALLBOARD—a utility product identical with Graylite Building Board; made in the same sizes but ¾ ′ thickness.

PRIMED ORAYLITE BUILDING BOARD—has a prime coating factory-applied on the linen textured surface of regular Graylite Building Board. Standard oil paints can be readily applied, and for many purposes a single coat is all that is needed.
Thicknesses: ½ ", ½ ". Sizes: 4' x 6', 7', 8', 9', 10' and 12'. Square edges.

INS-LITE BUILDING BOARD-comes in the light color of natural wood. Same thicknesses and sizes as Graylite Building Board.

Double-Duty NSULITE Builds Insulates

SAVE LABOR, TIME AND MATERIALS



INSULITE Interior Finishes

Insulite decorative products for interior walls and ceilings are made from the regular structural insulating boards. Thus one material combines insulating value with attractive pre-finished decoration. That's double-duty in one application! Both Lusterlite Tileboard and Durolite Plank have an excellent T&G joint for easy, fast and secure concealed fastening with nails or staples. DUROLITE 1/2" PLANK AND INTERIOR BOARD—a textured DUROLITE ½- PLANK AND INTERIOR BOARD—a textured surface board predecorated with an exceptionally serviceable finish. It has amazing resistance to scuffing and abrasion. It's easy to clean—easy to repaint. Colors—scientifically selected for popular appeal: wory, pale green and variegated woodtone.

Decorsive Plank—Thickness: ½ ". Widths: 8", 10", 12" and 16". Lengths: 8', 10' and 12'. Concealed fastening joint on long edges. Interior Board—Thickness: ½ ". Sizes: 4'x6', 7', 8', 9', 10' and 12'. Square edges.

DUROLITE ½" PLANK—the same product as 14" Duron-Durolite ¼" PLANK—the same product as 14" Duron-

and 12. Square edges.

DUROLITE ¼° PLANK—the same product as ¾° Durolite but ¾° thick. Designed especially for application directly to wall framing spaced 16° o.c. Special concealed fastening joint. Vertical beading to simulate alternate 6° and 10° plank widths when applied. Colors: ivory, pale green and light woodtone. Size: 16° x 8′.

LUSTERLITE 1/2 TILEBOARD AND INTERIOR BOARD — has a amouth surface, predecorated to offer high light reflection when used on either walls or ceilings. The finish is durable, is readily cleaned and may be repainted. Colors: white and light ivory.

Decorative Tileboard—Thickness: ½ ". Sizes: 12" x 12", 16" x 16", and 16" x 32". Concealed fastening joint four sides.

Interior Beard — Thickness: $\frac{1}{2}$ ". Sizes: $\frac{4}{x}$ 6', 7', 8', 9', 10' and 12'. Square edges.

WEVELITE 1/2" INTERIOR BOARD is factory painted. The weverife 72 "RERIOR SUARD—is factory painted. The ivory-white textured surface offers a general purpose type of finish backed by years of popular acceptance. Easy to repaint. Thickness: ½". Sizes: 4" x 6', 7', 8', 9', 10' and 12'. Square edges.

10' and 12'. Square edges.

SMOOTHITE 'A' INTERIOR BOARD—coated on one side with a smooth, light cream utility finish. No additional decoration is required but Smoothlite may be painted if desired. Thicknesses: 'A' and nominal 'A' wallboard. Sizes: 'A' x 6', 7', 8', 9', 10' and 12'. Square edges.

FIBERITE 'A' AND 'A' ACOUSTICAL TILEBOARD—a special product for low cost, efficient acoustical correction. Made entirely from strong wood fibers, the sound controlling porosity of Fiberlite is carefully retained. An oil base paint is sprayed on to avoid sealing the surface pores. And the textured finish resembles travertine stone. Color: white. Thicknesses: 'A', 'A' Sizes: 12' x 12'; 16' x 16'; 16' x 32'. Beveled butt edge joint four sides. All bevels are painted.

INSULITE Hardboard Products

REGULAR HARDBOARD-Heavy density board. Golden oak brown color. Thicknesses: ¼ ", ½"; Sizes: 4" x 5', 6', 7', 8', 9', 10', 12'. Also ¼ " and ¼" thicknesses in 4' x 12', BLACK TEMPERED HARDBOARD—Extra heavy dense hardboard with an integral black color. Thickness 14". 14". 14". 12'. %"; Size: 4' x 12'.

'8", '8", '8", '8"; '8:ze. 4" x 12".
TEMPRRED HARDSOARD—Extra heavy density board for service where high resistance to moisture and altrasion is needed. Burl walnut color. Thicknesses: '8", '8"; 'Sizes: 4" x 5', 6', 7', 8', 8', 10'.
12". Also '%" and '%" thicknesses in 4" x 12" only.

LEATHERITE HARDBOARD—Simulates rich Spanish grain leather with a deep brown color. Thickness: 1/2 "; Sizes:

leather with a deep brown color. Thickness: ½ "; Sizes: 4" x 6', 8', 12'.

DENSUITE—Medium heavy density board. Golden oak brown color. Thicknesses: ½", ½ "; Sizes: 4" x 8', 10', 12'.

PANEITIE—Extra heavy density board with 4" square-scored tile pattern. Natural burl walnut color. Thickness: ½", Sizes: 4' x 8', 12'.

UNDERLAYMENT—Medium heavy density; smooth one surface to receive floor finish. Used over existing floors, wood sub-floors or Graylite Wallboard in new construction where it is covered with lingleum asphalt tile or

tion where it is covered with linoleum, asphalt tile or carpeting. Thickness: 1/4"; Sizes: 3'x 4' and 4'x 4'.

INSULITE Insulating Wool

Made of Fiberglass*

Insulite Insulating Wool is feather-light and extremely

Insulite Insulating Wool is feather-light and extremely resilient. It stays put, doesn't disintegrate and will not burn or rot—no loss of original high insulating efficiency. Batt and roll blankets are manufactured of Fiberglas pre-formed insulation. The inch, medium and thick insulation is enclosed in a paper envelope; one side is asphalt coated for high vapor resistance, the other side is perforated vapor-permeable paper. The papers form a nailing flange at the edge on both long sides. The economy roll blanket has an open back with vapor barrier and nailing flange on one side only.

ROLL BLANKETS Thickness	Width	Length	Pes, per Pkg.	Sq. Ft. per pkg.
Inch (Nom. 1")	15" 19" 23"	80' 47' 9° 47'	1 1 1	100 75 90
Economy (Nom. 1½°)	15° 19° 23°	72' 47' 5" 47'	1 1 1	90 75 90
Medium (Nom. 2")	15° 19″ 23°	60' 47' 5" 52' 1"	1	75 75 100
Thick (Nom. 3")	15° 19° 23°	40' 31' 7* 39' 1"	1	50 50 75
BATT BLANKETS			1	
Medium (Nom. 2")	15° 15° 23°	24" 48" 36"	24 12 18	60 60 103.5
Thick (Nom. 3")	15" 15" 23"	24° 48° 36°	16 8 12	40 40 69

UTBITY BATTS manufactured of Fiberglas pre-formed insulation. No paper covering either side. 4" nom. thickness, 15" x 10% ". Package of 27 pieces covers 30 sq. ft.

POURING WOOL is Fiberglas pre-formed insulation nodu-lated to small pellets for pouring or hand packing. Packaged in bags of approximately 39 lbs. Bag covers approx. 20 sq. ft. at 4" thickness.

*T.M. Reg. U.S. Pat. off. Made by Owens-Corning Fiberglas Corp. Insulite, Graylite, Lok-Joint Lath and Bildrite are registered trade marks. (Insulite) signifies that Minnesota and Ontaria Paper Company is the source of the product.



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MOR-SUN FURNACE DIVISION MORRISON STEEL PRODUCTS, INC.

649 AMHERST ST. . BUFFALO 7, N. Y.

Two Honored by Long-Bell For 50 Years Service

Awards for 50 years of service with the Long-Bell Lumber Co. were presented to L. L. Chipman and George S. Hays at a banquet in their honor at the Hotel Monticello in Longview. Wash., bringing to 12 the number of half-century awards made by the firm in its 75 year history. Seven of the recipients are living.

Chipman, a company director, lives



208 YEARS of service with Long-Bell Lumber Co. have been amassed collectively by men above. S. M. Morris (left). Long-Bell who has 55 years service, congratulates George S. Hays who recently got 50 year-pin, and J. H. Kenesson (second from right). 53-year man. congratulates another 50-year honoree, L. L. Chipman

in Longview, Wash. Hays is general manager of Long-Bell's Vaughn division near Eugene, Ore.

J. M. White, Long-Bell president, presented each of the veteran lumbermen with a 50-year lapel pin and a watch engraved with the service dates.

Present at the award dinner were S. M. Morris, director who will complete 55 years with the company in August, and J. H. Kenesson, general manager of the Longview division, who completes his 53rd year in August. Both are Longview residents.

The other Long-Bell men who have completed 50 years of services are A. L. Sweet, Kansas City, Mo., and Walter Sailors and John F. Williamson, both of DeRidder, La.

Northern Hard Maple and Birch in blocks and patterns are manufactured for all floor construction purposes. This flooring is laid in mastic over concrete subfloors or easily nailed to softwood subfloors or old wood floors. Square blocks and single slats for laying herringbone style are now popular for residence and housing projects. Continuous strip and square block designs in maple and birch are much in demand for schools, factories, bakeries and commercial buildings.



Only \$10.50 Per Pair

QUICKLY PAY FOR THEMSELVES

NOW! Save endless climbing up and down ladders. Save hours of putting up and taking down scaffolds. Just hook The Richey Safety Ladder Jacks to your ladder rungs, adjust to any angle or height, place boards

across the Jacks—and you're ready to go to work. They're constructed of heavy steel for utmost safety. Order yours today, only \$10.50 per pair, prepaid, cash with order—or C.O.D., you pay charges. Richey guarantees full satisfaction or money refunded. Better order Now!

