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INSULITE SHINGLE-BACKER provides a smooth, uniform, insulating undercourse that gives you better looking shingled sidewalls . . . faster and easier!

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INSULITE DIVISION

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Here's how Architect Emil Minz, Chicago, and Builder A. J. Epson & Son, Skokie, Ill., used Fenestra Steel Casements to put oomph in a living room.

How to put OOMPH in a living room

... and keep it OUT of cost

Open it up to the sunshine.

Make it look big and bright and gracious.

Bring in plenty of controlled fresh air and don't leave the view outside.

Put oomph in your living room—in your whole house—with graceful Fenestra* Steel Residence Casements. Then tell your "windowshopping" home buyers that these windows twirl open to catch the breeze... that they are washed and screened and stormsashed from the warm, comfortable *inside* of the house.

NEW OUTSIDE / INSIDE TRIM SPEEDS INSTALLATION For really fast installation get your Fenestra Casements complete with Outside/Inside Galvanized, Bonderized, Prime-Painted Metal Trim. Nail to sheathing. Anchor to studding. No finishing required.

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In every town and city, there are hundreds and thousands of ugly cracked ceilings. And home owners don't know what to do about them.

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		AMERICAN BUILD



A DIRECTORY FOR BUILDERS AND DEALERS

The APRIL issue of AMERICAN BUILDER will contain the most complete Directory for builders and dealers ever published. In three separate alphabetical listings will be found:

- 1. Building Products and Equipment Manufacturers
- 2. Brand Names and Manufacturers
- 3. Building Products and Equipment Manufacturers and their addresses

To make it easy to locate and casy to use, this special section will be printed on tinted paper. Here is a handy shopping guide buyers of building products and equipment cannot afford to be without. Don't miss AMERICAN BUILDER's big April Directory issue.

A LUMBER DEALER BUILDS A HOME FOR HIS OWN USE—Here is a honse with so many modern. features packed within its four; walls that every one will want to give it careful study.

AMERICAN BUILDER'S GATE-FOLD BLUEPRINT HOUSE for April is designed by Norman R. Johnson, popular St. Paul architect and designer of small homes.

Timely editorials, how-to-do-it items, Better Detail Plates and news from all segments of the industry will round out this giant Directory issue.



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MARCH, 1951

Number 3

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On and Off the Record

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NUTONE Dress Up your Homes





Sell your homes easier . . . faster. Install a NuTone Door Chime in every one of them. There are 14 models for hallway, living room or kitchen that range in price from \$3.95 to \$79.95 list. Some with Telechron clock movements and hand-rubbed mahogany cabinets. Attractive designs in both long tube and short tube door chimes. Tubes are satinbrass, tarnish-proof.



WALL MODEL NE-S



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NE Lowest Cost Installed

Cut Costs up to \$150 AND SAVE 3 TO 5 DAYS' WORKING TIME **ON EVERY HOME YOU BUILD**

Prefinished BRUCE STRIP FLOORS eliminate sanding and finishing on the job

When you use Bruce Prefinished Floors there's no waiting for sanding to be done, no tie-ups while finishes dry. No worries about electric current or about sanding and finishing workmen not showing up on schedule. No interrupting the work of other trades. Builders estimate they save from 3 to 5 days per house by using Bruce Prefinished Floors instead of job-finished flooring-What's more, you cut floor costs substantially because factory-finishing costs less than on-thejob finishing. This saving usually amounts to 10¢ to 15¢ per square foot, depending on local costs, Throughout the nation, leading builders who have "figured it out" are now using Bruce Prefinished Floors, exclusively.



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Quality hardwood flooring plus a superior finish ... that's what the owner gets in a Bruce Prefinished Floor. The factoryfinish penetrates into the wood and does not scratch, chip, or peel like a surface finish. Housewives say it's so easy to keep their Bruce Prefinished Floors clean and beautiful at all times.



With the famous "Scratch Test" Finish

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BRUCE RANCH PLANK FLOORS AND BRUCE BLOCK FLOORS ARE ALSO PREFINISHED

Publisher's Page



Non-Essential Spending Undermines Economy

HE AMERICAN economy is the strongest bulwark against communism in the world. Main-

tain its strength, and it can support whatever military preparations and effort may be necessary successfully to resist efforts of communism to conquer the world. Undermine its strength, and communism may and probably will be successful in its program of world conquest.

Whether the strength of the American economy will be maintained or undermined will be determined by the policies adopted by American governments, national, state and local; and what those policies are will be determined by the American people.

The great present menace to the economy is inflation. The inflation we have had already is bad enough, but not beyond control. It is when inflation becomes uncontrollable that it wrecks an economy. And it becomes uncontrollable when the people rush to exchange their money for goods because of fear their money may become virtually or actually valueless.

There are not lacking signs that this is beginning. The government has adopted regulations to reduce construction of homes. This is assumed to be anti-inflationary, because it reduces the demand for building materials. But a recent survey in 12 cities by the Wall Street Journal indicates that it is *inflating the prices of bomes*, the prices of which are running 5 to 20 per cent higher than a year ago. homes as saying that "because of inflationary conditions they desire to hang on to their homes," and buyers as saying, "they would feel safer with their cash in a house."

Inflation is caused by the total demand for goods exceeding the total supply of them produced. It can be stopped only by (1) reduc-ing the demand for goods, (2) in-creasing the supply of them, or (3) both these means. The total demand for goods is created by both government buying, national, state and local, and private buying. When buying by the national government for defense is enormously increased, as at present, buying for all other purposes by the national, state and local governments should be re-duced, and this reduction of government non-defense buying should be accompanied by a great increase of total production. Otherwise, the government buying will take so much of total goods produced that there will not be enough goods left for private buying to maintain the strength of the economy and to provide an adequate standard of living for the people.

Charles E. Wilson, who has resigned as president of General Electric to direct all production and stabilization of the economy for the Federal government, has recently said that while production for defense "involves approximately \$40 billion a year, I am sure we can superimpose that on the economy without doing too much harm to civilian requirements ** because the manufacturing facilities that the country now has are so much greater than they were ten years ago * * * and we still have a lot of latitude as far as hours of work are concerned * * * many industries can go over to a 48-hour week, which gives you roughly 20 per cent more production."

It is encouraging to have such an optimistic expression regarding potential production from Mr. Wilson; but it does not change certain vitally important economic facts. The total production of industry, however much it may be, has to be divided between government buying and private buying. To whatever extent government buying is unnecessarily large, it creates an unnecessary and inflationary demand for goods. Senator Harry F. Byrd, the leading authority on the subject, recently has made a detailed estimate showing that non-defense spending recently proposed by President Truman can be reduced almost \$8 billion a year-or about one-half of the increase in taxes proposed by Mr. Truman.

Non-essential government expenditures must be paid either from excessive taxes or by increasing government debts. In either case they should not be tolerated by the people, because they are inflationary and deprive private industry and the people of goods needed to maintain the strength of the economy and the standard of living, when maintenance of the strongest economy possible and the highest standard of living practicable are more needed than ever before.

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Same O. Dum,

Chairman Emeritus

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Manufacturers of Gunnison Coronado and CHAMPION Homes Junnison Homes

UNITED STATES STEEL US CORPORATION SUBSIDIARY

"Gunnison," "Coronado" and "Champion"—T.M. Gunnison Homes, Inc. AMERICAN BUILDER





With America's number 1 economy lockset there are only 2 holes to bore... only 3 units to slip into place and it's installed—that fast! Here are other Kwikset "400" Line features: Rugged precision construction; durable highquality materials; 5-pin-tumbler security; low unit cost; simplified, graceful beauty in lustrous, lifetime finishes ... truly America's number-one economy lockset. Preferred by builders, contractors, jobbers, dealers, architects and homeowners ... write for your copy of our colorful catalog featuring Kwikset's "400" Line and the new Kwikset "600" Line.

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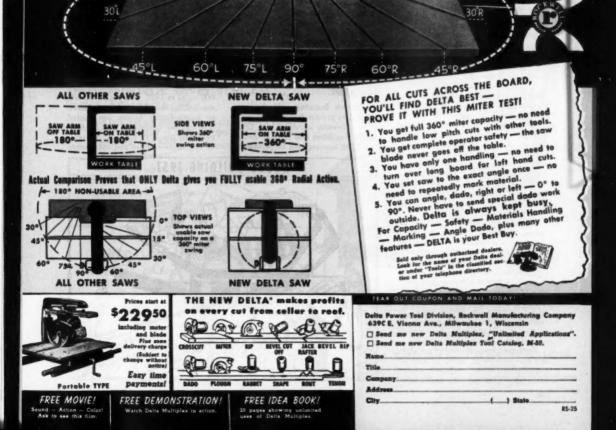
DELT/

S°R

power saw, see what it offers in miter capacity.

GET PROOF!

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



in the Building Field

Full Set of Controls Now in Effect

THE WAGE-PRICE freeze which became effective the last week in January completes a set of controls on the building industry which began immediately after the outbreak of the Korean war. Here, in brief, is a summary of the controls now affecting builders.

The target of 850,000 new homes in 1951 set by the government under Regulation X in October remains unchanged. The government hopes to cut housing starts about one-third by requiring higher down payments on new homes than were required during 1950 when 1,400,000 new homes were started. There are no restrictions on cash buyers of new homes. A lender is subject to the regulation if during 1949 or 1950 he extended real estate credit more than three times in the total amount exceeding \$25,000. If the buyer owns his lot, the value of the lot may be considered as all or part of the down payment.

Lending for major additions or major improvements is also subject to the regulation if the cost exceeds \$2,500. If it does not exceed \$2,500 it is not considered a major addition or "improvement and is not restricted by Regulation X.

Short term construction credits are exempt from Regulation X provided that the credit is to finance construction of one- and two-family residential units, or major additions or improvements, and if this loan is to be paid off in 18 months or less. However, final financing must conform to the regulation.

Tight restrictions on building of stores, restaurants, banks and other commercial structures were ordered by the National Production Authority in January. Since February 15 builders have been required to get a license from NPA before they can start work on a commercial building. In general, licenses will be granted only for work which furthers the defense effort, is essential to public health, welfare or safety, or will alleviate or prevent a hardship to a particular community.

Exempted from the order are storage and warehouse buildings used by manufacturers and processors, wholesale food establishments, and wholesale supply facilities for fuel oil, gasoline, coal, gas distributing system and pipe lines.

Small commercial buildings, costing less than \$5,000 are not covered by the regulation.

License applications should be submitted on special NPA forms to the Commerce Department's regional office nearest the location of the construction. These offices are in Boston, New York City, Philadelphia, Chicago, Cleveland, Atlanta, St. Louis, Kansas City, Dallas, Minneapolis, Denver, Seattle, Los Angeles and San Francisco.

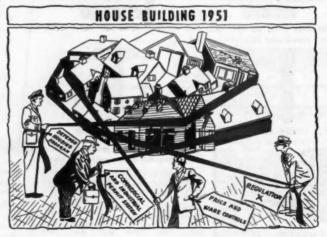
Reason for controls is conservation of scarce materials, principally steel, aluminum, copper, zinc, brass, etc. Drastic cuts of civilian consumption of these metals have been ordered. Manufacturers for the most part are responsible for the allocation of the portion of their production for civilian use. Plumbing and heating systems will become increasingly hard to get. However government officials have assured builders that equipment will be available for 850,000 dwelling units in 1951.

Defense housing will be constructed by private builders according to the Defense Housing and Community Facilities and Service Act of 1951. The housing will be permanent housing erected by private builders. It will provide for FHA mortgage insurance more liberal than the terms of Regulation X in defense areas for new privately-owned housing serving families of persons engaged in defense activities.

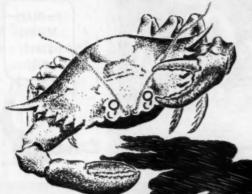
In isolated areas, such as atomic bomb manufacturing sites the Housing Administrator will be empowered to acquire land to provide site improvements and then to dispose of the land to private and public agencies for use in accordance with the plans made.

A price and wage controls system became effective in January. The system at present is flexible but will become increasingly effective as the Economic Stabilization Agency gets personnel organized to do the tremendous job of controlling several hundred thousand prices and the wages of millions of workers.

The year 1950 set an all-time record in home building with 1,400,000 units started. This total exceeded the 1949 record volume (1,025,100 units) by 36 per cent and was almost 50 per cent above the previous peak of 937,-000 units in 1925. The year 1950 was marked by the extraordinary number of single-family homes constructed. The number (estimated at 1,156,000) exceeded the 1949 total for all types of new units—houses and apartments.



"DON'T GIVE THEM ANYTHING TO RAB ABOUT!"



PPED ALUMINUM AWNING WINDOW

it's

sealed

like a

refrigerator

GIVE THEM

THE TIGHTEST CLOSING WINDOW EVER MADE

Why be satisfied with ordinary windows in the homes you build? Take advantage of the terrific selling impact of the tangible, easily demonstrated superiorities of AUTO-LOK weatherstripped awning windows. They not only help sell the house, but they keep the buyer happy, and accent the quality of your work. Remember, a satisfied customer is an invaluable asset.

ONLY AUTO-LOK GIVES YOU ALL THESE ADVANTAGES

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Distinctive beauty. No drafts -- air scooped in and upward.

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100% ventilation, even on rainy days.

AUTO-LOK IN WOOD

REGARDLESS OF ANY ALUMINUM RESTRICTIONS, your job can still have AUTO-LOK performance. After years of work and testing, the many AUTO-LOK features are now incorporated in a wood AUTO-LOK window, and will soon be available in your area. We are now applying the famous AUTO-LOK principle to produce the ultimate in a wood window that gives you the same tight closure and all the other important features that have made AUTO-LOK the fastest selling awning windows in America.

Consult SWEET'S-write for free folder "WHAT IS IMPORTANT IN A WINDOW?" and detailed report on air infiltration test by Pittsburgh Testing Laboratory Please address Dept. AB-3

LUDMAN CORPORATION P. O. Box 4541, Miami, Florida





2 REASONS WHY IT PAYS TO SELL NU-GLAZE INSTEAD OF PUTTY!

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Although Nu-Glaze is applied like putty, it is entirely unlike putty in other ways. Needs no working up, clean to handle—not oily, does not dry out, harden, crack or peel. Perfect for glazing wood or metal sash, replacing putty, setting plumbing, filling cracks, boatwork of all kinds. Nu-Glaze does the job better too, because it always sets to a rubber-like consistency. It's no wonder Nu-Glaze sells fast!



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

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No Building is Weatherproof until it is CALKED





SELL NU-GLAZE INSTEAD OF PUTTY

Does the job better than putty, and makes you bigger profits too! Nationally advertised, nationally known and nationally used. Stock up on Nu-Glaze today!



Nu-CALK CALKING COMPOUND

Same fine product as in Speed Load. Nu-Calk Calking Compound is available in ½ pint, pint, quart, gallon, 5-gallon cans. Also 55gallon drums. Nu-Calk is the standard of calking quality

MACRIANBURG DUNCAN G. QUALITY PRODUCTS here's the most efficient, most popular calking load on the market!

Au (ALK SPEED LOAD

Easy or use: YES! And even casher to self! Here an owne of the reasons why the new, improved NU (A).8. SPEED LOAD enjoys such nationwide aupularity. The specially designed cap insures perfect contact out gun nuzzle—carit pull loose from fiber norm on machined container is air-proof, moisture, unot machinely vacuum nacked With.

> SPEED LOADS the user's hands news touch the compound. Always has a smooth, even flow, and easy



CG-4 SPEED LOADER Here's the other half of this famous salesmaking combination! This SPEED LOADER calking gun retails at a price that payes the way to more calking sales. It's light, sturdy, fool-proof. Retails for only \$1.95. Show it and you'll sall it!

Your order will be shipped same day received!

PACKAGED 10 LOADS TO A CARTON

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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.

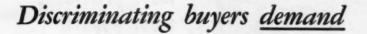
STANDARD CG-3 CALKING GUN AVAILABLE

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There are 10 Spand Loads to each cartons to each castons to each case. Please order in multiples of 4 cartons. Full fraght dlowed on orders of 8 cartons or for the sections of

MACKLANBURG-DUNCAN CO. OKLAHOMA CITY 1, OKLAHOMA







the most versatile flooring material

"I can usually recognize the prospects who know what to look for when buying a house, because they seek the features that will give them many years of economy and quality.

"Oak flooring is one of the first things they look for, because practically every prospective home owner knows that oak will harmonize with all furnishings—for the life of the house —Oak gives them quality and economy.

"With a grade of oak for even the lowest priced homes, I find that I can get the advantages of oak at the cost of cheaper materials.

"Yes, 85% of home buyers are demanding oak flooring. That's why I put oak in all of my houses." National Oak Flooring Manufacturers' Association, Sterick Building, Memphis 3, Tennessee.

No other feature helps **sell** a house **faster** than a good oak floor.



SEND COUPON today for "WHY IT'S IMPORTANT TO YOU"

There's an *economy* story behind the Ford Truck Power Pilot! It's so important, it needs more telling than space will allow here ...

You owe it to your bank book to get the facts. Mail the attached coupon today. You'll get news on the Power Pilot...on new 5-STAR Cab comfort...new transmissions, axle ratios, pistons and camshafts... new features throughout the '51 Ford Truck line.

Don't delay! Mail the attached coupon today for facts that can mean real dollar savings for you.





MARCH, 1951

SERVEL <u>ALL-YEAR</u> tremendous hit ...builder

ROBERT H. WACHENDORF is builder of the distinctive Meadow Ridge Year-Around Homes in Amberly Village, Cincinnati. Designed to provide the utmost in luxurious suburban living, each attractive home planned by Mr. Wachendorf features a Servel *All-Year* Air Conditioner, for year-round comfort.

Public response to All-Year Air Conditioning in his exhibit home was so enthusiastic that this Cincinnati builder went on to plan the entire development around Servel units. As a result, he can assure his clients of homes that will always be completely comfortable, no matter how hot or cold, wet or dry the weather may be.

A mere flick of the finger sets the Servel All-Year Air Conditioner. From then on, operation is entirely automatic. The Servel switches from cooling to heating and back again as needed to maintain the desired temperature. Year round, humidity is carefully controlled to eliminate stickiness in summertime, add enough moisture for comfort in winter. And the Servel filters out dust and irritating pollen,



circulates air evenly throughout the house.

By planning homes around Servel All-Year Air Conditioning, it's possible to effect economies which offset the unit's price. For example, Servel air conditioned homes need no screen porch, no fireplace, no attic fan. Outside doors and windows may be kept closed. Glass can be fixed, permitting use of a simple window frame. No screens are necessary. The total of these savings may more than pay for the air conditioner.

Servel units can be used in any size, style or shape of home your client wants. They're not confined to any one type of architecture. Ask your local Gas Company for full particulars, or write to Servel, Inc., 1103 Morton Avenue, Evansville, Indiana.

AIR CONDITIONER in model home orders 175 more !

Architect: Luigi Marioni, 1518 Beacon Street, Cincinnati)

NOW YOU CAN INSTALL SERVEL ALL-YEAR AIR CONDITIONING AT LITTLE OR NO EXTRA COST!

Many of the customary features in a home no longer have functional value when All-Year Air Conditioning is included. .. such things as porches, fireplaces, accens, etc. So in preliminary planning you can leave them out. This way you'll generally save enough to make up the cost of the Servel system. And clients feel they're making a marvelous exchange. For the things omitted provide pleasure only part of the time. Servel brings them comfort 365 days a year!





NO SCREEP

LÓWER-COST N WINDOW CONSTRUCTION

MARCH, 1951



NO FIREPLACE



NO SCREEN PORCH



This is Mr. George Decker . . .

at the doorway of one of the houses he and Oliver Martin built in Stratford Acres, Stratford, Conn.

"Why hello!" says Mrs J. Ritzul. The Ritzuls have occupied this house for 7 months now. Mr. Decker is paying them a visit to learn how they now like their General Electric all-electric home.





Just a year ago, recalls Mr. Decker, 8400 persons visited the model home... and within 48 hours all 50 homes planned (each with General Electric Kitchen-Laundry) had been sold at \$10,500 each. This despite the fact that other houses in the immediate neighborhood were not selling!



"'Bryan and I were just clearing the dinner table," explained Mrs. Ritzul. "It's so nice to wash away messy food waste and not be bothered with garbage cans. We wouldn't give up our General Electric Disposall® for the world!" Mr. Decker just grins.

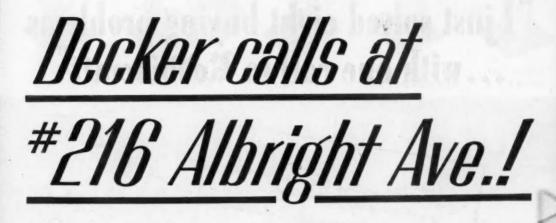


"All our friends wish they had a G-E Dishwasher too!" says Mrs. Ritzul. "I had no idea our G-E Dishwasher would get our dishes so clean and sparkling—to say nothing of the time saved!"

"Gives Mummy more time to read stories to me," interrupts little Bryan.

You can put your confidence in-







"By the way, Mr. Decker, my pots and pans don't get black any more! This G-E Range is so clean and it cooks so f-a-s-t! I really don't mind cooking a bit, and our electric bills for the entire house are less than half of what I thought they would be—never over six dollars!"



"There's room for ever so much food in our G-E Refrigerator—and it's so easy to keep everything in place. I don't think there's a finer refrigerator made than a G-E."

"I agree with you, Mrs. Ritzul. That's why we had a G-E Refrigerator installed in our home, too!" comments Mr. Decker!



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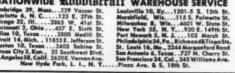
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W. P. "Bill" Atkinson Elected 1951 NAHB President

New head, developer of Midwest City, Okla., is one of nation's most prominent home builders

W. P. "Bill" Atkinson, outstanding Oklahoma City home builder and land developer, was elected president of the National Association of Home Builders at the 1951 convention. He succeeds Thomas P. Coogan, of Miami, 1950 president.

Other officers elected were : First vicepresident, Alan E. Brockbank, of Salt Lake City, Utah; Second vice-president, Emanuel M. Spiegel, of New Brunswick, N. J.; Secretary, R. G. "Dick" Hughes, of Pampa, Texas; and Treasurer, Nathan Manilow, of Chicago, Ill.

Atkinson is nationally known as the developer of Midwest City, a post-war city located near Tinker Field Air Base, nine miles east of Oklahoma City.

The well-planned community last year took top honors in the NAHB's annual Neighborhood Development Contest. It has grown into a complete community of

11,000 persons under Atkinson's guidance. Regional vice-presidents also elected were :

1. Clark Sundin, Worcester, Mass. (Maine, N. H., Vt., Conn., R. I. and Mass.).

Charles Buchman, Albany, N. Y.
 (State of N. Y. except N. Y. City).
 Frank Collins, Philadelphia, Pa.

(Penna. and Dela.)

4. Earl Wicker, Richmond, Va. (Md., D. C., Va. and W. Va.).

5. George Goodyear, Charlotte, N. C. (N. C. and S. C.).

6. Richard Brown, Birmingham, Ala, (Fla., Ga. and Ala.).

7. Walter Shapter, Columbus, Ohio.

- (Mich. and Ohio). 8. A. O. Aldrich, Chicago, Ill. (Ill. and Ind.).
- 9. Harold R. Rosendahl, Minneapolis, Minn. (Wis., Minn., N. D. and S. D.).
- 10. Earl Bumiller, St. Louis, Mo. (Iowa, Mo., Kans., Neb.).
- 11. Roger Givens, Oklahoma City, Okla. (Texas and Okla.).
- 12. C. Taylor Burton, Salt Lake City, Utah (Utah, Mont., Idaho and Nev.)
- 13. Marcus O. Bogue, Denver, Colo. (Colo. and Wyo.).
- 14. Samuel Anderson, Seattle, Wash. (Wash. and Ore.).
- 15. Nels Severin, San Diego, Calif. (So. Calif.).
- 16. Harry Gilbert, Chattanooga, Tenn. (Ky. and Tenn.).

17. Floyd Kimbrough, Jackson, Miss. (Ark., La. and Miss.).

MARCH, 1951



W. P. "Bill" Atkinson

18. Dale Bellamah, Albuquerque, N. M. (Ariz. and N. M.).

19. Niels Schultz, San Rafael, Calif. (No. Calif.).

20. James Graham, Long Island, N. Y. (N. J. and Metropolitan New York).

Relax Credit Controls. NAHB to Ask

The newly elected president of the National Association of Home Builders said at the annual convention that the association intends to press for an immediate relaxation of Federal mortgage credit controls in critical defense areas.

William P. Atkinson, of Oklahoma City, Okla., speaking at a news conference the day after his election to the top NAHB office, also told reporters

1. NAHB will ask the Federal Housing Administration for a leeway of 900 dollars on FHA mortgage limitations as outlined in the Defense Housing Act in certain "high cost" areas. The present contemplated limit is \$8100 per unit.

2. Instead of restricting overall size of houses built during the emergency, the government should restrict merely the amount of critical materials involved in the building of an individual home, and let the builder go on from there.

3. The Association will do its utmost to cooperate with the government during the emergency, and in turn will ask "realism" from Washington authorities.

NAHB Policy Statement **On Defense Housing**

The following policy statement concerning the Defense Housing Act of 1951 (S. 349) recently introduced in Congress, was unanimously adopted at the 1951 convention by the Board of Directors of the National Association of Home Builders .

1. As a basic national policy it should be clearly recognized that private industry, if not hindered by unnecessary and unrealistic restrictions, can provide housing wherever and when needed for defense. The following program proposes such additional governmental aids as may be necessary to enable private enterprise to carry out this policy.

2. The credit curbs of October 12th should be relaxed in areas designated as defense areas so that as many homes as possible may be produced under existing legislation.

3. In any defense area in which the relaxation of credit control does not prove sufficient to provide the necessary amounts of housing for defense workers, the National Housing Act should be amended to provide a title which would authorize FHA to insure, in designated defense areas, 90 per cent loans on multifamily units and on one to four family units for rental or for owner-occupancy, based on acceptable risk in view of the emergency. Maximum mortgage limits in such title should provide a suitable extra amount in higher cost areas at the discretion of FHA.

4. In areas where the need will not extend beyond the defense emergency. FHA should be provided with a separate defense insurance fund to insure-and Federal National Mortgage Association authorized to commit to buy-loans on rental projects of mobile or demountable type housing on such terms as the Commissioner shall prescribe and at an amortization rate not necessarily limited to the estimated period of the need. As an additional aid in such areas, FHA Title I Section 8 should be amended to permi rental of the type of small structure nocontemplated under it.

5. The FHA insurance authorization should be increased sufficiently to cover the new titles and FHA operations under existing titles.

6. The Wherry Act should be extended for at least two years and amended also to include projects of the Atomic Energy Commission

7. A limited sum should be authorized (Continued on page 32)

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Uniform Code of Ethics Approved at Convention

A uniform code of ethics, binding upon all members, was approved unanimously by NAHB at the annual convention.

In the preamble to the new code, the Association stated its intention to place home ownership within the reach of every American family, strive for well-designed, constructed and located homes, and to maintain the nation's building industry under the American free enterprise system.

In order to achieve these objectives, Association members pledged themselves to the following principles :

1. A paramount responsibility to customers, community and nation;

 High standards of health, safety and sanitation will be considered in all home building;

3. The right of a fair return for goods and services shall be upheld in relations with labor and other segments of the building industry;

 Research for improving materials, techniques, equipment, and home financing methods will be vigorously pursued;

 Sound legislative proposals affecting the building industry will be supported and publicized widely.

"Creeping Socialism" Must Be Checked, Senator Dirksen Tells Builders

Everett M. Dirksen, senator from Illinois, lashed out against the "moral confusion that permeates the country today" in a speech that keynoted the opening general session of the 1951 NAHB Convention and Exposition. This confusion is a stepping stone to socialism, he declared.

In a state of moral confusion, Senator Dirksen pointed out, the government always gains authority. "Moral confusion," he said, "is a shield which the government uses to move deeper into the lives of private people." After World Wars I & II, during the periods of uncertainty, controlling statutes became law under the guise of being temporary measures to meet emergency situations. Often, however, these laws remained on the books for years after their justification.

Socialism is control, Senator Dirksen said, and every control is, by implication, a step towards socialism and freedom's eventual suicide. The essence of this suicide today, Senator Dirksen stated, is found in what he calls "back door socialism" or "creeping socialism" by

Top NAHB Officers for 1951



Alan E. Brockbank, First Vice President, of Salt Lake City





R. G. "Dick" Hughes. Secretary, of Pampa. Texas



Nathan Manilow, Treasurer, of Chicago



Senator Everett M. Dirksen

which, step by step, the government assumes an ever-increasing degree of control over the nation's economic life. "It is by our own hand we liquidate freedom," he maintained, "for people must be vocal to prevent an end of freedom."

May Oppose Defense Housing Bill

Directing his remarks to the defense housing bill now before Congress Senator Dirksen said he may vote against the bill because he feels it contravenes and endangers the free systems of the United States. He pointed out that the present provisions are another form of government control that he opposes and that the law provides a blank check for spending.

There is a need for housing to meet special conditions caused by national defense programs such as atomic energy projects, he said, but he feels that these problems can be dealt with as local difficulties and with simpler but more explicit directives than this current defense housing bill.

Dirksen said he felt that laws such as these must not contain blank check provisions and must be explicit. First, however, he insisted that the future course of the country must be "spelled out" before we proceed with further controversial legislation that may be another step down the socialistic road.

Emergency Aid to State Offered by N. Y. Builders

In case of an all-out war, the home builders of New York will be ready to offer their skilled help in their area of building activity.

This was disclosed recently in a statement issued by Walter S. Johnson, new New York State Association of Home Builders president.

Realizing that under an emergency situation it might be necessary to provide some temporary shelter for its displaced citizens, the State Association makes an offer to the New York governor and his state agencies to provide "the full cooperation of our membership, together with the skill and know-how of all our affiliated organized associations."

AMERICAN BUILDER

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No Change in '51 Home Goal, Housing Leaders Say

850,000 Starts Are Still Planned: Sparkman

A high government official told the nation's home builders at the NAHB convention that up to the present time the Administration has no intention of reducing 1951 housing construction below 850,000 units.

"From the facts now available, and if full-scale war does not come, I do not see any evidence that would support fears of a sharper cutback in 1951 starts," said Senator John Sparkman (Dem., Ala.), who is the Administration's chief housing spokesman in the Senate.

In discussing the proposed volume of housing production for 1951, the Alabama senator said no one should overlook the fact that there is "an essential difference" between the housing problems now faced by the country and those which prevailed in the early days of World War II.

"When World War II began we were immediately committed to outright war on a full scale.

"We have a different situation now before us. It is true that we are girding our production power for defense production. But we are not, as we were in 1942, immediately transforming our economy on a total war basis."

As to the matter of financing 1951 construction, Sparkman implied there was little chance of relaxing present mortgage credit regulations, except in critical defense areas, when he said :

"Considering the backlog of home finance and the more liberal terms contemplated for defense housing programs, it would seem that even the greatly reduced level of home finance applications since the October credit curbs became fully effective would be sufficient to assure attainment of the 800,000 to 850,-000 unit volume proposed for the year."

Sparkman then expressed his belief that home financing is one area in which the government's role in housing can and should be reduced. "Many of you," he told his audience, "share my view that the government ought not to be required to carry so much of the load of home financing.

"Further, I think you will agree that the government has done so because private lenders have not done more of the job. It is a job which they must do or the government will be called upon to continue to see that it is done."

Sparkman, a vigorous advocate of public housing, expressed the hope that some portion of the non-defense housing production would go to the subsidized program.

"I know that many of you differ with me on the desirability of public housing," said Sparkman. "But all the warnings that have been sounded as to the dangers implicit in such a program fail to alarm me nearly as much as the dangers that I am convinced are implicit in a democracy that condemns a large number of its families and children to live in slums.



Senator John Sparkman (Dem., Ala.), right, is greeted on his arrival at convention by Richard H. Brown, left, president of the Birmingham Association of Home Builders, and Holt Rast of Birmingham

"I know of no better answer than public housing, and so long as we can build for other than defense housing purposes, I believe some portion of our non-defense housing production should and must go to those in the low-income bracket."

To Ease Regulation X In Defense Areas, Cortright Predicts

Relaxation of federal mortgage credit controls under Regulation X will take place in key defense areas "in the immediate future," it was predicted by Frank W. Cortright, executive vice-president of the National Association of Home Builders.

His forecast was contained in his annual report submitted to the NAHB board of directors.

In speaking of the outlook for 1951, Cortright expressed the hope that before March 1, Congress will enact legislation which will assure that the private home building industry will do the major part of defense housing construction. "It is expected," he said, "that the fed-

"It is expected," he said, "that the federal government will do only the part which is beyond the ability of private lenders to finance."

He said that the job of the industry during the coming year will be the construction of about 800,000 units, with an increasing number during the last half of the year for rental to defense workers. "This official target of the government will probably be reduced or enlarged, depending upon international events and the domestic supply of critical materials," he added.

Of the past year, Cortright said it was easily the most noteworthy in the industry's history, with nearly 1.400,000 new homes built. "Only twice before in this country has the building of homes approached the million mark," he said.

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No New Estimate Now in Making, Foley Assures

The announced target of from 800,000 to 850,000 homes for 1951 has not been changed and no change is presently contemplated, Administrator Raymond M. Foley of the Housing and Home Finance Agency assured delegates at a general session of the 1951 NAHB convention.

Foley said that "We cannot say that the estimate of housing starts that can be undertaken without inflationary danger and without interference with defense activities may not have to be changed. But let me add that there is no changed estimate presently in the making for early announcement."

No Expeditors or Coordinators

Speaking of a "rumor that seems to have much disturbed the industry . . . that there will be a new, added type of overall organization in the defense production set-up for the coordination or control of housing matters," the HHFA administrator commented :

"I am authorized to assure you that nothing of this sort is contemplated, but that the present housing agency will continue to perform the housing tasks for the government, working in proper liaison with the defense production agencies to that end."

NAHB past president Thomas P. Coogan acted as moderator for a discussion group, which consisted of Foley, T. B. King, chief, loan guaranty section, Veterans Administration; Franklin D. Richards, Federal Housing Administration commissioner; William A. Clarke, real estate consultant, Federal Reserve Board; W. P. Atkinson, new NAHB president; Milton T. McDonald, president, Mortgage Bankers Association; George S. Goodycar, Charlotte, N. C., builder; and Joseph Meyerhoff, Baltimore, Md., builder.

The outlook for VA activity this year was forecast by loan chief King. He said that, taking all factors in account, it would be reasonable to expect that an average of at least 20,000 to 25,000 new homes a month will be completed and sold to veterans with G.I. loans over the first half of 1951. King emphasized these trends "are predicated on the assumption that 1951 will be governed largely by the signs that now appear on the road."

Probe Needs. Richards Asks

Stating that he was "not here to minimize your problems or those of your government, but to cooperate with you in laying plans to cope with the disruptive forces that generate these problems," FHA commissioner Richards suggested a scrutiny of specific housing needs, particularly in the lower price and rental classes. He said that location is of increasing importance, that continued study should be given to the new methods and materials, and warned that too much advance buying will produce unnecessary strain on production.



Dealer's Viewpoint

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

Tracking Down Policy Makers is Full-Time Job

Any Association charged with representing the interests of its members before the defense agencies here in Washington faces four difficult problems.

First is the problem of keeping an ear constantly to the ground in order to learn about proposed new regulations and orders while they still are in the formulative stage, so that we can have an opportunity to urge amendments, if necessary, before the orders are officially issued.

Second is the problem of finding out who really makes the policy decisions. It doesn't pay to stop with making representations to a specialist down the line because, even though he is convinced, someone up above may reverse his decisions.

That already has happened in several important instances. Defense agency officials who thought they had full authority and responsibility in certain fields and proceeded accordingly, have found themselves over-ruled by someone higher up.