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RICHEY Manufacturing Co.
2801 Rochester Road Springfield, Illinois

AMERICAN BUILDER

This is the Woman who OK's the Kitchen in the House you Build . . .



FASED VENTILATOR IN!

HE signs the papers, but she gave him the go-ahead. You cinch the sale when you show the beautiful, comfortable, efficient kind of kitchen women today demand. A FASCO-ventilated kitchen is modern, clean, odor-free. That means a better, cleaner home—and your customers know it means a better value. That's why it's easier for you to sell homes equipped with FASCO!

Easy to install, quiet, inexpensive—FASCO ventilators are low in cost, add immeasurably to the salesappeal of every home you build! The FASCO "CEIL-N-WALL" (shown above) can be installed anywhere. Fits standard duct perfectly. New 10" Turbo-Radial Impeller delivers more air through a standard duct—with less noise—than any other type of blade or wheel used. Single or 3-speed operation. Good-looking, inconspicuous.

FOR OUTSIDE WALLS



The famous FASCO Outside Wall Ventilator fits any wall thickness. Designed for quick, easy installation, it's rustproofed and has positive, weathertight seal. Easy to clean, efficient and economical, it's America's most popular kitchen ventilator. Available in 8" and 10" blade size models.

You'll be surprised at the low cost of this sales-clinching "extra."

WRITE or WIRE TODAY for Bulletin AB-14

FASCO Industries, Inc.

ROCHESTER 2, N. Y., U.S.A.

HICO IST

designed for easy, fast installation . . . smooth, lifetime operation



Out of sight ready for action Hidalift is completely concealed in the sash at all time? . . assures a neat, unmarred window appearance.



Available

Furnished in either the cup type or "L" hinge attaching bracket. Packaged complete. Each set includes four balances ready for quick, easy installation.



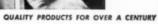
Exclusive Hidalift tensioning screw

A feature of both cup or "L" type. The tensioning screw allows simple adjustment at any time after installation with an ordinary screwdriver.



2-way tension

The "L" type Hidalift balance can also be easily tensioned during installation by winding the bracket arm.



7	£	S
10 #	*18	GYON

HIDALIFT DIVISION
The Turner & Seymour Mfg. Co., Torrington, Conn.
Gentlemen:

Send complete literature and prices on Hidalift
Please check Dealer Builder

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Address Zone Zone



KOHLER ELECTRIC PLANTS

Independent Source of Electricity

PORTABLE

Low cost portable power—operates saws, drills, pipe threaders, cutters, other tools having universal (AC-DC) motors. Develops 1500 watts AC. Helps finish jobs faster. No need for central station service. Handle for carrying. Two-wheel, rubber-tired hand truck available. Compact, weighs only 75 lbs. Other models, 350 watts to 15 KW. Write for folder 18-A.

MODEL 1.5MS, 1500 watts, 115 volt AC. Manual control. Length 18", width 14", height 21".

Kohler Co., Kohler, Wisconsin. Established 1873

KOHLER OF KOHLER

PLUMBING FIXTURES . HEATING EQUIPMENT . ELECTRIC PLANTS AIR-COOLED ENGINES . PRECISION PARTS



Wins Coveted Award



FOR LEADERSHIP in research, engineering, design, safety, and manufacture in the plumbing fixture field, the Briggs Manufacturing Co. plumbing ware division, has received the merit award from the American Society of Industrial Engineers for the second successive year. Robert L. Crinnian, national president of the society, left, presented the 1951 citation—industry's highest honor—to E. O. Brady, general manager of Briggs' plumbing division recently in Detroit.

Millionth Booster Pump

MILLIONTH booster pump produced by Bell and Gossett Co., Morton Grove, Ill., inspired the ceremony above where C. E. Pullum, vice president in charge of production, presents No. 1,000,000—which has been gold-plated—to E. J. Gossett, president. Participating (from left) are H. A. Lockhart, chief engineer; Ernest Kersten, factory superintendent; Pullum; Gossett; R. E. Moore, vice president in charge of sales; Ralph A. Patterson, general sales manager; and William A. Boone, assistant sales manager. Mark was reached in 1950.

Cite Advantages of Precast Shower Receptors

Precast receptors for built-up stall showers have been reported advantageous in several types of installations.

Fiat Metal Manufacturing Co., which produces the receptors in regular black and white or special colored terrazzo, states in a brochure that the precast shower floors reduce the danger of cracks in tile shower walls by providing a solid, rigid foundation that is not affected by shrinkage of supporting wood framing or settling of the building.

Installations with the precast receptors can be tile, slate, plaster, marble or structural glass.

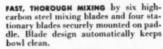
Other advantages claimed for the receptors are: elimination of lead pan, attractive appearance at low cost, leak proof and rust proof, and a faster job by contractors.

HERE'S YOUR MOST MODERN PORTABLE MORTAR

MIXER

Worthington-Ransome 6 cu ft mortar and plaster mixer

No other mixer has so many time-saving, cost-saving features



FAST DISCHARGE. Drum can be emptied in 4-5 seconds.

EASY, CONVENIENT, SAFE OPERATION, Single lever operates speed reducer—no clutches. Bag cutter located on protective grill. Bag platform on 20° angle helps avoid spilling. Bowl lock prevents accidental discounter the control of the control accidental dumping while mixing.

EASY SAFE TOWING. Towing bail lifts leg stand 'way up-can't be damaged by roughest terrain.

SEE THIS MIGHTY MIXER AT YOUR WOR-THINGTON DISTRIBUTOR, or write for bulletin to Worthington Pump and Machinery Corporation, Construction Equipment Division, Dunellen, N. J.



FAST - COMPACT **EASY-HANDLING • SAFE**

Can Keep 30 Men Working at Top Speed.



BUY BLUE BRUTES



Superb floor, isn't it?



related products, including oak trim, stair treads, risers, thresholds and glued-up panels; Arkansas Soft Pine trim, mouldings, paneling, finish.

BRADLEY UNIT WOOD BLOCKS.

of course!

Owners and developers alike respond with spontaneous enthusiasm to Bradley's smart block floor styling! Reason: it combines stimulating modern design with the beauty and dignity of oak; it appeals to owners' pride of possession; it promotes home development sales.

To duplicate the beautiful floor shown, specify Bradley's Prime Grade Pre-finished Red Oak 9" x 9". Bradley blocks are produced in all standard grades and sizes, finished or unfinished, including beech and pecan. Detailed data* and Block Instal-

lation Manual sent on request.

BRADLEY LUMBER COMPANY of Arkansas

WARREN, ARKANSAS



Write for literature—giving complete information on all "Trouble Saver" scaffolding accessories.

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Combine the expertly-designed Allith garage door hardware with your own or any standard door. Result...a rugged, easily-operated overhead door that gives full and lasting customer satisfaction.

Quickly installed, standard set fits any opening up to 9' wide x 7'6" high when doors do not exceed 275 lbs. Other sets available for openings up to 10' wide x 10' high.

PROUTY, INC

DANVILLE, ILLINOIS
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Provisions of Housing Bill As Approved by Senate

The Defense Housing Bill has been approved by the Senate Banking and Currency committee with amendments which would authorize \$1,500,000 for the mortgage insurance programs, limit appropriations for community facilities provided by the Federal government to \$60,000,000 and authorize appropriations of \$50,000,000 for government housing.

The Senate-approved bill follows the general pattern of the House bill, but the latter carried no limitations on the various programs. The Senate bill also makes the authorizations applicable only in "critical defense housing areas," and provides a formula for determining such areas. Provisions of the new Senate bill:

- 1. Eliminating \$1,500,000 FHA authorization for civilian and defense housing, it provides authorization for Titles I, II and IX in the amount of \$1,500,000, none of the authorization to be used for other than defense housing.
- No features of the bill can be used until the president determines that a particular area involved is a "critical defense housing area."
- 3. After an area has been certified as "critical":
 - a. The first step is the relaxation of Regulaton X and similar residential credit restrictions.
 - b. If this does not provide housing the next step will be the use of the new FHA Title IX of the bill.
 - c. If this does not provide housing within a 60-day period following public announcement of the availability of Title IX insurance, as indicated through bona fide applications, Federal housing may be constructed by the government under Title III of the bill (which provides permanent public housing similar to that built under the Lanham Act of World War II). Unlike the previous bills, a limitation of \$50,000,000 is set on Federal subidies for such public housing.
- 4. To secure Federal funds for community facilities, the new bill requires that the local governing body or chief executive must certify that the necessary projects cannot be provided by local effort alone. Unlike previous bills, a limitation of \$60,000,000 Federal expenditure for community facilities is specified.
- 5. The highly controversial provision for the Federal government to acquire and assemble land is limited in this bill to \$10,000,000 (this is de-

signed to prevent land speculation scandals such as that in the Savannah River hydrogen bomb plant area).

6. The bill provides \$15,000,000 in Federal funds for assisting in the production or distribution of prefabricated houses or components where funds are not otherwise available on reasonable terms.

7. Title IX (90 per cent insurance) provides maximum mortgage amounts as follows:

a. Single-family, \$8,100; two-family, \$15,000, except that these maximums may be increased to \$9,000 and \$16,000 respectively where FHA determines costs so require. An additional \$1,080 mortgage amount is permitted for each additional bedroom in excess of two and not exceeding four.

b. Maximum mortgage amount for multi-unit structures is \$8,100 for each family unit (or \$7,200 where the room average does not equal or exceed four per unit). Such mortgage amounts may be increased by \$900 where FHA determines costs require it.

8. The Title IX loan amortization on one and two family units is 25 years. Multi-unit amortization is determined by FHA.

9. The Wherry Act (military housing) under Title VIII of FHA is extended for two years and the maximum mortgage amount of \$8,100 can be increased to \$9,000 at the discretion of FHA where costs require. The Atomic Energy Commission housing is made eligible for this insurance.