Third is the problem of keeping track of the sudden and frequent shifts in executive personnel in the ever-changing defense agencies. After locating the right man in the proper agency and convincing him that a certain course of action or procedure is desirable, we wake up to find that the official in question has been transferred to another position or has retired to private life. Or we find that some new man has been placed between the individual and his former superior, thus creating another layer of authority to be reckoned with. Or a brand new agency has come into being overnight.

And fourth is the problem of getting interpretations of and presenting appeals from the various control orders, such as M-4 and Regulations W and X.

Experience gained in meeting the same problems during and after World War II is going to be invaluable during the confusing months which lie ahead, but many new circumstances and conditions are sure to complicate things.

In this connection, it is encouraging to read that Defense Mobilization Czar Wilson and Price Administrator DiSalle hope to staff their new agencies with practical businessmen who know the facts of life about production and distribution. If followed out, that policy should eliminate some, but by no means all, of the difficulties and frustrations which had to be coped with during the 1942-47 period.

The trouble is that the task of controlling production, end-uses, prices, wages, etc., and the consequences of control orders often are so unpredictable, and so complex, that the most able and best-intentioned officials are going to make a good many mistakes and create numerous injustices. Our job, as representatives of industry, is to hold those mistakes and injustices to a minimum and to present convincing facts and figures with which to correct them when they do occur.

That sort of work is going to occupy a great percentage of our time in the next year or so.

Delegates from France Attend Convention

Popularity of the NAHB Conventions and Expositions is not confined to the continental limits of the United States. Last year, one delegate came from as far as Bombay, India. That delegate was the only woman architect in India—Miss Perrin Mistri.

This year, two delegates from Paris, France, were on hand for the meeting— Jean Daniel Evette, Architect, D.P.L.G., and his wife. They arrived in New York January 18 by Liberty ship, and left February 15 after visiting Detroit, Cleveland, Atlanta, Memphis and Louisville.

Evette, who is "chartered by the government" (the literal French meaning of



Architect Jean Daniel Evette and wife of Paris. France, were convention guests during their recent tour of United States

D.P.L.G.), is particularly interested in building materials.

The Distaff Side of The Convention

While husbands attended serious, thought-provoking sessions on problems currently confronting the building industry, the wives who accompanied them found the social activities planned by the convention committee left them with little free time and no dull moments.

Private Dining Room No. 1, official headquarters for ladies for the last three years, had all the aspects of a friendly club room every morning as women from all sections of the country gathered to enjoy rolls and coffee and renew acquaintanceships of the previous year before starting out for the event of the day, according to Mrs. Lillian Asmus, official hostess. Mrs. Asmus, who has been official greeter in the ladies headquarters for the past three years, was assisted by a special committee composed of wives of members of the Chicago Metropolitan Home Builders Association, host chapter at the convention. Headed by Mrs. Ben Davidson, president, members of the group were Mrs. Frances Atkinson, Mrs. Walter Berg, Mrs. Leslie Combs, Mrs. William A. Dean, Mrs. A. J. Del Bianco, Mrs. Raymond Hines, Mrs Lawrence G. Holmes, Mrs. John McNamara, Mrs. Charles A. Mitchell, Mrs. Carl E. Reed, Mrs. Richard Smykal, Mrs. Edward G. Gavin, and Mrs. Kenneth Schuham.

Enthusiasm ran high among the women who participated in the program planned especially for women registrants. This included tours of Chicago's famed Merchandise Mart, a tea and style show at Carson, Pirie, Scott's (a leading Chicago department store), and a luncheon in the Gold Room of the Congress Hotel at which the well known author of humorous best sellers, Mrs. Willie Snow Etheridge, appeared. In addition, tickets were available to popular radio and television shows.

Increasingly, women are making their presence felt at the National Association's annual convention. Last year 703 women attended the meeting; this year the number jumped to 1115. Composed largely of wives of builders, associate members and exhibitors, this female contingent has all the aspects of an auxiliary without a central head. Nonetheless the faint outline of an organization which could easily become national in scope is to be found in the formation of women's auxiliaries at the local level. Currently there are five such groups with a membership well over 100. They are at Dayton, Ohio, Mrs. M. E. Kimmey, president; Salt Lake City, Utah, Mrs. B. Lue Bettilyon; Seattle, Wash., Mrs. W. H Johannesen; Albany, N Y., Mrs. Wm. Pagano, and Des Moines, Iowa, Mrs. W. H. Leachman. At a conference held at the Chi-

conterence new at the Cin-

caso convention, it was revealed the purpose and activities of the groups differ; however, each unit reported enthusiastic acceptance and support from the members of the local association.

The Dayton and Salt Lake City auxiliaries report that participation in community activities such as polio drives, renovation of clubs for youngsters whose parents work, a survey of rooms available for the civilian defense not only sustains interest in membership but creates good will for the building industry as a whole.

These auxiliaries are eager to have new units formed during 1951, and will be glad to lend their assistance to any person or persons wishing to found one.

Women's Achievements In Industry Told

Presided over by Mrs. Henry Chalaron of New Orleans, convention women told a striking story of accomplishment in the home building industry as well as in the whole field of human endeavor in the women's session of the NAHB Convention.

Mrs. Margaret Raynor of NAHB pointed out that women have become the decisive factor in politics, have won recognition of their administrative ability by securing eight seats in the House and one in the Senate and that therefore it is not surprising that they should turn to homebuilding as a means of expressing their knowledge of what other women want in homes.

Mrs. Wallace Johnson, a home builder of Memphis, gave a film presentation entitled "Rebirth of a Neighborhood," describing a rental housing project for negroes in Memphis which has won acclaim all over the country as an outstanding example of what private enterprise can do to eliminate slums from big cities.

Maxine Livingston, family home editor of Parent's magazine, and Mary Davis Gillies, architectural editor of McCall's magazine, charged builders with failing to provide some of the amenities such as good circulation, adequate work surface, proper facilities for children's recreation. Mrs. Gillies said one might think that some builders had lived in caves all their lives judging from the appearances of some houses.

Mrs. Henny Mollgaard, home builder of Milwaukee, and Edward R. Carr, Washington, D. C., took exception to the charge that builders of the country are not adequately meeting the housing needs, pointing out that no other country is housed in a manner even remotely comparable and that while there may be room for improvement in design, we are now supplying the best possible housing for the money.

Emily Kimbrough, noted author and lecturer, told stories of her travels and supplied a note of humor to the program. A near-capacity audience of men and women attended the ballroom meeting.

MARCH, 1951

Cortright's Column

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



NAILB Policy Statement Outlines '51 Goals

Briefly stated, here are the goals for the nation's organized home builders, as framed by NAHB's resolutions committee and vigorously approved by the board of directors:

 Through private enterprise Americans have become the best housed people in the world. The industry can continue to meet the serious problems that face us now and in the future.

• An adequate housing supply for all our people is essential to our defense effort.

• Government, after setting a housing goal consistent with defense mobilization, must consider material and manpower supplies in order that the goal can be reached.

Mobilization of home building by Government can best be accomplished by constant consultation with home builders. World War II housing mistakes thus can be avoided.

• As regards defense housing, private industry can provide housing wherever and when needed for defense purposes if not hindered by unnecessary and unrealistic restrictions. October 12 credit curbs should be relaxed in designated defense areas to spur home production.

• Defense housing should not be concentrated along rental lines to the exclusion of owner-occupied housing. Much of the population shifts prompted by defense measures will be permanent moves and for sale housing will be needed.

 The policy of low cash downpayments and 25 to 30 year amortization periods has brought home ownership into reach of untol4 thousands in the last decade. Home ownership promotion must be protected and expanded.

 The GI home loan program should be continued. Further, its benefits should be extended to all veterans who may have entered the armed forces on or after commencement of the Korean action.

Shortages of critical materials should not be aggravated by wasteful building codes. Local building code officials, lenders and governmental agencies are urged to permit the fullest use of alternate materials and to reexamine requirements which, in many cases, require excessive use of critical materials.

• The industry calls upon the Congress to suspend, for the duration of the emergency, the public housing program. American taxpayers cannot afford the expensive, non-productive luxury of subsidized public housing. Defense housing needs should not be used as an excuse for more public housing.

Blight in urban areas should be prevented through enforcement of local health and sanitation codes, as witnessed by success in Baltimore of the "Baltimore Plan." Blight can be prevented by local action, without the expenditure of tax funds and with minimum use of critical materials. The Federal urban redevelopment program has no place in a defense economy and should be shelved.

• The Wherry Act has provided needed housing for the armed forces through private enterprise. The industry pledges its support for a two-year extension of the Wherry Act.

 Legislation providing maximum limits on eligible mortgages should reflect increased costs in order to accomplish its mission of providing housing under present conditions.

• The industry has repeatedly called attention to the necessity for a broad, stable mortgage market as a financial base for an efficient home building industry. Wider sources of mortgage credit mean lower mortgage costs to the home buyer. All efforts to this end should be supported.

Employers in all industries are urged to give consideration to the employment of members of the Reserve Corps of the Army, Navy, or Air Force, even though they may be subject to call to active dury.

There you have the NAHB's goal and its guide for the year 1951. Your support is needed to help the industry successfully accomplish its mission of putting home ownership within the reach of every American.

Outlook for Materials Supply Told by Industry Experts

One of the top sessions at the NAHB 1951 convention in attendance and interest was the special panel on the materials supply situation in which discussion was led by some of the most prominent men in the industry.

Miles Colean, Washington (D.C.) economist and expert on matters pertaining to the building industry summed up the materials supply situation in one sentence yesterday when he said "Costs will be high and volume will be low."

Pointing out that the whole question of supply of building materials hinges upon the requirements of the military and that at the present time military needs are umknown, Colean stated that no one can forecast when or what type of controls will be imposed.

Labor is strongly organized, he said, and will not readily agree to reduced wage rates even though there should be temporary unemployment in the building trades.

John Haynes, Director, Building Materials Division, NPA, was equally frank in giving the builders the whole truth about the supply situation. He also summed up his view in one sentence stating that "it is the seller rather than the buyer who will determine the volume of construction business in the coming months." Military needs are the key to the supply situation, he stated, and they are constantly changing, the most recent estimate being more than twice the figure offered just two months ago.

Haynes declared that in 1950 total volume of new construction was 27 billion dollars plus 8 billions for repair and maintenance and that there will be a substantial reduction from that figure in 1951 because of the necessity for stockpiling critical materials in addition to those actually going into defense and war

Policy Statement

(Continued from page 27)

with which the Federal Government may provide, or assist local governments to provide, utilities or community facilities in defense areas where local governments are unable to do so without such aid.

8. The emergency should not be used as an excuse to further public housing. The subsidized public housing program must be suspended at least for the duration of the emergency so that Federal funds and critical materials can be conserved for defense purposes.

We will support any legislation to accomplish these purposes and vigorously oppose presently proposed or any future legislation which is inconsistent with them. In its present form, S. 349 does not satisfactorily conform to these principles.

It is the further sense of this Board that it shall be the duty of the Executive Committee and the President's Advisory Council of this Association to accomplish the foregoing to the best of its ability and in its best discretion. construction.

Another factor limiting 'somebuilding, he pointed out, is the need for a sharp increase in industrial plant construction, which requires three times as much steel per dollar of volume as home construction. Also, we are woefully behind in hospital and school requirements, he said, and predicted that these categories would be given preference over homes, if and when priorities are instituted.

Edward Gavin, Editor, American Builder, called upon both government and industry to exercise the utmost ingenuity and resourcefulness in meeting the present threat to our industry.

"Our business is to build homes and to house the American public in war as well as in peace," Gavin declared. He stated that we can only do this if Washington will try to understand builders' problems and if builders will refrain from bucking the aims of the government.

Gavin stated that builders must begin to think in terms of substitutions and improvisation and must find materials which are not critical.

Fight Public Housing At Local Levels, Panel Advises

Local action on local levels is the most effective way of combating public housing. This was the consensus of the panel and interested delegates who attended the discussion on "Defeating Public Housing by Local Referenda" during the NAHB convention.

Thomas E. Mosheim of the Houston, Texas, law firm of Kelley, Mosheim and Ryan led the discussion panel. Participants were John I. Hennessy, secretary of the Home Builders Council of California, G. Keyes Page, director of the Civic Research Council of Flint, Michigan, and

(Continued on page 182)

Defense Housing Builders' Responsibility, Atkinson Tells Chicago Association

Builders must assume the responsibility of supplying the nation's defense housing needs and maintaining non-defense starts at the level estimated as desirable during the emergency, and in doing so they must exploit all possible resources, W. P. "Bill" Atkinson, NAHB first vice president, told members of the Chicago Metropolitan Home Builders Association at the group's annual officer installation dinner Jan. 16 in the Sherman Hotel.

Atkinson, who arrived in Chicago early in order to attend the local installation and pre-convention NAHB executive meetings, stressed the importance of the national association to the nation's economy. Calling attention to the homebuilders' record in producing 1,000,000 homes during World War II and 5,000,-000 post-war homes, he said :

"In the face of this splendid record this is no time for retreat—no time to stop because building is hazardous and difficult—no time to throw up our hands in despair. Rather it is a time to look forward and to assume the great responsibility of supplying the nation's defense housing need while the emergency exists."

While pledging full cooperation in the protection of national security, the NAHB officer warned that "we must make certain that we do not lose the very elements which we are now mobilizing to protect.

"It is our fight to establish in the minds of the people in Washington a true recognition of the importance of our continued production of housing in the volume required to meet the nation's needs."

Short talks were made at the meeting by E. C. Mahoney, new Chicago president, and A. O. Aldrich, retiring leader. Edward G. Gavin, *American Builder* editor and a member of the Chicago association, acted as master of ceremonies.

Among the guests was Martin H. Kennelly, mayor of Chicago.



W. P. "Bill" Atkinson, second from right, quest speaker at Chicago Metropolitan Home Builders Association just before convention, chais with Chicago's Mayor Kennelly. Others are Martin C. Huggett, left, executive vice president of the Chicago association, and E. C. Mahoney, new Chicago president. Occasion was installation of 1951 Chicago officers.

Versibond Has Everything!

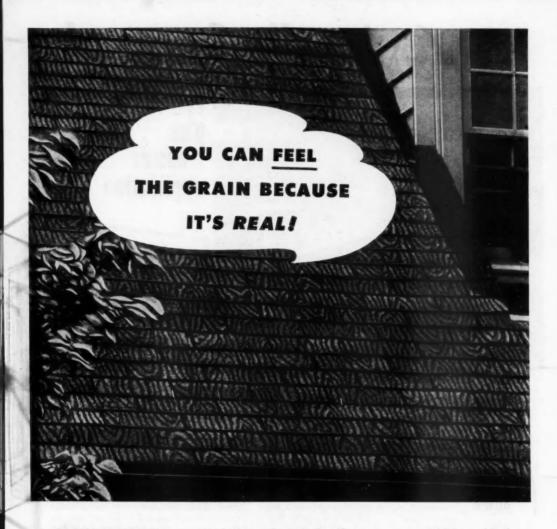


plus easier application



Know it by the FLEXIBLE RUBBER BACKING VERSIBOND is a "natural" for builders and installers! Its easier installation - by contact pressure - reduces costs. It is easy to cut to size - easy to bend to form concave backs of sink tops and other decorative effects. It can be shaped, routed, drilled, countersunk and counterbored. Cut edges are easily filed, planed, or sandpapered to desired smoothness. What about "owner benefits"? VERSI-BOND offers the owner all the advantages of the highest quality decorative plastic laminate surfacing materials *PLUS cigarette-proof* quality at no extra charge! A full range of popular color - patterns gives the customer freedom of selection to harmonize with any decorative plan. VERSIBOND is resistant to wear, stains, heat, light, and boiling water. (VERSIBOND exceeds "NEMA" tests for those qualities.) For full - color, descriptive folder about VERSIBOND, write ... The Ohio Rubber Company, VERSIBOND DIVISION, 100 Ben Hur Ave., Willoughby, Ohio.





WOODTEX ASPHALT SHINGLES

- High ridges, deep shadow lines on an extra thick base shingle
- A product of Certain-teed's unique graining process
- "Millerized for longer life"

ARDMORE, PENNSYLVANIA

• In green, gray, blue, red and brown blends



ASPHALT ROOFING - SHINGLES - SIDINGS Gypsum plaster - Lath - Wallboard - Roof Decks Acoustical Tile Insulation Fiberboard

housewife's eye-view

"7/hen it comes to kitchens, Mrs. America is sharp-eyed. That's why she so readily appreciates the years of experience that have gone into the design and construction of Curtis kitchen cabinets. Here are some features she'll notice in the Curtis kitchens your include in your plans!



Close-up of Curtis wall unit showing large storage space. Cabinet is made in 36" and 44" heights and in eleven widths-from 12" to 44". All are 14" deep.

widths--from 12" to 44". All are 14" deep. with contact Curits cabinets are made of usual, painted two coats at the factory. They can be left "in the white" or finished in any color of the owner's choice. All hardware is furnished and applied. For complete information, mail the coupon.

Inst the thing for quick and slides into unit. Any be used alone, or with cabinet above.

Mixer and vegetable storage unit-241/2" deep, 32" bigh, 18" wide. Ventilated vegetable drawer is below. This unit is a "must" with huse bousewives.



Pan and bread drawes unit-has two small wood drawers 3" deep and one metal bread drawer 81/4" deep, 19" long, 103/4" wide. Two widths, 28" and 32".

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inted e left lor of s fur-	Curtis Companies Service AB-3K Curtis Building Clinton, Iowa	Bur

Gentiemen: I want to know more about Curtis kitchen and storage cabinets. Please send your free book.

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Curtis makes a complete line of architectural woodwork for the modern hame. Make your next house "all Curtis."

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HERE'S WHAT HOUSE

GIVES YOU SOUND SALES BUILDING OPPORTUNITIES THROUGH ADAPTABLE, PROMOTABLE EDITORIALS such as these appearing in the

April issue . . . reaching and influencing your best customers month after month.

BE COOL ON THE POTOMAC

House Beautiful's Climate Control House for the Washington, D. C. Area. The April issue of House Beautiful presents its climate control house specially designed for the Washington, D. C. climate, where the summer is hot, humid, and windless. Seasonal flexibility—open and breezy in summer, snug and warre in cold weather—is achieved through two main tools —a big cool roof and louvered windows.

The solutions offered will be of endless and practical value to home builders in the area which is considered by many "worse than The Congo." And to builders in any region where similar climate conditions exist. Make use of the principles shown in this house which is designed for summer comfort and winter warmth and cheer. In addition to the selection of the right lot, emphasize the right plan incorporating the use of attic fans, roof spray for summer cooling, venetian type glass jalousies, wind free sun pockets, glass fibre insulation, radiant heating coils, resilient floors, sound absorbing ceilings. There's a myriad of ideas which will give answers to the problems on design and construction which confront you and your customers in this type of climate. ... ideas which can result in extra profit for you.

BEAUTIFUL DOES FOR YOU...

Do you sell:-Lumber?

Brick? Cement? Glass? Asphalt? Paint?

HERE'S THE BRIGHTER SIDE OF THE BUILDING PICTURE

In his article "Let's Face It—Building Will Be Tougher", the brighter side of the building picture is presented by Miles Colean to the prospective home builder. Presently forsee-able scarcities are mainly

HOUSE BEAUTIFUL TELLS YOU

How To Use Nature In Your Life

See the front cover and pages 108 through 113 in the April issue displaying in beautiful color an outdoor play area created by one of America's greatest designers, Thomas Church. With the surrounding environment as the theme of its design, the area is planned for relaxation, swimming, sunning, picnicking and loafing.

The design theme determined the choice of materials for terrace and lanai . . . native stone and finished redwood. Basic elements of terrace design have been carried into lanai interior. Stone retaining wall of terrace comes through glass wall to join fireplace. Terrace bench is repeated as built-in furniture. Concrete terraces surround the pool.

There are ideas galore to be had from these inspiring pages . . . ideas adaptable to your own terrain . . . ideas for promoting products you sell. Keep this April issue handy. Your customers will be asking you about it. limited to light metals, but a pretty good house can still be made out of available material—lumber, asphalt, gypsum products, glass insulation, brick, cement. Here's an article to capitalize on!



Promote outdoor play areas

EMPHASIZE SIMPLIFIED LIVING

With this highly enlightening editorial "How a Freezer can Simplify Your Living" (page 124). Placing the freezer close to cabinets for packaging materials and work counters is important in planning. In addition to a discussion on quantity cooking for freezing, it points out importance of the location of the unit. Here's an article to keep on display for your customers to see. Here's a way to promote the sale of home freezers.

FOR MORE PROFITABLE SALES BUILDING IDEAS turn the page

HERE'S WHAT HOUSE

Gives you inspirational ideas for promoting brand names like these

GLENDURA SOIL-PROOF WALLCOVERING BY IMPERIAL is featured in the Imperial Paper and Color Corporation advertisement. Glendura is a newly developed, truly soil-proof wall decoration. Nas the delicate water-color beauty of fine wallpaper, yet gives armor-plate protection against dirt, soil and accidental sations like lightick, grees spatiaring, food stains, etc. Imperial Paper and Color Corporation, Glens fails, New York.

STRAMAN WALLPAPERS for 1951 are more varied, more beautiful than ever before ... the most complete line of quality wallpapers in Strahon's 63 years. Nationally advertiser in NOUSE & GARDEN, MOUSE BEAUTIFUL, MOUSE BEAUTIFUL'S GUIDE FOR THE BRIDE, and LIVING FOR YOUNG HOMEMAKERS, to make it easy for you to sell them.

Whether you are redecarating or building a new home, PC GLASS BLOCKS can add that touch of beauty every home owner wants. A free, informative 24-page booklet an glass block patterns, use and construction methods is evailable from the Pirisburgh Carning Corporation, 307 Fourth Avenue, Pirisburgh 22, Pennaylvania.

Gleaming walls of VITROLITE® glass paneling put a tauch of glamor in bathrooms, powder rooms and kitchens ... for new hames or remodeling. Libbey-Owens-Ford advertising tells home owners and home buyers about the beauty and practicality of Vitrolite and shows the attractive correlated Vitrolite. (R)

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Full color national advertising for AMTICO RUBSER FLOORS will feature specially designed rooms by autotanding decorators, including William Pahmenn and Tommi Parzinger. When you feature AMTICO, you assure lasting customer satisfaction. In addition to greater beauty, it offers comfort, quiet, fire-resistance, easy cleaning and lifetime wer. NATURALLY BEAUTIFUL FLOORS – Patterned by nature with distinctive grain and mellow coloring. **BRUCE HARDWOOP FLOORS** match the trend to natural, inherently beautiful materials in architecture and decoration. Available in Strip, Black and Ranch Plank designs. Factory-finished for beauty and durability, and to save time and monsy on the job. E. L. Bruce Co., BOX 397, MEMMIS 1, TENN.

CODDYLAR WINGFOOT VINVL FLOORING ----"the world's most beautiful flooring'---is available in a rainbow range of colors, styled exclusively for Goodyear by Raymond Leavy Associates, to harmonize perfectly with any decor. Wingfoot Vinyl is easy to clean, is absolutely colorfast, doesn't need waxing, and defies marking, scuffing, sun and time.

SPONGEX... The Sponge Rubber Rug Cushion ... The finest cushion underfoot.... The cleanest cushion under rugs.

Kirsch autstanding leadership in the drapery hardware field . . . continuous for three generations . . . is a force which is today even more vital and dynamic than ever. Ars. America knows the Kirsch name and she trust the products bearing it. That's why millions choose **KIRSCH DRAPERY MARDWARE** and **Venetian** blinds.

The importance of color in the home emphasizes pre-fob venetion blinds. **EASTERN PRE-FAB** VENTIAN BLINDS offer all the features the consumer wonts <u>enclosed</u> all-metal hand. fasible metal slots, and conspises bottom rail with ange-on tops clamps. It colors in DuPont Plastics. Custom-made by Eastern Machine Products Company's Pre-Fab custom-manufacturers.

VENI-PLEX CUSTOM BLINDS - New, oil plastic, Flexible slats in living colors for better living. VENI-PLEX Custom Blinds - so completely exclusive - you can see they're Custom Built.

The only garage doors backed by continuous national advertising in leading consumer and architectural magazines. Single and double widths, many sizes, with CRAWFORD MARVEL.LIFT Mechanism which activates BOTH sides of door evenly and gives finger-tip aperation — a child can operate double width door. Radio control available.

The CRANE ALL-AMERICAN SINK is designed for homeowners withing a sink for counter-top installation. This sink has two large bosins with basket strainers and stoppers. Convenience features are the scop depressions, which drain into grapped lever handles; and e retractable hose servery.

ELJER'S top-quality cost-iron and vitreous chine bathroom fixtures are delightful in four postel colors that fit well into modern hame decorating plans. Outstanding in the line are such "extras" as the Legation Borth, the Martha Washington Lavatory; and the Sylentha closet with its integral chine overflow and valve seat.

Buyers look twice nawadays to see what water heating facilities are in your homes. BRYANT HEATER'S advertising in House Boautiful has them hopefully watching for the Bryant Automatic Gas Water Heater. Good bet for builder, this madern, insulated, underfined heater, built to last for years, bespeaks top quality, efficiency, economy.

1951 Models RUUD AUTOMATIC GAS WATER HEATERS incorporate increased performance from smaller sizes along with certain material-saving design change, both for the purpose of conserving critical materials. Ruud Mfg. Co., Pittsburgh 1, Penna.

USE THE CONVENIENT COUPON METHOD OF ORDERING

Check any or all the top-quality products below (preceded by a number), which

- are advertised in April House Beautiful, fill in your name and mailing address
- ... mail to: Merchandising Division, House Beautiful Magazine, 572 Madison
- Avenue, New York 22, N.Y.
- 1. ANCHOR CHAIN LINK FENCE
- 2. DUBOIS WOVEN WOOD FENCE
- 3. HABITANT RUSTIC WOOD FENCE
- 4. RUSTICRAFT WOODEN FENCES
- AND GATES
- 27. JOHNS-MANVILLE DECORATIVE PANELS & PLANK
- 28. MISSISSIPPI CORRUGATED GLASS
- 29. PC GLASS BLOCKS
- 30. PITTSBURGH PLATE GLASS
- 31. ROMANY TILES
- 32. VITROLITE GLASS PANELING
- 33. AMTICO RUBBER FLOORS
- 34. BRUCE HARDWOOD FLOORS
- 35. GOODYEAR WINGFOOT VINYL FLOOR COVERING
- **36. NAIRN INLAID LINOLEUM**
- **37. SPONGEX RUBBER RUG CUSHION**

- 38. IMPERIAL "GLENDURA" WALL COVERING
- **39. STRAHAN WALLPAPERS**
- 40. STOCKWELL "CARIBBEAN CRUISE" WALLPAPERS
- **41. UNITED WALLPAPERS**
- 42. LORENTZEN LEVOLOR VENETIAN BLINDS
- 43. PELLA VENETIAN BLINDS
- 44. PRE-FAB VENETIAN BLINDS
- 45. VENI-PLEX CUSTOM VENETIAN BLINDS
- **46. ZEPHYR PERMANENT AWNINGS**

- 47. BURROWES ALL-ALUMINUM HEALTH GUARD COMBINATION WINDOWS
- 48. CRAWFORD MARVEL-LIFT DOOR
- 49. FOX WINDOWS
- 50. NATIONAL GUARD ADJUSTABLE SCREEN DOOR GRILLES
- 51. RUSCO COMBINATION SCREEN & STORM SASH
- 52. CABOT CREOSOTE STAINS & STAIN WAX
- **53. CUPRINOL WOOD PRESERVATIVE**
- 54. MARTIN-SENOUR NU-HUE PAINTS * MINWAX WOOD FINISH
- 55. O'BRIEN LIQUID VELVET WASHABLE FLAT WALL FINISH
- 56. RAMUC ENAMEL FOR POOLS
- **57. SHERWIN-WILLIAMS PAINTS**
- **58. STANDARD KOVERFLOR**

NAME				AB-APR
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			AMERICAN	

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BEAUTIFUL DOES FOR YOU

which parade across the pages of House Beautiful month after month

BLACKSTONE'S AUTOMATIC HOME LAUH-DRY, consisting of three matching units -Auto-motic Washer, Dryer and Ironer, are being fea-tured in House Beautiful advertising. The three units installed side by side require end/72" of wall space. Previaion is made to vent the dryer to eliminate excassive mainstare and link.

Housewives everywhere are discovering the Gen-eral Electric way of banishing garbage for good They scrape food wastes into sink drain, turn en the cold water, and let the G-E DISPOSALL shred and flush the tiny food particles hormlessly away to sever or steptic tank. Two new models fit prac-tically any sink.

KITCHENAID AUTOMATIC HOME DISH-KITCHENAID AUTOMATIC HOME DISH-WASHER advertising in this issue features a fac-tual report from users on the features they con-sider superior. Revolving wash principle; circu-lated electric het air drying; esses of dish-handling with front-opening door and two individually sliding racks; sanitary, self cleaning principle; rate high in user preference for KitchenAid made by Mobart Manufacturing Company.

"How to enjoy better living right naw.... Wherever you are", a 16-page, illustrated booklet offered in the ad of the LP-GAS INFORMATION SERVICE. Talls haw LP-Gas brings new conven-ience and comfort to suburban, small tawn and farm living, Free Capies available from LP-Gas Information Service, 11 S. LaSalle, Chicago 3.

MAJESTIC INDOOR HOME INCINERATOR burns household gerbage and rubbish without fuss, muss or better. You just fill it - up to two bushes, Light it, Leova it. By patented downdraft action refuse serves as own fuel. Connects to sepa-rate or regular furnace flue. Low cost and easy to install.

Now you can offer your customers beautiful **RITCHEN MAID KITCHENS** with modern Fio-Line Styling. Aluminum Drawers, Resinite Doors, and a host of convenient features. Available in four delightful pastels and the popular Appliance White. Advertisements supported by a full assor-ment of soles promotion material and a complete newspaper mat service. The Kitchen Maid Corp., Andrews, Indiana.

Watch for O'Brien's full-page, full-color ad in the April issues of House Beaufiful, Better Homes & Gardens, and Living, introducing O'BRIEN'S COLORS of 1951, available in Liquid Velvet-America's Most Washable Flat Wall Finish end shown in the new O'Brien Color Manual an full-page 6' x 3' swatches, Complete dealer mer-chandising program. The O'Brien Corporation, South Bend, Ind.

"An invitation into 100 homes" is SHERWIN-WILLIAMS' New Paint & Color Style Guide. Professional painters and amateurs alike will be delighted with this newest adition of a famous book. Available new for treference or loon from any Shervin-Williams store or any paint store handling Shervin-Williams points.

Because the "Invisible Hand" makes painting quick and easy for your customers, STANDARD's complete line of quality paints makes selling easier for you! Since only the finest ingredients are used in STANDARD PRODUCTS, painting problems or stanDARD PRODUCTS, painting problems when the selved more efficiently, more beautifully when are the STANDARD or word! are solved more efficiently, more paints by STANDARD are used!

NATIONAL GUARD PRODUCTS, INC., Me phis, begins new schedule of consistent advertising in April House Beautiful to promote sales through growing list of dealers for Adjustable Screen Doos Grilles in popular price range. Skillfully hand-crafted at steel, with white enamel finish, the beautiful anamental grilles feature graceful figu-rines of cast aluminum.

The HUNTER PACKAGE FAN is a compact, pow-erful ventilating fan exaily installed in any othic to pull in fresh, coal breass and push eur stole, humid air, Installation is simple and inexpensive. Fan, mater and suction bax—one unit that re-quires only a coiling aporning in helivary and IV clearance in artic, HUNTER FAN AND VENTILAT-ING CO., 400 S. Front St., Memphia 2, Tenn.

HEATILATOR FIREPLACE is a valuable extre sales feature in any home. It circulates heat throughout the entire ream instead of wasting it up the chimney. Will not enable. Simplifies con-struction, adds little or orbiting to cast. No limit to montel design. Notionally advertised - people know the quame "Meatilator"!

MOR-SUN PRESSED STEEL FURNACE (for gas and all) unique in that it is MASS PRECISION PRODUCED) Every part is dis-pressed. Beoutiful an the autiside and rugged efficiency on the inside are not enough; the MOR-SUN gives more – dependability – through use of quality canted equipment. MOR-SUN finest, most beautiful fur-nace in the world!

This year, the Bureau will stress to home buyers the importance of ADEQUATE WIRING through advertising in House Bocutful and other national magazines. Supported by many tied-in local com-paigns, this national promotion will make many more millions of present and future home owners home withing. bandhs to be gained from proper home withing.

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FREE DISPLAY CARDS FOR YOUR BUSINESS

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

Avenue, New York 22, N.Y.

- **59. CRANE COUNTERTOP SINK MODEL** 5-124
- 60. ELIER BATHROOM FIXTURES
- **61. PERMAGLAS AUTOMATIC WATER** HEATERS
- 62. RUUD AUTOMATIC GAS WATER HEATERS
- **63. GENERAL ELECTRIC DISPOSALL**
- **64. IN-SINK-ERATOR ELECTRIC FOOD** WASTE DISPOSAL
- 65. KITCHENAID AUTOMATIC HOME DISHWASHER
- 66. MAJESTIC HOME INCINERATOR
- 67. CHELSEA FANS
- **68. HUNTER PACKAGE ATTIC FANS**
- **69. ILG ELECTRIC VENTILATORS**
- **70. B & G HYDRO-FLO HEATING**
- **71. BRYANT AUTOMATIC GAS HEATING**
- 72. BURNHAM BASE-RAY HEATING

MARCH, 1951

- **73. HEATILATOR FIREPLACE UNIT**
- **74. MODINE CONVECTORS**
- **75. MOR-SUN FURNACES**
- 76. WILLIAMS OIL-O-MATIC OIL BURNERS
- 77. WINKLER LP OIL BURNER
- **78. YOUNG LOW-LEVEL CONVECTORS**
- **79. BLACKSTONE AUTOMATIC HOME** LAUNDRY
- **80. HAMILTON AUTOMATIC DRYER**
- 81. LP GAS APPLIANCES
- * TUCKER TELESCOPE HANDLED HOUSE WASHER

- 83. KITCHEN MAID KITCHENS
- **84. GENEVA MODERN STEEL KITCHENS**
- **85. KIRSCH DRAPERY HARDWARE**
- 86. STERLING HARDWARE
- **87. INCLINATOR HOME ELEVATOR**
- 88 SHEPARD HOME FLEVATORS
- **89. SUPERCEDAR CLOSET LINING**
- **90. MARBLE FOR THE HOME**
- 91. RAIN-L-FLO GUTTER TUBE
- 92. NATIONAL ADEQUATE WIRING BUREAU
- **93. PORTLAND CONCRETE**

* No card available.

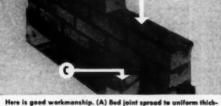
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ADDRESS			
CITY	ZONE	STATE	

Good workmanship and "non-critical" BRICK and TILE make <u>any</u> building <u>better</u>!

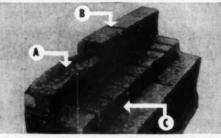
HOW TO CONSTRUCT A WATERPROOF MASONRY WALL

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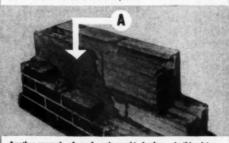
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reve is good workmonship. (A) load joint spread to uniform thickness. Mortar only slightly furrowed. (B) Head joints completely Riled by (C) buttering end of brick before shoving into place. Slushing partly filled head joints does not do the job.



This is an example of poor workmanship—likely to leak. (A) Deeply furrawed bed joints. (B) Only partly filled head joints. (C) No marter in vertical or collar joints.



Another example of good workmanship is shown in this picture. (A) Here the backs are being parged as well is built. Parging of the back of the facing an backup often produces water resistant walls even if head joints are only partly filled. Do the buildings you build say, "HERE IS GOOD WORKMANSHIP"?