10. G. I. defense workers (certified) can purchase defense housing without regard to credit restrictions, provided they do not exceed \$10,000 for a two bedroom unit, \$11,000 for three bedroom and \$12,000 for four bedroom.

Wall and Boot Panels Precast Ready for Erection

Substantial savings are reported by builders on the Pacific Coast through slabs which a California firm ships ready for erection. The aggregates used are pumice and silica sand.

The walls and roof of a Sacramento house are reported to have been erected in eight hours with a total labor cost of \$96, exclusive of crane. The cost of the foundation plates, wall panels, steel sash and roof section for this basementless one-story house with 1150 square feet of floor space, was reported to have been \$2.597.03.

The wall panels measure 7½ by 16 inches and average 14 feet in length.



the rear," writes H. B. Olney, East Chicago, Indiana, contractor. "On one job we left Chicago at 6 A.M., traveled 100 miles, erected 12 tons of pre-cast concrete joists, and got back to Chicago by 8 P.M."

NEVER DAMAGED A JOIST

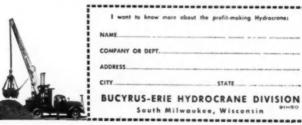
Regarding the Hydrocrane for joist erection work, Mr. Olney said, "This rig sure is wonderful for setting concrete joists — it'll ease a slab down 1/32 of an inch at a time, if necessary. I can't ever recall damaging a concrete joist with a Hydrocrane doing the hoisting."

Available with clamshell bucket, crane hook, catch basin bucket, trash bucket, grapple and magnet. Two sizes, ½ yd. 2-ton and ¾ yd. 3-ton. Send the coupon for full details.

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← All-Purpose Fan Type BB

All-Purpose ran Type as for removing masks, staam, leat, femes, stc. Heavy daty direct drive fan for centineaes operation. Recommended for se against static pressure and in dact work, One piece panel and orlife, lightweight. Simple to install. Sizes from 16" to 30". Tutally enclosed meters.



SEND FOR FREE CONTRACTOR'S KIT.
Contains all the information you need to
make ventilating and cooling installations
in factory, store, office or home. Write for
complete information pertaining to your
defense needs. Address inquiries to
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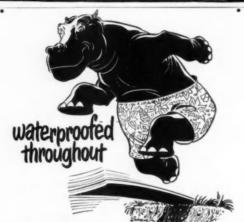


Industrial Fan Type IND For large general area ventilation. Moves large volumes of air under pressures. Scientifically designed blades overcome high resistance in hoods and ducts. "V" belt drive. Sizes from 24" to 60"."



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INSULITE*structural insulation

Bildrite Sheathing and Graylite Building Board are asphalt-impregnated throughout...every fiber is waterproofed. They're great in structural strength ... high in insulation value.



INSULITE DIVISION, MINNESOTA AND ONTARIO PAPER COMPANY

Letters . . .

(Continued from bage 41)

poured concrete and using a mixture almost identical with that used in flooring work. I built some walls of these block and I am happy to state that they are still in good condition and show far less cracks than many newer walls built with conventional block. At that time I tried to interest some of our block makers in them but they could not see that they were better than the product they were making.

C. L. Perrin New Hartford, Iowa.

Ozark Construction

Sirs: . . . This is a small town that is currently enjoying considerable building activity. It is a tourist community and there is a lot of cabin construction going on. Several retired business men have come here to build summer homes that range in price from \$10,000 to \$30,000. All of the towns in this area are experiencing building activity because the area is near the site of the new Bull Shoals dam. A new town is springing up at the damsite. The town of Forsyth is being moved to a new location because of the flooding of the area by the new dam construction.

W. E. Dodds Branson, Mo.

The American Way

Sirs: There is only one way in which a democracy can survive, namely, by means of a well-informed public and the right of each citizen to express his views and opinions. I do not fear for our national safety as long as we use this right. It is the subversive elements of our nation boring from within that we must guard againstmore so than the threat of communism from Russia itself. We cannot kid ourselves that we can exist without the rest of the world, and that there is no menace to our way of life, for there is. We have the greatest setup of government ever inaugurated by man, and we must fight constantly to preserve it. There is no better way of combating this menace than by the presenting of facts to the general public to form public opinion. I have been engaged in the building business for many years in a rural and suburban setting. I have seen industry come into our community and thrive when both labor and materials were readily available. I have lived to see the older methods cast aside and new techniques employed. But the younger generation appears unwilling to learn and pursue a trade, thinking that it involves too much effort. This interest in building trades must be inspired by some means, and I believe you are doing an excellent job in this connection in the pages of American Builder. The building industry is one of the greatest factors in our national economy. Let's fight for it, tooth and nail.

C. Fred Kelso, Architect and Contractor, Sabina, Ohio.

Comments on Regulation

Sirs: As a general contractor operating in four counties of central Wisconsin, which are divided equally between farming and resort recreation areas, I believe that Regulation X under present government control will decrease the average construction of homes and commercial buildings by at least 50 per cent. At least 50 per cent of all construction in this area is purchased by veterans, whose financial backing is limited in most cases, and we have banks in this area who will not make a veteran loan because of the low rate of interest (41/2 per cent).

Farmers, business men and resort owners in the area are a fairly prosperous class of building investors who will not be affected to any great extent by the Regulation because of the ability to make the substantial cash payment necessary. The only factor I can see which is of great importance in this area is the cost of labor and materials. Regulation X, in my opinion, will be a strong factor in leveling off the spiraling building material prices, and also in the availability of building materials in smaller communities where building will be materially cut down.

A recent survey by the VA of building material costs in the state of Wisconsin indicates that smaller communities pay a much higher price for building materials because of the smaller number of lumber yards and material dealers. It is my opinion that Regulation X is a good thing for builders who operate in a small community.

S. R. White White Construction Co., Wisconsin Dells, Wis.

Sirs: Our problem here in western South Dakota is somewhat different from that of larger populated areas with industrial activity. The town of Mobridge has a little less than 4000 people. We have a utilities power plant here and some railroad shops. We are on a transcontinental rail line and highway, but we lack industrial (Continued from page 176)

INFORMATION-

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light industrial building. ☐ Contractors specializing in heavy	zing in residential or light commercial or building or other heavy construction. ed in both of the above, not specializing
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Now, more than ever, it is important that masonry receive positive protection from destructive water and unsightly stains. Cor-O-Pel is proven to be thoroughly effective for more than ten years. It is "custom manufactured" for use on stone, cement, brick, etc. and is very effective in mortar joints.

COR-O-PEL IS WATER RESISTANT

COR-O-PEL is produced from Silicone invisible—permanent—heat stability—water repellence—yet it penetrates deeply—leaves the surface unchanged in color or texture.

COR-O-PEL 15 STAIN RESISTANT
COR-O-PEL prevents unsightly efflorescence (salts) from leaching out of
the exterior masonry surface and stops
moisture from carrying stains into the
masonry surface.

ONE APPLICATION DOES THE JOB One application of COR-O-PEL is all that is required, making it unusually economical in both labor and material. COR-O-PEL may be applied at any temperature. It is recommended for above grade application only.



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Free sample of COR-O-PEL.

☐ Free sample of COR-O-PEL.
☐ Full information and Price List.

NAME___

COMPANY

ADDRESS

Distributor Dealer Contractor Architect

Letters . . .

(Continued from page 175)

plants to keep working men busy during low farm income periods and during war time (which is now). At a time like this many of the laboring class of people move to other localities in seeking defense jobs. Our biggest problem is to keep our people at home during times of war and unrest. Regulation X does not affect our building problems as much as the shortage of materials and the fluctuation of population during times of stress. Less homes will be built in Mobridge in 1951 because of the present shortage of heating, plumbing and wiring materials, and the availability of more houses and apartments for rent due to the loss in population.

Paul D. Stein Mobridge, S. D.

Sirs: I build residences, resort homes, barns and granaries and remodel commercial buildings and churches. I do not think Regulation X will have an effect on my business, but the war will, with its problems of labor.

> Elmer E. Taylor, Contractor and Builder, Huntsville, Ohio,

In the Army Now

Sirs:... I was ordered to active duty in the U. S. Army from the Organized Reserve Corps in September, 1950. I have appreciated American Builder and found that every issue is beneficial to me. I am looking forward to the time when I will again be able to get back abreast of the times and building trends by reading my copies of American Builder that will have accrued by then.

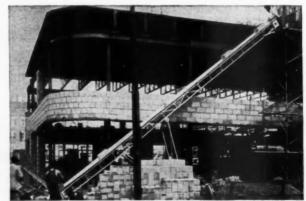
Lt. Robert L. Lutz Camp Atterbury, Ind.

Convention Echoes

Sirs: Many thanks for your copies of "Reflections from the Convention." Your account of the building situation today, and your advice, could not have been more concisely pictured and I feel certain our accounts will welcome your judgment and in turn, feel a little more secure and a little less pessimistic. From this end we hear all kinds of reports from individuals that they are going to close up.

that they are going to close up before the break really happens . . . that they are expanding their advertising programs because they feel that now is their chance for honest local competition . . the big community builders (as apart from the merchant builder) welcome credit

COST-CUTTING PORTABLE ELEVATOR AMAZES BUILDERS · CONTRACTORS



Biggest news in material handling for contractors and builders is the new, low-cost, portable MULKEY ELEVATOR. Custom built and tailored to the requirements of the building trades . . . handles concrete blocks, bricks, mortar, sand, dirt, lumber, roofing, insulation, sacks, boxes, with ease. Strong as a bridge, yet one man handles and operates . . . easily trailed up to 35 miles per hour. Has patent-design clutch and brake assembly. Basic length, 24 ft, 17½ ft. maximum lift, 8 ft. extension available. Balanced up to 40 ft., approximate maximum lift 28 ft. One contractor reports . . . "my MULKEY ELEVATOR keeps 10 men constantly supplied with brick and mortar . . . it has paid for itself many times over." Write now for FREE LITERATURE AND PRICES:

SAM MULKEY CO. • 1621 Locust • Dept. AB-6 • Kansas City, Mo.

controls, saying there will be less jerry-built houses and more substantial homes built for the individual owner. It is anybody's guess. Personally, we plan to stay in business because we have too much faith in the American people to think they will allow themselves to be herded like sheep forever. Something is bound to blow in Washington and it may be sooner than we think.