If they do, you are protecting your reputation as a quality builder, and assuring your future in the community.

Your best partner in building this reputation is quality brick and tile. These reputable materials enhance good workmanship with beauty, permanence, low maintenance and lasting value.

Today, add one other very important reason for building with brick and tile. Clay is *not* a critical raw material. The supply is *unlimited*.

This is important to you and your customers! It will help you avoid work stoppages due to raw materials shortages.

Use "non-critical" brick and tile and good workmanship for all essential structures and defense housing. Together they will build any building better.

For information on any masonry problem, please feel free to contact the regional SCPI office nearest you. Your inquiry will be welcome.

14 regional offices to serve you

Structural Clay Products Institute New Haven 10, Cann. 341 State Street New Yerk 17, N. Y. 1949 Grand Central Terminal Canten, Ohio 306 Market Avenue, North Pittsburgh 22, Pa. 502 Benedum Tress Building Chicago 1, Illinois 228 North LoSalle Street Ames, Iowa 1201/2 Welch Avenue Cauncil Bluffs, Iowa 425 North of Street

Minneapolis 4, Minnesota 206 Wesley Temple Building Denver 4, Colorado 116 West Tenth Avenue Phoenix, Arizene 1538 West McDowell Road Sen Francisco 5, Califernis 55 New Montgomery Street Seattle 4, Washington Central Building

> Clay Products Association of the Southwest

Austin, Texes Littlefield Building Oklahoma City, Oklahoma First National Building

PRODUCTS INSTITUTE 1520 18th Street, N. W., Washington 6, D. C.

CEDAR SHINGLES SAFE AGAINST 136-MILE GALE

Tests Reveal Cedar Shingle Superiority

"These wind tunnel tests, made under controlled conditions simulating those actually experienced in normal construction and use, provide scientific support to the excellent record of wind resistance which has been established over many years by cedashingle roofs in this country." said W. W. Woodbridge, Secretary-Manager of the Red Cedar Shingle Bureau. "Large areas of the United States, particularly the Middle West, the Atlantic seaboard and the Gulf Coast regions, periodically are visited by windstorms of considerable intensity. Cedar shingle roofs invariably weather these storms in excellent shape."

AFTER

THE

BIG

BLOW

Wind tunnel's hurricane velocity fails to dislodge shingles

A wind velocity of 136 miles per hour, greater than that experienced in any general windstorm, failed to disturb or effect in any way a roof panel of red cedar shingles in recent wind-tunnel tests at the University of Wichita in Wichita, Kansas, it has been revealed by the Red Cedar Shingle Bureau.

Purpose of the tests, acording to the Bureau Secretary-Manager, W. W. Woodbridge, was to determine the actual intensity of wind required to blow off cedar shingles from a typically-constructed roof.



Construction experts, guest observers at the University of Wichita wind tunnel experiment, examine the section of cedar shingle roofing following the test. Two 1,150 horsepower Allisen aircraft engines drove the propellors which whipped up a furious windstorm. Testing equipment revealed that a wind speed of 136 miles per hour existed at the top of the panel.

MARCH, 1951

"But instead of revealing the amount of hurricane force which is required to cause failure in a cedar shingle roof, the panels successfully resisted the maximum wind velocity which the University of Wichita's wind tunnel could generate—namely. 136 miles per hour. So we still don't know the collapse point, but we do know that it is greater than 136 miles per hour."

The University of Wichita's wind tunnel, normally used for aeronautical research, is a return-flow atmospheric type tunnel with a test section seven feet high and ten feet wide. In this test sec-tion, a cedar shingle roofing panel, slightly larger than five feet by eight feet in size, was installed at a 30-degree angle to simulate normal pitched roof construction. The shingles were No. 1 Certigrade 16-inch XXXXX. laid at standard five-inch weather exposure. with two 3d nails driven into each shingle about six inches above the butt and about one inch from the edges of the shingles. The shingles were applied to 1"x4" sheathing boards, spaced apart on five-inch centers, and nailed over 2"x 4" rafters spaced on 16-inch centers. At the top edge of the panel, shingles were laid crossways at five-inch exposure, to represent normal ridge or comb application.

When it was observed by University engineers who conducted the tests that no deformation of any shingles occurred at lower tunnel speeds, the velocity wa: progressively stepped up to the maximum that could be obtained. Throughout the test there was not the slightest visible deformation of any shingle on the panel.

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There's a famous BEE GEE Window to meet every need, satisfy every fancy, fit every budget—of every customer for every type of home. Beauty, design, style, practicability, price— BEE GEE Modern Wood Windows have them all—in over 42 different styles and sizes.

Famous BEE GEE features: Clean the OUTSIDE from the INSIDE—the BEE GEE Modern Wood

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Window is a complete unit consisting of frame, pre-fit glazed sash with glass bedded in putty— Copper screen and all hardware installed at the factory. A complete unit ready to set in the wall.

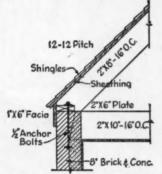
New, extra-added feature:-New automatic modern storm windows.

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Letters to the Editor

Boot Framing Problem

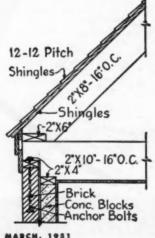
Sirs: In laying out a design for a small house . . . it was found neces-sary to raise the roof 12 inches without adding to the ceiling height of the floor below. The solution indicated in the attached sketch has been proposed. . . . The break in the joist plate was resorted to in order



to bring the exposed eaves trim down to reasonable width and still get full bearing for the joists. Placing the rafter plate on top of joists and spiking it to rafters appears to be sufficient to absorb the thrust of the rafters as set in this case, especially as interior wall studding and plates will take much of the roof weight and reduce thrust. Please let me have your opinion of the solution.

> John Montgomery Mahon Harrisburg, Pa.

Your method, Mr. Mahon, appears to be feasible. However, it seems a bit unorthodox, and we believe



our solution shown here may be more simple. The wall can continue right up to the underside of the 2x6 plate, and the 2x10 joist ends can be housed in the wall as shown. The plate is then secured to the wall by anchor bolts placed approximately four feet apart. A 1x4 fascia is sufficient to cover the area between the top of the brick wall and the underside of the roof sheathing. One difficulty might be encountered with our idea. Brick masons would continue their masonry wall up to the underside of the floor joists. After floor joists, roof rafters and wall plate are in position, it will be necessary to call the mason back and fill in the portion of wall up to the underside of the 2x6 wall plate .- The Editors

A Better Solution

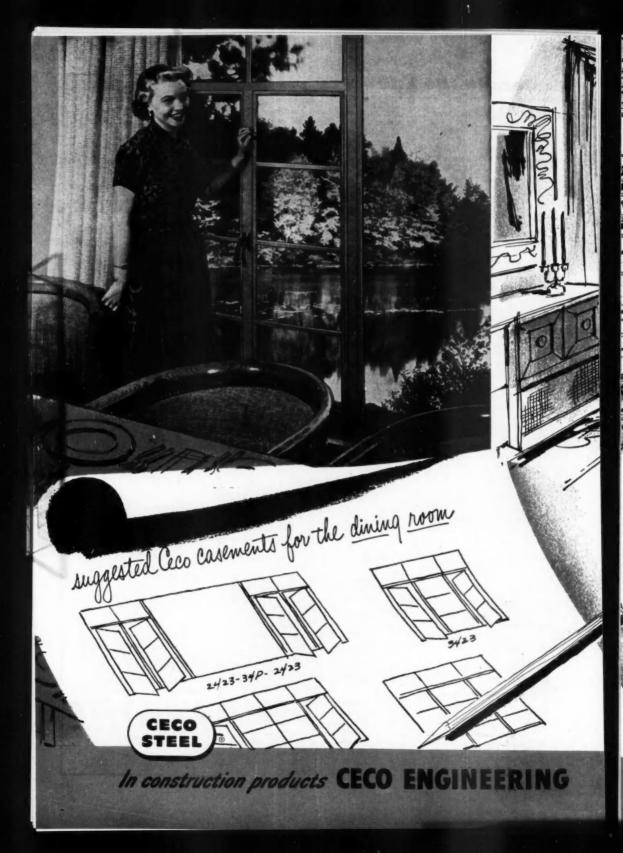
Sirs: Regarding Elmer Ogborn's inquiry on page 39 of your December, 1950 issue. The remedy suggested may work if Mr. Ogborn is able to apply the aluminum foil effectively. This is quite doubtful on account of lack of space; or, accessibility, if there is sufficient space. However, if done this way, it still leaves an opportunity for the vapor in the air to reach the cold air in the attic and condense on the underside of the foil and soak the insulation. A vapor foil should always be on the warm side of the space to be protected. A simpler plan to try, and much less costly, would be to put 2, 3, or 4 metal ventilators on the roof to permit the moisture-laden air to escape. The size, number, and locations of the vents will depend upon the size and shape of the roof. One or two vents should be near the low points in the roof to permit fresh air to get in. These might be in the soffit of the cornice if there is space. The outlet vents should be near the high points of the roof. Perhaps one-inch of area per each foot of roof surface might be enough, although 11/2 inch would be more effective, as a kitchen makes a lot of vapor.

H. A. Daniel, Newburgh, N. Y.

Mr. Ogborn's problem concerned condensation in a low-pitched roof, a kitchen with a shed roof not exceeding a 3:12 pitch. The ceiling is covered with fibre board insulating blocks and has rock wool batts above. Moisture, in (Continued on page 186)

STAY TIGHT WITH KAY-TITE WHITE For Water Seepage In Porous MASONR IN POROUS MASONRY CINDER BLOCK WALLS CEMENT BLOCK WALLS STUCCO SURFACES PUMP AND BOILER PITS FIELD AND QUARRY STONE CONCRETE MASONRY RETAINING WALLS 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

Box 550 West Orange, New Jersey



Daylight and View for the Dining Room too

Ask any headwaiter of a plush dining place what request he hears again and again and he'll tell you:

"Table next to the window please."

makes the big difference

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

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

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

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

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

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

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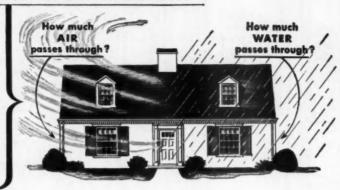
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ANOTHER ADVANTAGE OF BUILDING WITH HOMASOTE ...

TRUE INSULATING VALUE



Four factors determine the insulating value actually delivered

FOR MANY YEARS, the insulating value of a material has been based on the BTU rating. Such a test, made in a laboratory under perfect conditions of temperature and humidity, can hardly tell the whole story of what actually happens in the finished house.

When you select insulating material, you also need to know how much water the material will absorb—and how long it will take the water to penetrate through the board. As a fourth factor you also should know whether air will pass through the material in any appreciable quantity.

To determine the meaning of *true insulating value*, we invite you to study the chart at the right. Homasote's leadership is clearly indicated.

To give your client *real comfort*, important fuel savings, lasting freedom from drafts and mildew—and maximum structural strength without corner bracing—always specify weatherproof Homasote.

HOMASOTE COMPANY, Trenton 3, N. J.





. . in Big Sheets up to 8' x 14'

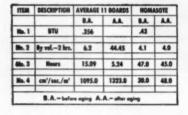
... oldest and strongest insulating-building board on the market



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.



AMERICAN BUILDER



THIS CHART shows how Homasote compares with the average of 11 other boards on: (1) BTU rating—the lower the better; (2) water absorption—the less the better; (3) time of water penetration through the board—the longer the better; (4) rate of air flow through the board—the lower the better. All figures are from tests made by an undisputed, *independent* bureau of standards . . . These figures show why Homasote envelops a home in a material that gives the owner the nearestto-perfect combination for true insulation. On and Off the Record

SCARCE MATERIALS—On Jan. 10, National Production Authority issued a list of materials declared to be scarce or in danger of becoming scarce if they were hoarded.

THE LIST—It was in connection with an order—Notice 1, Title 32A to prevent hoarding. It declared that no person shall accumulate in excess of reasonable demands of business, personal or home consumption, or for the purpose of resale at prices in excess of prevailing market prices, any of the materials on the list.

INCLUDED—On the list were softwood lumber, softwood plywood, gypsum building products, insulation or insulation board in which pulp or paper is a component, cast iron pipe and cement.

CEMENT—At the time the order was issued cement producers had just stated that they were producing as much cement as conceivably there could be a demand for.

LUMBER—Also, at the time, there was a surplus of softwood construction lumber, particularly Southern pine.

ALARM—There seemed to be no reason except the alarm that might have been created by the order to assume that there would be a scarcity of either lumber or cement.

BASIS—At one hearing of industry advisors called in to consult with government officials, one of the advisors questioned the statement that there were either shortages or impending shortages. The answer was that government statisticians had arrived at the conclusion. No further explanation was given.

CONCLUSION—Either the government statisticians are arriving at conclusions that do not square with the facts, or government heads are not confiding their need to their so-called industry advisors.

COOPERATION—It is possible only with complete confidence on both sides. If it is desirable that business and government cooperate, both should be in accord on fundamentals such as shortages and threatened shortages. If

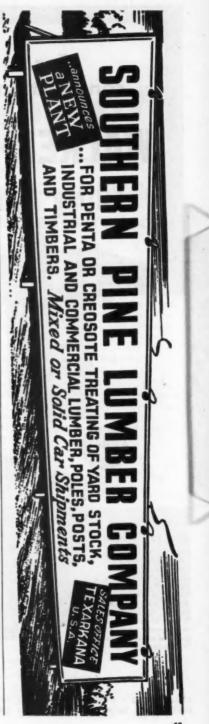
MARCH, 1951

the statisticians were wrong, as many of the advisors thought and tried to point out, time should be provided to prove it. If the statisticians are right, based on some information they have, the information should be disclosed.

METHODS WRONG-Lack of full explanation on the one hand, or unwarranted and unexplained assumption by statisticians on the other, create nothing but doubts in the minds of business men. It has been stated that sometimes reasons of security are given for not divulging full information. That is not a valid explanation. since it can be assumed that a well organized communist spy system is getting all the information. Business men on these advisory boards should have been carefully screened before being invited to serve. Such men undoubtedly have the welfare of the nation just as much at heart as anyone else. If they are to be of any help to government they must be taken into complete confidence. Until they are told the whole story the stated need for regulations will continue to be viewed with doubt if not suspicion.

EFFICIENCY-The Clarksville (Ind.) Tribune recently reported the following: "A government employee in a government car had driven from Chicago to Clarksville to find out how many new houses had been built there in the past two years. The trip took two days and 600 miles of travel-to obtain information which a 3-cent letter could have obtained from the town clerk. Nor was this the end of it. A week later two women employees of government, driving in another government car, arrived in Clarksville seeking the same information. When advised the data already had been obtained by a Federal man, they said. 'Oh, yes, we know about him. But he was from the Census Bureau and we are with the Department of Labor.'"

COMMENT—The Tribune states tersely that there are too many people on the public payroll busy doing nothing. The observation is not an original one, but it is true, and the Tribune's evidence is interesting. It would be funny if it were not so serious. Possibly a bureau of co-ordinators might pay its way, unless it was found that the co-ordinating bureau had to be co-ordinated by still another.



For every construction job .

WALKER-TURNER **Tilting Arbor Saws**

9" MODEL

Capadity 31/4". Table 23* deep x 19" wide. Speed 4000 r.p.m. Saw guard with splitter and 2 anti-kick back pawls. Cast alumi rip fance is easy to adjust and assures accurate work without necessity of a test cut. Graduated support bat, adjustable pointer and micro-adjustment simplify setting up.

10" MODEL

Capacity 31%". Table 26%" wide a 321%" deep with front expansion. Speed 3800 r.p.m. Saw arbor takes up to 1" wide Dado. Triple "V" Belt. Safety guard can be removed quickly by hand screw. Rip fence locks front and rear. Spring loade support bracket keeps fence aligned h blade while setting up.

Whatever the size of your operation, you can have the cost-cutting advantages of Walker-Turner machine design. For there is a Walker-Turner Tilting Arbor Saw for every need and budget.

The machines shown here differ in specifications, but they're alike in that each is designed for profitable operating. Fast, accurate, versatile, and simple to operate, Walker-Turner Tilting Arbor Saws keep your costs low and quality high.

For full information about these and other cost-cutting machines in this complete line, see your local Walker-Turner dealer, or mail coupon for catalog.

NEW 12" MODEL

Partition of the sector

Capacity 4½". Table 48" wide x 38%" deep. 5 h.p. 3 phase motor of 3 h.p. single phase. Dado copacity 11%" wide. Saw speed 3600 r.p.m. New rip fence locks front and rear, micro-adjustme "T" slots for miter gouge. New improved safety guard and splitter. Multiple "V" Belt Drive.

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building industry today!

This four-inch cube is your key to lower building costs. It saves cutting and trimming time...reduces waste ... helps you give the owner more value for his building dollar. It stands for *modular design*—the simple system of coordinating all plans and building materials on a four-inch "module," or unit of measurement. Modular design wood windows, frames and other building materials fit together easily and quickly, without wasteful cutting and trimming at the building site.

when you install windows, for example ...

The standard opening sizes take *any* design of modular-size wood window, whether plans call for two-light, four-light, eight-light, twelve-light, top divided or some other type. And the sizes are the same anywhere in the country. One national standard now replaces the ten or more local or regional standards. As a result, you save hours of cutting and fitting time on every job.

see your lumber dealer...

He can give you additional information on modular design. Or, mail the coupon for our free folder.

FIVE POPULAR DESIGNS OF MODULAR SIZE WOOD WINDOWS

These five favorite window designs are all manufactured to fit any modular size window opening. Your lumber dealer can supply them all without delay. Ask him today about these cost-cutting window values.





MARCH, 1951



TECHNICAL GUIDE for Builders and Craftsmen



EXAMPLE of double glazing with only two sizes of glass used



WINDOW WALL FRAMING; header and uprights in position

Suggested Details For Insulated Window Wall Construction

A long sought for ideal—standardization of double-glazed window panes and frames—has appeared on the building horizon in the form of a simplified compact unit easy to install. In their search for an economical unit which could assure the complete installation of insulated glass in the medium priced home, the Libbey-Öwens-Ford Glass Co. of Toledo, Ohio, conceived the idea of using dressed 2x6 inch framing material for this basic unit. Stops for glass are applied or rabbeted into frame.

The house shown at left above, built by Russell H. Benjamin at Tenafly, N.J. and designed by Herman H. York, architect, should be of special interest to builders. In this house only two glass sizes are used. They are $45^{1/2}$ $x 25^{1/2}$ " in the fixed openings and $42^{1/2}$ " $x 22^{1/2}$ " in the ventilated openings where hinged sash are provided. These two sizes have been added to the standard Thermopane list. This standardization is of particular value in window wall construction where a maximum of nine units—three high and three wide, are integrated into one large frame. Mills are now making available as stock units the large, as well as smaller groupings of six and three. This type construction offers flexibility to meet every fenestration requirement.

The ventilated units may be either wood or aluminum sash. The wood sash are arranged to hinge at top and swing out. The aluminum sash made to the stock size of $45\frac{1}{2}$ " x $25\frac{1}{2}$ " is now produced by the A.B.C. Steel Equipment Co., Inc., Tampa, Fla. This unit is rabbeted into (Continued on page 48)



STRUCTURAL MEMBERS and stops form finished window frame

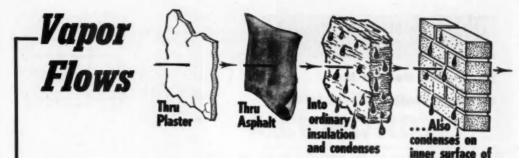




GLAZING compound applied



VOIDS filled when glass is set AMERICAN BUILDER



Vapor does not flow thru nor condense on outer or inner surfaces or reflective air spaces of multiple sheet accordion aluminum.

Water vapor is a gas. At 32° its density is 1/200,000th that of water so that it can sieve through asphalt, plaster, and most other building materials. Cold ordinary insulation and cold outer walls, below the dewpoint temperature of the vapor, cause it to condense.



cold outer walls

Tough aluminum is impervious to water vapor and yet has insufficient mass to extract heat from contacting air before reaching equilibrium in temperature with it. Colder air can support less vapor, and is an important cause of condensation.

In addition, multiple accordion aluminum repels 97% of heat rays, emits only 3%, and is also an excellent block to conduction and convection. This construction is commercially available as Infra Insulation Type 4 and Type 6, costing less than $7\frac{1}{2}$ ¢ and 9¢ sq. ft. respectively, material with labor, installed between wood joists in new construction.

"Simplified Physics of Vapor and Thermal Insulation," an authoritative and simply written brochure which has proved of value to architects, engineers, builders and contractors, teachers and officials, may be obtained free by filling out the coupon below.

THERMAL FACTORS, TYPE 4 INFRA Down-Heat C.064, R15.62 equals 5" DRY Rockwool Up-Heat C.109, R 9.17 equals 3" DRY Rockwool Wall-Heat C.105, R 9.52 equals 3 ¹/7" DRY Rockwool VAPOR PERMEABILITY equals ZERO

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MARCH, 1951



Suggested Details for Window Walls

(Continued from page 46)

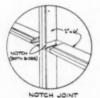
2x6 in. frame with aluminum screen clipped to inside of frame. Operation is controlled by means of a cam lock at sill. The principle of window wall construction can be applied to all openings in the house regardless of their location. The units to be used, ranging in groups from two to nine both horizontally and vertically, are of a size to meet all conditions.



HALVED JOINT



THE EXPLOSED DETAILS SHOW THREE SUGGESTED METHODS OF FRAMING A FIXED WINDOW



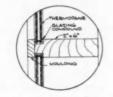


BUTT JOINT

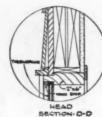
ALTERNATE METHODS used in framing members of window wall

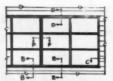


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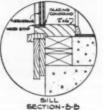


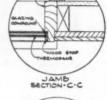
ALTERNATE POSITION of glass and stops in intermediate frames



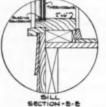


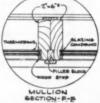
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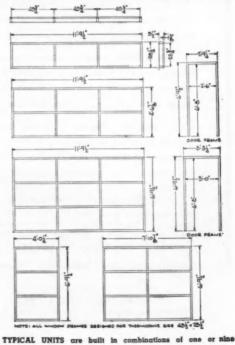


2.6





SECTIONS through window wall using 2x6 members for fram



Newest addition to the RICHMOND line

for today's industrial and school wash rooms

THE DUNBAR, a new streamlined pedestal urinal of acid and stain-resistant vitreous china...in the famous Richmond permanent "whiter-white"... syphon jet for trouble-free operation ... pedestal base permits thorough cleaning ... for quality installations.

Now yours to specify and install—a complete modern line of plumbing fixtures specifically designed for today's industrial and public rest rooms a line which, besides vitreous china lavatories and service sinks, includes...

THE URITO, stall urinal for single and battery installations...requires minimum floor space...has integral flushing rim...available with 3" or 6" seam covers...serves as a drain for flushing wash-room floor.

THE DELTON, wall-hung washout urinal... provides unobstructed floor area for thorough cleaning... economical installation.

THE DEWEY, flat-back wall-hung urinal ... economical unit for low-cost installation ... unobstructed floor area for easy cleaning.

THE DEWEY

THE DELTON

BOND RADIATOR CO.- APPRIATE OF REYMOLD'S DETAILS CO.

THE URITO

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Please send me a literature on the R ing fixtures. No ob

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ZONE STATE

SACTOR OF STREET

For Kitchens of Warmth and permanence



KITCHEN MAID Cabinets of Wood

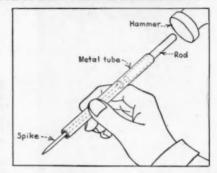
Nothing quite takes the place of hardwood for kitchen cabinets—the warmth and beauty, the permanence, the way wood lends itself to planning and installation. And today availability is not the least of wood's advantages. When you choose cabinets by Kitchen Maid, you are assured construction that has been tested and improved over 40 years, styling that's ahead of the field, customer approval that comes from a famous name. You also get from experienced dealers intelligent cooperation which can save much time and money. Decide now to select Kitchen Maid for your next project. Send coupon below for new catalog with specifications.



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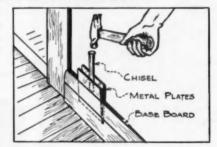


How to Drive Nails in Difficult Areas



To drive a nail in hard-to-reach places use a short piece of metal tubing wide enough to accommodate the head of nail to be driven. Then take an iron rod which fits loosely into tubing. Rod should be square at both ends. To use, place nail in tube and rod in the other end. By striking the rod with hammer the nail can be driven in place easily. —Submitted by Herbert E. Fey, New Braunfels, Texas.

How to Remove Baseboards



To remove baseboards without damage to the surface or board use two square sheets of heavy sheet metal and place at top of baseboard to be removed. A heavy chisel driven between the two sheets forces the board off the wall. Sheets measure six inches each way and are tapered and sharpened at one end.—Herbert E. Fey, New Braunfels, Texas.

Short Method for Figuring Quantities

A short cut for figuring the amount of cubic yards of concrete in walls or floors is to multiply the length by the width or height, and divide by the number below according to the thickness of wall or slab.

For a 3 inch wall divide by 108. For a 4 inch wall divide by 81. For a 6 inch wall divide by 54. For an 8 inch wall divide by 40.5. For a 10 inch wall divide by 32.4. For a 12 inch wall divide by 27.—Submitted by Frederick M. Sellers, Peoria, III.

regular and half surface

Butt Hinges by NATIONAL LOCK

ANOTHER EXAMPLE OF NATIONAL LOCK'S COMPLETE LINE OF QUALITY-BUILT

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Builders Hardware

A65-015 3-1/2" x 3-1/2" Ball Tip Butt Hinge

A wide selection of regular weight

Butt Hinges and regular weight,

Half Surface Butt Hinges . . . both Ball Tip

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and Button Tip (with Loose Pins)

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MARCH, 1951

Like many leading builders all over the country...



has changed to **CELOTE**

IT COSTS NO MORE to build more comfortable, more salable homes ... with Celotex Double-Waterproofed Insulating Sheathing! Stronger, more rigid than ever! Celotex 2%2" Big Board Sheathing meets strict F.H.A. Standards with NO CORNER BRACING. Insulates as it builds a stronger wall -does both jobs at one cost!

NO WONDER SO many leading builders, like W. P. Atkinson, are changing to Celotex Double-Waterproofed Insulating Sheathing! Why don't you? You'll find all the facts in the helpful Celotex booklet, "How You Can Build Better Homes at Lower Cost." Write now for a free copy! The Celotex Corporation, Dept. AB-31 120 S. LaSalle St., Chicago 3, Illinois,

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Only Celotex Insulating Sheathing gives you all these big advantages

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2. STRONGER, MORE RIGID than ever. Builds, insulates, protects-all at one time. Yet costs NO MORE than ordinary sheathing, applied !

3. DOUBLE-WATERPROOFED-inside by integral treatment that coats every single fibre; outside by asphalt coating. Yet has over twice the vapor permeability required by Government agencies!

4. RESISTS MOISTURE PENETRATION even under severe exposure during construction. This enables you to resume work more quickly after heaviest rain, cutting costly delays!

5. FASTER, EASIER, THRIFTIER to apply than ordinary sheathing. Negligible waste. No building paper needed.

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6. IT IS THE ONLY SHEATHING made of tougher, stronger, long Louisiana cane fibres-and protected by the exclusive (patented) Ferox® Process against fungus, dry rot, termites!

7. BACKED BY THE SALES POWER of the famous Celotex name. Over a quarter century of hardselling national advertising in The Saturday Evening Post and other popular magazines has helped create unsurpassed public preference for Celotex Products. That's one reason why homes built with Celotex are easier to sell!

AMERICAN BUILDER

U atkinson

Celetex Corporation South LaSalle Street cage 3. Illinois

GAST PLAZA OSSICE BUILDING RIDWERT CITT. ORLANDNA

July 25, 1950

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Atkins

These Beautiful Homes are typical of the 3500 built by W. P. Atkinson in his impressive Midwest City, Oklahoma, development. Like many other outstanding builders the nation over, Mr. Atkinson has changed to Celotex Double-Waterproofed Insulating Sheathing!

double waterproofed Insulating Sheathing

Celotex ²⁵/₃₂ Big Board Sheathing greatly exceeds rigid F. H. A. standards with **NO CORNER BRACING**

Official test results below prove it! Without corner bracing, 4-ft. wide, 2%2" thick Celotex Big Board Sheathing GRATLY SUR-PASSES strict F.H.A. Standards, which require bracing strength at least equal to horizontal wood sheathing with corner bracing. Yes, you can make this important *extra* saving, yet build a better, stronger wall... with this Celotex Double-Waterproofed Insulating Sheathing. Remember, it insulates as it builds—does BOTH jobs at ONE cost!

	F.H.A. Technical Circular No. 12 Criteria		Average of Test Results	
	Dry	Wet	Dry	Wet
Maximum Load, Ibs.	5200	4000	6720	7290
At Load of 1200 lbs. Average Total Deflection, in.	0.2	0.28	0.217	0.147
Residual Deflection,* in.	0.1	0.14	0.067	0.040
At Load of 2400 lbs.	0.6	0.8	0.533	0.483
Average Total Deflection, in. Residual Deflection,* in.	0.8	0.6	0.230	0.483

*Deflection remaining after removal of load.

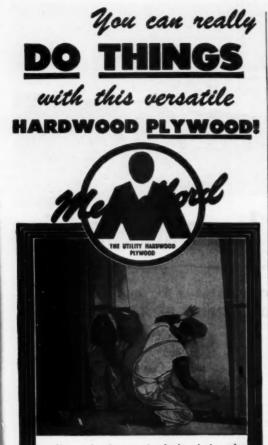
TYPES AND SIZES

²⁵/₂₀" Big Board: 4' wide x 8', 9', 10', 12' long; square edges.

1/2" Big Board: 4' wide x 8', 9', 10', 12' lang; square edges.

21/2" V-Type Center Matched: 2' wide x 8' long; V-type tangue and groove on long edges





Here at last is a genuine hardwood plywood, free from the disadvantages of soft woods, yet attractive in price. It is *ideal* for dry-wall construction, built-in cabinets, furniture, partitions, store fixtures, etc.

Mengelbord[®] is a low-priced utility hardwood plywood available in standard stock panel sizes ¹/₄" thick, 3-ply. It is moisture resistant—recommended for a wide variety of interior uses.

Mengelbord has a one-piece face with no joints or oval patches. It is made from beautiful unselected White Gum (Tupelo) with the face grain running the long way of the panel for greater strength and better decorative effects.

It is smoothly sanded, free from grain-raising, warpresistant, cuts and works cleanly.

Mengelbord is light in color and suitable for a variety of finishes: paint, stain, natural, or as a base for wallpaper.

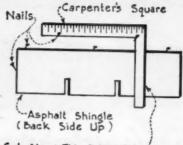
Write today for samples and descriptive literature. No obligation, of course.

Where fine wood panels of Mahogany, Oak, Birch or Walnut are desired—ask for Mengelux. Literature on request.

Plywood Division, The Mengel Co., Louisville, Ky. *Reg. U. S. Par. Off.



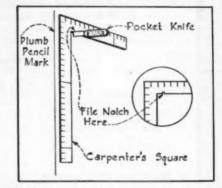
A Method of Cutting Asphalt Shingles



Cut Along This Edge With

A few nails driven into a flat working surface such as a work bench or subfloor, make a convenient jig for cutting ashalt shingles to be placed along the rake of the roof. Decide on the proper spacing and cut from the underside of shingle with a linoleum knife, using framing square as guide for the knife. Shingles will all be uniform in size.—Submitted by John Mack, Elmira, N.Y.

Using Square for Emergency Lovel



By filing a small notch in square as shown in drawing this tool can be converted into an emergency level. Make a plumb pencil line on the wall using a level for this purpose. Take a pocket knife and force blade into wall about two inches away from pencil mark with cutting blade upward. Shift the square until it balances on blade with the long side of square parallel with pencil mark. Mark spot where notch is to be made and use a small triangular file for cutting notch. To use, a small brad is driven into wall and the square is balanced on the nail.—Submitted by Herbert E. Fey, New Braunfels, Texas.

Let your suggestion pay you five dollars (\$5.00) in cash. This sum is paid by the American Builder for each short cut ar job pointer that is accepted for publication. Send all material to Architectural Editor, American Builder, 79 W. Monroe St., Chicago J, III.



MEANS **GREATER PRESTIGE** FOR BUILDERS

Quick recognition of quality is one thing most builders strive to achieve in presenting their houses to prospects.

This is not easily accomplished. Most of the quality brands of the materials you use are hidden beneath plaster or paint.

One sure-fire way to build prestige is to install Westinghouse Appliances. They, too, are qualitybuilt. The public knows it and wants them. The coveted Merit Award of the A.S.I.E. for Household Laundry Equipment is just another evidence of Westinghouse quality.

Send for our new catalog. It shows, describes and gives space requirements for more than 30 Appliance models and sizes which will win favor with your prospects. Fill in and mail coupon, today.

SEND FOR FREE CATALOG



19 AS 31

MERIT AWARD

Westinghouse

Electric CORPORTION Electric Appliance Divis

GRANTED BY THE NATIONAL

BOARD OF GOVERNORS FOR

LEADERSHIP IN RESEARCH.

ENGINEERING, DESIGN AND

MANUFACTURE IN THE HOME LAUNDRY FIELD

"It pays me to install electric water heaters,"

Mr. Brugger builds slightly unconventional, low-priced homes like this. Electric Water Heaters are standard equipment.

says Mr. John T. Brugger, Jr., builder, of Wayne, Pa.



"The ideal piece of equipment is one that's best for both the builder and the home buyer," says Mr. Brugger. "*Electric* Water Heaters come under that heading."

It stands to reason that the cleanest, most automatic, most trouble-free kind of water heater is the kind that home buyers want. An Electric Water Heater is built for long life. The storage tank is fully insulated. This means economical operation. All-electric, dependable temperature control assures safety.

It pays builders to install Electric Water Heaters because this type is economical for builder and customer alike. 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.

ALICRAFT • BAUER • BRADFORD • CRANE-LINE SELECTRIC • CROELY • DEEPFREZE • FAIRBANKS-MORSE • FOWLER • FRIGIDAIRE • GENERAL ELICTRIC HOTFORT • HOTSTREAM • JOHN WOOD • KELVINATOR • LÄWSON • MERTLAND • MONARCH • NORGE • FEMCO • REK • BHEM • SEPCO-A. O. SMITH • THERMOGRAY • TOASTMASTER • UNIVERSAL • WESLX • WESTMOHOUSE

EDITORS' Round Table

REGULATION X evidently will have a very marked effect on building in the Los Angeles area.

A SURVEY recently made by the Security-First National Bank of Los Angeles, was derived from a study of the financial status of 400 families, who recently purchased homes in development projects. The homes they purchased ranged in price from \$6925 to \$12,400, averaging \$9023.

DOWN PAYMENTS under Regulation X for veterans would be \$1007, and \$1909 for non-veterans. It was found that only 91 families or 23 per cent had enough liquid savings to have made the down payment required of veterans. Only 50 families, or 13 per cent of the non-veterans could have made the payments.

THE BANK concludes that Regulation X will have a greater effect in Los Angeles and environs than in other sections for three reasons.

THE FIRST is that the postwar building boom seems to be further advanced there than nationally, and that saturation of the market is closer.

THE SECOND REASON is that large tracts for veterans, selling for less than \$100 down have accounted for the bulk of home building sales in the later months of 1950.

THIRD, is that purchasers seem to be weaker in the area than in other sections. That is, less liquid cash.

THIS PERIOD of re-armament or approach to war is different in many respects than in 1941. The difference should have a great effect on the availability of materials.

OF FIRST importance is the fact that now, unlike the condition in 1941, there are adequate physical facilities for housing men in training for service. Much of the extensive training camp plant constructed for the war is still in good condition.

THE BUILDINGS, in many cases, were roofed temporarily, and require new permanent roofs. Through lack of occupancy since 1945, repairs are necessary in most cases. But, the job of getting the training camp plant in condition is largely one of repair and maintenance, rather than new construction.

THAT MEANS that there should (Continued on page 61)

MARCH, 1951



Amazing <u>Re</u>-Discovery WOOD WINDOW UNITS

All over the country, architects, builders and home owners are discovering that *wood* window units are the most modern windows available today.

They are finding, for instance, that precision-made stock-design wood windows come as completely assembled units, equipped with up-to-date sash balances and efficient weatherstripping—ready to install.

They are finding that wood sash and frames reduce condensation problems-are immune to rust and corrosion.

They are re-discovering the fact that wood windows can be finished in popular "natural" tones, or easily painted and re-painted in the colors of the owner's choice.

Remember, modern wood window units give lifetime service because they are scientifically treated to resist stain, decay, insect attack or humidity. Wood Window Information Service, 38 South Dearborn Street, Chicago 3, III.

> See your local lumber dealer for wood window units

Where are the nails? Where are the joints?

In this unretouched photograph of Smoothgrain Asbento Siding Shingles, there are 18 exposed nail heads and 8 vertical joints. Can you find them? They're prastically invisible!—thanks to a new process developed by Johns-Manville for "graining" and color-blending Smoothgrain Asbestos Siding.

Beautiful Smoothgrain Asbestos Siding Shingles

The "grain" is so striking in appearance ... and the color-blended texture so harmonious throughout the entire job . . . that the nail heads and vertical joints between shingles seem to disappear.

Easier to cut ... cleaner edges ... less waste!

Faster, better installation is a plus advantage you get with Johns-Manville Smoothgrain Asbestos Siding.

That's because the surface of this newly-improved siding is *smootb*, not grooved. With the cutter always working against a smooth surface, the cut edges are clean and sharp. There's no chipping to cause spoilage or mar appearance. Also, the siding is *stronger* because it has the same cross section throughout.

It resists soiling better, too, because it has no grooves, no raised texture to catch the dirt. The "grain" is not produced by any grooving of the shingle; it is *built-in* by means of ceramic granules, deeply embedded into a sparkling white background. The striking appearance is always the same from any angle you look!

Smoothgrain Asbestos Siding comes in an outstanding variety of beautiful Permatone colors, including Heather Green, Autumn Brown, the warmly rich and practical Weathered Gray, and the ever-popular Silver Gray which goes well with any color scheme. For full-color brochure, write Johns-Manville, Box 290, N. Y. 16, N. Y.



GOOD HOUSEKEEPING SELECT. The Complete Chimney

Meets The High Standards of Quality • Safety • Economy Demanded by Builders Everywhere

SMALL

HOUSE

of the Month

Architect Fred W. Harsen, of Tenafly, New Jersey, Lovel Construction Company, and Good Housekeeping magazine selected the Van-Packer chimney for this modern house because it is low cost, efficient and safe. In addition to these reasons, more and more builders and contractors are selecting Van-Packer because it saves them precious man-hours on the job. In just three man-hours, most installations can be completed-and there's no waiting for a



sub-contractor to come in-no scaffolding to erectno pier to construct-no mess to clean up afterward. Everything needed to complete the chimney is included in the tightly sealed packages. There's nothing else to buy. Use Van-Packer in your next house and we are sure you will always use it.

VAN-PACKER

HOW DO I ORDER - For exact quotation, supply only two measurements from top of rain cap: (1) to the roof on the longside and (2) to the floor or ceiling where base is suspended.

WHERE DO I BUY IT-See your lumber dealer, heating contractor or write direct to address below. You can count on prompt delivery.

Van-Packer Co 136 S. Clark St Chicago 3, Illin	
Yes, I want What is the na	t complete details and free literature. me of my nearest dealer.
NAME	
FIRM	
ADDRESS	
CITY	STATE

If its Proof you want-BERNICO SEWER PIPE IS

astra

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

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

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

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

Get the complete story on how Bermico can do the job for you more efficiently and economically. Write to: Dept. AB-3 Brown Company, 500 Fifth Avenue, N. Y.

BERMICO SEWER PIPE





Branch Sales Offices: Portland, Mc., Boston, Chicago, St. Louis, San Francisco, Montreal SOLKA & CELLATE PULPS · SOLKA-PLOC · NINROC PAPERS · NINROC TOWELS · NINRO CONTOWELS · DEEMICO SWEER PIPE, CONDUIT & CORES · ONCO INSOLES · CHEMICATS

EDITORS' Round Table

(Continued from page 57)

not be the enormous demand for building materials for military use that there was throughout the war.

LUMBER, during the war, was the most critical of all building materials, and more than anything else constituted the reason for L-41. With lumber surpluses on hand at the beginning of the year, and the military demand much less than it was during the war there seems to be no reason for a limitation like L-41, at least in the foreseeable future.

ANOTHER DIFFERENCE this time, and a very important one, is that most of the industry and government heads have had the experience of piloting the economy through a war. In 1941 practically no one with top executive experience in World War I was active in business or public life. This should result in eliminating many of the mistakes that were made a decade ago.

TIED CLOSELY with this is the fact that these industry and government heads have learned how to work together. If government officers will do their part there is every reason to believe that if it becomes necessary to move into a full wartime economy, it can be done with much less dislocation than in 1941.

HEADS OF both production and distribution segments of industry learned many useful things about shostituting and improvising between 1941 and 1946. These same heads, generally, are still running the nation's manufacturing plants, and should be able to pick up where they left off with even greater ability to produce new items under regulations, In 1941 no one was skilled in stretching scant supplies or in finding new things to use in place of accepted standard items. Some steps in this direction already are being taken.

BECAUSE OF a number of regulations, no one of which has a direct effect, producers of plumbing fixtures are finding that one regulation affects another, and the two together affect a third in such a way as to prohibit the manufacture of full lines of style and color.

GOOD ADVICE at this time seems to be for builders to specify standard, medium price, white fixtures, although colored and high-price items are still

(Continued on page 65)





PARKAY Sets the Pattern for Fine Hardwood Floors in Swank Apartments and Modest Homes

The luxury of Parkay readyfinished hardwood floors is not reserved for buildings of any specific type or price class. True, there are no finer hardwood floors than Parkay. Made of choice American Oak, then carefully factory finished, this flooring offers



a lifetime of wear while keeping its lustre and beauty.

But Parkay is economical as well as durable and smart. While offering the wearing surface of standard flooring, its thickness permits use with other resilient materials without changing floor levels. Laid with special adhesive on any sound, smooth subsurface, Parkay installation is fast—and, being ready-finished, it eliminates costly on-the-job finishing.

Yes, Parkay is beautiful, durable, practical—and its cost, laid and ready for traffic, is little, if any, more than conventional strip flooring finished on the job. Parkay is available in two styles— $9'' \times 9''$ Tiles and 9'' wide Broadboard in random lengths. Write for free sample and complete information. Parkay, Inc., Louisville 9, Ky.





FOR THE SALES YOU WANT... HERE'S THE INSULATION YOU NEED!



You don't need "hard selling" to move Barrett* Rock Wool Insulation. The merits of these products speak for themselves.

Your customers will quickly see the advantages of the 8-foot batts that provide seamless, vapor-proof, ceiling-to-floor protection. They will like the extra strength of the triple-thick nailing flange for secure fastening. Home owners will welcome, too, the lower fuel consumption you can confidently promise them. The high resilience and non-settling qualities of BARRETT Rock Wool prevent cold, bare spots from developing behind walls. And BARRETT Rock Wool is priced right for the average home owner.

You can safely store *more* Barrett Rock Wool Insulation in *less* space. It's made from carefully selected slags which are tested to assure a clean, lighter, more resilient wool that returns to specified thickness even after long storage.

Write today for information. Your Barrett representative will 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 1, III. 1327 Erie Street, Birmingham 8, Alabama 36th St. & Gray's Ferry Ave., Philadelphia 46, Pa.

AMERICAN BUILDER

*Reg. U. S. Pat. Off.

"My customers get extra beauty, extra protection"

Sargent Integralock

• Homeowners like the added security that comes with the turn of a deadbolt. They also want key-in-knob action and styling for today. Give them both — maximum beauty and maximum protection — in a popularly priced

A better lock by -

SARGENT

model of the famous Sargent Integralock, the superior lock with a sealed case that is quickly installed in a small mortise.

Builders everywhere tell us they are installing; Integralocks because of these values.

> Ask your hardware dealer or write us for full information. Dept. 5C.

New York NEW HAVEN, CONN. Chicago

Builders Hardware and Fine Tools since 1864

MARCH, 1951



64

THE BENNETT LINE OF SALES PROVEN FIREPLACE SUPPLIES

The Bennett Fireplace line is complete - and profitable. And Bennett dealers enjoy a steady demand, thanks to our continuous national advertising. It pays to feature Bennett.

SIMPLIFIED and STANDARDIZED

This simplified Bennett fireplace is sized for standard brick, with no cutting or fitting. It lets you offer every customer "The Perfect Fireplace." Quicker and easier to build - it's priced within the reach of all. It's a big-volume, high-margin unit-a real profit-builder for you. Count on this Bennett - the recirculating unit with most sales appeal.



THROAT DAMPERS

A Better Damper at Low Cost. Steep 60° Front slope gives sure draft. Struc-tural Steel with sturdy slip-joint elimi-nates damage in shipping, handling and in use. With unconditionally guaranteed steel wive Cat. No. C-101 steel valve, Cat. No. C-101.



A quality damper at competitive prices. Superior casting facilities in our own foundry enable us to produce this steep slope 50° Damper, with interchangeable Rotary or Ratchet Control feature. With guaranteed steel valve (No. C-103) or cast iron valve (No. C-104).



levscreen

SAFETY FIREPLACE CURTAINS

The only Nationally Advertised curtain screen. Every fireplace owner is a prospect for Flexscreen. Its own best salesman, a display on your floor will increase your volume on this "quality" product. This year, the Flexscreen line includes a perfectly balanced line of Fireplace Accessories, too.

Write now to 351 Market St. for **Catalog and Full Information on the** COMPLETE POST-WAR BENNETT LINE

EDITORS' Round Table

(Continued from page 61)

available. The lavatories may be without towel bars and legs (pedestals instead), and may be off-white in color. These still have beauty, grace and high utility. They can be used without penalizing quality, and the chances are that they will be in sufficient supply to take care of building needs, at least throughout 1951.

IT SHOULD he kept in mind that, generally, productive capacity for building materials is about twice what it was in 1941. Part of the increase is due to improved production techniques, and part to expanded plant facility.

HOWEVER, this increased capacity can not be taken as a measure of ability to produce at twice the 1941 rate. In many industries, the doubled production has barely been able to meet demand, and machines have been run to the breaking point. Many now down for repairs that normally would require two or three days, require one to two months, because of difficulty in obtaining parts.

ASPHALT ROOFING, and in some cases, insulation board, may have trouble keeping production schedules up. The reason is early scarcity of felt, rags, pulp and granules in the roofing field, and pulp and paper in the insulation board field.

SHORT COURSES for prospective retail lumbermen are running into trouble. Uncertainty about the vulnerability of young employees to military service causes both employers and employees to hesitate about embarking on the courses. Several have been cancelled because of low registration. Both employers and young employees should be encouraged to proceed as far as possible in the normal way. There is no point in mentally getting into a uniform months before the actual fitting takes place. Nothing can be gained by side-tracking normal civilian pursuits until the time comes when it becomes necessary to do so. The post military period for every young man is going to be many times longer than the military service period. It is the former that should be planned for. If and when any employee or student is called for service, the military heads will do all of the planning. The real concern before as well as after military service is preparation for useful and constructive leadership in civilian life.

MARCH, 1951

Un job after job—contractors report this new American Super 8 cuts *twice as fast* as a standard 8" machine! This greatly reduces time and costs...and *increases* the contractor's profit!

NOW Sand Floors with

MORE SPEED ..

MORE PROFIT

Double your production with

14

FRICA

The Super 8 is powered by a specially designed 2 H.P. motor...drum driven by vari-speed transmission...drum speed range from 1600 to 2800 r.p.m. assures greatest efficiency under varying conditions...drum speeds easily selected by "dialing" Drum Pulley...great range of drum pressures selected by variable control—52 lb. to 103 lb.—to meet all conditions in floors. Operates efficiently even with low voltage! Has double volume dust pick-up...low center of gravity... *plus* many more all-new Super Features! Sead coupon for details.





Powerful 2 H.P. motor starts under a "no losd" condition due to automatic take-up of motor pulley.



American Sustaining Device provides variable control of drum pressure to meet all conditions in down





WITH THE FINEST RESIDENTIAL LOCK OF ITS KIND!

HOME DUTY TUBULAR LOCKS

THE NEW

THE YALE & TOWNE MANUFACTURING CO. Stamford, Conn.

HOTPOINT HOUSE FEATURES YALE HARDWARE

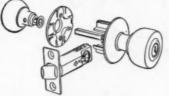
YALE hardware goes with the finest in residential living. Here in the Hotpoint House symbol of modern living at its best—you'll find YALE hardware used throughout. Every fixture is of matching design and beautifully styled in brass to illustrate how much you can add to the appearance and livability of a home.

You'll be hearing more about these great new YALE locks

Get acquainted—look over the newly developed advantages YALE engineers have built into this competitively priced, residential tubular

lock. You'll see speed of installation, strength of assembly, security, styling and YALE's traditional quality. For all the facts, write Dept. S43.

New YALE ideas for faster, easier installation



Pre-assembled into 5 Components

Only 5 parts to handle—and every one designed to slide into its proper place with unbeatable ease. YALE does most of the assembly work for you—reduces the final installation job to three simple steps!



Bridge Girder Construction

Automatically places roses and latch case in precise alignment and holds them there, rigidly, an exclusive feature of the H11. (Latch bolt can be reversed, simply by rotating.)





YALE "Twin-Bar" Cylinder for extra security

Here is YALE's latest development for improving tubular lock security—the "Twin-Bar", a disctype cylinder with double side bars. Any attempt to pick this lock causes the side bars to lock tighter than ever.





FOUR

Entrance doors H11 Passage doors H33

Bedroom doors H34

Bothroom doors H35

[HII) is self-aligning, brosstrim—t others plain trim, brass plated]

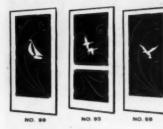
Luxury Styling at a competitive price

As in all YALE hardware, the quality in this residential lock goes far beyond its smartly styled surface. The lockset knobs and roses are brass. The girders are steel, zinc plated and dichromated; the latchcase is steel. Every part, in fact, is built for easier operation and longer wear.



THE YALE & TOWNE MANUFACTURING COMPANY Stamford, Conn. In Canada, St. Catharines, Ontario

MARCH, 1951



HOW TO DRESS UP ANY HOME

HAND WROUGHT QUALITY

A screen door grille achieves the appearance and feel of quality only through hand-working and welding of fine iron. Quality makes the difference in sales.

LOW COST

Your cost is kept low because of production line methods of manufacture and because we depend on volume sales at moderate prices. These prices range from \$3.00 to \$65.00.

STOCK SIZES

Grilles are available in stock sizes for single panel, two panel, and combination storm doors. All are finished in gleaming white enamel, in original and graceful designs.

NO. 21

Get Coffman Grilles, porch posts and stock railings from your Building Supply Dealers. They are easy to buy, easy to install. Write for illustrated folder and price list.

R. G. Coffman Co., Inc. P. O. Bex 1113 ORLANDO

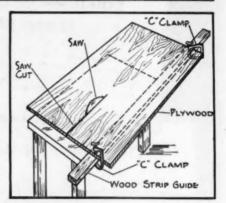
68



Cutting Boards on Table Saw

Large sheets of plywood or other similar material can be easily cut by removing fence and clamping a wood strip to the underside of board to act as a guide.

Two C-clamps are secured to each end of board to hold guide strip in position and not interfere with work. Guide strip runs along edge of saw table.— Herbert E. Fey, New Braunfels, Texas



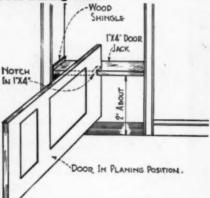
Jack for Holding Door During Work

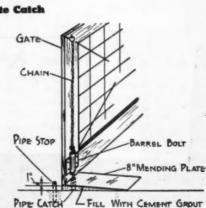
• A simple jack for holding door in position while edge planing can be quickly made out of scrap material for use on the job.

To use, the scrap piece of 1x4 should be the approximate width of door opening. Notch on one side to receive door. The 1x4 is then wedged between the side jambs about 2 feet above floor. Shingles are used as shims as required. The door is then placed in position in notch for planing.— Charles O. Yankovich, Meadville, Pa.

How to Make a Gate Catch

To secure gate for driveway imbed a metal pipe in ground surrounded in concrete. with pipe projecting one inch higher than bottom of gate. Pipe which receives the barrel bolt is also imbedded in concrete with top of pipe slightly below bottom of gate. To make operation easier an 8 inch mending plate is placed against the pipe and sloped to normal height of drive. Area under plate is filled with concrete.-Werner Kraatz. Santa Cruz, Calif.





AMERICAN BUILDER



NO. 6

I'M GLAD I BOUGHT A MAXAW

AND HERES WHY

It weighs only 10 lbs.

It cuts 21/16" on a square cut.

It cuts 2" dressed lumber at 45°.

• IT COST ME ONLY-It is compact – easy to handle.

Progressive builders everywhere . . . by the thousands to date . . . acclaim MAXAW as THE saw that revolutionized electric hand sawing. Only if you try a MAXAW will you fully appreciate ALL its great features.

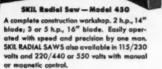
POWERFUL

ELECTRIC SAWS FOR MORE THAN 25 YEARS

THE NEXT TIME YOU ASK TO SEE A POWER SAW SAY "MAXAW"



With just ONE 1 "We are cutting lumber for 500 houses...



"The SKIL Radial Saw is a MUST on multiple home construction"

Say Dewey and Willis Larr, builders in Dallas, Texas. Here are their reasons... in their own words

"With one saw we are able to keep 17 men busy at all times"

Dewey and Willis Larr cut production time to the very minimum by using their SKIL Radial Saw to pre-cut joista, bridging, studs...to cut and notch rafter assembling into the roof trusses.

The SKIL Radial Saw makes any cuts, grooves, or shapes... becomes a complete and reliable construction workshop operated by just one man.



2"Keeping 17 men busy at all times with just 1 saw operator



3"We have cut more than a million board feet of lumber

4"We have had practically no maintenance cost in 2 years of use"

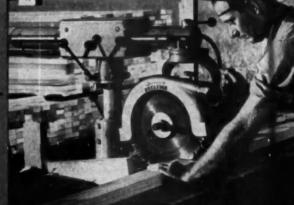


"This saw gives us greater accuracy in gang cutting" Lite hundrade of other builders, this Dallas company appre-ciates the precision with which the SKIL Radial Saw oper-ates in gang outing. Alignment to within 1/100 inch-gives constant accuracy for the life of the machine. That saves outting . . . means less weste, faster work.

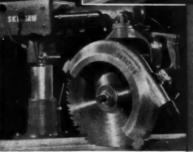
"The ease of handling and quick adjustments save time"

.

One man handles the entire operation. All contro adjusted without leaving the operating position. A ments for various cuts are made with front-positi handy leaves. Special stops automatically set may a producting angles, diministing guesswork. All SKIL Baw settings are quickly, conveniently and accurately







We have had practically as maintenance cost"

maintenance cost²⁷ is SKIL Radial Saw has been overy day for 3 years, yet on practicelly no maintona in usw is built to last longer,

SAVE TIME, SAVE WORK, SAVE MATERIAL, SAVE MANPOWER. USE A JOB-PROVED SKIL RADIAL SAW.

Ask your SKIL Distributor to demonstrate this better saw today or write for literature.



SKIL Tools are made only by SKILSAW, INC., 5033 Elston Avenue, Chicago 30, Illinois Factory branches in principal cities . In Canada: Skiltools, Ltd., 66 Portland Street, Toronto, Ontario





There's going to be BIG DEMAND for Bird Narrow Shake Insulating Siding in the new 11" size. It's the most attractive, most natural-looking siding that ever saw the light of day!

You add distinction to any house with this perfectly proportioned insulating siding. It "belongs" with traditional or modern architecture – meets the design requirements of old houses and new, equally well.

We predict you're going to break sales records with this siding because these features spell outstanding SALES APPEAL-

 Bird 11" Shake is perfectly proportioned to give any house a new, distinctive, modern appearance.

NEW 11" EXPOSURE, Handsome - Authentic. It's a faithful duplication of the handsome, handsplit wooden shingles used in colonial times - leading in popularity today!

- 2 Bird's Shake design is handsomely textured to resemble thick wooden shingles!
- 3 The double shiplap adds structural strength, shadowed beauty, and provides real protection against weather.
- 4 Stepped method of application and resultant air space gives added insulation. Homes are kept warmer in winter, cooler in summer.
- 5 Each individual panel of Bird 11" Shake Siding is treated with a protective envelope of asphalt for maximum strength and durability.
- 6 Choice of several attractive and suitable colors.

Ask your distributor, Bird salesman, or write us direct. Bird & Son, inc., Dept. AB-3, East Walpole, Massachusetts.

East Walpole Massachusetts



New York, New York Chicago, Illinois

precision-cuts for a \$10,000,000 HOUSING PROJECT!

MeCay Mat



Part of the 1,000 dwelling units built with American Houses at Fort Bragg, N. C.



One of today's outstanding projects is the 1,000-house job at Fort Bragg, North Carolina.

This military housing project is being built by T. A. Loving and Company of Goldsboro, N. C. and W. H. Weaver Construction Company of Greensboro, N. C.

The houses and apartments in this project were prefabricated by American Houses, Inc., who have over 60 DE WALT SAWS in operation in their three plants for precision cutting and mass assembly of a wide range of house models and designs.

This example of the use of DeWalt for precision cutting for multiple construction should interest all builders.

The building market is rapidly changing. You may want to devote your future efforts to other types of building: defense housing, military housing, low-cost rental housing, special wood structures, etc.

No matter what type of building you do-whether for a single structure or for a thousand-you have a valuable asset when one or more DeWalts are on the job. You build faster...better...more accurately... and at lower cost.

DeWalt models are available from 1/2 H.P. to 71/2 H.P.

Shown on this page is the newest DeWalt GR—the "builder's saw." This model has 5 new features, including low dead rise motor which permits deeper cut. See what all five features mean to you by seeing an actual demonstration! Your DeWalt dealer will show you. Send coupon below for full information.

MAIL THIS COUPON TODAY!

DeWalt, Inc., 13 Fountain Avenue, Lancaster, Pa.

Please send me literature and complete specifications on the new DeWait GR.



The Honeywell Man Gave Me the Sales Idea of the Year!

You'd never guess how it happened.

When Bob Mason, the Honeywell man, dropped in that day, I greeted him with, "Well, what are you selling now?"

"Not a thing," he said, grinning. "I'm just checking to make sure you're happy with the electronic temperature controls I sold you."

"Sure I'm happy," I said. "My customers *love* 'em. And why wouldn't they? Moduflow keeps their homes comfortable all day long—no matter how the weather changes. Why, we practically *never* have a complaint about heating any more."

"I expected *that*," Bob said. "After all, Electronic Moduflow can be 100 times as sensitive as standard controls. But what about your *prospects*? How do *they* go for it?"

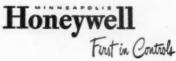
I scratched my head. "I don't know. We never mention it."

Bob looked shocked. "My gosh, you're missing the boat. You ought to make it a *big* pointnot only in your personal selling but in your advertising."

Well, the minute he said it, I knew he was right. So I didn't waste any more time! We've been featuring Moduflow ever since. And the response has been *wonderful*.

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

Electronic controls can help you sell houses, too. For more of the "why's" and "how's," call yout local Honeywell office. Or write Minneapolis-Honeywell Regulator Co., Dept. AB-3-47, Minneapolis 8, Minnesota.



for a Better Sheathing Job in Less Time... ARKANSAS SOFT PINE



RADE MAR

Center and End Matched Sheathing! Here's What You Get:

> No cut-back at studs; goes on in 1/3 less time. It encloses and braces the frame and, at the same time, *insulates*. That's because thoroughly seasoned wood, being a nonconductor of heat and cold, is a *natural insulation*. Example: On an outside wall, Arkansas Soft Pine sheathing of standard 25/32" thickness keeps out as much heat as 5" of common brick, 9" of face brick, 12" of stone or 13-1/2" of concrete.

Where To Get It

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

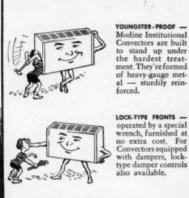
ARKANSAS SOFT PINE BUREAU . . . 351 Boyle Building

FREE



Uniform Floor-to-Floor Temperatures Economical, Trouble-Free Heating





MODINE Convectors provide fast, uniform heating, even in the coldest weather — permit you to take full advantage of the benefits offered by steam or hot water heating. They are ideal for school room installation because they cannot burn hands or clothing, even on direct contact. Their smart, unobtrusive styling makes them first choice with top architects and designers.

Modines are light and easy to install. Initial cost is surprisingly low — and extra years of trouble-free service are an important Modine plus.





Choose from three enclosure types. Type IF with upper grille and choice of lower opening or lower opening or lower grille..., for either recessed or free-standing installation. Type I W and IS designed for wall placement. Dampers for all enclosures optional at alight extra cost.



For full defails, call your Modine representative ... listed in the "Where-to-buy-if" section of your phone book. Or write direct, Modine Mfg. Ca., 1501 Dekoven Ave., Racine, Wis.

AMERICAN BUILDER

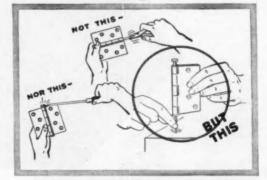
76

NEW HOLE FILLS BIG DEMAND!

Stanley Button-Tip Hinges

At last . . . Stanley has developed the hinge that ends all bother! A hole drilled in the lower tip of the new Stanley Button-Tip Hinge makes it easy to tap out the hinge pin.

The hole is a time-saver in hanging doors. It simplifies removing door from frame and eliminates chance of marring finish of butt or pin. Cut your building costs, build client good will ... ask your dealer for STANLEY HINGES.



THE STANLEY WORKS, NEW BRITAIN, CONN.



REMEMBER TO THREE HINDES TO A DOOL

...so you can remove hinge pins

HARDWARE . TOOLS . ELECTRIC TOOLS . STEEL STRAPPING . STEEL **MARCH**, 1951



The stucco that

won't tell its age

The real beauty secret of modern stucco homes and commercial buildings is the Keystone System of Stucco Application. Because Keymesh reinforcing is embedded in the center of the stucco it prevents breaks in the wall... assures an exterior finish, either for original construction or over-coating, that is not only beautiful when new but which retains its attractive appearance for the life of the building. In addition, the Keystone System of Stucco Application affords time, material and economy advantages. That's why so many builders are using it. Architects are specifying it. Buyers recognize it as a real sales feature. Let us send you the facts, in the new 44-page "Keystone System" booklet today. Write: Keystone Steel & Wire Company, Peoria 7, Illinois.



KEYSTONE SYSTEM OF STUCCO APPLICATION WITH KEYMESH



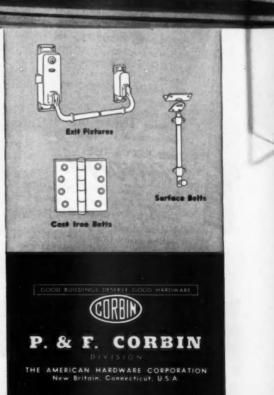
... By the Makers of: Tie Wire, Wolded Fabric, Hon-Climbable Fosce, Halls, Cates, Keystene Poultry Netting, Red Brand Fonce and Red Top Steel Posts
78
AMERICAN BUILDER



King Junior High School, Portland, Maine is equipped throughout with Corbin "900" Series Locks and other fine-quality Corbin Hardware. Architects: John Howard and John Calvin Stevens; Centresteri C. Profenso Company; Nardware supplied by: King & Dester Company.

Schools are designed and built to serve for many years. So is Corbin Hardware. That's why so many fine new schools, like the King Junior High School in Portland, Maine, rely on Corbin for their hardware needs.

You will find that Corbin Hardware meets all of the specialized needs for the efficient flow of school traffic. It makes an economical installation, too, because it provides year after year of quiet, trouble-free service.



Corbin Hardware used at King Junior High School Includes, emong other items:

Dear Pulls

NATIONWIDE DEMAND for

INQUIRIES POURING IN

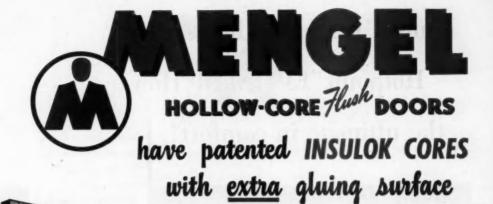
from our National Advertising indicate a busy, prosperous future for National Homes dealer-builders. Shown here is part of one day's mail. We have recently been receiving as many as 6,000 inquiries from prospects in a single day!

AND HERE'S THE

A large number of our inquiries come from areas not now served by National Homes dealers. Undoubtedly we are getting many from your city. Find out what a National Homes dealership can mean to YOU in 1951!

Nation's Largest Producers of Prefabricated Homes ...

NATIONAL HOMES Corporation • Lafayette, Ind. EASTERN PLANT ... HORSEHEADS, NEW YORK



Mengel's patented Insulok Core-special interlocking grid construction-3/8" surface width (on 11/4" centers)-permits a stronger bond between core and faces... greater dimensional stability... a lighter, more durable and trouble-free door.

Mengel Flush Doors also provide many other advantages. They are designed and built to the highest standards of quality for *extra* durability, *extra* eye-appeal. Get all the facts. Write today for our new full-color descriptive A.I.A. catalog, including specifications,

Plywood Division, THE MENGEL COMPANY, Louisville 1. Kentucky

Kimsul^{*} insulation helps give Hotpoint "Electrified" House the ultimate in comfort!

Hotpoint House of the 50°s, Plandome, Long Island, N.Y. – "the most electrified house ever built." Matern & York, architects; Walter Uhl, builder.

For the thrill of a lifetime, thousands of people are flocking to see the world's most electrified home in Plandome, Long Island. They're seeing coffee start to perk automatically... screens and windows move with the flick of a switch ... garage doors open and close by radar. Yet, the insulation — one of the most important luxury features that help give this Hotpoint House the ultimate in comfort — cannot be seen. It's installed in the ceilings and sidewalls — and by no strange coincidence, the planners of this "rarest" of all homes specified new Reflective KIMSUL*.

With its reflective aluminum foil vaporseal cover and many-layer stitched fiber blanket, KIMSUL employs the most effective method of stopping heat loss ever devised. It's light, easy and pleasant to handle, can be *properly* installed without skilled labor and special equipment. KIMSUL does not sift or settle to leave part of the wall or ceiling unprotected – provides *permanent*, uniform protection ever every inch of covered area. It's resistant to fire, moisture, vermin and mold – super-flexible for use in caulking and fitting behind pipes, wiring, or other "tight-spots."

Today, compare these facts about KINSUL with those of any other insulation. You'll then see why it was specified for today's most modern new home. For complete technical data, see Sweet's Architectural and Builders Catalogs, or write to:

Building Products Division KIMBERLY-CLARK CORPORATION Neenah, Wisconsin

Now 2 types of KIMSUL insulation — Regular and Reflective (Bud Refl) (Gray Refl)

> *T. N. REG. U. S. PAT. OFF. & CAR. AMERICAN BUILDER

How to win Mr. Homeowner's Seal of Approval



Ruberoid, always first with the best in Asphalt and Asbestos Roofing and Siding, now has the added distinction of being first in the roofing field with the Good Housekeeping "Seal of Approval."

wrants in the seal that guarantees the product is also your assurance of customer acceptance and lasting satisfaction . . . giving added distinction to Ruberoid's famous interlocking Tite-On Shingles and Asbestos-Cement Siding.

Ruberoid Tite-Ons are famous for their wind-defying, fire-resistant, long-lasting qualities. Their basket-weave beauty and attractive blend of colors give any house added sales appeal.

Ruberoid Asbestos-Cement Siding, too, offers pleasing design possibilities, combined with fireproof, maintenancefree, long-lasting economy that appeals to budget-minded home buyers.

You and your prospects will be seeing these Ruberoid advertisements in such magazines as Time, Better Homes & Gardens, Good Housekeeping, Successful Farming, Country Gentleman, Farm Journal, Capper's Farmer, etc.

When you build or remodel, specify Ruberoid, the roofing and siding materials that have brand acceptance, sales appeal, and are backed by the Good Housekeeping Seal of Approval.

Specify Ruberoid Roofing and Siding and you'll seal more building contracts.



MARCH, 1951

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500 Fifth Avenue, New York 18, N. Y.

RUBEROID

... and Holpoint Leads in Modern All-Electric Kitchens and Home Laundries!

today's modern homes START

This Hotpoint All-Electric Kitchen in the Hotpoint House of the 50's is the distinguishing characteristic of a home built for truly **Better Living**. But, kitchens in modest bungalows or small apartments can be just as modern and can contribute just as much to modern **Better Living** ... If they are Hotpoint All-Electric Kitchens.

Today's busy homemakers wellowe a relief from the tedious, time consuming kitchen and home Tour Iry chores which Hotpoint Hong Appliances take over and do auto natically. The time and energy thus conserved can be spent on the wore important and more enjoyable modern responsibilities.

Des aned for the groutest labor-saving utility ... styled at the peer of modern custom and engineered to be the finest, Moto wint All-Electric Kitchens and Auto hatic Home Laundries distributes the homes you build large or small—as the answer to the modern demand for ; ... Better Living.

RANGES • REFRIGERATORS • DISHWASHERS • DISPOSALLS • WATER HEATERS • AUTOMATIC WASHERS

b

for free literature on Hotpoint Home Appliances... Hotpoint will gladly give you helpful counsel in kitchen and home laundry planning for your particular project.

me



with Modern Kitchens_

5600 WEST TAYLOR STREET, CHICAGO 44, ILLINOIS

(A General Electric Affiliate)

FEATURED IN THE HOTPOINT HOUSE

nodernfold

THE DOORS

THAT FOLD

ACCORDION

LIKE AN



Found Something Different To Spark Their Sales! "MODERNFOLD" DOORS

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Look at the photo and floor plan. Think bow much smaller these voous would have been with old stationed swinging doors. It's sound soliing logic to specify "Modernfold" doors-just as builders base done since 1936.

Morganford Gardens Project of forty \$12,80,00 homes is located in St. Louis, Mo. Farrer and Farrer, huilders; Frank McGuire of Mapleuvond, Mo., architect; and J. Ben Miller Realty Company, Sales Agent and Finance.



Of course, the saving of valuable floor and wall space was the main factor in Farrar and Farrar's choice of "Modernfold" accordiontype doors for their Morganford Gardens project. However, they soon found other reasons to influence their decision to use these vinyl-covered, steel-framed doors in their next project and in individual homes.

E. A. Farrar says "Modernfold" doors were a powerful factor in selling these homes. Women buyers especially were attracted to this "something different." They were thrilled by the ease of operation . . . the gorgeous color which blended perfectly with the decorative scheme.

"And," says Mr. Farrar, "'Modernfold' doors, with all their sales appeal, cost us no more than conventional doors with frame and trim." No wonder this alert building outfit recommends "Modernfold" doors wholeheartedly-plans to use them in a new project of 103 houses.

For full details on "Modernfold" doors, mail coupon.