Edward N. Scott, Cleveland Publications, Inc., Pasadena, Calif.

From Australia

Sirs: I am about to construct a house which will have a flat roof. As there are only a few of these in this city. there is not much information concerning this type of roof construction. The materials at hand are galvanized iron, corrugated asbestos, and wood covered with a bituminous compound. The difficulties are to make it waterproof. With the use of asbestos, the recommended pitch is 71/2 degrees, which would give a lean-to roof of about 4 feet 6 inches drop in 35 feet. This is more than I want. With the use of galvanized iron, the best method would be to sweat the joints and fill in the nail holes. From the information available here, the most satisfactory method would entail the use of wood, using either flooring or tongued-and-grooved planks. The difficulty here is danger of fire from bush fires. Have you any articles on this subject, published or unpublished, and could you supply me with information on this subject?

A. I. Dunnicliff Adelaide, South Australia.

The flat or semi-flat roof is rapidly gaining in popularity in the United States and in almost all cases roofs that have a pitch of less than 3 in 12, which would embrace the normal semi-flat or shed roof are covered with a built-up roof of 3- or 4-ply of 15-pound felt, each ply thoroughly mopped over the other with the top surface covered with clean gravel. A metal gravel stop is provided at the ends and sides of the roof to keep the gravel from washing away. Proper insulation and a moisture barrier should be provided in the joists area to prevent condensation and also to insulate against heat and cold .- The

Plan NOW for NATIONAL HOME WEEK September 9 thru 16



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"Will it be cool in summer?" is a question most home buyers ask. You can answer "Yes" and chalk up satisfied buyers when you install Emerson-Electric Attic Fans in your homes. The reason is simple: The reputation of Emerson-Electric Attic Fans for dependable service means years and years of comfort to your clients. And remember, you save your clients half on in-

stallation costs when you install Emerson-Electric Attic Fans during original construction.

Specify these efficient, economical fans in your blueprints. Point out the advantages of this type of home cooling to home buyers. You'll turn summer heat into a selling point!

For complete data, write for Bulletin No. 419.

THE EMERSON ELECTRIC MFG. CO., St. Louis 21, Mo.

Specify Emerson-Electric Kitchen Ventilators

You put added "sales appeal" in your homes when you specify Emerson-Electric Kitchen Ventilators! Wall and Ceiling models are available for easy installation in any type construction. Don't overlook this looked for feature in modern home planning.



EMERSON EMERSON ELECTRIC



TWIN WHEEL 300 cfm CLIPPER VENTILATOR

Model 1501 is packed with features • Sensationally priced • Now in production



DUAL WHEELS
FITS IN 8-INCH JOIST SPACE
FULL 300 CFM — CERTIFIED
EXTRA QUIET OPERATION
EASIER TO INSTALL
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SIMPLIFIED CONSTRUCTION
STANDARD 31/2" x 10"
FURNACE DUCT

For the first time Trade-Wind offers a twin wheel ceiling ventilator with interchangeable discharge that develops a full, certified 300 CFM, yet is priced competitively with ordinary ventilators. Equally important to you, Model 1501 is now in production and deliveries already are being made.

Write or wire us today for the complete story on the biggest ventilator value in 1951. Mail handy coupon now.

Trade-Wind Motorfans, Inc. 5705 S. Main St., Los Angelos 37, Calif.
Please rush your Bulletin 625 on the all new Model 1501 Trade-Wind Clipper.
NAME
ADDRESS

Concrete 'Logs' Formed on Curved Metal Lath Makes Rustic 'Cabin'

Curved metal lathing covered with color-mixed cement becomes a realistic "log cabin" hunting lodge, comfortable home, or rustic style commercial structure in the Perma-Log system for exterior construction now being made available to contractors through franchises.

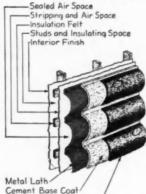
The Perma-Log model home looks as if it were made from big logs with



EXTERIOR frame construction details

white mortar chinking. The porch roof is supported by a "tree stump" and the exterior of the fireplace chimney has the appearance of another, larger stump. The concrete logs are formed with base and colored finish coatings, the former being applied in one continuous unit to provide a completely sealed exterior surface.

Equally adaptable for finishing both new and old building exteriors, Perma-Log can be applied to steel framing as well as to wood frame



Colored Coment Tex Coat

CONCRETE logs formed on curved metal
lathing assume authentic rustic lines

structures. It can be used in a wide range of bark textures and colors.

Metal lathing delivered flat to the

Metal lathing delivered flat to the building site is prepared to become the base of the logs by using a simple forming device which can be made quickly on the job. Lathing strips 4' by 2'3" are crimped in the device to

provide a form for sections of two logs and intervening chinking.

Log sections of the lathing are 11" wide and still flat before placed on horizontal furring strips of the structure. At that time the lathing bulges outward and acquires the desired rounded form because the edges of each log section aare drawn into a 9" space before being nailed. Roofing nails, used to attach the lathing, are left extended about ½" to help anchor the exterior concrete.

Perma-Log construction provides triple sealed-air space insulation.



EXTENDED corner construction of logs is achieved with sloping wood frame

One air space is the usual one between plaster or paneling and the sheathing. A second air pocket is between an insulating felt applied to the furring strips and the sheathing. The third air space is provided in the area between the felt and the metal lath which becomes logs when covered with the mortar.

All materials for Perma-Log construction may be purchased locally and the cement mixtures may be applied by the plastering or mason tradesmen.

Inventor of the Perma-Log idea is W. W. Maier of Mio, Mich., where 50 such homes have been built in the last 16 years. Franchises and licenses were being issued recently in California, Arizona, Florida, and many other states.

The concrete log system can be applied to any size home. In northern Michigan, where it is used extensively for new homes, commercial buildings, and for remodeling jobs, the contractor charges 88 cents per square foot for the surfacing, including both material and labor, with profitable results.

In the Cleveland, Ohio, area Walter A. Taylor, who holds the franchise for that state, has licensed builders to use it in constructing homes in the \$27,000 to \$30,000 bracket on scattered wooded lots.

Standard frame construction with studding on 16" centers is recommended for new structures.

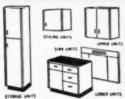
Seeing is Believing!

"Our first installation of Nu-Style Cabinets definitely proved that it doesn't pay to make cabinets ourselves."

SAYS MR. ELLINGTON OWENS BUILDER, SWEETWATER, TEXAS

The above statement is easy to understand when you realize that Nu-Style Cabinets are designed especially for Builders, around your proven skill and craftsmanship. That's the principal reason why Nu-Style Cabinets are furnished K.D. semi-assembled. Yes... Nu-Style Cabinets are a natural because the design—workmanship and simplicity make them the Number 1 choice of Prospective Homeowners. After all, it is the Builder's ultimate aim to satisfy his customer—the Homeowner.

UNIT KITCHEN CABINETS furnished in graduated sizes



ONE OF THE FAMOUS
BILT-WELL LINE OF WOODWORK

Mantels & Telephone Cabinets • Multiple-Use & Linen Cabinets • Stair Parts • Nu-Style Cabinets • Superior Unit Wood Windows • Exterior & Interior Doors • Entrances • Shutters • Clos-tite Casements • Carr-dor Garage Doors • Basement Unit Windows • Louvers & Gable Sash • Breakfast Nooks • Combination Doors • Screens & Storm Sash • Corner (China) Cabinets • Gli-dor Cabinets • Ironing Board Cabinets





Packaged in dust-proof corrugated cartons for easy handling.

Nu-Style Cabinets were supplied by Brown Lumber Co., Sweetwater, Texas

Nu-Style Cabinets are completely machined, prefitted and assembled as far as practical for Carton Packaging. All hardware, with exception of nails, is included. Illustrated instructions for assembling Nu-Style Cabinets are in every carton package.

CARR, ADAMS & COLLIER COMPANY DUBLING



• Comes on the job as an assembled wall section — all hardware on!

• Makes installation easier faster...more economical...absolutely foolproof.

Complete assembly in just a few minutes.

RECESSED DOORS
the Modern way



Packaged Hardware K-D Wall Sections Ready-Unit Section

- NO TRACKS above or below . . . a new cantilever principle which gives silent, trouble-free operation.
- . BALANCED SPRING CONTROL.
- EASY ADJUSTMENT—every moveable piece of hardware accessible and removable without disturbing wall or door trim.
- ADAPTABLE to 1%" or 1¾" doors
 —standard wall construction.

For literature and further information write to

DORFLO MANUFACTURING CORPORATION

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INDUSTRY BRIEFS

Appointment of W. E. Pflieger to



W. E. Pflieger

the new position of special representative of the Williams Oil-O-Matic Dealer retail activity department was announced recently by E. H. Davidson, general sales manager of the Williams division,

Williams division, Eureka Williams Corp. The New England states and eastern seaboard will be Pflieger's territory. He was previously the New York metropolitan area field sales representative for Oil-O-Matic. His appointment to the new position is one of the first moves in expansion plans for Oil-O-Matic dealer retailer activity.

L. Charles Underwood has been appointed assistant advertising manager of Philip Carey Manufacturing Co., L. W. Clarke, vice president in charge of sales, announced recently. Underwood joined the Carey firm in 1947, prior to which he was with the Ohio National Life Insurance Co., as assistant manager of field service. Recently he has been in sales and promotional field work.