1	New Castle Products
1	P. O. Box 837 New Castle, Indiana
	Gentlemen:
1	Please send me full details on "Modernfold" doors.
	Name
,	Address
	CityState

MERICAN BUILDER

THE ANSWER TO THE BUILDER'S NEED FOR SALES-APPEAL AND EYE-APPEAL



and you'll sell **2** bathrooms in every home!



A BIG NATIONAL ADVERTISING PROGRAM BY BRIGGS WILL MEAN MORE BUSINESS FOR YOU!

Briggs Beautyware is out to make "Mr. Average Homebuyer" two-bathroom conscious! With a complete program of colorful advertisements in national publications, Briggs is building buyerpreference for its colored fixtures building more business for the man who follows the Two-Bathroom Plant





C 1951. LITTE IN U.S.A.

BRIGGS started the idea!

BRIGGS is promoting the idea!

BRIGGS is selling the idea! Today's homebuyer is a bargain hunter! He's looking for something sew and distinctive—something that will take the home he buys out of the "ordinary" class—yet keep it within his budget!

Install two bathrooms of colorful Briggs Beautyware in every home you build add a star attraction that will help you sell more homes faster! Don't overlook the big economies of "back-to-back" installations where the same rough pip-'00g estic charge for colored a more than white Briggs Two-Ban bathrooms of c ware in every ho

ing serves both bathrooms and the savings you can make by installing one bathroom over the other in two-story houses. What's more, your homes can have the extra appeal of Briggs Beautyware colored fixtures for only 10% more than white!*

You'll find it will pay to capitalize on the Briggs Two-Bathroom plan! Install two bathrooms of colorful Briggs Beautyware in every home you build!

BRIGGS MANUFACTURING CO., 3001 MILLER AVE., DETROIT 11, MICH.

New Kelvinator Electric Ranges

have amazing New Heat-Up Speed-New Styling-New Features!

To see the possibilities of these 1951 Kelvinator Electric Ranges from your standpoint . . . simply evaluate them from a woman's point of view.

They have new style to delight the most critical "eye for beauty." They have new heat-up speed for greatly increased cooking effectiveness... a "Rocket" Unit that hits cooking heat in seconds... oversize ovens that preheat to 350° in less than five minutes ... broilers that get red-hot in 10 seconds!

And from the compact apartment models to the spectacular double-oven "Automatic Cook" these seven ranges set quality standards surpassing even the unquestioned excellence of previous Kelvinator electric ranges.

In this great new range line you'll find such features as "Colormatic" Controls; tough, stain-resistant titanium-porcelain enamel finish; levelling adjusters on all 4 corners; oven-venting that will not streak range or walls; and all models have been accorded the Underwriters' Laboratories, Inc. top rating of "O" for safety!

In features, and on the basis of that important consideration—cost of ownership, they are your best buy! For full information and literature, write to Dept. AB, Kelvinator, Division of Nash-Kelvinator Corporation, Detroit 32, Mich.



AMERICAN BUILDER

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A Challenge To Meet

A S THIS is being written, in mid-January, it appears that regardless of justification or reason, transition to a garrison state with a controlled economy is in process. The American Builder has not and does not agree that the war against the Chinese Communists or the re-armament of Europe or staffing it with American troops calls for economic regimentation. On the contrary, this magazine believes that it is not only possible but essential to superimpose production for war or defense on practically normal production for civilian purposes. We believe that steps in that direction offer the most effective way to dissuade Russia and its communist satellites from war, or, if they are not to be dissuaded, then the most effective way to conclude an impending war victoriously and expeditiously.

Regardless of our beliefs, and similar beliefs held by many others, controls and regulations are being issued and projected almost daily in mid-January. If for any reason or lack of reason the control theory for expediting defense or prosecuting war must prevail, the home building industry is left with only one course. That course is to bend all of its ingenuity and resources to finding ways to produce a maximum number of new dwelling units within the framework of the regulations, and possible with available materials. The business of home builders is to build homes. It must continue to be their business in war as well as in peace, even though it requires improvisation, substitution and changed methods.

The business of building materials manufacturers is to produce the materials of construction, and in war, to find ways to improvise and to superimpose military production on civilian production. If any segment of the industry fails to meet the challenge in the re-armament or war period that lies ahead that segment will deserve the epithet of failure wrongly leveled at it following World War II.

There is a choice of two alternatives. The first is to say that good homes cannot be built in quantity under the limitations. The second is to decide that work can continue in normal quantity and acceptable quality. The second choice is the only one open to an industry charged with housing the public. If every component part of the industry makes that choice and sets its mind to accomplishing it, there is no reason why housing should not continue to be produced in quantity consistent with demand.

Accomplishing that objective might mean that labor will have to forego its eight-hour day and five-day week. It certainly means that manufacturers will have to improvise and substitute, then advertise what they have to offer as widely as possible. It means that distributors will have to study advertising more carefully to keep abreast of developments, and that builders will have to do the same, and in addition, be ready to alter their operations to fit the materials made available. If all will do their parts intelligently and purposefully, there need be no slackening of home building to the extent that another critical shortage will develop.

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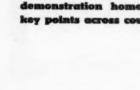
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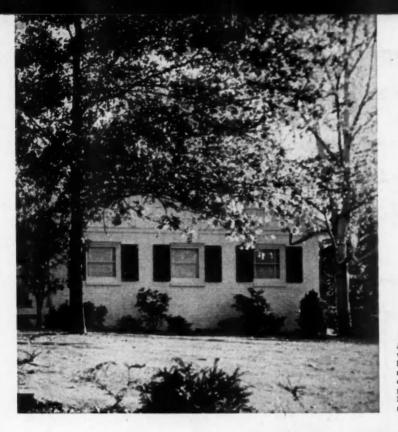
All-Electric House of the 50's

Contemporary design incorporates actual examples of the many benefits that electricity can make possible in everyday living. House is pattern for other demonstration homes in key points across country A HOUSE which dramatizes all the practical advances in electrical living in the last 25, years has been completed at Plandome Mills, Long Island. Known as the "Hotpoint House of the Fifties," it so completely harnesses electrical energy that the click of a switch or the push of a button will eliminate the drudgery of housework and bring the ultimate in comfort and healthful year round living plus entertainment to the occupants.

The house was formally opened by James J. Nance, president, Hotpoint, Inc., leading manufacturer of all electric kitchens and automatic home laundries. This company and General Electric Supply Corporation, its New York distributor, co-sponsored the house as a means of demonstrating for architects, builders and the public practical applications of new work-saving home equipment. The house has won wide attention in the home building industry, and may well serve as the pattern for other demonstration houses in various price brackets in key points across the country.

By installing a low voltage, remote-control wiring system, it was possible to bring maximum versatility and ease of control for the host of electrical servants incorporated in this 'most electrified house ever built." A bedside switch will start coffee percolating in the kitchen, windows open or close with the click of a switch, clothes are washed and dried automatically, garbage is disposed of electrically, dishes are washed and dried electrically, thermostatically controlled air conditioning will keep the house comfortable 12 months of the year regardless of outdoor tem-





A MYRIAD of comforts and conveniences that electricity can bring to home owners in this mid-century period have been observed by more than 60,000 persons who have visited this home, designed to make maximum use of electrical ensary

perature or humidity, a pushbutton on the car instrument panel opens garage doors and turns on garage, kitchen and porch lights, electrically heated dirt keeps flowers blooming in the greenhouse regardless of the seasons, and a myriad of other tasks performed by electricity make this house an outstanding achievement in the employment of kilowatts for human comfort, time economy and enjoyment. All products and equipment used are standard, and are available for use in houses in all price brackets.

The house was designed by Matern & York, architects, of Jamaica, N.Y., and was built by the Flower Hill Building Corporation, of which Walter Uhl, well-known Long Island builder is president. It is located on a corner lot of approximately onehalf acre to take full advantage of



SOUTH side of the house, which is the rear, showing some of the large glass areas located here to take maximum advantage of sun in winter and a garden view in summer



INTERIOR was designed for maximum use of space and flexibility. Although the large adjoining rooms afford adequate privacy, they can be opened up by means of large folding doors to form continuous living areas. The basement runs about two-thirds of the house

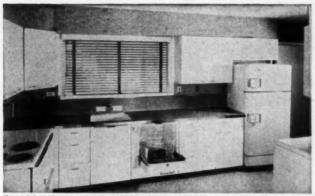
favorable exposures. The glassed areas enclosing the living space, which is at the rear of the house. face south for maximum winter sunshine. Thus the recreation room, the sitting room adjoining the master bedroom, living and dining rooms have a pleasant garden view with a sunny exposure. The designers strived for maximum flexibility in use of the living areas. Adjoining rooms afford privacy, yet they can be opened up to form continuous living areas when space is required. Large, folding doors were used to good advantage in achieving multiple use of space. For example, the sleeping area in the master bedroom is relatively small, while the adjoining sitting and dressing rooms can form a separate spacious unit with full garden view. The recreation room can be opened to use this added space in the hall area. The traffic circulation pattern eliminates passage through the living area to

get to the dining room, bedroom, kitchen and garage.

The foundation is poured concrete with a basement under approximately two-thirds of the house, which is of conventional frame construction with brick and stone veneer exterior. Interior walls are plastered over gypsum lath. Walls and ceilings are insulated with multiple layers of wood fibers stitched to crepe paper with a reflective aluminum foil cover on the inside.

One of the most complete allelectric combination kitchen and home laundries ever designed is one of the outstanding features of this house. Designed and manufactured by Hotpoint, it includes a doubleoven pushbutton range, a combination refrigerator-freezer, automatic dishwasher-sink with garbage disposal unit, an 8-cubic-foot freezer, base and wall cabinets, automatic washing machine, clothes dryer, ironer and cabinets for laundry use. All appliances were finished in yellow for this kitchen. The equipment, together with special accessories, breakfast nook, planning desk and other details, are arranged in an Lshape. Felt-back inlaid linoleum was used on the kitchen floor and the counter tops are Textolite.

The low voltage wiring system, which was used throughout the house, makes it possible to have any number of controls for certain lights and outlets. With high voltage wiring the expense of having more than one switch for lights and outlets makes this impractical. Typical applications of this system in the Hotpoint House are a control panel in the master bedroom which will operate lights, turn the radio off or on and operate the coffee percolator in the kitchen. This remote control system was set up so that there are four locations where every light in the house as well as



Part of the all-electric kitchen showing the automatic dishwasher-sink with a garbage disposal unit, push-button electric range at left, retrigerator and some of the cabinets, Note the continuous work surface between retrigerator and range adds convenience



LIVING BOOM with large sandstone double fireplace which separates this room from the recreation area. The large electrically operated double-plazed window is partly lowered with screen covering the opening. Note the recessed ceiling lighting

exterior floodlights can be switched on or off at the touch of a single button. A button near the telephone will turn the radio off if that is desired. The master selector switch has nine positions for operating the various circuits throughout the house.

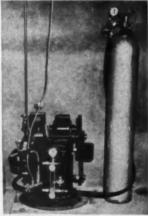
A continuous work surface counter is placed over the dishwasher-sink and flanking cabinets. The refrigerator is at one end of this counter, the range at the other. The kitchen is designed around "work-saving centers," with cabinet storage space at each center. For example, foods stored in the refrigerator area move to the sink where they are prepared for cooking. Then they proceed to the range. Dishes and utensils then are scraped and rinsed and placed in the automatic dishwasher. The laundry center has an automatic washing machine, cabinet. dryer and ironer, so that clothes follow the same assembly line pattern.

- internet

The combination heating and air conditioning is a split system, which is a combination of hot water and forced circulating air. An oil-fired boiler heats water which circulates through a coil in the furnace. A fan circulates air across this hot coil through the duct system to warm the house in cold months. During hot weather, when cooling is desired, a five-ton compressor driven by a three-phase, five horsepower motor, cools coils in the furnace with the motor-operated fan circulating air throughout the house in the same duct system which is used for heating. Two driven wells supply water for household use and for the cooling system. One of the wells is for intake and the other is for dispersal for the cooling system. The heatingair conditioning unit is controlled automatically in all seasons with a double set of indoor thermostat plus an outside thermostat which compen-



AUTOMATIC electric pump and pressure tank which supplies water to the house from one of two driven wells. This well is used for supply and the second is used for dispersal of water used in air conditioning equipment. Switch box is above spump



CONDENSING unit in besement which operates built-in soda fountain in the recreation room above. Besides providing storage space for 10 gellons of bulk ice cream and a large dry storage area, this unit supplies continuous cold soda and plain water, cooled



FIVE-TON compressor, operated by threephase five-horse power motor, for the cooling unit. This is part of the heating and air conditioning system which assures even, comfortable temperatures

93



sates for radical temperature changes. The greenhouse is heated with cast-iron radiation, separately controlled with its own thermostatic system. Soil in the flower beds in the greenhouse is heated electrically. Several types of windows were used in the house including electrically operated double-glazed plate glass units, wood casements, spe-



SITTING room adjoining bedroom, which may be completely separated from the sitting room area by closing the large folding doors, shown open. The windows in the room can be opened or closed by a switch on the well near the heads of the beds

cial sash that open or close by sliding sideways and double hung windows that can be lifted out of the frame for cleaning. Windowalls were used in the master bedroom, dining room, kitchen and entertainment room. These units have built-in weatherstripping and specially-designed frames and sash which eliminate sticking and binding.

There is an intercommunication system built in with eight stations in various parts of the house. The units are mounted flush with the walls with control panels in each of the three bedrooms, kitchen, living room and recreation room. All stations are connected to and powered by a central amplifier located in one of the closets. Remote operation permits receiving and answering calls from across a room without touching the control panel.

Lighting for the house was engineered so that it would be both decorative and utilitarian. Fixtures blend with the architecture of the house and with the decorations and furnishings. Highest levels of illumination are in work spaces such as the kitchen, laundry, and bathrooms where lighting demands are the greatest. In all rooms the lighting equipment is designed to magnify the size of the rooms and the ceiling heights. Broad shallow illuminated surfaces of light are used to eliminate glare. The metal finishes are simple and restrained. Recessed "midget toplite" fixtures are in the living room as well as other areas of the house. These small fixtures, which are flush mounted in the ceil-



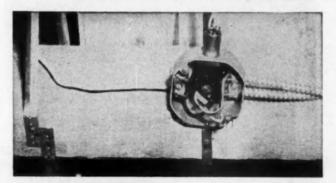
ENTRANCE hallway, which has unusual figured wallpaper. Note door chimes, recessed lighting fixtures at far end used in combination with exposed fixture

ing, each use a 75 watt R30 lamp or a standard 100 watt lamp. They can be used with or without the "midget" louver, which eliminates glare with a 45-degree shield. Each fixture has a five-inch opening, designed to give soft, direct light for dining rooms, halls, card tables and similar spots. Colored lenses can also be used with these fixtures when that is desirable.

The upward acting double garage door opens or closes automatically with the push of a button on the instrument panel of an automobile. This radio control unit operates from any location inside the garage and up to a distance of about 75 feet outside the garage. When the door is open a



LARGE television screen dominates this side of the recreation room. The ceiling in this room is pliched with large exposed beems. This, with the decorations, gives it a rustic theme. At the left is the recreation room side of the double fixeplace and at far and is another of the large folding doors





PRINCIPAL element of the low voltage wiring system is the small relay, shown here installed in one of the knockout holes in an ordinary outlet hos. This relay is a split-cell, dual-action solesoid for on and off switching of up to 1.850 watts. Switches used with the low voltage system are single-pole, double-throw, momentary contact normally open type. The switch control circuits operate on 24 volts

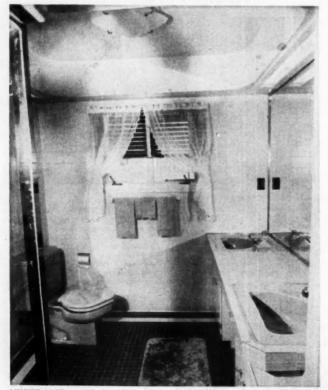
THE BUILT-IN SAR can be completely closed from the recreation room with draperies on traverse rods. Walls of the recreation room are hardwood plywood paneling, preliniabed and precut to width of stud spacing. Note built-in gun rack

MARCH, 1981



HOME FREEZER is installed in a specially-built recess in the garage, where it is convenient to unload food for the freeser from the family car or from store delivery service vehicles

YEAR-BOUND air conditioning plant, which is a split system with the circulated air heated by a hot water coll and circulating pump. The cooling unit operates through the same aircirculating fan and ducts as the warm air in cold weather



MASTER BATH. quest both and powder room are all finished in clay tile. The master both, shown here, has two vitreous china lavatories and a glass shower enclosure. High casement windows, which open out, afford privacy. Clay tile in this bath reaches to ceiling where soffit encloses recessed lights in addition to fixture on ceiling

small light on the car's instrument panel informs the driver. When the light is out the driver knows the door is closed. The door operating unit is run by a sealed motor which requires no lubrication or adjustment once the unit is installed correctly.

All bathroom floors and walls are finished with clay tile. The master bathroom has yellow tile to ceiling height with the floor in green. The guest bathroom walls are tiled to a seven-foot height and the floor is light pink with a dark gray border. The powder room walls are tiled in pearl gray to a four-foot height and the floor is light gray. All bathroom fixtures are in colors to match and blend with the walls and floors. The recessed tub in the guest bathroom is enclosed with a glass shower wall and the master bath has a glass-enclosed shower stall. Cabinet tops in the bathrooms and lavatory are Textolite.

The prefabricated glass greenhouse is equipped with electrically operated automatic ventilation which opens and closes roof openings by means of thermostatic controls, to keep the temperature in the interior constant. This conservatory is connected to the recreation area.

All door hardware, both interior and exterior, as well as door stops, coat and hat hooks, are solid brass. The front door handle design has matching design trim in the hardware throughout the rest of the house. All lock cylinders are keyed alike to simplify handling of keys.

There are four television receiving sets in the house, all with built-in antennas. The largest of these, in the living room, has a 24-inch screen.

GREENHOUSE is heated with cast-from radiation connected to the same boiler used for the heating and alr-conditioning system. Soli in the unit is heated electriccily, with both the radiation and soli heat thermostatically controlled. Heat for the soli is provided with electric cable

PREFABRICATED greenhouse is shown below being assembled during construction operations. Ventilation in the greenhouse is controlled thermostatically





Firms With Brand Name Products and Services Who Participated in the Erection and Demonstration of the Hotpoint House of the Fifties

- Abington Radio & TV Service, Inc.—Television antenna
- Andersen Corp.—Windowalls, casements and double hung windows
- Armstrong Cork Co.—Linaleum in kitchen Bigelow-Sanford Carpet Co., Inc.—Carpeting
- Cadillac Motor Car Div. of General Metors—Automobile
- Crane Company-Bathroom fixtures
- Crawford Deer Seles Corp.—Garage
- E. I. DuPont de Nemours & Co.—Paint Empire Safe Co.—Wall safe
- Executione Inc.—Intercommunication system
- Flower Hill Building Corp., Walter Uhl, president—Construction
- James J. Gavigan & Co.-Soda bar
- General Electric Ce.—Air conditioning and heating equipment; Textolite; remote control wiring; lighting; television and radie; small appliances, clocks, electric blankets

- General Electric Supply Corp.-Distribu-
- Hicks Nurseries—Landscaping Hotpoint, Inc.—Kitchen and laundry
- equipment
- House Beautiful—Decorating consultants Hunter-Douglas Corp.—Flexalum venetian blinds
- G. M. Ketcham Manufacturing Corp.— Bathroom accessories; disappearing stairway
- Kimberly-Clark Corp.—Kimsul insulation
- Lewis Associates, Inc.—Distributors of G-E heating and air conditioning equipment
- Lightolier Company—Lighting fixtures
- Long Island Lighting Co.
- Lord & Burnham—Greenhouse Matern & York—Architects
- matern a tork-Architects
- Minnespelis-Honeywell Company—Contrels on air-conditioning and heating units
- National Gypsum Co.—Lathing
- New Castle Products-Modernfold doors

- Nu-Tone, Inc.-Deer chimes
- Pittsburgh Plate Glass Co.—Glass for automatic windows
- Plandome Mills, Inc.-Real estate
- Prudential Insurance Co. of America-Mortgage
- Rotiss-O-Mat (Tri-Mart)-Rotary barbe-
- W & J Sleane-Furniture and droperies
- Swivelie: Company-Lighting fixtures
- Teletronics Laboratory—Electrically operated garage door mechanism
- Tile Council of America—Clay tile for bathrooms
- U. S. Plywood Corp.—Plywood in recreation room
- Douglas Van Riper—Insurance and real estate
- Vite Automatic Windows, Inc.—Automatic windows
- Yale & Towne Manufacturing Co.—Deer hardware

From Ancient Chalet



THE HOUSE BEFORE modernisation was a mixture of several types of design with the Swiss chalet style predominant

... to Classic Colonial



THE HOUSE AFTER modernisation retains much of its original form. with emphasis placed on removal of socalled ornamental "ginger-bread." Well proportioned columns and cornices with the addition of blinds for windows have removed every vestige of its forms: appearance and have turned a liability into an asset

An outmoded dwelling is given new life through well directed improvements both inside and outside with a minimum of cost

A COMPLETE change in the character of the exterior was accomplished in remodeling a large, old structure in Greenfield Hill, Fairfield, Conn. The work was recently completed with a minimum of effort and expense for the owner by Alfred W. Hansen, builder, from plans prepared by William Henry-Jackson, Fairfield architect. Builder Hansen says, in review of his effort, that this type of work is one of the most interesting and challenging ventures in the building field, particularly as it applies to homes of this nature that have been out-moded by the crop of new homes constructed since the close of the last war.

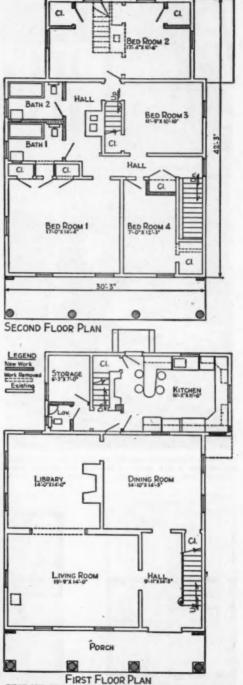
The physical characteristics of the house were not greatly disturbed during the alterations, except that all wood carving was removed from front and side walls. Cornices were clipped tight against walls and a new finely executed colonial feature including columns, entablature and pediment replaced the old work. New wood blinds were installed at windows to complete the traditional picture.

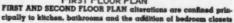
Aside from extensive changes in the kitchen, first floor lavatory, and two baths on the second floor, the plan alterations were of a minor nature with the introduction of closets in bedrooms to increase their efficiency. A completely new alignment of cabinets and counters was made in the kitchen with such new equipment installed as a Hotpoint dishwasher sink, a G.E. range and a refrigerator. Cabinets, made by Curtis have linoleum counters. Bathrooms and lavatory were equipped with Standard Sanitary fixtures and new linoleum on floors. New linoleum was also laid in kitchen. Walls and ceilings of the entire house are insulated with rock wool. Gutters and down spouts are of copper. Shingles on roof remain.

The cost for remodeling this single family house, including new Lightolier fixtures and complete decoration, totaled \$9,600.



DIRECT VIEW OF FRONT shows the clear cut and well defined lines of the colonial exterior with its orderly arrangement of motifs





MARCH, 1951



OLD STRUCTURE as it appeared when Sannenberg started his remodeling operation. Stone walls are 20 inches in thickness



AFTER sand blasting all loose and weather beaten masonry from the exterior. a new finish of concrete was applied pneumatically. This varies in thickness from three to seven inches

Remodeling

This builder took a substantial one-hundred-year-old, three-story building and developed it into a series of modern $2\frac{1}{2}$ to 4-room good income apartment units

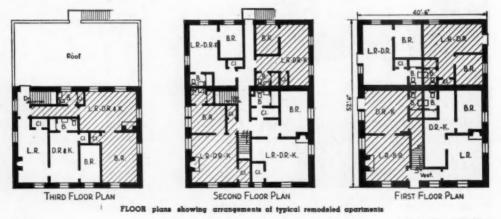
AONE HUNDRED year old masonry structure, originally erected as a carriage and wagon shop, has been completely remodeled and renovated, inside and out, to complete a modern apartment building in Belvidere, Ill. Rudy Sonnenberg, who purchased the structure and did the remodeling, had completed four smaller jobs of renovating buildings in Belvidere prior to this undertaking.

Stone walls in the structure are 24 inches thick around the exterior and stone walls of varying thicknesses also divide various parts of the interior.

One of the first jobs was to rip out the first floor and excavate below floor level far enough to lay down a thick fill of coarse gravel, covered with six inches of cinders. This was covered with four inches of reinforced concrete, which, when set, was coated with tar. Over the tar a finish concrete coat 1¼ inches thick was applied. Asphalt tile above this forms the finish floor. The old sagging second and third floors were left in place and new joists laid over them for new floors.

Because ceiling heights in the old structure were unusually great, new ceilings were built 18 inches below the old, leaving a dead air space between the two. This space was also used for piping, wiring, gas water heater flues and ventilating fan ducts.

Interior of the masonry walls was furred out, lathed and plastered. By using the original stairways as forms, reinforced concrete stairways were poured for the remodeled structure. These are also finished with asphalt tile, and 2x2-inch angle iron nosings.



Old Structures Is Profitable

Joists salvaged from the original first floor were used for a new builtup roof laid above the old roof. After the exterior of the building had been thoroughly sand-blasted to remove weather-loosened stone and mortar from the original masonry, from three to seven inches of Gunite were applied as an exterior finish. This concrete finish was shot against the old walls under pressure of 70 pounds to the square inch with a Jet-Crete machine.

The apartments vary from 2½ to 4 rooms. Each unit is heated with Bryant wall panel heaters, individually controlled by each tenant. There is also an individual hot water heater for each apartment. All the bathroom walls are finished with clay tile and floors are concrete, covered with rubber tile. Kitchens are equipped with metal cabinets and sinks. Tenants supply their own refrigerators and ranges.

One of the features of this remodeled masonry structure is the fact that each apartment has a wood, coal or gas-burning fireplace.



COMPLETED structure with covered entrance and tile coping to make it appear lower

Soundproofing between floors was achieved by filling the voids between the floor joists with from three to seven inches of cinders. Sonnenberg has tried mixtures of sawdust and cinders for this purpose, but used cinders only in this building. He recommends a mixture of at least 50 per cent cinders when sawdust is used in combination with the cinders.

Sonnenberg, who is the owner-contractor on this job, has renovated and remodeled a total of ten buildings in the last few years. Five of them are in Belvidere with the other five scattered in Iron Mountain, Mich., Marquette, Mich. and South Bend, Ind. A year and two months were consumed in completing the job in Belvidere described here. It was the biggest and by far the nost difficult undertaking of that type he has completed. At present he has two or three more on his drawing board. Remodeling and renovating old structures is a hobby with Sonnenberg, who is a brother of the now deceased former heavyweight wrestling champion, Gus Sonnenberg.



BAY windows in the front units on first and second floors were capped with tile





FLUSH panel doors were finished naturally and open doorways were arched



VENTED, grilled recesses were built to house water heaters for each of the units

A House of Many Features

A California builder packed so much livability into a 1400 foot model house he drew 25,000 visitors the first month it was open to general public

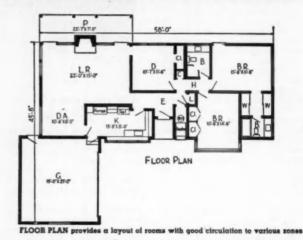


PARTIAL VIEW of rear of house showing covered porch adjoining living room

THIS MODEL home after it was finished was found to be exceedingly popular, and drew over 25,000 people the first month it was open. The builder, John Summerfield of Pasadena, during this time sold homes of similar design to 15 prospects; these were offered for \$12,500. The FHA commitment on the model home placed on a \$3,750 lot was \$11,400.

The house has many interesting features including a wood shake roof, oversized garage, forced-air heating system, two baths, three bedrooms, ample closets, living, dining room and kitchen in a total of 1400 square feet of living area. The plan has good circulation; all rooms can be reached from the hall without going throughother rooms. The living room, master bedroom and den have a view of the mountains through large picture windows; the kitchen at the front of the house has an entrance from the garage. The forced-air furnace is enclosed in a space adjoining the main entrance, which has an inset doorway permitting access for repairs and adjustments. A motor court occupies the major portion of forecourt.

The exterior facing is 12 inch lap siding which is painted a chocolate



brown with all trim painted a contrasting white. The 16 foot standard garage door is treated in a special manner by nailing 1 x 12-inch boards around the perimeter and down the center of door. Then moulding strips were placed inside of this area to form squares. By painting the 1x12's and mouldings white and the back an attractive. practical color scheme. Sliding glass doors are employed

freely in the exterior walls with two in the living room in conjunction with full length windows, and one in the master bedroom.

John Summerfield, who is a licensed architect as well as a builder, has built a large number of homes in the Pasadena, Calif., area.



FRONT AND SIDE VIEW of house showing the forecourt created by the Lahaped plan. An interesting feature is the use of bay windows in the kitchen. front bedroom



FRONT VIEW of office building designed in contemporary style to conform to the residential character of the neighborhood. Wallis are painted a striking red with trim in white

Small Clinic for Suburban Area

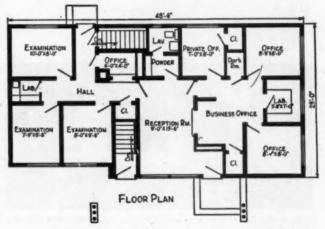
Complete facilities made available away from busy street intersections with parking space for pairons

THE SMALL office building erected for Doctor Aaron Moses in the Highland Park area of St. Paul, Minn., from the plans prepared by Norman R. Johnson, architect, is an example of the type of structure that is being reproduced in quantity all over the United States. It successfully meets the serious problem of parking that doctors and dentists, in fact all manner of professions or otherwise, have had to contend with in the past.

This small clinic occupies a site one block away from a busy suburban street intersection. In this manner Dr. Moses has the advantage of the business from the intersection without the conflict.

Full advantage is taken of all space in the building. The first floor is divided into two sections, one on either side of the reception robm. One side is the owner's suite and the other side is rented to another doctor. The basement is partially occupied by a beauty shop. The cost of this office building was \$24,000.

All exterior walls are frame placed upon a 12-inch-thick concrete block foundation. Facing is a 36-inch vertical plywood with 1x3 inch battens spaced over the plywood 16 inches on center. Roof surface is a 5-ply built-up membrane with metal gravel stops at edge of overhang. A continuous screened opening is placed in the soffit for ventilation of roof area. Balsam Wool insulation was used in walls and ceiling.



RECEPTION room in center divides the floor area into two groups of affices



MARCH, 1951

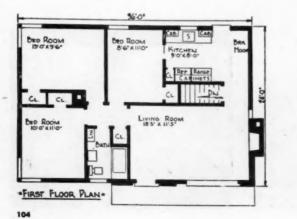


RESIDENTIAL STREET takes shape as Spokane homes replace open terrain. Builders had only to build; mortgage firm did the rest

Three Builders Let Experts Handle



"MANOR-CREST BUILT" \$9,700 home features a large picture window. Floor plan below



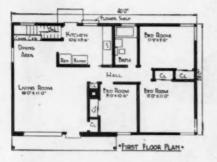
ON A 168-HOME project in Spokane, Wash., three builders had nothing to worry about except the actual building; the financing, selling and even payment of the bills were handled through an arrangement with a local mortgage firm. The system, which left the builders free to concentrate on the construction end of the business, worked out to the advantage of all concerned.

The three were Mike Stolz of Crestwood Homes, Inc., John Burchell of Highlands, Inc., and Harding Ward, Northridge Homes, Inc. President of all three companies and also sales manager, co-ordinator, etc., was C. E. Frey, vice president of the Murphey-Favre Mortgage Co.

Each builder operated as a separate corporation and confined his work to the part of the tract agreed on, but as far as the public was concerned all units were advertised and sold as "Manor-Crest Built" homes.

Ten floor plans were used in the subdivision, with each builder using three or four different plans in groups of 20 to 25 houses. The result was variety in each area without the added expense of too many variations in the tract as a whole.

Some of the features of the homes, which ranged in price from \$8,000 to \$10,600, were full basement, hardwood floors, tile bath, bathroom heater and kitchen fan. The higherpriced homes have fireplaces. One-car garages were \$515 extra.



THREE-BEDROOM house (right) is in \$10,600 class. Plan has good separation of living and sleeping areas



the Paper Work

Lots were about 65x100 feet and paved streets with curbs and sidewalks were included. Exteriors were of cedar shakes or siding with wood roof shingles. Combed plywood, brick veneer and other materials were used for embellishment of front elevations.

Sales were opened on February 15, 1950, and by August 1 the 130 completed houses had been sold. Construction of the remaining 38 units was started at that time.

Spot radio announcements were the principal means of attracting potential buyers and, since the subdivision is located at the edge of the city and specific directions are required to reach it, the results were considered excellent. Five spots per day were ordinarily used Mondays through Thursdays and 10 each Friday. Saturday and Sunday.

day, Saturday and Sunday, Among the nationally advertised products used in the homes were Cordrey locks, Briggs Beautyware, Hall-Mack accessories, Mengel doors, National water heaters, Pryne exhaust fans, Crawford garage doors, General Electric and Youngstown sinks, Armstrong lineoleum, Delco coal stokers, Sandberg forced air furnaces, American Standard fixtures, Kaiser aluminum foil and General Electric bathroom heaters.



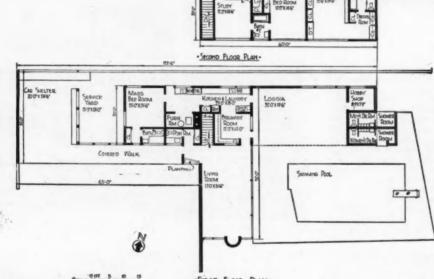
\$9,000 HOUSE above, has one of development's most popular plans. Ten were used



STREET OF HOMES after completion with view of forest background

MARCH, 1951

OVER-ALL VIEW of house shows the garage and service wing in the foreground, with living, sleeping and recreational areas to the right



.FIRST FLOOR PLAN.

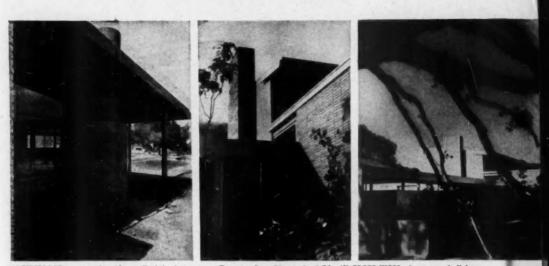
THIS MODERN PLAN provides complete separation of living and service areas with everything embraced under one roof

House Built Around a Pool

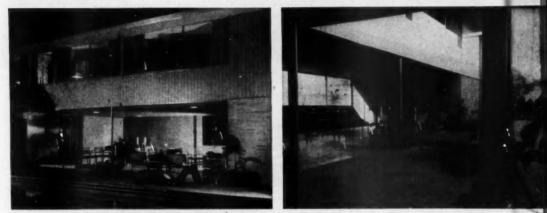
ADVANCED CONTEMPORARY design, emphasizing the rugged beauty of structural elements, is the striking feature of one of a group of four estate homes which comprise "Castles in the Air," California's luxury home exposition. These homes are located in the Royal Oaks Estate section of Sherman Woods, a suburb adjoining the Los Angeles area.

The modern house illustrated on these pages was built by the Wallace F. McDonald Company Builders from the plans of Sumner Spaulding-John Rex, A.I.A. This house containing 4,000 square feet of living area is a high point in home luxury and convenience. The plan is developed around the pool and surrounding area, and lends itself to maximum outdoor living and entertainment by the owner.

Living room, kitchen and loggia form an ell around the pool with service wing on opposite side of living room projection. This arrangement keeps the activities of living and service areas entirely separate. A feature of the large loggia and garden room is the open-front where wall of this room facing the pool is omitted. Thus, the area surrounding the pool literally becomes an extension of this room. Dressing rooms for men and women are provided at one end of loggia with kitchen located at opposite end for convenience in serving.