Harry W. Jobes, an aeronautical engineer with experience in the field of production engineering, has been appointed assistant to the president of United States Radiator Corp., according to Wesley J. Peoples, chairman of the board and president. Jobes is assigned to the light metals division of the corporation including the production of magnesium and aluminum components, demand for which has greatly expanded in the present defense program, Peoples said.

Appointment of Harold K. Wilson



Harold K. Wilson as manager of the new product department of Georgia-Pacific Plywood and Lumber Co. has been announced by Owen R. Cheatham, president. Wilson, who has been with

H. X. Wilson the Douglas Fir Plywood Association for the last six years, has been serving since 1946 as the association's eastern representative. In his new position he will be responsible for the development and application of plywood and its products into their many new uses. His headquarters will be at the Olympia, Wash, unit of the company.



NOW! A FAST LOW-COST WAY TO

Decorate Wallboard and Plaster Walls!



FINISHES AND DECORATES IN ONE OPERATION!

Here's bow Gold Bond Color Texture saves you time and money:

- 1. Minimizes sanding time on treated joints.
- Gives walls a super-hard colored finish that covers blemishes and imperfections.
- 3. Costs so little you can use it on lowest priced houses!
- 4. Mixes with water, goes on easily with brush or roller.

HELPS SELL HOUSES FASTER!

America's foremost authority on color—the famous Rahr Color Clinic—developed eight brand-new colors for Gold Bond Color Texture, based on a survey of thousands of women. Distinctive texture designs that add interest to every room are easy—a light stipple in the living-room, a decorative swirl design for the dining room, a combed finish for the bedrooms. There's no end to the sculpture-like textures that can be "custom-built" right on the job.

Your Gold Bond Representative will be glad to show you these charming new colors and demonstrate the easy-working qualities of this material.

IN 8 NEW COLORS AND WHITE!

- 1. Azure
- 4. Shell Pink
- 7. Vanilla

- 2. Goldenrod
- 5. Citron
- 8. Platina
- 3. Lichen Green 6. Tourmaline

You'll build or remodel better with Gold Bond

NATIONAL GYPSUM COMPANY · BUFFALO 2, NEW YORK

Fireproof Wallboards, Decorative Insulation Boards, Lath, Plaster, Lime, Sheathing, Wall Paint, Textures, Rock Wool Insulation, Metal Lath and Sound Control Products,

Adjustable STEEL TRESTLES For Interior and Exterior Scaffolding



Size No.	Low	High Point	Adjust- ments	Working Heights	Leg Spread	Weight Lbs.	Price Per Trestle
2	16"	22"	4	71/3' to 73/4"	13"	151/2	\$10.75
3	2'	3'	5	8' to 9'	171/4"	211/2	11.40
31/2	21/2"	31/2"	5	81/2' to 91/2'	201/2"	241/2	12.65
4	3'	41/4	6	9' to 101/4'	23"	28	13.90
6	4'	6'	9	10' to 12'	331/2"	53	17.20
8	51/2"	8'	11	111/2' to 14'	41"	74	22.30
10	61/2"	10'	15	121/2' to 16'	41"	113	35.60
12	7'	12'	19	13' to 18'	47"	153	41.00
			parce	E FOR FACTOR	w		

WRITE FOR FREE Cutulog. Send today for illustrated catalog describing largest and most complete line of masonry tools for your trade, including transit levels.

GOLDBLATT TOOL COMPANY

Solid Section Steel Casement Windows offer **PLUS VALUE** IN RESIDENTIAL AND **APARTMENT CONSTRUCTION** Low original cost plus economy of installation and continuing owner satisfaction make LEMCO Casement windows the choice of builders throughout the country. We also proudly offer Lemco Series 62 Monu-mental Aluminum Awning Windows and Lemco



Aluminum Casement Windows when government regulations and availability of materials

INDUSTRY BRIEFS

Alexander Rubin has been named

general manager of the building products division of L. Sonneborn Sons, Inc., it was announced recently by Dr. Ferdinand Sonneborn, president. Prior to going to New York three years ago, Rub-



in had been branch manager in charge of the Baltimore territory. In New York he held an executive position at department headquarters of the building products division.

Appointment of two new regional managers for Norge Heat Division of Borg-Warner Corp. has been announced by M. A. Straub, sales manager. They are Fred Potter for the territory of Kansas, Missouri, Southern Illinois, Oklahoma, Texas, Arkansas and Louisiana and Mississippi; and Ralph E. Rawles, the states of Virginia, Kentucky, Tennessee, Alabama, Georgia, Florida

and North and South Carolina.

F. P. Forbes recently was appointed a new vice president of Campbell and Ives Co., New York City, officials of the firm have announced. Forbes, a registered professional engineer, was formerly with Weyer-haeuser Timber Co., where he had been manager of the engineering and fabrication department for the past 10 years. Campbell and Ives is a timber construction engineering firm and is the New York representative of Timber Engineering Co. and Unit Glued Laminated Structures.

Election of R. D. Syer to the board of directors of Allied



Building Credits, Inc., was announced recently by R. A. Peterson, president. Sver, who also was elected executive vice president, started his banking career in

R. D. Syer New York in 1931. He went to southern California in 1933 and has been active in banking circles there since that time. He has been with the Allied Building Credits firm since 1948. He is a resident of Pasadena and graduate of Stanford University and Harvard Graduate School of Business Administration.

AMERICAN BUILDER

for Every Plan, choose

MASONITE HARDBOARDS

19 types and thicknesses to fit your specifications

leatherwood—Want an unusual surface texture? Use scuff-proof Masonite® Leatherwood, the hardboard that looks and feels like rich Spanish-grain leather. Specify for small areas like doors, wainscots, soffits and counter fronts, and in large areas such as a single wall to contrast with other walls. Can be finished to produce striking tone-on-tone effects. ¾" thickness.

standard presdwood®—Makes dry wall construction really pay off! Durable wall and ceiling surface for living and sleeping areas, game rooms, sun porches, lounge rooms, etc. Large panels go up fast, cut installation cost. Provides beautiful background for modern interiors. Can be painted, enameled, stained, varnished. In ½", ½", ½" and ½" thicknesses.



nesses.



E CORPORATION
BOX 777, CHICAGO 90, ILLINOIS

rooms, game rooms) and takes a beautifully smooth finish. In 1/8", 3/6", 1/4" and 3/6" thick-

"MASONITE" signifies that Masonite Corporation is the source of the produc

LUMBER DEALERS EVERYWHERE SELL MASONITE HARDBOARDS

MAY 1951

183





THAT "FINISHED LOOK"-FOLDOOR comes in a wide choice of beautiful, colored, highly durable plastic-coated fabrics to harmonize with any color scheme. Topped with an attractive cornice, FOLDOOR installa-tions have that finished look.



"EASY GLIDE" OPERATION—Built with a sturdy frame of rust-resistant steel, FOLDOOR travels on a rugged, single piece, two-rail steel track. The double-truck trolley, with large-diameter wheels, insures smooth, easy-glide operation.



"DOOR-KNOB HEIGHT" HARDWARE—Handles at normal, door-knob height is a FOLDOOR feature especially desirable in homes with small children. FOLDOOR'S simple yet positive latching mechanism is easily operated with one hand. No fussing, no fumbling with FOLDOOR.



WALL-FIT" WIDTH-FOLDOOR occupies the least amount of "stack" space of any ex-tensible door. When pushed back onto itself, FOLDOOR'S maximum width is only 51/2 inches. This means FOLDOOR fits inside the measurements of most wallsdoes not stick out into the room.

You get them all with new, improved HOLCOMB & HOKE

HOLCOMB & HOKE MFG. CO., INC. - INDIANAPOLIS, INDIANA

Profitable Installing Distributorships Still Open

INDUSTRY BRIEFS

E. W. Ruddick has been appointed



manager of the Western Forest Products Department of Pacific Mutual Door Co., it has been announced by Kenneth D. Hoag, president. Ruddick was recently associ-

ated with the Ponderosa Pine Woodwork Association in Chicago. He entered the lumber business in 1934 with the Wright Lumber Co. of New York City. During the last war he spent several years with the Aircraft Production

The Frank G. Hough Co., Libertyville, Ill., was host to more than 200 distributors from the United States and Canada at a recent "New Plant-New Products" show. The occasion was to celebrate completion of a building program. New facilities include a 96x306-feet assembly building and enlarged painting, parts and material storage space; and a modern 1-story office building with 18,500 square feet of floor space. The visitors toured the plant and office and were shown the entire line of Hough products announced for 1951 production.

.... Appointment of Paul B. Walker

as sales manager of the Crawford Corp. has been announced by W. H. Crawford. president. Walker will direct the national sales of Crawford prefabricated homes. A native of Youngstown, Ohio,



Walker

he entered the home building field 14 years ago, serving as salesman, manager and partner in several construction firms. He served 31/2 years during the last war as a Naval officer with a destroyer squadron.

....

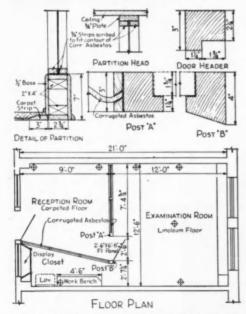
A stepped-up advertising campaign featuring "Bathrooms for Americans" has been launched in consumer and trade publications by Universal-Rundle Corp. Full page, 4-color ads will be used, along with a supplementary merchandising program. For the consumer series, bathroom sets will be especially designed by Ving-Smith, New York designer and decorator and built for each advertisement.



RECEPTION ROOM finished in good taste at a minimum cost

"Middling" Rental Space Becomes Colorful Office

A typical, drab, suburban office space located on the north side of Chicago was quickly converted into a pleasant and attractive office suite after Dr. Arthur G. Larson moved in. This conversion, the expense of which was paid for by the doctor, was accomplished at a minimum of cost and confusion. The total expenditure amounted to \$500; the carpentry and millwork, including cases, being \$350, and the electric work, fixture and decorating \$150.