(1) FIREPLACE is set in the gives wall of the living room. Free standing chimney is visible. (2) GLASS WALL of entrance hall forms background for indeer planting. (3) DETAIL VIEW of service forecourt with main entrance at right center. Enclosed service gard



(1) LOGGIA which is completely open on the pool side is enclosed on opposite wall with glass and siding. Battery of bedrooms above overlook the pool. (2) VIEW OF LOGGIA toward hobby room and dressing rooms. Panel heating in floor slab of loggia and pool

Service wing is composed of two-car carport, drying and service yard, maid's room, laundry and utility room. Covered porch' leads directly from carport to main entrance. This unit, which is strategically located in center of plan, is the only opening in a solid masonry wall dividing the two areas. The second floor area over the kitchen and loggia is devoted entirely to bedrooms and baths.

The house is situated on a hillside lot 160 feet wide by 170 feet deep. This has been graded off at an intermediate level for the home site. The house is well oriented to the lot, turning its back to the steep hillside and facing the main rooms with large glass exposures to the view of magnificent oaks, green hills and stretches of valley beyond. In the immediate foreground a young citrus orchard and well designed planting assures privacy from the road for the occupants.

One of the main features of this house is the radiant heating system. Extensive use of glass, especially in the living room with its wall of glass facing the pool and including two sliding doors, each having a steel frame and weighing 300 pounds, made it necessary to use copper tubing in floor slabs and ceilings. Tubing is also placed in floor of loggia, area around pool and in the pool. This feature makes outdoor entertaining possible, even to use of pool after sundown. The warm concrete maintains a comfortable temperature for lounging in the open.

The exterior treatment is a sincere expression of the plan arrangement. Painted vertical redwood boards, patterned Roman brick and large glass areas combine to form a grouping of inter-related units and materials with contrasting roof pitches that spell "MODERN DESIGN" in capital letters. Considerable restraint has been used by the architects in the use of roof overhangs. These are used only where they serve as sunshades for windows, otherwise the roof is clipped tight to wall surface. High strip windows and openings in service wing wall serve a dual purpose. They provide light and air above eye line and tend to lighten the appearance of wall construction.





(1) FEATURED CONVENIENCE is a metal wall case called "bathroom library." (2) PASS-THROUGH between breakfast room and dining area. Hinged doors flush with wall paneling. (3) ENTRANCE wall of fluted opaque glass and brick forms background for plant box

A novel feature of the house is the fireplace at one end of the living room. The opening which is parallel with the wall on the inside, extends the full width of fireplace except for piers of Roman brick at each end. Opening extends in depth beyond the wall and takes the form of a semi-circle extending upward to window cross bar. From this level the flue is free standing. The exterior of the fireplace and flue is finished in Roman brick laid up in header courses. The fireplace over mantel is a panel of Swedish marble.

Concrete slab construction prevails throughout the house with concrete walls and footings extending below grade line to firm soil. Framing is a combination of masonry and wood frame walls, steel beams, standard pipe columns, wood joists, beams and rafters. Wall and roof sheathing are placed diagonally on supports for added rigidity. This builder has used every precaution to avoid any settlement in foundation or plaster cracks in walls or ceiling. Five-eighth inch steel rods are placed in the foundation, two rods in footings and one in upper part of wall, thus forming a beam. In large rooms metal lath is applied over plaster board on ceilings. Headers above windows and doors receive extra nailing to eliminate any possibility of plaster cracks. All finished lumber is kindried; wardrobe doors are 1-3% inches thick; interior painting is done in five coats thoroughly rubbed.



MODERN frame farm service buildings can be erected to stand permanently plumb and to withstand anticipated wind pressures

Construction Lumber – Part IV

Framing Farm Buildings

A LTHOUGH WOOD has been the conventional building material for farmers for centuries, it is only within the last generation or so that either time or money has been devoted to scientific study of correct framing practices in erecting farm service buildings. A drive through the countryside in almost any section of the nation will reveal evidence of false economy in selection of lumber and carelessness in its assembly into structures. Buildings out of plumb, sagging ridge lines, uneven settlement and failures of other types are common sights. Regardless of the size, type or architectural style of modern frame farm service structures, they can be erected to stand permanently plumb, to withstand wind pressures ordinarily experienced in the area, and to retain an attractive appearance.

The first factor to consider in planning any permanent farm structure is the foundation. Footings must be of sufficient size to carry the load without abnormal or uneven settlement. The size and depth of footings depend on soil conditions and the loads to be carried. In all instances they must be placed below the frost line, and must be made with a level face in contact with undisturbed soil.

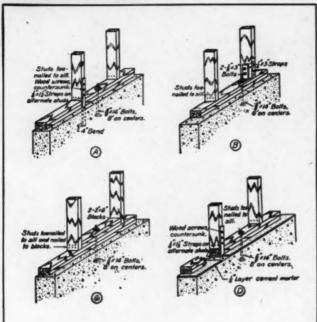
Foundation walls, particularly for barns and granaries, must be calculated to give maximum strength and permanence. One serious fault with masonry foundations under barns that is commonly found is failure to buttress or reinforce long runs of relatively thin walls. In a great many cases it is not the vertical compression loads which put the biggest strains on barn foundations, but pressure from the outside pushing in or from the inside pushing out. Manure



or earth is often piled against a wall in a spot where such pressure can cause a failure. The movement of subsoil under shallow footings because of excessive moisture and the consistent stamping and tramping of animals has been found to cause foundation failures, which could have been avoided with more adequate footings. Needless to say every permanent farm structure must be anchored solidly to its foundation. A number of methods of doing this are suggested in accompanying drawings.

Generally, on the average American farmstead, the barn is the largest service building. Structurally there are three basic types of barns—the pole frame, the post frame and the balloon frame with the gable, gambrel or arched roof and frame. The pole is the simplest type of frame, and was used largely by early settlers because there was no lumber at hand for framing. Poles were set in the ground at 10 or 12-foot intervals, with girts,





cate that the conventional method of anchoring frame buildings to their foundations is a very weak point. The usual method, used a great deal, is a double sill bolted to the foundation and studs toenailed to the sill. The four drawings above show improved methods for anchoring side walls to the foundation.

In A, a 1/4x11/2-inch strap iron is bent to form an L shape. The foot of the L and part of the leg are imbedded in the poured. The upper part of the leg, which has been previously drilled with holes, is fastened securely to the stud with large wood screws or lag screws. The double sill is anchored to the foundation in the usual manner and all the studs are toenailed to the sill. The steel straps must be carefully lined up and properly spaced.

In B, anchor bolts are placed at sixfoot intervals in the foundation wall as it is poured. A 12-inch length of 1/4x3inch strap iron is bent to form an Lshape bracket 4 inches long in one direction and 8 inches in the other. The 4-inch leg is drilled to fit over the anchor bolt and the 8-inch leg is drilled for two ³/₆-inch bolts by which it is fastened securely to a stud. Every third stud is held down in this manner and the others are toenailed to the sill in tervals when the sill is laid. the conventional manner. Existing

ESTS and field observations of farm buildings can be anchored in this manbuilding failures in windstorms indi- ner by using lag screws to fasten the straps to the sill, provided the sill is well anchored to the foundation. In place of the L-shape bracket shown, a T-strap might be screwed to the inside of the studs and sill.

In C, headers of the same size as used for the studs can be placed between pairs of studs 8 feet apart along the foundation. Anchor bolts are placed in the foundation 8 feet on centers and anchor the headers as well as the wall concrete at the time the foundation is securely to the foundation. The studs are toenailed to the sill and spiked to the ends of the header. The header should be separated from the sill by blocks spaced widely enough to prevent splitting the ends of the studs when spiking them to the headers. By using lag screws to fasten the headers to the sill, this method can be used to strengthen buildings already built if the sill is well anchored to the foundation.

In D, 1/4x11/2-inch iron straps are bent in an L-shape to extend across the underside of the sill and up the side of the stud far enough to permit fastening them to the stud with large wood screws or lag screws. The sill is laid on a bed of cement mortar and secured to the foundation with anchor bolts spaced eight feet apart along the wall. The iron straps are inserted at four-foot in-

Drawings and data above courtesy Kansas State College.



EVEN though far more material than is ordinarily used was incorporated in this barn the principal joints were merely ice-nailed. This resulted in complete failure at the sill, plate and ridge. The leeward half of the roof was lifted completely out but was not severely damaged. One unusual point is that the windward side of the mow of still remained standing after the



HERE is what happens when con carelessly mixed and poured for farm buildings. The foundation wall under this well-built small barn was of such poor quality that the anchor bolts pulled out. permitting it to be twisted out of shape



TOTAL lack of anchorage left this small grain his susceptible to easy destruction by high winds which swept through the area. In this case the structure had been built on a foundation of rocks with no mortar between and no means of anchoras



THAT barns blow up and not down 14 dramatically shown in this photo where the side of the roof blew up past the silo without damaging that structure. The storm area covered by these photos was struck by winds which reached velocities as high as \$5 to 70 miles per hour

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FAILURE of an inadequate masonry block foundation was the main cause of extensive wind damage to this barn. Masonry block walls are only as strong as their weakest mortar joint. There are very few. If any, building codes which would permit unbuitressed walls of this length, yet there is no hesitancy in building long barns without bracing walls with partitions or buttresses Wind damage photos courtes Werpthaeurs false Co. ANOTHER block foundation failure, which is no reflection on the use of concrete block for this purpose, but which is the result of foulty section. The superstructure here was moved sideways a distance of the post height and suffered very little damage. but the foundation was a total loss. Twenty-one cows and two horses were killed while four caives in one corner survived

braces and plates fastened to them to form the framework.

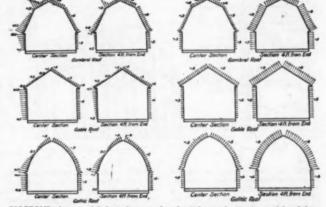
The post frame, or post-and-girt system of barn framing was introduced in this country by the early colonists. It was the most convenient method of framing for them because the timber had to be hand hewn. It consisted of heavy posts set well apart, tied together with girts, and braced with knee braces. Members were mortised and doweled together with no nails or metal fastenings.

The balloon frame, or stud-andjoist system is the present efficient method of construction, made possible by the availability of dimension lumber and a plentiful supply of nails. Small members are spaced closely together and braced by sheathing or the skin covering of the building. It is a very efficient method of building because all the parts serve a structural as well as a weather resisting purpose. Framing members in barns with this system are usually spaced two feet on center.

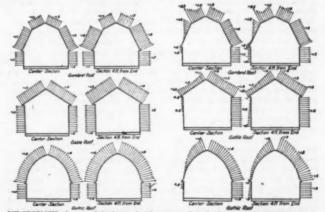
Laminated arch barns are considered as one more step in the evolution of barn framing. Wooden laminated members are bent and glued into an arch shape with two rafter sections secured together at the ridge to form one rafter unit. The ends of the arches or rafters are set on a solid foundation and are tied together with good bracing and exterior covering. These structures are not only increasing in popularity as barns, but a great many are being erected to house machinery and to serve other purposes on farms.

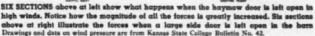
The principal types of roofs on barns vary between gable, gambrel, and gothic arched. The gambrel and arched shapes are the most popular where a large amount of hay storage space is desired in the mow. Although the cut of gambrel roofs follows a regular pattern, the method of bracing and tieing rafters varies a great deal. Serious weaknesses have

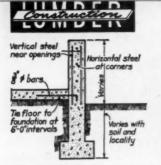
MARCH, 1951



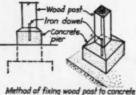
DIAGRAMS above and below show results of wind tunnel tests on models of farm buildings. Small arrows indicate direction and map,litude of forces due to wind. Left tubove are six sections of three models showing forces due to wind perpendicular to side, all doors closed. Note that pressure on the building changes to suction or lift about two thirds of the way up the root. The six sections at right chove show forces due to wind perpendicular to end, with all doors closed. Notice all force here is upward and outward



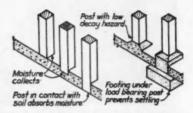




IN ALL types of buildings, including farm buildings, it is essential that the foundation be extended below possible frost penetration, even though firm bearing soil is found at a shallow depth. This will prewent upheaving by freesing temperatures

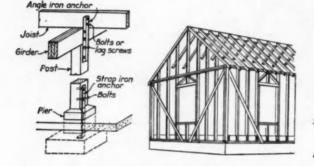


INTERIOR posts in farm structures will, under certain conditions, move laterally or sideways. An iron pin or dowel embedded in the post footing and running into the post likeli will prevent any possibiity of movement to put building of plumb



MOISTURE is present in excessive amounts around many form buildings, particularly barns. Posts should always be placed so that moisture cannot accumulate between the bottom of the post and the floor. Shows good and bad ways of placing posts

> Asphalt paint or mete Battens and braces



TIEING all framing members together securely is essential in farm structures. Where a load-bearing post supports a girder on which either joists or rafters rest. an angle iron or similar device should be used to the post. girder and members

been found in this type of barn roof framing when it is subjected to unusual stresses in high winds.

Research studies made in the field show that barns do not blow down they blow up. They are lifted completely off foundations, or if the sidewalls are well tied to the foundation, roofs or portions of roofs and sides blow off and out. The most common reasons for barn and other farm building failures are (1) the nature of wind pressures; (2) the method used in making certain joints; (3) masonry block foundation failures because of low quality work; (4) failures at points of anchorage.

The Engineering Experiment Station at Kansas State College made an extensive study of the nature of wind pressures and their effect on barns. Some of the results of these tests are illustrated on these pages, along with some of their recommendations in anchoring and framing to avoid common failures. Because most failures occur at the sill, plate and ridge in gambrel roofs—wherever toenailing DURING winds of high intensity, the walls of a building are subjected to tremendous pressures that tend to force the framework out of plumb. A diagonal brace inserted at each corner as shown above will assure ample strength to offset wind pressure

is usually used—it has been found much safer to lap members past one another and put nails, bolts or fastenings in shear. The ridge point can be further reinforced by a light strap iron over the rafter junction.

Good joints are so important in farm building that every builder should know the relative merits and strength of the principal methods of making wood joints. The most common joint used today is the simple nailed joint. There are also bolted joints, split ring joints and glued joints, or combinations of all four of these.

In a shear test made on a nailed joint two pieces of 2x6 were fastened together with eight 16 penny spikes. This carried a load of 3,100 pounds. Two pieces of 2x4 bolted together with two $\frac{1}{2}$ -inch bolts carried 6,800 pounds, more than twice as much as the nailed joint with onethird less material. A joint using a timber connector, a $\frac{2}{2}$ -inch ring embedded between two 2x4's carried 10,010 pounds. This shows that a $\frac{1}{2}$ -

valls dous with the cross rails and diagonal bracing on the exterior. Since there is always are intered mostbilly of moisture collecting bailed

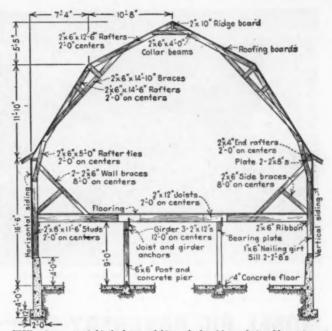
with the cross rails and diagonal bracing
 on the exterior. Since there is always a
 possibility of moisture collecting behind
 and in the joints of the cross rails and
 braces, it is best to have them on the inside
 Drawings abve, courtesy Southern Pine Association

inch bolt is as good as six to ten 10 penny spikes, and that one 21/2-inch timber connector is as good as about six 1/2-inch bolts. Of course it would be impossible to put six bolts at the intersection of two pieces of 2x4 where a connector can be put. Splitring connectored joints will make use of as much as 80 per cent of the tensile strength of the wood. The glued joint in this series of tests consisted of two pieces of 2x4 lapped eight inches and glued with a phenolic resin adhesive, held in place by ordinary "C" clamps. The joint was tested to failure and showed 75 per cent coverage of the contact faces. The joint carried 13,210 pounds, almost four times as much as the two 2x6's nailed together with the 16 penny spikes. This shows what can be accomplished by reinforcing ordinary nailed joints with glue.

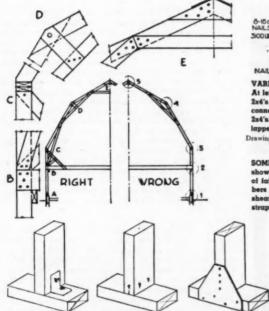
Additional information on fastening wood joints is given in the section titled "Correct Nailing in Framing," which appeared in the January issue.

In framing farm buildings, as in framing houses, there is always a correct grade and size of lumber for specific uses. The principles outlined in the section titled "Durability With Economy-Using the Right Grades" can be applied to selection of lumber for farm building construction. It is important, however, to remember that most of the framing members in farm structures are exposed on the building interiors and subjected to heavy strains and stresses from more directions than those in most other structures. This is because farm service buildings either house livestock, crops or machinery and in the usual course of usage, many of the framing members of farm buildings are subjected to shocks and sudden strains caused by animals coming in close contact with them or by unduly heavy loads in storage use.





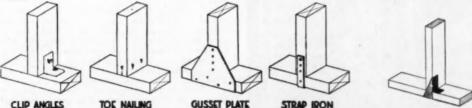
HIGH resistance to wind is the feature of this gambrel roof frame designed by engineers at Kansas State College. Studs and joints are doubled on 8-foot centers at wall braces





VARIOUS types of joints discussed in text on the previous page. At left are 2x6's fastened with the common natiled joint; next are 2x4's fastened with two $\frac{1}{2}$ -inch holis; the third illustrates at imber connectored joint with one $\frac{31}{2}$ -inch ring imbedded between two 2x4's. The fourth illustration shows a glued joint with two 2x4's lapped eight inches. This latter joint tested by far the strongest Drawing so joints and barn roof at left courtey Weyerheuser Sales Co.

SOME SUGGESTIONS for improving stud and joist framing are shown at the left. To eliminate toenciling at the common points of failure at sill, plate and ridge, it is always wise to lap members past one another and put nails, bolts or fasienings in shear. The ridge joint may be further reinforced by a light strap iron over the rative junction, shown in Section E above



FOUR methods of improving what are commonly toenatiled joints. The conventional toenatiled joint is shown second from the left. The Timber Engineering Company's newly-developed Trip-LGrip anchor, made in six different shapes, is at the right

MARCH, 1951



MODERN Pound's Acres pig "hatchery" removes many risks attending breeding and farrowing

MODEL PIG HATCHERY Features Efficient Planning and Good Construction



PLENTY of daylighting and ventilation are affered in hatchery



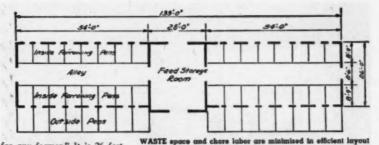
WINDOWS are arranged for maximum lighting where it is needed 114

NEWEST DEVELOPMENT in hog farming is the narge pig "hatchery," where little pigs are farrowed on a mass-production basis for sale as six-week-old weanlings to the farmer. Essentially, the pig hatchery is to the hog feeder what the baby chick hatchery is to the poultryman. Exponents of the system point out that it removes risks attending breeding and farrowing, and enables the farmer to specialize in feeding. The cost per pig to the farmer is less than the cost of breeding and care at farrowing time and during the first critical six weeks of the pig's life; uncertainty is eliminated regarding the size of litters and the number that will survive to weanling age; and good market-type stock for feeding is assured. Although only a few hatcheries are operating as yet, intense and widespread interest indicate that many more will be built.

As would be expected, Iowa is in the front line of this development. Its newest and largest pig hatchery, third to be completed in the state thus far, was recently opened near Perry. Approximately 5,000 farmers, county agents, 4-H Club members, Future Farmers, and agricultural college students and teachers attended, many coming in from other states.

Dale McBride, manager of Denniston & Partridge Co. at Perry, sold the materials and equipment for the \$25,000 building, which was designed by E. L. Smith, chief engineer of Clay Equipment Corp., Cedar Falls, Iowa. Contractors were Bower & Bower Construction Co., Perry. The hatchery and its 320-acre farm are owned by G. C. Pound, executive vice-president of Kraft Foods Co., and Elmer South, who manages the operation.

This is a model building of good, but economical construction, and was designed to eliminate waste space and reduce chore labor through convenient layout and up-tothe-minute equipment. One of the comments repeatedly made by visiting swinemen was that "just one wing would

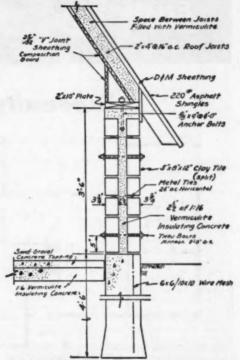


make a dandy hog house for any farmer." It is 26 feet wide and 133 feet long. Axis of the building runs east and west. There are two wings, each 26 feet by 54 feet, with a two-story feed section, 24 by 26 feet, in the center.

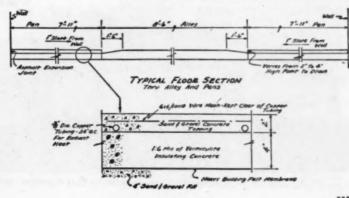
The concrete foundation, reinforced with 6x6x10 gauge wire mesh, extends 4 feet 6 inches below grade. Side-walls are 10-inch cavity tile construction, face finish outside, smooth finish inside. The cavity is insulated with $2\frac{1}{2}$ inches of vermiculite concrete, 1:16 mix (1 part portland cement to 16 parts vermiculite concrete aggregate). The conventional gambrel roof is frame, finished inside with 25/32 inch edge-matched sheathing. This portion of the building is insulated with $3\frac{1}{2}$ inches of vermiculite fill. The roof is supported by 2-inch steel pipe columns, 6 feet 8 inches on centers. Inside ceiling height over the alley is 8 feet. This low height allows the use of short material in the framing. Asbestos siding was used for the exterior finish of the feed section and the ends of each wing; asphalt shingles, for the roof.

Under the pens is a hot water radiant heat floor, sloped one inch to the center alley for drainage. This floor construction, too, is a model installation. The entire inside area was filled with 4 inches of sand and gravel, and covered with a vapor membrance, well lapped and sealed. On this was placed a 4 inch thick slab of vermiculite insulating concrete, 1:6 mix, to retard heat loss through the slab to the ground, and edge loss at the foundation wall. Copper tubing, 3/4 inch in diameter, spaced 24 inches on centers, was anchored to the vermiculite slab with copper strips over the pipes, tacked on each side with long, galvanized nails. The pipes were then covered with a 2 inch thick slab of sand-and-gravel concrete, reinforced with 6x6x10 gauge wire mesh. Precautions were taken to keep the mesh from touching the copper tubing, to avoid the possibility of corroding action of steel on copper. An asphalt expansion joint was installed between the sand concrete topping and the foundation wall.





CONSTRUCTION details of Pound's Acres building. It cost \$25,000

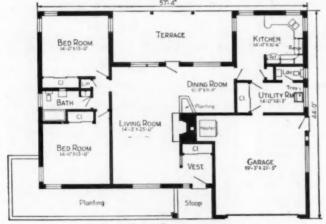


RADIANT heat pipes are installed on each side of concrete floor its pig katchery. The copper pipes are spaced 24 inches on centers, anchored to Vermicuitte concrete under them and covered with wire mesh and 2 inches of concrete



INTERIOR of one of the King concrete block houses built on a radiant heated slab. Fireplace is standard in all units. Interiors of exterior walls are moisture-sealed, furred out and plastered over foil-backed gypsum lath

Ingenuity Adds Extra Value



FLOOR PLAN

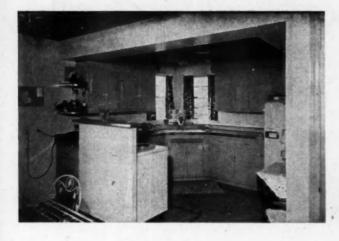
BY WORKING in close cooperation with concrete and paint experts, a young Buffalo builder has pioneered home construction with concrete block and radiant heat in that area. About three years ago, 35-year-old Dick King established his own home building business and immediately began searching for ways to hold down costs and speed erection of houses.

Fred Reinhold of Anchor Concrete Products, Inc., in Buffalo, became interested in King's problems and worked with him to improve on the appearance of houses built with concrete block. Reinhold's firm had developed a lightweight block by using expanded blast furnace slag as aggregate. By scoring this with special machines in the block manufacturing plant, a wide variety of ashlar effects can be achieved in the exterior ap-

AMERICAN BUILDER



TYPICAL example of the 35 concrete block units completed thus far. John Highland, Jr., architect, varies all existions



For Home Buyers

BRAND NAME PRODUCTS USED IN KING HOUSES Carrara glass for window sills, k room walls Comenthide paint mberlain weather strip deers **Crosley** kitchen equip Dur-O-Wel for reinforcing block walls Eljer plumbing fixtures **Fleetlite** windows Flexicore precast concrete Formica counter tops Kencork and Kentile for floors Kwikset hardware Linde transparent m colored concrete blocks **Price Fyroplace** units lockote masonry seal Security asphalt shingles Scientific Products autor door operators U.S.G. gypsum lath U.S. Radiator boilers Vees wall tile Zonalite plaster appregate

pearance of a concrete block wall when the mortar joints are raked in harmony with the scoring, which is from 3% to 5%-inch deep.

King was conscious of moisture problems inherent in concrete block construction so he did considerable work studying the various methods and products. A paint man in Buffalo succeeded in working out a formula for a sealer which permits final exterior coats of oil paints in any color desired. Sealer is applied on the exterior below grade as well as above to thoroughly seal the block against any capillary action. Interior sides of the walls are coated with tar before being furred out for the gypsum lath. Sometimes a foil-backed gypsum lath is used without the tarring process and sometimes both the tar coat and the foil-back lath are used. Interior walls are finished with vermiculite aggregate insulating plaster. Lintels and sills are precast concrete. This wall in the various combinations mentioned has proved successful.

King's houses, which are designed by Highland & Highland, AIA, of Buffalo, are basementless with concrete slab radiant heat, zoned for individual room control. Electrically welded wrought-iron pipe is used to carry hot water through the slabs. The houses are ranch type in the \$20,000 to \$25,000 price range with two and three bedrooms. Oversize single or full double garages equipped with automatic garage door operators are standard in the houses. A fireplace is also included in every house. Thus far about 35 such units have been completed with all of them being sold before completion.

This young builder believes that when a new house is sold if should be complete with very few if any extras for the new owner to buy to make the unit completely livable and enjoyable year 'round. This is one of the reasons he chose a window unit, made of aluminum, which comes to the building job completely assembled, with screen and storm sash, ready to install in the rough opening. This window, made by a Buffalo firm, also appeals to King because he has found it saves installation costs on the job—costs which he is determined to hold to a minimum.

King runs his own masonry, carpentry and painting crews. He sublets plumbing, heating and electrical work. He has been specializing on these houses for the last 21/2 years and has found that as time passes his concrete block radiant heated houses are increasing in popularity in the Buffalo area. Plans for a large project of these houses in a wider price range are already under way. The homes are approved by FHA and VA. When he first started using concrete block and radiant heat, banks in his area were reluctant to give him financing facilities. This is no longer a problem. He is confident he has solved all the problems inherent in using concrete block walls and floors in the Buffalo area, where the climate is extremely cold in winter and hot in summer. and is staking his future success as a home builder on that conviction.





THIS builder's efforts to cut down on the number of parts to be handled in assembling a house resulted in his choice of a factory-assembled window unit complete with screen and storm sash, which can be easily and quickly installed in one operation on the job

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INTERESTED CUSTOMER is shown a stairway detail while others select items from the coloriul boards

Buying Made Easy with Self-Order Service

MERCHANDISING by self-service, in which the customer is able to handle and inspect the merchandise he wants to buy, has proved an outstanding success in a number of fields. Lumber dealers, the bulk of whose stock does not ordinarily lend itself well to the system, have experimented widely to find workable adaptations of the system—and one of the most successful reported to date is the "Self-Order Service" of the Forest City Material Co., Cleveland, Ohio.

Designed to make easy the ordering of complicated grades, sizes and kinds of lumber, and colors, sizes and types of other materials, the Forest City Co. system centers on movable "Self-Order" merchandising boards 7 feet, 2 inches high by 8 feet, 2 inches in width. The firm's customers say that through use of the displays, which include a sample of each grade and dimension of lumber and of each

A Cleveland dealer helps customers to help themselves – and it pays off

building material in stock, they are able to see at a glance merchandise that was formerly hidden in the yard or warehouse.

Each sample is identified as to grade and the unit by which it is sold (lineal foot, square foot, bundle, etc.) and has a large price tag alongside. This price is kept current, can be changed in a few seconds. One customer described the system as "a giant catalog with everything in the third dimension so that you can handle the real thing instead of a picture."

Theodore Carlon, the company's advertising and merchandising manager, who originated the display boards, gave this account of their development:

"Our stores, like most lumber dealers", experience daily and weekly spurts in retail buying. These spurts usually come between 11 a.m. and 2 p.m. and after 4 p.m. on week days, and run all day Saturdays. You can't successfully operate a lumber store by hiring enough sales help to meet these peak spurts of business. Rather you must average out the number of salesmen to the number of customers on the total weekly basis.

"As a result it was noticed that we lost many sales during these spurts because some customers couldn't wait. Our problem was to keep the waiting customer interested, keep him from walking out and, further, to educate him so that he could tell the salesman exactly what he wanted and how much; the average lumber customer knows very little about grades, units of sale, etc., and consequently takes much of the salesman's time and his own in getting information on the products.

"On the other hand, the waiting customer walks around the store and can't see what he wants because usually the only tie-in and related items

AMERICAN BUILDER

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are on display or on tables, while the main items, such as framing lumber, roofing, siding, wallboards, shelving. sheathing and plywood, are all stacked in the yard and out of the buyer's sight.

"We decided to try to bring these bulk lumber yard items inside the retail store in the form of swatches or samples, to display them prominently and price them in the simplest way possible. In this way, the waiting customer would not only be kept interested but also would learn something about what he wanted to buy."

The first board constructed by the firm was for roofing, siding and shingles. One each of every item stocked in this category was colorfully displayed and placed in the store for a typical busy Saturday trade. Results were described by Carlon as excellent; customers flocked to the display. selected the items they wanted, noting quantities and price, and were able to give orders to the salesmen very quickly. Waiting customers spent their time studying the different kinds of items; walkouts diminished and less time was wasted between customer and salesman.

Success of this first board prompted the owners of the Forest City Material Co., Leonard and Max Ratner, to go ahead with the method, including in it everything carried in stock. A Cleveland display builder, George Boehm, was engaged to build displays for the firm's three stores.

Another advantageous feature of the self-merchandising boards is that they can be moved from one place to another, permitting a flexibility of store layout. When they are placed in front of the windows, their reverse sides—which can be painted or covered with any material or fabric make excellent backgrounds for window displays.

The boards are constructed of two $\frac{3}{4}$ -inch Fir plywood panels, two $2x^4$ -inch stanchions and two $\frac{3}{4}$ -inch plywood supports. The panels are 4 x 8-feet and 3 x 8-feet. Each panel was sanded smooth and then given two coats of white pre-finishing material and two coats of a quick-drying paint with a flat finish.

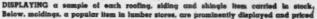
Each stanchion was cut to 86 inches and then a $\frac{1}{4}$ -inch slot 1-inch deep was routed the entire length to receive the plywood panels. These were finished in the same manner as the plywood panels. The supports, cut from $\frac{1}{4}$ -inch birch plywood, measured 12 inches high by 36 inches wide.

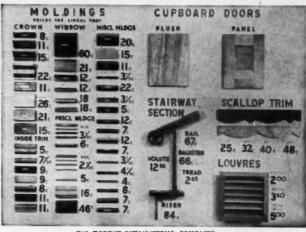
When the service was initiated, the public was told about it in a series of newspaper advertisements.

DIAGRAM (right) of elevation and section shows construction details of boards

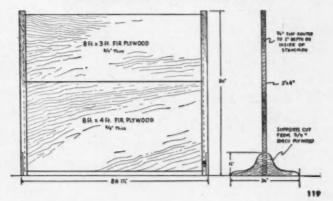
MARCH, 1951







THE FOREST CITY MATERIAL COMPANY "SELF-ORDER SERVICE" MERCHANDISE DISPLAY BOARDS





FRONT AND SIDE VIEW presents a well balanced house with a horizontal emphasis. A pleasing relationship of window and wall area is obtained,

A House That Merits Approval

DESIGNED by Henry Otis Chapman and Randolph Devans, architects of New York City, this month's Blueprint House has an inherent charm that invites closer inspection. Its conservative traditional design has retained, through the years, a well deserved popularity in spite of the increasing number of adherents to its glamorous prototype—the modern house as we know it today with its flat, shed roof and large glass areas.

This house, which is not large, contains actually five rooms within the 875 square foot area. The breezeway and garage add another 440 square feet to the total floor area. This does not include the basement for the main portion of the house. The living area turns its back to the street and faces the rear lot; the lot can be developed into an outdoor living room. Main entry to the house is obtained through a breezeway which is separated into two units by an ingenious arrangement of glass block. The bedrooms face the street. Each one has cross ventilation.

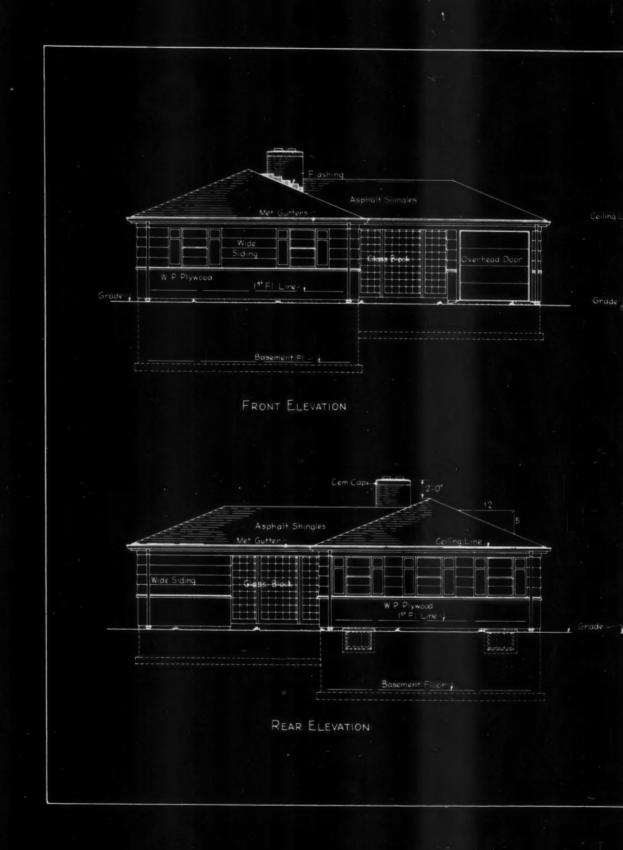
The exterior wall facing is flush plywood or boards from top of foundation to window sills. The area to the cornice line is double coursed siding or shingles laid approximately 10 inches to the weather. The roof pitch being 5 to 12 does not allow a great deal of storage space in the attic, consequently a scuttle placed in the ceiling of the bedroom hall permits access to this area for inspection. Wood blinds on each side of the windows were required to keep the windows in scale with the wall surfaces.