To carry on this work economically, materials normally used only for industrial purposes were chosen. Sheets of corrugated asbestos cement were installed vertically with wood members to form partitions. The tops and bottoms of the sheets were held secure by strips scribed to the corruga
(Continued on page 187)



White Fir, thanks to the care given its production by member mills of the Western Pine Association, will stay straight in the yard and on the job. It saws and nails easily—takes and holds paint, enamel and natural finishes excellently.

White Fir is an excellent all-purpose, economy wood for concrete forms, sheathing, subflooring, and roofing lumber; for joists, studs, rafters, sills and plates; for interior and exterior trim and mill work; for industrial boxes and crates.



For more information about White Fir send for free illustrated 56 page book. Address—

WESTERN PINE ASSOCIATION Yeon Building . Portland 4, Oregon

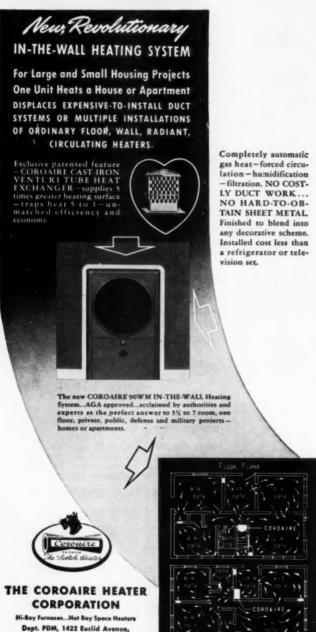
THESE ARE THE WESTERN PINES THESE ARE THE ASSOCIATED WOODS Idaho White Pine, Ponderosa Pine, Sugar Pine

Larch, Douglas Fir, White Fir, Engelmann Spruce, Incense Cedar, Red Cedar, Lodgepole Pine.

OODS FROM THE WESTERN PINE REGIO



COROAIRE DOES IT AGAIN!



INDUSTRY BRIEFS

D. S. Smith was elected president



Z-mish.

and chairman of the board of Perfection Stove Co. at the recent annual directors' meeting. He succeeds L. S. Chadwick whose retirement was previously annunced. Smith

Baith joined the firm as a clerk in 1910 when it was known as the Cleveland Foundry Co. He was elected vice president and treasurer in 1949 and executive vice president and treasurer the following year. The board also named George McCuskey secretary and treasurer of the company. McCuskey joined Perfection in 1944 as assistant counsel in the legal department.

L. S. Chadwick, who was the de-

signer and builder of the Chadwick Six motor car, noted during the early years of the century for its speed and hill climbing ability, resigned recently as president and chairman of the board of **Perfection**



L. S. Chadwick

Stove Co. Chadwick came to Perfection as a consulting engineer in 1912 when the firm was known as the Cleveland Foundry Co., was elected to the board in 1917, and became president five years later. Within the past two years, Chadwick, who is 76. led Perfection into the ranks of gas and electric range manufacturers, following 61 years during which the firm's products were principally in the oilburning field.

Election of five new members to the board of directors of Vita Automatic Windows, Inc., was announced recently by Lawrence Vita, president. They are Raymond C. Shepherd, former vice president of the Dime Savings Bank of Brooklyn; John Oakley, president of Perkins Machine and Gear Co., Springfield, Mass.; Lewis L. Smith, former president of Merritt-Chapman and Scott Corp., New York; Irving Kleet, president of the Smithtown Lumber Corp., Smithtown, L. I., and Dan Cooney, owner of the Lida Credit Agency, Mineola, L. I. The Vita firm was organized early in 1949 to market a picture window which may be lowered or raised electrically by a remote switch and which provides a screen automatically covering the open area.

Cleveland 15, Ohio



PUBLIC HALL view of office. Note recessed show window at right

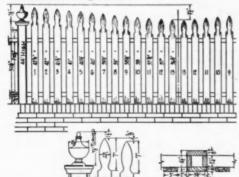
(Continued from page 185)

tions. The office and reception room are painted with contrasting colors, with one wall of the reception room—from chair rail to cornice—papered with a wallpaper having a Swedish motif pattern. With this decor and the Swedish modern furniture which complements it, an over-all pleasing effect has been obtained.

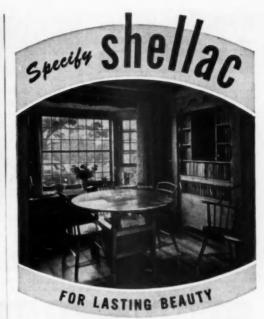


OFFICE AND LABORATORY. Radiator placed behind wire screen

A Williamsburg Fence



This fence designed in the traditional mode is in excellent design, good in scale and well constructed. Members are made of rough hewn pine and whitewashed.—C. D. Robb, Frankfort, Ohio.



Gives a satin-smooth natural finish to

FLOORS, PANELING, ALL WOODWORK

- · Won't Scratch or Mar
 - · Will Not Darken with Age
 - · Outwears Other Finishes

UNEQUALED WHERE A NATURAL WOOD FINISH IS DESIRED

Naturally, you're recommending natural wood paneling and built-ins in dens, rumpus rooms, kitchens, even living rooms. Wherever you enrich with wood grain, specify shellac — the finish that brings out its natural beauty and provides a richer, longer-lasting surface.

Shellac is Easy to Apply — Easy to Maintain dries fast, simple to retouch and keep beautiful

Nationally Advertised

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MAY 1951

NOW! Automatic-Economical Low Cost . . . High Wattage

RADIANT Wall-Insert HEETAIRES

★ BUILT-IN THERMOSTAT or MANUAL Control

Set it . . . and forget it!

NOW... Automatic Thermostatic Control has been added to this low cost series of Wall-Insert Heetaires. Just set the thermostatic control dial at the temperature you want—the Heetaire will automatically produce and maintain any desired temperature between 40° and 80° F.! It is economical—the built-in thermostat automatically turns the Heetaire on and off as needed—not using unneeded electrical current.

It is small and compact—Simply and Easily Installed! 1500 Watts...also available in 1000 and 1250 Watts...
120 or 240 Volts...ONLY 17\%" high x 12\%" wide!



Built-In HEETAIRE Model 248 TE



Tested and listed under re-examination service by Underwriters' Laboratories. Inc.

WRITE for all the details - and the name of our nearest HEETAIRE representative,

gives smoother push-pull action with absolutely no "creeping" of tape into

Underside is white too. Mark with

Every "Evans White-Tape" is un-

Check these list prices: 10-ft. \$1.49 8-ft. \$1.19 6-ft. 98¢

EVANO & CO. . NEWARK 5, N. J.

ordinary pencil, remove mark with

MARKEL

ELECTRIC PRODUCTS, INC.

151 SENECA ST.

LASALLEPRODUCTS, INC.

BUFFALO 3, N. Y.



Snow-white blade with bold, legible, jet-black numerals and graduations. Graduated in 32nds for first 6 inches.

Sturdy die-cast case heavily chromeplated, calibrated for quick reading inside and outside measurements.

Blade ½" wide made of finest high carbon steel-tempered-Bonderizedenamelled-baked.

Blade replaceable in seconds—without tools—without even opening case. And Evans replacement blades cost far less.

Prices higher in far west and Canada. Order from your tool distributor.

case.

flick of thumb.

conditionally guaranteed.

Makers of Evans Folding Rule and "The Folding Yardstick"

INDUSTRY BRIEFS

Election of Creighton C. Graves as



Graves

president has been announced by the Huttig Sash and Door Co. of Texas. Graves joined the Huttig organization eighteen years ago as a sales representative in St. Louis, became assistant man-

ager of the Roanoke, Va., plant in 1940, was transferred to Dallas as sales manager in 1943 and was made manager in 1943.

* * * * *

Robert E. Ditsler, merchandise

manager of the refrigeration specialties department of the Westinghouse Corp., has been granted a leave of absence in order to join the National Production Authority as an industrial



Ditale

specialist on household refrigeration. Ditsler has been with Westinghouse since 1930 and for the past three years has supervised nation-wide merchandising of electric water and milk coolers.

Fred D. Unkel has been appointed



Unkel

general manager of the Eastern Division of Georgia-Pacific Plywood and Lumber Co., according to an announcement by James L. Buckley, division vice president. For the past several years Unkel

has been manager of the company's wholesale distribution warehouse in Philadelphia. James E. Hande, who been handling west coast lumber sales in the east for Georgia-Pacific, has been named to manage the Philadelphia warehouse.

Directors of the Masonite Corp. recently made their first official inspection of the firm's new hardboard plant in Ukiah, Calif. The delegation was headed by Eugene Holland, president. The visitors were escorted on their trip through the plant and into the corporation's forest tracts by E. T. F. Wohlenberg, vice president and general plant manager.

Renew Your Subscription

"TROUBLE SAVER" Scaffolds Save Time and Man-Power on light construction jobs

- BRICK LAYING
- STONE SETTING
- CHIMNEY WORK
- PAINTING
- STUCCO WORK
- SIDEWALL WORK

Even on the small jobs, "Trouble Saver" Sectional Steel Scaffolds are profit-makers for you. Prefabricated frames fit into place—quickly and securely—to provide a strong, safe scaffold that can be erected and dismantled in minimum time for many types of interior or exterior work. They are quicker and more efficient than old-fashioned built-on-the-job wood scaffolds.

You can build your scaffold to fit the particular needs of each job. Time-saving and extra efficiency features include extension legs for levelling, builtin ladders on mason frames. FOR SALE OR RENT.

Write for Bulletins PSS-15 and PSS-24 showing how "Trouble Saver" can save you money.

Approved by Underwriters' Leboratories, Inc.



Ludders and Scaffolds for Any Porpose—Any Place—Any Time r Greater Safety . . . Efficiency . . . Economy

THE PATENT SCAFFOLDING CO., Inc.