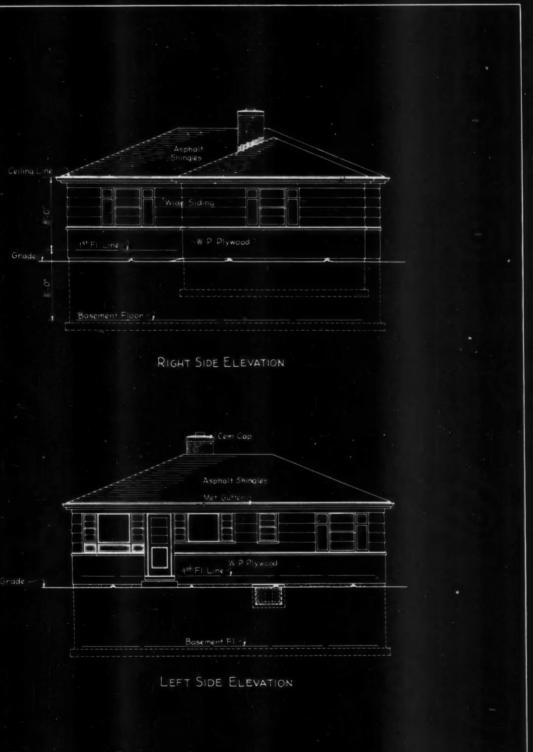
AMERICAN BUILDER

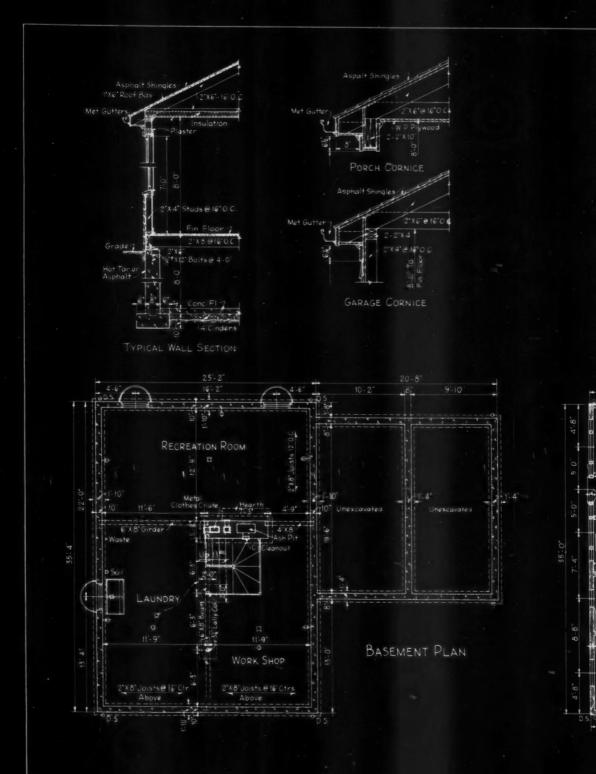
Blueprint House No. 51

Chapman & Evans, Architects

For complete one-quarter inch scale working plans of this house write American Builder Home Plan Service, 30 Church Street, New York 7, N. Y.











REFINEMENTS IN DESIGN, exterior and interior color treatments plus a host of special equipment are features of these houses

Speculative Houses with Custom Quality

QUALITY in plan, construction, equipment and interior decoration was the theme of E. A. Ballin, Hewlett Harbor, L. I., N. Y., when he set out to build and sell 50 houses similar to the one illustrated on this page. Although the price was \$29,990, no difficulties were encountered in selling all of them.

Special equipment which was part of the sales price included a Westinghouse Preciptron as an integral part of the oil-fired forced warm air heating system. General Electric kitchen and laundry equipment, also standard in each house, included a combination sink and dishwasher, electric range, home freezer, automatic laundry, drier, refrigerator, rotary ironer, electric clock and chimes. Windows are Ualco aluminum casements and fixed sash, all of them glazed with Thermopane. The three full-size baths, with built-in vanities, were equipped with Crane colored fixtures.

Other plus items in these quality homes were Fasco ventilating fans in all baths and kitchens; built-in bathroom scales; infra red and ultra violet lamps; circuit breakers; wrought iron stair rails; choice of birch, pine or painted kitchen cabinets; Textolite counter tops; built-in breakfast nook seating six persons; numerous built-in bookshelves, wardrobes, and storage areas. All bathrooms are finished with clay tile.

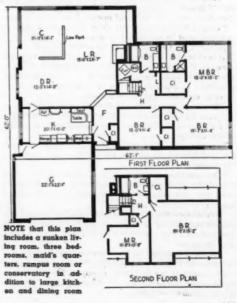
The houses, on lots with minimum dimensions of 135x195 feet, have poured concrete foundations with crawl spaces



THE FIFTY DELUXE \$30.000 units were built on 135x185-foot lots MARCH, 1951 under conventional frame floors. Interior walls were finished with three coats of plaster.

In addition to changing front elevations to achieve variety in the development, Ballin utilized the services of Color Stylist Beatrice West to blend exterior color treatments for maximum effects with paint, brick and stone.

When the model house was completed, it was decorated, furnished and prepared for opening by the House of Dreams, Inc., a New York firm of interior decorators. The houses were designed by Ballin, Lowey & Kessler of Woodmere, Long Island, N. Y.



125

Moscow or Shelby County

By R. E. Saberson

T WO PEOPLE are very much in my mind as I set about to jot down my observations on the affairs of the day ... particularly as they apply to homes and the industry which has made America the greatest home owning nation on earth and by such a wide margin that no other country even comes close.

First, let's consider the case of a Russian housewife, who came up with an idea that was promptly adopted by

the Soviet Union and put to work nationally. The story, which emanated from Stockholm, Sweden, was tucked away in the back pages of my Sunday newspaper. Here it is as reported by Reuters:

"With the approach of the Russian winter, Soviet citizens are being forced to weatherproof their own homes, offices, factories and schools.

"This mend-your-own-home movement was started by a Moscow housewife, Mrs. Lozneva.

"Tired of waiting for the authorities to repair a block of flats in which she lives, she rounded up the tenants and organized them into a 'repair collective.'

"They borrowed tools, 'scroung-

ed' materials and made a good job of repairing the leaking roof and broken windows.

"Then, overnight, she found herself famous. She hit the headlines and, as the newspaper Izvestia put it, gave the authorities a tip on 'how to save the public money.'

"Now the authorities are busy organizing 'Voskresniks' and 'Subbotniks'-meaning, literally-'Sunday tasks' and 'Saturday tasks'-in principal towns of the Soviet Union.

"Inhabitants 'volunteer' for these tasks, which are unpaid and must be carried out in spare time."

So much for the first part of the article.

It is difficult to imagine what would happen in overtime America if workmen were ordered to devote their weekends to the repairing and remodeling of neighborhood property . . . especially if they were told they would receive no compensation for their labor.

The second part of the article is of equal interest since it reveals how Russian authorities keep their subjects sold on the ways of the Communists as opposed to the freedoms which we enjoy.

"Izvestia and other publications have been stressing how bad housing conditions are in America," continues the dispatch.

"The American government, it is added, has this year halved the number of new homes being built to release more men and materials for preparations for a war of aggression against Russia.

"Nevertheless the papers frequently publish letters from readers complaining that they cannot find homes of their own and must live with relatives, or worse, share a room with strangers.

"Taking advantage of their freedom to criticize the execution of Communist philosophy but never the system itself, readers blame the factory managers for not arranging for more workers' homes, or the trade unions for failing to stimulate production. "Bureaucracy (often attacked in Russian newspapers) is holding back building materials and bureaucrats are occupying premises which should be used for homes, declares the trade union publication Trud."

There the story ends as Mrs. Lozneva's idea bears fruit with more and more Voskresniks and Subbotniks being organized to keep Russian dwellings in a state of reasonable repair.

> Next we jump from Moscow, where the joys of Christmas are unknown, to Shelby County, Ohio. where a happy customer of the Klipstine Lumber and Supply Company has this to say in the Christmas issue of the Company's publication. Under the heading of "A Christmas Thought" we read

"Our house is still, now . . even the flame in the fireplace whispers quietly . . . Martha and the kids are upstairs fast asleep . . . somehow they must sense tomorrow is the busiest day of the year . . . Tomorrow is Christmas . . . sort of a special day at our house—the home we own and love.

"Sittin' here in the silence . .

a fella can't help but feel proud . . . Martha and I worked hard for this house . . . hard so the kids could enjoy Santa Claus in a home of their own . . . hard 'cause we just wanted a home so badly. Got some other things on my mind, too.

"We haven't had an easy life. 'Spect lotta folks talked when we decided to build ... prices were high ... materials scarce ... the kids were young, and ... Martha wasn't well.

"Then one evening during the winter we called Jim Bell, the friendly Klipstine estimator, and told him about our 'dream' house. We hadn't really thought seriously about a new house until . . . Jim told us something I'll never forget . . . 'If you can afford to pay rent,' he said. 'you can afford to own a home of your own.' Kinda' thank Jim today for lookin' at the thing in that way. Martha and I were both convinced he was right.

"Things didn't go too well after we built, either . . . Billy was sick for three months . . . the winter was hard on wheat . . . and I was gettin' plenty low in spirit.

"But Martha wasn't discouraged and we put our nose to the grindstone. Today, I 'spect we're one of the happiest families in Shelby County.

"Yes sir, I'm mighty proud and thankful this Christmas... every time I think of the old days I get kinda' proud down inside ... all 'cause Mom and I decided to build this house of Ours. Makes a man really stop and think, doesn't it?"

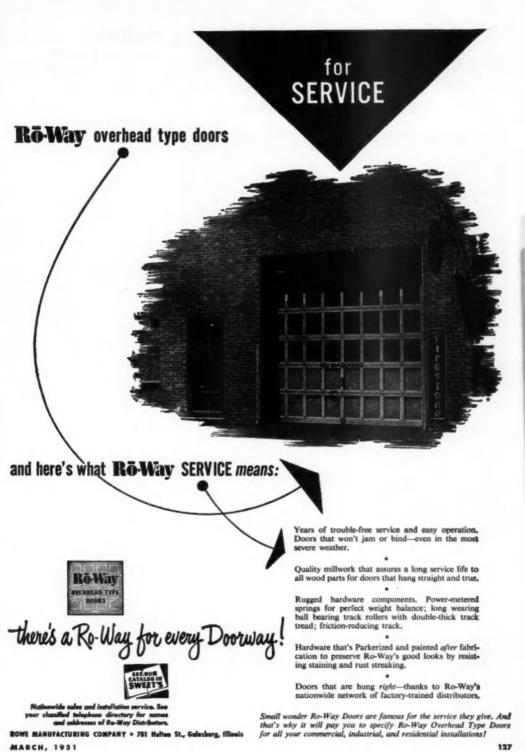
Next let's journey into the country and take a look at what's happening on the farms of America. For this picture we merely turn the pages of the Klipstine publication where we read:

"After 33 years of devoted public service, it's rather hard to single out highlights worthy of mention in honoring Shelby County's outstanding County Agent, Ralph W. (Continued on page 166)

AMERICAN BUILDER



that has contributed to a better way of life





IN·SINK·FRA

ONLY IN-SINK-ERATOR was conceived and engineered by an Architect to meet the exacting requirements of the building profession.

SEE SWEET'S -- Ga/IN Builders, 24a/IN Architectural -- or write for builder's data and prices IN - SINK - ERATOR MANUFACTURING COMPANY 1231 FOURTEENTH STREET, BACINE, WISCONSIM

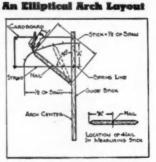
World's Oldest and Largest Exclusive Manufacturer of Food Waste Disposers

No. D-76 Garden Fences

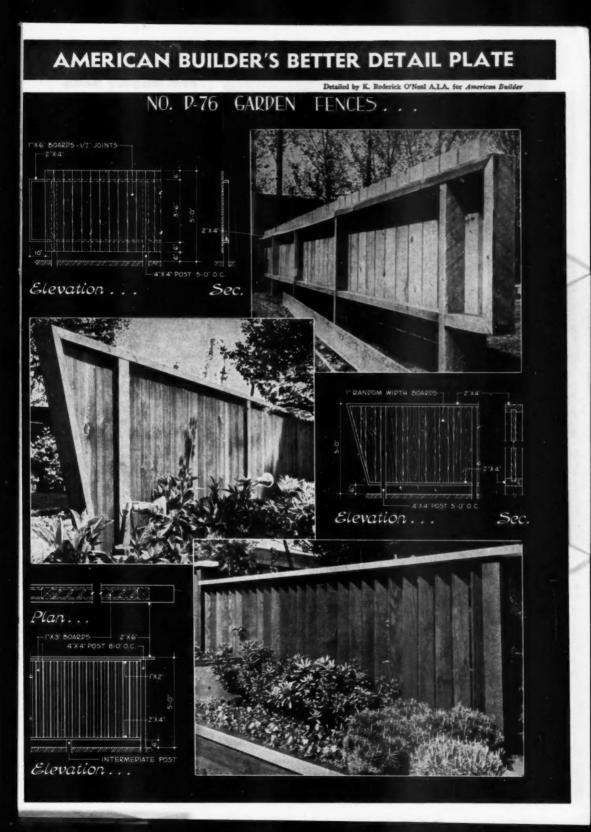
Detailed on the opposite page is a group of garden fences constructed of redwood boards. These fences are designed primarily for use as supplemental units in a complete garden arrangement, but can also be adjusted m design and structure to conform to lot line requirements.

In each of the three fence designs shown a different method of construction is used. The top fence makes an interesting pattern of the structural members with the facing boards extending six inches above and below the horizontal framing members. In center fence the pattern is established by the structural members, with the random width boards housed into framing members. The bottom fence makes good use of vertical boards spaced equally apart in a diagonal pattern. This is an excellent type for use where the owner desires to be screened from view and yet permit the breezes to filter through unhampered. The spacing of the diagonal boards can be increased or decreased according to taste.

In the fences shown all the boards and framing members are of roughhewn redwood with saw-marks showing except the top member of the bottom fence, which is finished smooth for a contrasting color; otherwise the material is left in its natural color. It is recommended that supporting posts below grade be set in concrete or heavily coated with creosote.



To lay out half an elliptical arch place a guide stick at right angles to a piece of cardboard. Make a measuring stick whose length is one-half of the arch span. Place nail in stick the distance indicated on "A." Draw arch by placing pencil at end of measuring stick and sliding nail along the spring line of arch which is bottom of cardboard.—Francis W. Ruth, Wernersville, Pa.





FIAT METAL MANUFACTURING COMPANY

Three complete plants Long Island City 1, N. Y. 9301 Belmont Ave.; (Chicago area) Franklin Park, III. In Canada: The Porcelain and Metal Products, Ltd. Orillia, Ontario

No.G-17..DrawerUnit and Display Shelf

The problem involved in the design of a stock case unit as shown in the adjoining detail plate was to provide sufficient interest in the area of concealed merchandise. The particular drawer unit illustrated is constructed of hardwood plywood, finished with natural walnut drawer fronts and the supporting frame and top lacquered.

The whole unit is mounted in a deep recess in the plaster wall and illuminated with fluorescent lights recessed in a trough above opening. The drawer fronts on the stock units were splayed so recessed finger pulls could be provided behind the face of the drawer. The drawer is mounted on ball-bearing extension slides.

The problem involved in providing an interior display for mannequin torsos was solved by providing a cantilevered Plexiglas shelf extending from the plaster wall above the drawer unit. This water clear ledge provides a floating effect which is intended to complement the display of feminine apparel.

In addition, an effort was made to provide a definition of space in the plain plaster wall surface above recessed display cases by molding recessed circular areas in the soft plaster at random around the glass shelf. These circles created a background for the display which gave an effect of soft shadow definition rather than a distracting color or material change.

The plaster wall is painted a soft tan and the inside of the drawer unit recess painted white for maximum light reflectivity. The floor is carpeted in leaf green.

Caulking Wide Openings



Coarse steel wool or remnants of screen wire are used as a base for compound when caulking wide openings.—Submitted by Arthur. N. Nelson, Kansas City, Mo.

AMERICAN BUILDER

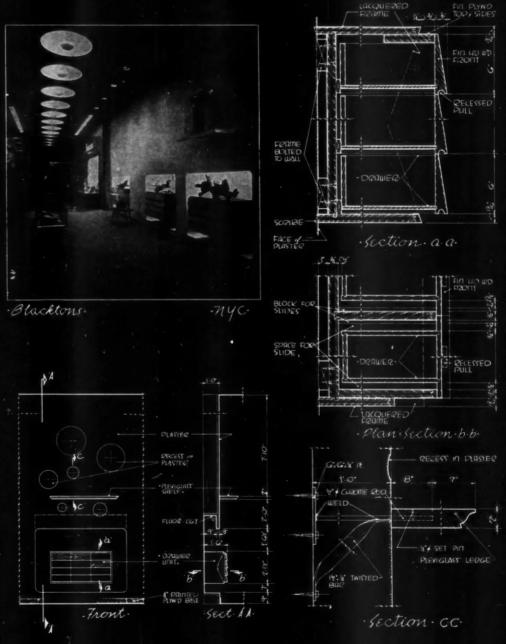
130

AT

AMERICAN BUILDER'S STORE FRONT DETAILS

Designed by Louis J. Gluskia for American Builder

Megin Dramer unit & DISPLAY. SHELF





NEW PRODUCTS Offered by Manufacturers



Insert Radiant Heaters-Markel Electric Products, Inc., Buffalo, N.Y., and La-Salle Products, Inc., 143 Seneca St., Buffalo 3, N.Y. Automatically produce and maintain any desired temperatures between 40 and 85 degrees F. Guaranteed.



Lang Co., Eighth & Carleton Sts., Berkeley 10, Calif. This aluminum screen will not rust, needs no paint. Will fit standard size double hung wood windows, other sizes on order. Screen snaps over screws, removed in seconds.



Fastener—Speed Clip fastens insulation, asphalt shingles, rolled roofing and plasterboard to wood surfaces. Has flat head; driven like noil through insulation and into the wood. Tinnerman Products, Inc., 2036 Fulton Rd., Cleveland, Ohio.



Earth-Moving Machine R. G. LeTourneau, Inc., Peoria, III. Tournatow's A.C. and D.C. generators are driven by diesel engine, providing power for all movements of machine and for winch operating through a patented fairlead.



Panelized Homes—The Housemart Inc., 18320 Lanken Ave., Cleveland 19, Ohio. Designed to save time and money on the sile. Sections engineered for fast erection. Conventional materials. Wide variation in design. Financing service.



Sew Table—Sales Service Machine Tool Ca., 2363 University Ave., St. Paul 4, Minn. Uniboy saw table is collapsible, lightweight. Designed for cross-cut, mitercross-cut, rip, etc. Height: 34 inches; length: E4 inches.



Light Hungers—Unit package developed especially for all types of outdoor lighting by Thompson -Electric Co., Cleveland 14, Ohio, includes disconnecting and lowering hanger, fixture adapter, fixed position corner pulley.



Prefabricated Homes — Pollman 1951 house features greater standardization. Five floor sizes are made in 16 standard wall sections, have 16 separate front elevations. Thyer Mfg. Corp., 2587 Wayne St., Toledo 9, Ohio.



Clothes Dryer—Rotite hanging type dryer features quick-acting, ratchet type line tightener for taking up line sag or scratch. Made from channel iron sections. Rotite Mfg. Division, 863 E. 140th St., Cleveland, Ohio.



Sump Pump Switch-Kenco, Inc., Elyria, Ohio. New, Kanco Roatless liquid level control switch for sump pumps is completely submersible. Actuated by air pressure an diaphragm. Pumps after water is below switch.



Magnesium Level— Scharf Magnelite line features a lightweight unbreakable frame. Die-cast vial holders are used; attached with screws they can be easily loosened for adjustment or replacement. J. B. Scharf Mig., Omaha, Neb.



Heet Distributing Stab-Flexicare Co., Inc., 1932 E. Monument Ave., Dayton 1, Ohio. Flexicare Warm-air Split system of ponel heating combines radiant advantages with advantages of conventional forced warm air systems.



Suspended Furnace—The Gilbarco oil-fired unit employs the counterflow principle of heat transfer. Has five return air openings, stainless steel combustion chamber, all-welded radiator. Gilbert & Barker Mfg. Co., West Springfield, Mass.



Light Fixture—Universal Pacemoker by Lightolier, Inc., 11 E. 36th Sr., New York, N. Y., is only 4 inches deep, creating a "built-in" lighting effect. Uses chandelier-like clasps instead of customary bottom knob.



Convection Heater—Norman Products Co., 1150 Chesopeake Ave., Columbus 12, Ohio. Overhead forced convection heater of shallow depth has low velocity impeller, single port, self-piloting, flame retention type burner, and Honeywell controls.

A835121

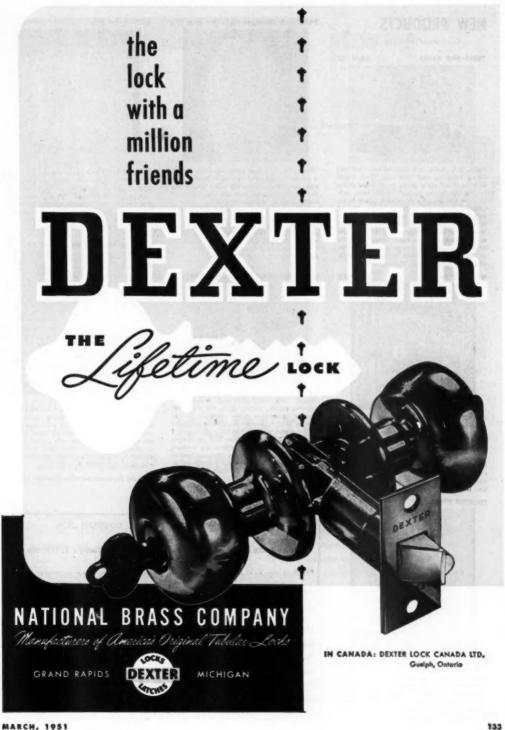
BLOCK FLOORING AB35124 "Oakblok," a sturdy block flooring, has two built-in splines to give extra durability, and each block has five crosswise grooves spaced to insure complete rigidly when laid in mastic. Available in 6%, 9, and 11½-inch sizes. This firm also affers Delfair square edge strip hardwood flooring. This 5/16-inch flooring comes in two widths, 2 and 1½-inch, and is graded according to NOFMA standards. D. L. Fair Lumber Co., Dept. AB, Louisville, Miss.



ALUMINUM MAILBOX

Pressure cast of aluminum, the new mailbox, Model 631A, has a smooth surface and sharp design details unbroken by casting marks. A plastic window, permanently attached, protects the box contents from wind and weather. Magazine holder is of wrought brass. Available in black, brass or aluminum metallic lacquer finishes. The H. B. Ives Co., Dept. AB, 5 Artizon S1., New Hoxen B, Conn.





NEW PRODUCTS

(Continued from page 132)

THREE-BAG MIXER A835107



Heavy duty Madel 16-5 concrete mixer has coil spring mounting and cast steel drum heads with machined roller paths. Drum roller shafts revolve on large, internal double row, selfaligning ball bearings mounted in pillow baxes artached to trusses welded to frame. The 27 H.P. gasoline engine is equipped with clutch and spring loaded hoist clutch which is kept in constant proper engagement to eliminate need for frequent adjustments. Model is quickly interchangeable to discharge either fram side or end. Loader attachment optional. The Kwik-Mix Co., Dept. AB, Fort Washington, Wis.

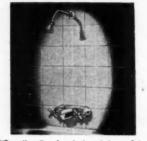


New 22-inch window fan is smartly styled to complement modern room decoration. Blade rotation on be reversed at the flick of a switch so that the fan can be used to pull air from other windows or to blaw directly into room in which it is mounted. High and law speeds permit regulation to temperature changes and the user's personal preference. Easily mounted in standard windows. Hunter Fan and Ventilating Co., Dept. A8, 400 S. Front St., Memphik, Tenn.

FOLDING STAIRWAY AB35120



An opening of 25½,554 inches is required to install the Wel-Bilt Fold-A-Way stairway, which makes attic space available for starage. Features are simple construction, and finger-tip operation. The stairway is delivered completely assembled in a single carton. It weighs about 70 pounds. Wel-Bilt Products Co., Dept. AB, 817 Farnsworth Bildg., Memphis, Tenn. BATH AND SHOWER FITTING AB35101



"Truart" wall surface bath and shower fitting is especially designed for solder-joint copper tube installations. Complete unit has roughing and finishing nipples, hot and cold valves on einch centers, automatic diverter valve in spour, self-cleaning shower head with ball joint, shower arm and flange. Complete fisting, No. T-8005, may be removed and replaced within a few minutes without breaking into or defacing wall. Briggs Manufacturing Co., Plumbing Ware Div., Dept. AB, 3001 Miller Ave., Detroi 11. Mich.

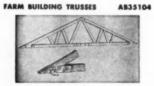


Lipton All-Seal waterproofing, a penetroing, integral, clear liquid compound, makes brick, concrete, plaster, stucco, stone, tile and other masonry construction water resistant. It may also be used as sealant for shingle roofs, all natural woods and many other materials. Will cover from 200 to 350 square feet per gallon, and may be applied by brush or low pressure garden type spray. Will not change colors of materials to which it is applied. Progressive Enterpriser, Depr. AB, 1001 N. Vermont Ave., Los Angeles 27, Calif.

ATET -

COMPACT SINK

The "Cymbrid" ink has a drainboard, single compartment sink with metal cabinet, and messures 42x22 inches. Also offered in 42x25inch size. It has a 21-inch basin 8 inches deep and features a wide ledge, sving-spout mixing faucet and sprayer. A 3%-inch ledge extends full length of sink. Acid-resisting enamel finish. Kohler Ca., Dept. AB, Kohler, Wis.



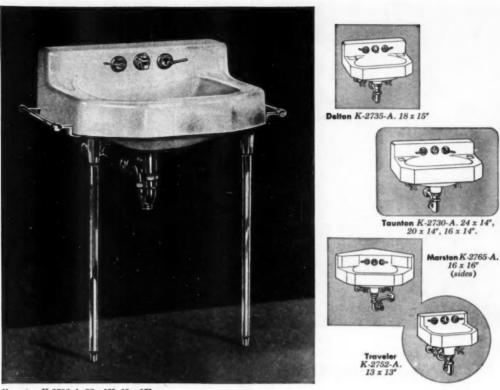
Sturdy, low-cast trusses for farm, commercial, and industrial buildings, are prefabricated of Douglas Fir and are factory finished ready for assembly. No special skills or tools are required for their erection. High strength to weight ratio. Roof sheeting can be noiled directly to trusses. Furnished in sizes up to 50 feet clear spon with complete necessary hardware. Form Building Service, Dept. AB, Rochelle, III.

RUST-INNIBITING ENAMEL AB35119 "Tortust" enamel now matches almost 30 equipment manufacturers' original colors and is applicable for identification of pipes and for the machinery safety code. Actual point is used on color chip cards to show paint gloss. The Wilburs & Williams Co., Dept. AB, Greenleaf and Leon Str., Boston 15, Mass.

New Products continued page 144

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Hampton K-2706-A. 22 x 19", 19 x 17"

KOHLER ENAMELED IRON SHELF LAVATORIES

Without overflow or with brass overflow

The Kohler Hampton is widely used for homes, apartments, institutions. Features include the unobstructed shelf across the back, ample basin and compact mixer fitting with pop-up drain. Large size has integral soap dishes.

The compact Delton is much used for housing projects, tourist courts—wherever space must be conserved. The space-saving Taunton is practical for home and apartment washrooms. The Marston permits effective use of corners. The Traveler is suitable for compact washrooms in service stations, offices.

Kohler designs are modern, clean cut. The high-luster, easy-to-clean enamel is fused to non-flexing iron, cast for rigidity. Kohler chromium-plated brass fittings are engineered for lasting efficiency, easy maintenance.

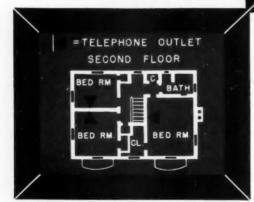
Kohler Co., Kohler, Wisconsin. Established 1873.

KOHLER OF KOHLER

PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS • AIR-COOLED ENGINES • PRECISION PARTS MARCH, 1951 133



Good telephone planning starts here



Layout shown includes outlets for portable telephone

One of the first signs of thoughtful planning is the triangular telephone symbol. It marks the spots for conveniently placed telephone outlets and permits concealed telephone wiring—two features planned to please clients and make houses you design and build more salable.

PORCH

ROOM

FIRST FLOOR

KITCHEN

DINING

ROOM

Translated, the triangles simply mean a few outlet boxes and connecting lengths of flexible tubing placed in the walls during construction. The cost is low; the beauty and convenience value, high.

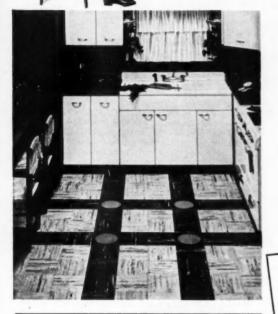
Your Bell Telephone Company will be glad to help you in planning efficient, economical conduit layouts. For this free service, call your local Business Office





Г

KENTILE FLOORS increase the value of small home construction



RENTILE FLOORS actually add to the value of small homes by keeping building costs down-quality up! Kentile's initial low cost and speedy, economical, tile by tile installation plus its amazing durability and fire-resistant properties make it the preferred floor for small home construction. Quiet and comfortable underfoot, Kentile pleases every home owner...in every room.

KENTILE FLOORS are built to last! They resist dirt, stain and wear for years and years...keeping fresh and new looking with only occasional no-rub waxings. Colors can never wear off... they go clear through to the back of each smooth, tough tile. And a Kentile Floor can be laid anywhere... even below grade on concrete in direct contact with the earth! Kentile Floors are ideal, too, for modern non-basement homes...or over radiant heating installations.

KENTILE is available in 26 light, bright decorator colors to allow almost infinite design opportunities. And special die-cut decorative inserts are available for installation at no extra labor expense to give each floor a note of individual interest. And, national advertising tells your customers about Kentile's famous guarantee.



KENTILE · KENCORK · KENTILE RUBBER TILE

KENTILE, INC., 58 Second Ave., Brookiyn 15, N. Y. • 350 Fifth Ave., New York 1, N. Y. • 705 Architects Building, 17th and Sensom Streets, Philodelphic 3, Pe. • 1211 NBC Bidg, Cleveland 14, Ohie • 225 Maores 3t., 5.E., Altenta 2, Ge. • Kansas City Marchandise Mart Inc., 22015 Grand Ave., Kansas City B. Marchandise Mart 4, Cele. • 4532 South Kalin Ave., Chicage 32, III. • 1113 Vice 51., Heusten 1, Texas • 45301 Santa Fave., Las Angeles 58, Colif. • 95 Market 5t., Oakland 4, Calif. • 452 Statier Bidg., Boston 16, Mass.



RENEASE is the perfect companion for a Kentile Floor! It is applied directly against any smooth wall where it meets the floor area and effectively seals hardto-clean, dirt-catching cracks and crevices. It never needs painting and scuff and mop marks won't show.

Worthington's Answer To Your Toughest Pumping Problems...



Impeller (A) and shaft seal (B) — <u>the only moving parts</u>

Only two moving parts in a Worthington Blue Brute Self-Priming Centrifugall And no ports, jets or valves to clog up. Instead, positive self-priming results from expert application of basic hydraulic principles — a Worthington specialty for over 100 years.

Materials are right — in the right places. Impeller and renewable wear plates are of special abrasive-resisting alloy . . . the dual shaft seal is fully enclosed and selfadjusting . . . the steel alloy casing defies rust, erosion and hard knocks . . . the air-cooled engine is easystarting. So, with all trouble-making gadgets left out, this Blue Brute Portable has absolutely everything you want for fast, dependable pickup, plenty of reserve power — and next to no maintenance!

See your nearby Worthington Distributor for the A. G. C.-rated sizes, base-mounted or with steel or pneumatic-tired wheels.



WORTHINGTON PUMP AND MACHINERY CORPORATION Construction Equipment Soles Division Dunellon, New Jersey Distributors In All Principal Cities IF IT'S A CONSTRUCTION JOB, IT'S A BLUE BRUTE JOB

Catalogs and HOW-TO-DO-IT INFORMATION

887—VERSATILE VISE—The "Versa-Vise," a woodworking vise which can be turned to any position in a full circle for numerous uses, is pictorially presented in a new broadside issued by The Will-Burt Co., Orrville, Ohio. Thirty photographs show different uses.

888—AUTOMATIC SUMP PUMPS—Kenco floatless submersible sump pumps are illustrated and described in Circular No. 10 issued by Kenco, Inc., 1125 N. Ridge Rd., P. O. Box 400, Lorain, Ohio. Specifications and suggested applications are given.

889—METAL TOILET COMPARTMENTS—Ceiling hung and floor braced compartments, in wide range of models for varied applications, are shown in a new catalog offered by Fiat Metal Manufacturing Co., Franklin Park, Ill. Complete architect's specifications are given for each model. Construction details show specific structural features.

890—COMBINATION WEATHER STRIP SASH BALANCE—Cenco combination metal weather strip sash balance, featuring enclosed springs, maximum weathering. simplified framing and balance, is presented in a brochure available from Central Metal Strip Co., 4343 N. Western Ave., Chicago 18, Ill. Installation details are shown.

891—OPEN WEB STEEL JOISTS—Graphically illustrated 25-page catalog available from Ceco Steel Products Corp., 5601 W. 26th St., Chicago 50, Ill., shows how and where open web steel joists should be used. **Properties**, dimensions, load tables, instructions for erecting, and other valuable information are covered.

892—CABINET AND WINDOW HARDWARE— American Cabinet Hardware Corp., Rockford, Ill., has issued several new pages to be inserted in Amerock binders containing information on the Amerock line. The new literature, primarily intended for dealers, illustrates and describes a cabinetmaker pack, Colonial cabinet hardware, and the new "Wintite" sash lock.

893—**COMBINATION WINDOWS**—The Rusco (Vertical slide) prime windows are featured in a new 12page catalog offered by The F. C. Russell Co., 1100 Chester Ave., Cleveland 1, Ohio. Standard types and sizes and combined units are shown, with construction details, and installation details.

894—"SOLAR HOUSES—An Architectural Lift In Living," is title of an attractively illustrated catalog on this subject offered by Libbey-Owens-Ford Glass Co., Nicholas Bldg., Toledo 3, Ohio. Valuable suggestions on house orientation, the proper use of windows, and principles of solar heat are given, as well as house design suggestions.

895—INSULATION—"Fiberglas Building Insulation in Residential Construction." a 20-page catalog issued by Owens-Corning Fiberglas Corp., Toledo 1, Ohio, tells what kind of Fiberglas to use for the job, and illustrates how to use it for best performance.

896—ARCHITECTURAL PORCELAIN ENAMEL —Examples of the use of porcelain enamel in store fronts, (Continued on page 140)



WINDOWALL specified by Humphrey & Hardenbergh, Inc., Architects

ANDERSE WINDOW UNITS CO

OPERATING WALLS of Andersen Gliding Window Units give extra meaning to the architect's open planning of this dining area. For each window opens.

These are WINDOWALLS . . . windows that admit pleasant breezes in addition to a view and a flood of light . . . walls that keep unpleasant weather from disturbing the owner's comfort. Hundreds of combinations are possible with these beautiful wood window units-combinations which give lasting satisfaction to both builder and owner.

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 Cosporation BAYPORT - MINNESOTA

Long Handle CEMENTERS' TROWELS

Highest grade spring steel blade, tempered, ground and polished. Steel mounting; first quality ash handle 7 feet long, adjustable to any position; bolt and nut.

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illustrated

18x5	inches\$	9.00
24x5	inches	10.50
30x5	inches	11.50
36x5	inches	14.00

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These levels are simple, accurate, durable and complete with 9 foot rod, target, plumb bob, carrying case and directions.

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Level\$53.00

No. 5 Convertible Level, without Compass...**\$78.00** No. 5C Convertible Level, with Compass....**\$99.00**

> Long Handle Trowels and Leveling Instruments shipped Express, transportation charges collect. Immediate delivery. Send money order or check with your order.

WRITE FOR REE CATALOO Send for illustrated catalog deribing largest and most comfour trade, including steel mortar boxes and steel trestles. Bill Walnut Street Ranses City 8, Mo.