38-21 12th Street, Dept. AB, Long Island City 1, New York See Your Classified Telephone Directory for Nearest Office



Moson Type Frames

Strong S' wide, many-purpose maton frames are hondy units in "Trouble Saver" assemblies. Separate working and material storage levels are provided for faster, easier work. Rungs may be used as a ladder. Plenks may be placed across the rungs, as

As reported in BUSINESS WEEK

and the Nation's leading building trade magazines.

HERCULES METAL BRIDGING SAVES TIME, MAKES MONEY; BRIDGES FLOORS FASTER, BETTER, AT FAR LESS COST!

NOW builders can know their lowest true cost of BRIDGING!

- ► ADJUSTABLE FOR 2x6, 2x8, 2x10 STRIOL
- NO NAILING REQUIRED
- SAVES COST OF WOOD, NAILS TIGHTENS AS JOISTS SHRINK
- FHA ACCEPTED
- ANYONE CAN INSTALL
- PERMITS SUB-FLOORING TO BE
- LAID FIRST, BRIDGED LATER ADAPTABLE TO ALL STANDARD CONSTRUCTION
- MAKES A TRIM, STURDY, HAND-
- READILY REMOVED, RE-INSTALLED ALTERATIONS EVER DESIRED



HOW THEY WORK . . .

Simply set the sharp points of one end into the joist near the sub-floor, then place points of the other end into the next joist near the bottom, PULL DOWN and it snap-locks to position.

Formed from 20 gauge rust proofed steel. Assembles quickly, you do not have to sort them, for they come packed 100 male to a carton, 100 female to a carton. Thus, the 2 cartons make 50 sets (set consists of 4 pieces
—when assembled completes the figure X). Shipping weight of the 2 cartons-50 lbs.

HOW THEY SAVE . . .

Lumber 1x3 for 16" O.C	14¢ se
2 eight-penny nails each end, 8 nails to set	10
Average cost for cutting (4 cuts)	24
Labor cost (at \$2.50 hr. or 4c per min.), to set and install tope	164
Labor cost at bottoms, 2 minutes	84

MINIMUM COST PER SET 41¢ SET



... POSITION ... PULL DOWN ASSEMBLE 2 HALVES

TERRITORIES OPEN. WRITE TO

R MFG. and SALES AKRON 14, OHIO

NO SMUDGE



I recommend installation of the Ranger Hood in every house I build. It . .

Walls . Drapes

Furniture

- · KEEPS WALLS SPOTLESS ... Expells cooking grease, smoke and vapors that spot and discolor walls, drapes and woodwork.
- · REMOVES COOKING ODORS ... Prevents unpleasant cooking odors from spreading through the house.
- · ADDS KITCHEN COMFORT ... Leaves kitchen air clean and sweet, and at a comfortable temperature.

Fits any range . . . and will save many times its low cost.



For Complete Information and Name of Your Nearest Dealer,

ROBERTS MFG. COMPANY

Dept. B., Cleburne, Texas

New National Home Magazine Published

The first edition of a new magazine published by National Homes Corp., manufacturers of prefabricated housing units, Muncie, Ind., was issued March 1. The new housing magazine is entitled "Your National Home Magazine" and the first edition consists of 300,000 copies. The



launching of the new magazine is being nationally advertised, with full color pages in such publications as This Week Magazine, Life, Collier's, and The Saturday Evening Post. Copies are being sent to all members of Congress, FHA and VA offices, building inspectors, the Mortgage Bankers Association, U.S. Savings & Loan League, and to all banks. Four hundred dealers of National Homes Corp. will distribute copies, one to a family, free, at local Open Houses, and they will also give copies to prospects now on their lists. Price by mail is 25 cents per copy.

In addition to describing the progress of National Homes Corp. in producing prefabricated units for all sections of the country, the issue contains fourteen pages of floor plans and exterior designs, room arrangement ideas, decorating hints and helps, landscaping suggestions and family savings plans.

Loans Last Year Increased 44 Per Cent

Loans amounting to the record figure of \$5,237,000,000-44 per cent more than in 1949-were made by the nation's savings and loan associations last year, according to William K. Divers, chairman of the Home Loan Bank Board. About three-fourths of this total was to finance the construction of homes.

NOW-Add to your "know how" of "HOUSE CONSTRUCTION

SAVE MONEY AND TIME WITH THESE LATEST PROFESSIONAL METHODS

Here is an exact working guide on every detail of house construction from foundation to finish. Tells you dimensions, materials, processes, step-by-step working methods. Hundreds of scale drawings and photographs make every step easy to follow. Quickreference index enables you to find instantly any construction detail on which you want modern, authoritative guidance. Can be used for alterations in a set of stock plans, for making additions or changes in a building, or for complete construction of a dwelling. Conforms with modern practice and building regulations in all parts of the country. Gives you helpful ideas on how to build in accordance with latest developments in painting, wiring, heating and air conditioning, insulation and soundproofing

The guidance you get on even a single house construction detail can repay you a hundred times the small cost of this remarkable volume.

Every Step in House Construction-Explained and Illustrated:

Ferromines Ferrom and demany *Ferromination forms * fifth * Garden * June * No. demany * Ferromination forms * in the State of the Stat

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e elements: 'bears construction are considered in an orderly and are slow-reated asile great electing."—The Architectural "In amorang member of ellustrations, phongraphs, morbing depuings and ret oney pretions fell this complete look for profession, conceasing

More than 41,000 antisfied users!

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You don't risk a penny to
find out how valuable
"House Construction Details" can be to you. Just
mail coupon. See for yourself how you get clear,
professional guidance on
every building detail. Then
either send only \$4.50 (plus
postage) in full payment,
or return the book and
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Send for 10 DAYS FREE EXAMINATION, "House Construction Details." I will either return it in 10 days and owe nothing, or send only \$4.50 (plus shipping charges) in full payment.

Address

City & State.

SAVE! Send \$4.50 with this coupon will pay postage. Same return and privilege.

The Sensationally NEW Low-Priced



PARKS No. 20 20" PLANER

Here is a modernly designed, rugged, high-speed, low-priced planer that is ideally suited for every shop and industrial plant requiring a quality surfacer. The Parks No. 20 Planer has a four-knife cutterhead with a speed of 3600 R.P.M. and offers two feed speeds — 20 and 40 F.P.M., and 40 and

80 F.P.M. Write for complete descriptive literature.

The PARKS Heavy-Duty 12" x 4" Planer

A compact, sturdy, thickness planer that offers mill planer precision and ruggedness at a sensationally low price. Write for descriptive catalog sheet.



The PARKS WOODWORKING MACHINE CO., Dept. 30-C 1546 Knowlton St., Cincinnati 23, O.

HOE-BOY HOE TYPE MIXER S CUBIC FOOT HOE TYPE MIXER WONDER LINE



Look at These Extras

- 1 ADJUSTABLE TRIPLE ACTION
- 2 SAFETY GRATING AND BAG
- 3 SELF-ALIGNING-SELF LUB-
- HEAVY-DUTY ELECTRIC
- 5 MACHINE-CUT SPROCKETS-
- 6 ONLY 29" WIDE-TO GO THROUGH NARROW DOOR-WAYS

EXCLUSIVE CMC

Adjustable scraper blades turn materials back and forth into triple hoes to give thorough end to end, over and under mixing action.

CONSTRUCTION MACHINERY COMPANIES . WATERLOO, IOWA

'Packaged Homes'

Boost Material Sales

Consumer saves by paying a unit price for complete "packages" of materials, and dealer increases his sales volume

Sales "packages"—ranging from a "Complete Sprinkler System for a 50-foot Lot," \$31.95, to a three-bedroom "Package Home" for \$3,782—have appreciably increased sales of individual items for a California lumber and building materials dealer. Dolan's of Sacramento.

Advantages of the package appeal, according to the firm's owner and president, Mel Hirsch, are that it persuades people to undertake work they have postponed because they considered the cost prohibitive and, in cases where work already has been planned, customers are swayed to buy all the materials at the store advertising the saving.

Dolan's biggest and most successful package is the complete two-bedroom or three-bedroom home. The initially-introduced two-bedroom house sold so well at \$2,992 (now around \$3,300) that another model with an extra bedroom, which now sells for about \$3,800, was soon added. These prices include everything needed to build the home except concrete for the foundations. The company also arranges financing.



LARGE, attractive sales and display section was added to Dolan yard in 1947 to provide additional space for extra departments

Advertising theme for the "Package Home" is "You Furnish the Labor, Dolan's Supplies the Rest," and the majority of the houses are erected by the people who buy them. Local builders do not object to the program, feeling that since it serves a different market they do not lose customers. Several builders have been package purchasers.

Other Dolan package deals have been "Everything You Need to Complete Your Garage," for which components of single-car and two-car buildings were offered for \$279 and \$399 respectively, at payments of \$8.95 and \$12.88 a month, both without down payment; and the "Bride's Special, a \$139.95 kitchen ensemble including dinette set, dinnerware, stemware and an electric roaster.

Materials for the packaged homes are divided into unit loads. The second load is not delivered nor the first payment approved until after construction using the first load has passed an inspection. Dolan's has a field staff which helps buyers get started.

The two-bedroom house contains 804 square feet of floor

(Continued on page 194)

FACTORY CLOSE-OUT SALE OF CRITICAL MATERIAL MUITI-Use POWER SAW!

MR. BUILDER SAVE 530000

IMAGINE IN THESE TIMES!

You can get an all steel completely portable, multi-use power saw made by one of the world's leading precision manufacturers. Does the work of 3 saws—all in one, by adding abrasive blade for cutting steel sheets, pipes, tubing, aluminum, copper, TRANSITE PIPE in addition to sawing lumber of any length, or width—up to 4 inches thick. Complete with either Briggs & Stratton, or Wisconsin 3.6 H.P. gasoline engine. Very limited number available at a never-to-be-repeated offer. Yes, Mr. Builder you actually save \$300 by ordering now. Write for information.

TAKE THE SHOP TO THE JOB!

ENNIS SUPPLY CO.



EVERY SAW GUARANTEED

SPECIFICATIONS: height, 36 in.; width, 42 in.; depth, 39 in.; table top, 39½ in. diameter; saw diameter, 10 in.; gas engine 3.6 H. P. operates all day for pennies. Shipping weight 460 lbs. in original crates.

334 First Street North - AT. 1281 MINNEAPOLIS 1. MINNESOTA

WAS \$499.00 WHILE THEY LAST \$19900

PRICES SUBJECT TO CHANGE WITHOUT NOTICE F. O. B. MINNEAPOLIS, MINNESOTA, U. S. A.

LOOK WHAT IT DOES:

• Saws wood • cuts brick • cuts metal • cuts ceramics • cuts plywood • cuts rafters • bevel rips • miters • cross cuts • angle miters • rabbetts and tenons • not dependent on power lines • easily moved by 2 men • complete portability.

MAIL THIS COUPON TODAY!

Ennis Supply Comp 334 First Street Nor Minneapolis 1, Min	th	5. A.		
Please ship us (FOB MINNEAPOLIS Motor Truck.) Gasoline via (Portable) Fast	Power Freight	Saw
NAME				
ADDRESS				
CITY	1) STATE		

102

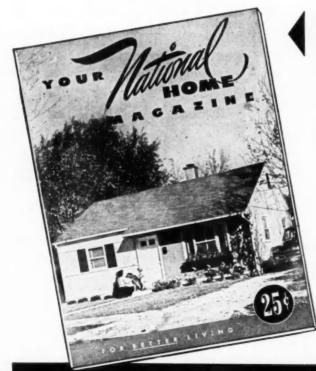
NATIONAL HOMES DEALERSHIPS

offer GOOD Business Opportunities some territories Now Open

By becoming a National Homes dealer you can be assured of having a steady supply of houses to erect.

You will combat rising costs by the advantages of our mass buying, streamlined production methods and the need for less field labor.

You will be supplying quality low-cost homes to thrifty families with savings to invest — an ever-increasing market further enhanced by a million dollar national advertising and promotion program over the past few years.



Send 25c and get the Complete Story about NATIONAL Homes

In order that you may be fully acquainted with the complete story of National Homes, we have prepared a big 64-page "Your National Home Magazine" which will answer every question about our homes and our organization. Get the facts about our production, distribution, and variety of plans and designs.

Mational)

Corporation • Lafayette, Ind. EASTERN PLANT · HORSEHEADS, N.Y.

NATION'S LARGEST PRODUCERS OF PREFABRICATED HOMES



TODAY — AS ALWAYS YOUR BEST PLANER BUY - IS A BOICE-CRANE

BUILT FOR EXTRA LONG LIFE

Thousands of successful installations, dating back ten, fifteen and more years. (Machine serial No. 1 still operates daily, having planed millions provided the serial No. 1 still operates daily, having planed millions of the Botee-Crane stok handles jobs impossible on larger planers—such as planing material as short as 61/2"; planing hard woods down to planing material as short as 61/2"; planing hard woods down to without tearing. Save big money by salvazing short and thin scrap without tearing. Save big money by salvazing short and thin scrap of the property of the save big money by salvazing short and thin scrap of the property of the property

A FINER FEED MECHANISM No troublesome clutch. Quieter. Instant power is stopping the motor, engine or lineshaft power. feed control without

121/4" x 20" ROLLER EQUIPPED TABLE 12½ × 20 KOLER EQUIPPED TABLE
Thick walls and exceptionally well ribbed, table casting, stays flat and
true. Choice of 11/2 and 2 H.P. direct to cutterhead, or V-belt motor
drive. Bench or complete floor type units.
Boice-Crane, with its complete line of durable intermediate capacity
power tools, can, at minimum cost, completely equip contractors to be
practically independent of the mill.

	"World's Largest Builder of	
966 Centra	Avenue	Toledo 6, Ohio
Planers	ree literature on Boice-Crane page Catalog No. 50 on entire l on Tru-Form Safety Cutters fo	ine r Shapers.
NAME	***************************************	
FIRM		
STREET		WATER THE TOTAL PROPERTY OF THE PARTY OF THE
CITY & ST.	ATE	

Packaged Homes . . .

(Continued from page 192)

area and the three-bedroom, 1014 square feet. They are of frame construction with machine cedar shakes or siding exteriors, Sheetrock interiors, hardwood floors, asphalt shingle roofs and an Ideal wall furnace.

Lumber and building materials form two departments of the Dolan store. There are five other departmentshardware and electrical goods, paint, heavy appliances, housewares and plumbing, and sporting goods. Each department has its own head and personnel, co-ordinated by Merchandise Manager W. C. LaBrache, who also handles all advertising and sales promotion.

The firm was engaged in lumber and wrecking operations until 1934 when used materials were discontinued.



HOUSEWARE items are very effectively displayed. A "Bride's Special" is one of packages merchandised by this department



COOKING demonstration—one of firm's promotional ideas

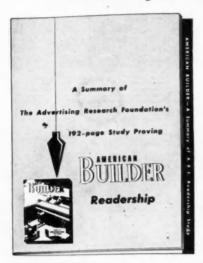
During the war a variety of products other than lumber were added, in anticipation of a drop in lumber volume. The extra lines paid off and in 1947 a store addition was built to handle them more advantageously.

Owner Hirsch is a strong believer in the power of national advertising and attributes much of his firm's success to a policy of "pushing" nationally-advertised lines. He says that people believe that nationally-advertised merchandise is of high quality, that they buy it more readilv than lesser-known brands, and that they are better satisfied with its performance.

Lumber and building materials are still the "backbone" of the business; the company has in fact found that the handling of a variety of other products has contributed greatly to a steady growth of lumber volume.

Dolan's advertising is not confined to use of considerable newspaper space, the firm also maintaining large billboards throughout the city and regular direct-mail campaigns.

Advertising Research Foundation's Readership Study of AMERICAN BUILDER —



Send for this new kind of Copy and Idea Book

Valuable information for sales and advertising executives, account executives and copy chiefs responsible for the sale of products to the huge light construction industry. You can use this impartial study to guide you in planning sales and advertising to the responsive AMERICAN BUILDER audience. Send for your personal copy today.

Highlights of the Study

99% of the qualified readers interviewed, remembered seeing one or more of the advertisements measured.

81% of the readers who claimed to have purchasing influence, stated they specify or recommend makes or brands.

89% of the home subscribers interviewed stated they read every issue of AMER-

76% of the readers interviewed remembered seeing one particular black and white advertisement.

First in the Field...

First in the Building Field Established 1879

First in number of subscribers Over 85,000 subscribers, ABC

First in number of advertisers 493 advertisers in 1950

first in number of advertising pages

Now available in booklet form

for Sales and Advertising Executives

Here, in a 16-page file-size booklet, is a summary of the essential facts brought out in the Advertising Research Foundation's Readership Study of AMERICAN BUILDER. This is the first survey conducted by the A.R.F. for any publication serving the light construction industry.

This booklet features a flow-chart of the 320-page February issue of AMERICAN BUILDER—the issue surveyed. Each bar in the chart is identified—advertising pages by name of manufacturer—editorial pages by title of articles. In this way you get a clear over-all picture of the readership values of all the pages—editorial and advertising, separately and collectively.

In addition, the 10 best-read advertising pages are illustrated for close study, reflecting the selling power of each manufacturer's message. The 10 best-read editorial items are also illustrated, demonstrating the high readership of these pages.

The entire booklet offers a true appraisal of AMERICAN BUILDER's audience and readership, based on the original, comprehensive A.R.F. Readership Study. Write for your booklet. Address your request to:

Robert H. Morris, Publisher

AMERICAN BUILDER

79 West Monroe Street . Chicago 3, Illinois

BUILDER

A SIMMONS-BOARDMAN PUBLICATION

The Readbook of the Light Construction Industry

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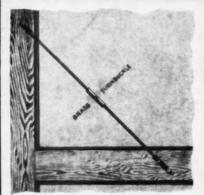
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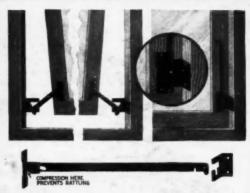
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No. 195 Screen Door Turnbuckle



No. 85 Storm Sash Adjuster

NATIONAL Screen and Storm Door Hardware

At this time of the year builders buy great quantities of the items shown on this page. This preference for National Hardware has been building up for 50 years.

No. 195 and No. 196 Screen Door Turnbuckle for screen or storm doors. End pieces are of steel with brass turnbuckle in the center which will not rust to steel. Therefore they are easily operated at any time. The No. 195 come either 14½ inches or 42 inches in length. The No. 196 come either 16 inches or 50 inches in length. The No. 196 come either 16

No. 85 Storm Sash Adjuster — Locks the sash securely in either closed or open position as shown in the picture. Two sizes, 5-inch and 10-inch. Packed one pair—one right and one left—in an envelope with 1 x 7 screws. Japanned or Cadmium finish.

No. 96 Mortise and No. 95 Rim Screen Door Latchesfor doors 1 1/6 to 1 1/6 inches thick. Doors may be right or left hand and swing in or out. Lever-type handles are set far back on the door to prevent interference when opening. No washers are required as handle and spindle are cast in one piece. Locking device is controlled by music-wire spring. Avoilable in any finish.

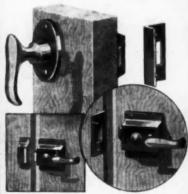
NATIONAL MANUFACTURING COMPANY

50 YEARS OF EXPERIENCE PRODUCING DEPENDABLE HARDWARE 50th YEAR 1951 NATIONAL

USE THIS 4-WAY TIME SAVER

- 1. See your National Dealer.
- 2. Consult his National Well Chart.
- 3. Check the items you need.
- 4. Your dealer does the rest.





No. 95 Rim Screen Door Latch