FIRST CHOICE OF THE TRADE FOR 66 YEARS

Catalogs

(Continued from page 138)

car dealer showroom buildings, gasoline service stations and in other applications are shown in a new 8-page bulletin offered by The Erie Enameling Co., Erie, Pa. Construction details are shown, as well as before and after photographs of outstanding remodeling jobs.

897—LIGHTWEIGHT AGGREGATES—A general brochure on Permalite aggregates, 8 pages, two colors, is separated into one section on Permalite lightweight plaster and one on Permalite lightweight insulating concrete. Available from Great Lakes Carbon Corp., Building Produets Div., 18 East 48th St., New York 17, N. Y. Technical data covers mix information, properties, and mix proportions by volume.

898—ASBESTOS SHINGLE CUTTERS—Literature available from Specialty Tool Manufacturers, 732 S. Illinois St., Belleville, Ill., presents a new model asbestos shingle cutter equipped with aluminum alloy knife bars and other refinements that make it 43 per cent lighter in weight than older models.

899—"THE WORLD'S NEWEST KITCHEN IDEAS"—is the intriguing title of a new 24-page fourcolor consumer catalog for Youngstown dealers issued by Mullins Manufacturing Corp., Warren, Ohio. It is full of practical ideas to beautify and improve the kitchen, and shows the entire Youngstown line.

900—PORTABLE HEATER—An automatic, portable heating unit that delivers extra large volumes of fresh heated air with positive safety is described in literature available from Herman Nelson Div., American Air Filter Co., Inc., Moline, Ill. For drying materials, thawing, space heating, or preheating mechanical equipment, the heater is capable of heating 25 ordinary rooms.

go1—STEEL NAILING CHANNEL—A new 12-page booklet on Screwlock Metal Furring Channel and Nailock Universal Steel Nailing Channel, Catalog SN-3, provides complete information on the recently developed Screwlock incombustible metal furring channels for use with materials to be fastened with screws. It is available from The Sanymetal Products Co., Inc., 1698 Urbana Rd., Cleveland 12, Ohio.

go2—WINDOW UNITS—"Anderson Windowalls" is the title of a new 16-page catalog published by the Andersen Corp., Dept. AB-1, Bayport, Minn., that describes their Casement window units, Gliding window units, Pressure Seal double hung window units, and Basement-Utility window units. Detail drawings and installation specifications are shown, as well as stock sizes and layouts.

SERVICE COUPON-CLIP and MAIL to CHICAGO

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ACTUAL PRICE \$10,000

How did C. H. Goodall, builder, do it?

How did he design and build a group of houses like the one shown here—each planned separately, tailored to fit its big, landscaped lot, built of the best materials and sell them for only \$7,500 to \$12,000?

"I cut out the frills", he says, "--the methods and materials that add cost but don't contribute much to a home's livability."

He even found that he could cut cost and add livability at the same time... with a window wall of Thermapane* insulating glass.

"With a conventional wall you have labor and material cost for brickwork, sillwork, plastering and painting, all in addition to the usual glazing costs. When you use double glass, you get a built-in storm sash with insulating efficiency as great as many non-transparent wall materials. Furthermore, with floor-to-ceiling windows, you eliminate the four expenses mentioned above entirely."

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Thermopane is made of plate glass or DSA sheet glass bonded at the edges by L·O·F's metal-to-glass Bondermetic Seal*. It comes in more than 90 standard sizes, as well as special sizes for nearly all kinds of windows.



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MARCH, 1951

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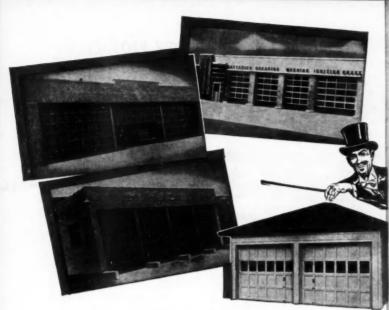
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NEW PRODUCTS

(Continued from page 134)

4835110



Made primarily for perimeter heating, nominal size of this floor diffuser is 2x14 inches. It is deep enough to allow space for subfloor, pad and carpet. Excellent for spraying warm air on large windows to counteract drafts or for putting a flat spray of air in any definite area. Fits in window sills, or in toe-space under kitchen cabinets. Neat and inconspicuous in any location. Set screw for balancing system. Damper is opened or closed by small lever. Will bear weight of heaviest furniture. The Lima Register Co., Dept. AB, 651 N. Baxter St., Lima, Ohio.

OIL AND GAS HEATERS

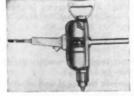
A835112



Four new 1951 fuel oil heater models and two new console-type gas home heaters, called Imperials, are available in two capacities, 41,500 and 53,000 B.T.U's. They feature smart sweptback lines and a front panel offset by dramatic shadow-box paneling. Burners have six separate stages of air injection and give uniform flame from low to high fire. Power-Air blowers provide forced warm air heating, and can be in-stalled on either side of the heater. Consoletype models feature new visible flame front and period furniture styling. Duo-Therm Div., Dept. AB, Motor Wheel Corp., Lansing, Mich.

ELECTRIC DRILLS

A835117



Four redesigned Skilsaw electric drills, Models 283, 2101, 2103 and 2121, range in capacity from 1/2-inch to 1/4-inch in steel and up to 11/2inch in hardwood. Lightness, compactness and balance are features that offer accuracy and easy portability. The 1/2 and 5/e-inch models are heavy duty, high speed drills weighing 14½ pounds. Skilsow, Inc., Dept. AB, 5033 Elston Ave., Chicago 30, III.

(Continued on page 146)

AMERICAN BUILDER

Expansion Completed Fast Three Quonsets, 40 by 200 feet each, and one 24 by 48-foot Quonset create a big new plant for Fastener Corporation at Franklin Park, Illinois.

IDEAL FOR FACTORIES, WAREHOUSES, MACHINE SHOPS, STORAGE OR SERVICE 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.

Made of N-A-X HIGH-TENSILE steel, Quonsets provide fireprotection and permanence far surpassing old-style buildings. They require little upkeep-are easily maintained. Let Ouonsets serve you now. Write us today.

GREAT LAKES STEEL CORPORATION Stran-Steel Division . Ecorse, Detrait 29, Michigan





STEEL AND QUOMSET REG. 144

Health authorities warn against danger of "up-and-down" heat!

Anthracite heat is economical, healthier, safer, more comfortable —and automatic anthracite heat pays for itself in a few years.

L very 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 hard-coal equipment your clients get the convenience of automatic heating and, because they burn the cheaper sizes of hard coal, they save as much as \$50 to \$125 on their yearly fuel bills.

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

Your clients can save up to \$50 to \$125 a year on fuel with this automatic anthracite heating equipment.



ANTHRAFLO ... A low-priced, efficient boilerburner unit. Compact. Feeds self from fuel bin. Rugged, simple construction. Completely automatic, silent, clean. Provides year-round hot water. (Furnacoburner units for warm air systems also available.)

MODERN HARD-COAL STOKERS . . . specially designed complete boiler-

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 automati-

ically feeds the coal and removes the ashes. Pro-

vides year-round hot water. (Furnace burner units for warm air systems also available)



◀ ANTHRATUBE ... A complete boiler-burner 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 bot water.

ANTHRACITE INSTITUTE

IOI Park Avenue MARCH, 1951 New York 17, N.Y.



WHEN YOU ARE READY TO SELECT SPACE-SAVING DOORS... Check these important features



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 installations 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-KNOS NEIGHT" 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 extensible door. When pushed back onto it self, FOLDOOR's maximum width is only 5½ inches. This means FOLDOOR fits inside the measurements of most walls does not stick out into the room.

You get them all with new, improved HOLCOMB & HOKE FOLDOOR HOLCOMB & HOKE HOLCOMB & HOKE MFG. CO., INC. - INDIANAPOLIS, INDIANA Profitable Installing Distributorships Still Game

NEW PRODUCTS

(Continued from page 144)

DRAFT FREE MAIL PLATE

A835113



New draft-free design makes practical a moil plate with openings large enough for magazines. The draft-free feature is accomplished by use of double gravity covers over the openings of both the autside and inside of the door. Letters ar magazines do not catch as they pass through the mail plate. Styling harmonizes with design of most hardware. Available in polished brass, polished branze, dull branze, dull nickel and chrame finishes. National Brass

LINOLEUM FLOOR COVERING AB35116



Texfloar Terano, a new linoleum floar covering available in five patterns, highlights a so-'inger-painting'' effect in each of its 9x9-inch cross directional black patterns. Colors are Pilot blue in a two-lane soft blue, Beachcomber gray, a light gray with values that range from cream to dark gray, Herdsman green, in light and dark stades of silver green, Buccaneer red ranging from light flame to deep wine, and Rancho beige, a combination of warm wood tones. Available in a two yard width. Slaone-Blaban Corp., Dept. AB, 295 Fifth Ave., New York 16, N. Y.

ATTIC FAN

AB35106



Vertical discharge attic fan, with built-in suction box, measures about three feet square and projects about 17½; inches above the attic floor. These dimensions make it ideal for use over narrow hallways and in low attics. In new construction, unit can be installed in less than an hour. All that is needed is a ceiling opening and adequate exhaust areas. Fan, motor and suction box are all in one unit that rests on attic floor. Na screws or bolts required to hold it in place. Robbins & Myers, Inc., 387 S. Front St., Dept. A.B., Memphis, Tenn.

(Continued on page 148)

An "ON-THE-JOB" ROUTER with

POWER

STRENGTH

DURABILITY

With a Stanley No. R5A Portable Router in your kit, you can do routing operations right on the job —save the trouble of moving work back to the shop, or the cost of expensive trim lumber.

The Stanley R5A is well balanced, easy to use, and gives you the benefit of these three outstanding features:

POWER. A full one-horsepower motor meets the demands of practically all on-the-job routing.

STRENGTH. Oversize shaft and bearings mean extra rigidity for smoother, more accurate cutting.

DURABILITY. Amply proven by many records of long use under severe conditions. Quality construction throughout.

Other features include sealed ball bearings; polished lightweight aluminum housing and base; forced air cooling; and easy depth adjustment. Motor speed 18,000 r.p.m. Operates on AC or DC. Many accessories available. See the R5A at your tool supplier's. For literature, write Stanley Electric Tools, 400 Myrtle Street, New Britain, Connecticut.



STANLEY No. RSA PORTABLE ROUTER

TWO OTHER STANLEY ON-THE-JOB TOOLS TO SPEED YOUR WORK:

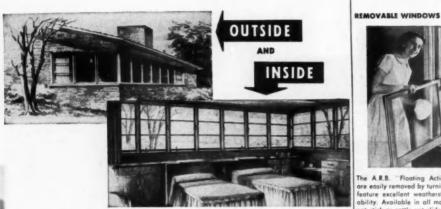


ELECTRIC HAMMER No. 310-A For speedier drilling and chipping of stone, concrete, brick; chiseling wood. Completely self-contained. Operates on AC or DC current.



ELECTRIC DRILL No. 166 Powerful, compact drill for steel or wood. Capadity %^e. Sealed ball bearings. Operates on AC or DC current.

HARDWARE . TOOLS . ELECTRIC TOOLS . STEEL STRAPPING . STEEL MARCH, 1951 147



Pella casement windows **PROVIDE CUSTOM WINDOW EFFECTS from STOCK SIZE UNITS**

Pella Casement Units can be combined into more than 300 different sizes of varying width and height. Installation cost is cut to a minimum because all Pella Casement Windows are completely assembled and pre-fitted at the factory. Pella Casements, in modular dimensions, fit right into specified rough openings.

CHECK THESE CONVENIENT, LOW-COST Pella FEATURES

ROLSCREENS - Pella

casements are equipped with inconspicuous, con venient Rolscreens that roll up and down like window shades. Rolscreens eliminate putting up, taking down,

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today for a

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complete set of

Casement Details No.1050M

painting, repairing and save valuable storage space.

DUAL GLAZING AND WEATHERSTRIP-PING - All Pella Casements are dual glazed to insulate against winter cold and summer heat . . . weather-stripped to eliminate drafts,

EASY TO OPERATE - Pella's patented hinge design and construction assure easy operation.

FITS ALL TYPES ARCHITECTURE -Pella Casements fit snugly into wood, frame, brick, brick veneer, stone, etc. They convey dignity and stateliness to Colonial architecture . . . enhance Cape Cod "coziness" . . . lend breadth to Modern or Spanish styles and sturdiness to half-timbered English.

3-LIGHT WIDE UNIT -- Only Pella can build these wide casement units, made possible because of Pella's patented hinge design, superior sash construction and steel inner frame.

astructions	aptics, send me "PELLA CASEMENT Installation in Full Size Casement Details No. 1050M."
Name	
Firm	
Address	

(Continued from page 146)

A#15111

NEW PRODUCTS

The A.R.B. "Floating Action" wood windows are easily removed by turning simple set screws, feature excellent weatherstripping and adjustability Available in all modular sizes, they do not stick or rattle yet slide easily on aluminum alloy metal sash guides. Wood is treated with repellent toxic. In various types and designs to blend with any style of architecture. A. R. B. Window Sales Co., Dept. AB, 306 E. State Fair Ave., Detroit 3, Mich.

ELECTRIC CABLE HOISTS A835115 Made in $\frac{1}{2}$, 1, 1 $\frac{1}{2}$, 2, 3 and 5-ton capacities, new "Bob Cat" heavy-duty electric cable hoists feature total enclosure of mator within the cable drum. This reduces over-all dimensions and affords weight savings. Motors are protected against moisture, splashing liquids, weather, dust and corrosion. Powered by high torque Ohio motors. Load hook oscillates on ball bearings and swivels on roller bearings. It is suspended on a 5/16-inch pre-formed plow-steel cable. Hook can be replaced without dismantling any part of hoist. Operates on 220, 380, 440 or 550-volt 3-phase, 60-cycle current. The Cleveland Chain & Mfg. Co., Dept. AB, Broadway and Henry Streets, Cleveland 5, Ohio.

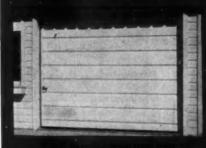
AUTOMATIC ANTHRACITE BOILER A835123

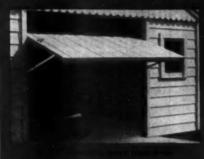


The 260M Axeman-Anderson Anthrotube matically takes anthracite from the bin, burns it, and shakes the ashes into a container or pit. Approved by Anthrocite Institute, it supplies heat for homes, apartment houses, or larger type buildings, with a capacity of 260,000 B.T.U's. Since interior of unit is under a portial vacuum at all times, motion of air is toward it, helping to keep cleaner bailer room areas. Supplies hot water all year. Axeman-Anderson Co., Dept. AB, 233 W. St., Williamsport 3, Pa. (Continued on page 150)

AMERICAN BUILDER

148







LIFETIME DURABILITY—Steel Sheets, milled to uniform specifications, are welded together into a one-piece door leaf —with no bolts, screws, rivets or stitches to become loose.

types

Grooved steel sheets welded to a deep steel frame form a rigid "box" unit---the kind of structure used for strength in bridges. Heavy, diagonal steel braces welded to a sturdy frame prevent sagging and weaving. Strand Doors stay plumb and square, operate easily, for a lifetime. Steel stands up under shipping and handling---and won't warp, shrink, rot or splinter.

Strand Garage Doors are galvennealed—galvanized with a heavy zinc coat for lasting rust protection, oven-baked to provide a clinging base for paint to match the garage. No priming coat is needed.

QUICKER INSTALLATION—Dependable springs and complete hardware including bolts, screws, handle, strong lock and 2 keys come in a single handy package (plus track in the case of the receding door). Everything comes ready to install; nothing more to buy. Hardware serves as installation templet on jambs, saving much time. Instruction sheet comes with door —handy man with simple tools can install.

STRAND GARAGE DO Bertori Steel Products Berto

BIGGER VALUE! — Strand's lower first cost results from standardization on four models—and big volume production concentrated in one plant. Order Strand Doors now from your dealer, or mail the coupon if you need more information.

STRAND GARAGE DOOR DIVISION Detroit Steel Products Company Dept, AB-3 2242 E. Grand Bivd. Detroit 11, Mchigan Pleose rush detailed description of Strand all-steel Garage Doors for 9' x 7', 8' x 7', and 16' x 7' garage openings. 1 am a Builder Deoler Prospective Owner Other

MARCH, 1951

149

New Incinerator Plant Selects Corrosion-Proof Screen Cloth!



Offices on lower level of this new incinerator plant at Ridgewood, N. Y. are screened with Lumite Screen Cloth, chosen for its exceptional durability and resistance to smoke, fumes, and salt air. Flat-application type integral flange screens made by Watson Mfg. Co., Jamestown, N. Y. and installed by Ney-Land, Inc., N. Y. C.

T'S LUMITE SARAN SCREEN <u>Cloth</u> ideal for every exterior use!



LONG-LASTING! 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.

Sold through hardware, Jum building supply dealers and sersan monufacturars.

SEND FOR FREE

SAMPLE AND

ADDITIONAL IN-

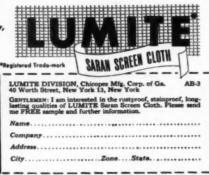
FORMATION TODAY!



STAINPROOFI Lumite Screening can't cause unsightly, costly stains on the screen frame, sill or side of a building.



NEVER NEEDS PROTECTIVE PAINTING! Lumite Screening can't rust, rot or mildew. And-it's non-inflammable . easy to handle . . . low in cost.



NEW PRODUCTS

(Continued from page 148) ELECTRICAL SERVICE FITTINGS A835102



For use with underfloor wiring systems, two new service fittings are only three inches high, are attractive in design and have a chrome finish. Fitting No. 7903-H has standard duplex T-slot receptacles for use with high potential light, power or office appliance wiring. Companion unit, Fitting No. 7904-HL is equipped with a single 3/4-inch composition bushing for telephone, buzzer and inter-communication wiring in plant offices and office building. Either model is quickly wired. National Electric Products Corp., Dept. AB, Chamber of Com-merce Bldg., Pittsburgh 19, Pa.

RAINTIGHT MULTI-BREAKERS AB35118



Complete line of raintight Multi-breakers extending from one through 20 circuits have been approved by the Underwriters' for outdoor use. Enclosures are formed and welded aplyonnealed steel. Conduit hubs are furnished in a variety of sizes in the top, and all knockouts in the sides, bottom and back are below lowest electrical part. Bottom or side hubs are unnecessary. Square D Company, 6060 Rivard St., Detroit 11, Mich.

CASEMENT LOCKING HANDLE AB35103



Locking handle, Part 7-V-E, is available at no additional cast as optional equipment on Fenestra residence casements where venetian blinds are installed. The regular Fenestra locking handle is part 7E. Both offer ease of operation. The optional handle eliminates problem of venetian blinds being marked or broken when blinds are raised and lowered while handle is in open position. Detroit Steel Products Co., 3101 Griffin St., Detroit 11, Mich. (Continued on page 152)

Mr. Builder:

Here's something made to order" for you .

Here's how one of the Country's Larger House Fabricating Plants can help you

CUT YOUR LABOR AND MATERIAL WORRIES BY 51

- Increase your volume and boost your profits, too

HERE ARE UNLIMITED PRODUCTION FACILITIES for RESIDENTIAL HOUSING SINGLE OR MULTIPLE UNITS ONE OR TWO STORY PRECISION ENGINEERED-PANELIZED-PRE-CUT

READY FOR INSTANTANEOUS ERECTION

FABRICATED ACCORDING TO YOUR PLANS OR OURS

IN QUANTITIES OF 1 TO 1,000 OR MORE AT THE 1,000 UNIT PRICE PROMPT DELIVERY

Our assembled package, produced from top quality materials to your exact specifications, provides you with a building ready for the following trades: ELECTRICAL, PLUMBING, HEAT-ING, PLASTERING, FINISH CARPENTRY, AND PAINTING.

The LFI Package consists of:

- 1. Pre-cut floor framing with semiprepared subflooring
- Pabricated exterior walls, including gables (with finished siding, cedar, or sabestos shingles, factory applied)
 Windows, metal weatherstripped, with hardware, glazed, included in wall assembly
- Exterior doors with hardware, hung in frames
 Assembled interior partitioning
- 6. Pre-cut ceiling and roof framing
- or trasses 7. Interior doors and interior trian optional

Write, wire, or call us today for the name of the LFI representative in your area

LUMBER FABRICATORS, INC., Fort Payne, Alabama





The LFI Method of Construction was used to build the Rench Home pictured above, from the Akron Builder's own plans



Above is the popular 3-badroom Tri-Lavel home. This house is protected by copyright and can be sold only by LFI Builders

HOMES

Distinctive styling, sturdy east struction, and economy of owner ship have made this LFI Ranc House popular in 36 states

NAILS

BRIGHT COMMON WIRE NAILS, made of finest quality steel wire, exactly according to rigid American specifications. Flat round head, ordinary diamond point, rustless, prime new quality, 100 # net kegs. Priced competitively. Immediate and future shipment from New York and other seaports.

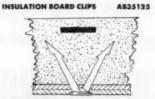
In addition to the above we are importing regularly the following items and would be glad to quote upon request:

CEMENT Blued Sterilized Plasterboard Nails Galvanized and Black Pipe Galvanized Field Fencing Galvanized Steel Sheets Galvanized Barbed Wire, Iowa Type Cold Rolled Shafting Bars Concrete Reinforcing Bars Other Miscellaneous Steel Items

RICHARD J. BAMBRICK Dept. AB-1 New York 4, N. Y. 125 Broad Street WHitehall 4-9156

NEW PRODUCTS

(Continued from page 150)



Sliding Loc-Clip, new unit for fastening insulation board tile to furring strips, eliminates the need for hammer or nails. It will work with T.G. or square joints. Designed for 1x2-inch furring strips. Just put on the market by E. G. Building Fasteners Corp., 101 Park Ave., New York 17, N.Y.

A835126

CELLAR DOORS



Steel doors offered by this company are sturdy, fireproof, and easily operated. In line with public thinking concerning public and home bomb

shelters, this firm believes the Bilco cellar doors will add extra protection for basement shelter exit. Firm also manufactures waterproof sidewalk doors, roof scuttles, vault and pit doors. The Bilco Company, 164 Hallock Ave., New Haven 6, Conn.

SPACE-SAVING FURNACE AB35114



Model 19 Superfex furnace, a new law "Hi-Bay" model, is 38 inches high and may be installed in basements having lower than average ceilings. Gas and electric lines may be brought in fram either the right or left sides. It has a buil-in draft diverter so that the flue pipe may be brought out the side or top of the furnace, according to installation demands. Air filter racks are designed so that the air filter can be used on the bottom or left or righthand side of the blower. Perfection Stove Co., Dept. AB, 7609 Platt Aver, Cleveland 4, Ohio.

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' Laboratories. Inc.

Leiders and Scaffolds for Any Perpose - Any Piace - Any Time for Greater Safety ... IMclancy ... Iconomy THE PATENT SCAFFOLDING CO., Inc.

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Mason Type Frames

Strong S' wide, many-purpose mason frames are hondy units in "Trouble Saver" assemblies. Separate working and material storage levels are previded for faster, easier work. Rungs may be used as a ladder. Plants may be placed across the rungs, as illustrated.



CHECK YOUR FILES

and see if you have up-to-

date information on Barcol OVERdoors. If not, write us or consult your Barber-Colman representative.

Specified because of MINIMUM HEAT LOSS

Home owners today like their garages to be as warm and clean as possible. You, as their architect or contractor, can help them by recommending the specification of Barcol OVERdoors. The Barcol OVERdoor has two outstanding features that minimize heat loss - first, a weathertight closing action that cams the sections snugly against the stop strips; and second, a rubber seal (standard on the Model 50) that fits irregularities in the floor to prevent drafts and keep out dirt. In addition, other distinctive features of the Barcol OVERdoor are easy operation, tailored torsion springs, continuous track brackets, protected cables, installation by factory-trained crews, and durable construction for long life with low maintenance. The satisfactory experience of many building people with Barcol OVERdoors is reflected in the many repeat orders we receive every year.

BER-COLMAN COMPANY 104 MILL ST. ROCKPORD, ILL.





backs up your sales with product features that build confidence!

Tile-Rite's heavy beveled edges, beautiful colors and perfect quality are sure-fire sales starters. The outside corners molded in all field tile and trim colors add to your customers' satisfaction.

extra satisfaction starts at this point

Tiny molded in pins anchor Tile-Rite securely in the mastic. Perfectly true, precision molded, double-bevel edges square off all lines.

Put these extra features to work for you! Easier, quicker installation saves labor costs. Simple accurate grouting improves appearance. Tile-Rite's plus qualities insure greater customer satisfaction, bring more volume business!

Investigate Tile-Rite's proven power-packer merchandising program to boost your sales today. Send today for more information.



Waiter Stromquist Dies; Was Masonite Executive

Walter G. Stromquist, vice president and general sales manager of the Masonite Corp., died of a heart attack January 1. He was 52.

Mr. Stromquist's entire business life, except for his earliest years with a railroad company, was associated with the progress of the board business. He joined Masonite in 1937



Walter G. Stromquist

as assistant sales manager, after having served six years as vice president in charge of mainland sales operations for Hawaiian Cane Products Ltd. In 1943 he was promoted to assistant vice president in charge of sales and merchandising for Masonite, and four years later became vice president and general sales manager.

Mr. Stromquist entered the sales field in 1919 as a sales correspondent with the Beaver Products Co., later becoming manager of the Chicago division. He joined the Universal Gypsum and Lime Co. in 1925 as manager of the central sales division.

An Entire Town Installs GE Garbage Disposers

The South's first town-wide installation of electric garbage disposers has begun in Mount Dora, Florida.

In an attempt to improve sanitation and simplif; garbage collection, Mount Dore has signed a contract to buy General Electric disposers for resale to local householders at a special price per unit installed.

"Our aim is to make Mount Dora a better and more attractive place to live in and visit," Mayor D. Fletcher Crane said. "We believe that by eliminating garbage cans, we can make the town both cleaner and healthier. And at the same time we can cut down the load on our garbage trucks."

The town received an initial shipment of 50 disposers, which were put on sale at the city hall. The mayor said he hoped that every one of the town's 1,500 householders would eventually install disposers, but they will not be compelled to do so.



Could forced sale RUIN your business?

Whether your business is a partnership, a proprietorship or a close corporation, here's a booklet which tells you how you can protect your interests and the interest of your family in case of your death or the death of an associate.

WRITE TODAY FOR FREE BOOKLET

"The Importance of Business Purchase Agreements." Packed with spelled-out examples this book cuts away the mystery of the Business Purchase Agreement – shows actual agreements, how they can prevent disastrous forced sale --shows how you can be sure that your share of your business will go to the right person.

NATIONAL LIFE Insurance Company VERMONT

City -

AMERICAN BUILDER

State_

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

 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.

5. DOUBLE WEATHERING CONTACT on all four sides. Gives complete weathering and water tightness.

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



Manufacturing Company, Rossmoyne, Ohio (In Greater Cincinnati)

Other STEELCRAFT quality building materials—Steel Basement and Utility Windows + Steel Sliding Closet Deers + Steel Deer Frames MARCH, 1951 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.

Mail This Coupon Today!

Gentleman: I'm interested Windows. Please rush me	d in the advantages of Steelcraft Casement full details right away.
Nome	
Compony	
Business Address	
City	ZoneState
My Position	Type of Business



4 new performance improvement features

NEW DESIGN INCREASES PERFORMANCE AND SAVINGS

	N.N.N.N.N.	

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 gypeum sheathing and up to 50% with insulation sheathing. Redesigned locking mechanism provides a tight clinch re-gardless of variations in sheathing, paper, and shingle thicknesses.

3 New, sharper ES-nail point assures quick, clean penetration of sheathing - prevents rup-ture 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 sidewall shingling job!

For complete information write to Elastic Stop Nut Corporation of America, 2330 Vaux-hall Road, Union, New Jersey.



Approved by the Red Cedar Shingle Bureau, Seattle, Wash-ington, representing manufac-turers of Certigrade Shingles. STrade Mark Reg. U. S. Pat. Off.

Well-Planned System **Of Lumber Treating** Pays Off for Dealer

All lumber entering the yard of a Charleston, S.C., dealer, Sires Lumber Co., is treated with a preservative, Permatox, which combats deterioration and prevents darkening. This emphasis on keeping all stock "clean" has, over a period of years, netted the company appreciable savings.

For this treatment the company has



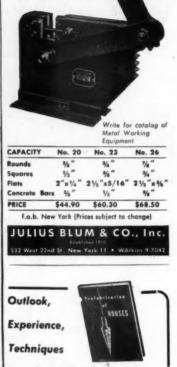
LUMBER arriving at Sires yard is started through "production line." (1) A large scaffold with overhead crane removes an entire truckload. (2) Lumber is delivered by a dolly to a series of circular saws to be sized to proper dimension. (3) It is delivered by chains to vat containing preservative. A system of pulleys then feeds boards to a conveyor on other side of vat

placed at the entrance to the yard a large scaffold with an overhead crane that removes an entire truckload of lumber at a time. This load is lowered onto a dolly which in turn delivers the lumber to a rack. from which each piece is fed into a series of circular saws that size each board to its proper dimension.

After being cut, each board falls onto a series of continuous chains that deliver material into a vat filled with the preservative. Boards are carried (Continued on page 158)

SAMSON BAR CUTTERS

- All Steel Construction
- Unbreakable Frame
- Easy Operation
- Immediate Shipment



the prefabrication of houses

By BURNHAM KELLY, The Massachusetts Institute of Technology

Based on The Most Complete Survey Ever Made

Working data on actual design and construction practices.

A review of the history, present condition, and prospects of the prefabrication industry. A study of managerial and financial prob-

lems with much exclusive material. A thorough and detailed analysis based

upon the wide study made by the Bemis Foundation. Covers prefabrication from the first experiments through the latest developments; the procurement, processing and fabri-cation of materials; the kind of firms in the business; their background and financing; and much more significant and useful material. 1951 466 pages illus. Prob. \$6.00

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JOHN WILLY & SONS, INC., Dept. AB-351 440 Fourth Ave., New York 16, N. Y. Write to Wiley for your approval cepy.

AMERICAN BUILDER

How long will it take?



How much will it cost?

Here's Your Right Answer to Both Questions!

Now, there's a business-building answer to the two main questions people ask about remodeling. That answer is the Nu-Wood and Balsam-Wool System. Here's how it works:

1. How long will it take?

Nu-Wood insulating Tile, Plank and Lok-Panels go up quickly to build or remodel rooms in attics, basements and other space. Modest in cost, Nu-Wood is factory-decoratedanother big time-saver for the homeowner. Nu-Wood takes the muss and fuss out of remodeling. It provides lasting value for the home-owneradds extra insulation and quiets noise.

2. How much will it cost?

The Nu-Wood and Balsam-Wool System has a wonderful answer for that one! Balsam-Wool Sealed Insulation, installed in the uninsulated attic of a home, will save enough in fuel to pay for itself and the Nu-Wood remodeling, too! What's more, Balsam-Wool attic insulation is sold under a money-back guarantee of complete satisfaction.



Hundreds of builders throughout the country are finding the Nu-Wood and Balsam-Wool System the key to greater remodeling sales. Want to know more? Then mail the coupon!



YOUR HOME BUYERS WANT

IN ONE EFFORTLESS WINDOW OPERATION COMPLETE WEATHER PROTECTION

Dura-Seal Combination Metal Weatherstrip and Sash Balance provides weather protection, free, easy window operation and window beauty ... all in one writ. It eliminates old style pulleys, cords, weights and box frames. It is used with a plank frame which permits the use of narrow mullions and trim. It provides an outstanding visual sales feature for your homes!



Dura-seal aluminum housings contain life-time cadmium-plated steel coil springs. These housings are attached to the jambs of a plank frame and fit into the grooves at both sides of the sash. The springs are completely encluded.



- The back surface of the Dura-seal one-piece jamb members is concave. This concavity provides a desirable fexibility that assures smooth, easy operation during all atmospheric conditions.
- Dura-seal permits easy removal of the sash.
- One-piece jamb members are cut to the pitch of the sills, thus providing an attractive appearance.



Lumber Treating . . .

(Continued from page 156)

into and through the vat by a special arrangement of pulleys which feed the boards onto a conveyor on the other side of the vat. From there they are carried by the conveyor to a point



REAR VIEW of shed is shown (4) where boards are being delivered by conveyor to point of handling. (5) and (6) Two views of the Sires Charleston yard, which covers four city blocks. (7) Wide use of mechanised materials handling equipment makes added contribution to yard's efficiency

about 100 feet away where they are handled, graded and stacked for future use.

In Business 40 Years

The firm, started 40 years ago by the father of the present president with a carload of lumber and a pair of mules, now has a Charleston plant which covers four city blocks. A new building containing roomy and attractive offices and sales space was completed in 1947. Serving a sales territory with a radius of about 50 miles, the store handles all materials except plumbing and electrical fixtures and (Continued on page 160)

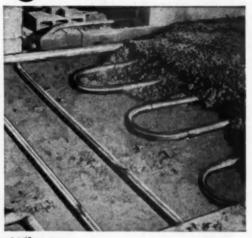


FOLEY MFG. CO. 124-1. Folity Bidg., Minnespelis 18, Minn. Send FREE BOOK---'Independence After 40'' Name Address

NOW ... ON -THE-GROUND FLOORS

Prevent Condensation! Block Heat Loss! Minimize Heat Lag!





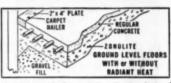
*Important Advantages Result When ZONOLITE VERMICULITE AGGREGATE Replaces Sand and Gravel in Concrete

It has recently been demonstrated by actual measurement of soil temperature at various depths that there is a very considerable loss of heat through floors of ordinary concrete on grade. This explains the common complaint that such floors are cold and tend to become unpleasantly damp through condensation of moisture from the air.

These objections do not apply, however, to on-the-ground concrete floors in which Zonolite vermiculite aggregate replaces the usual sand and gravel. These self-insulating floors prevent condensation—block loss of heat into the earth and, by minimizing heat lag, permit more accurate and immediate response to thermostatic control.

These natural qualities make Zonolite concrete an ideal base for radiant heat pipes. In an experimental installation, soil temperatures differed by 17.5°F. beneath a non-insulated concrete slab and a slab of Zonolite concrete. The soil temperature of 82.5°F. beneath the non-insulated slab indicated extreme heat-loss, while the soil temperature of 65°F. beneath the Zonolite concrete clearly showed its ability to keep heat in.

Construction details and other data on the various applications of Zonolite concrete are available without cost to architects and builders. Mail the coupon today.



ABOVE: Typical use of Zonolite insulating concrete with radiant beating coils to minimize lead, lag and loss of beat into the soil below.





MARCH, 1951



60 C or R H 75 C-600 V

RW

000 CM-

250(

THERM

HYDRO-

Imporatories as TYPE RH-75°C TYPE RW-60°C



PARANITE Hydro-Therm combines in a single wire the heatresistant qualities of Type RH and the moisture-resistant qualities of Type RW.

USED IN DRY LO-**CATIONS** Paranite Hydro-Therm carries more current per dollar

of cost. The higher amperage rating for Type RH wire under the National Electrical Code provides greater current carrying capacity. You can use smaller conductors, smaller sizes of conduit; and lower your labor costs.

USED IN WET LOCATIONS Paranite Hydro-Therm is rated as Type RW wire for 60°C operation because of its excellent moistureresistant qualities.



Lumber Treating

(Continued from page 158)

heating equipment. The Charleston plant has 40 employees.

In addition to a remilling plant where No. 1 lumber is processed into siding, flooring and millwork. Sires operates two sawmills in different locations, each about 30 miles from the Charleston yard. The remilling plant is about 60 miles from Charleston

Directing the company's activities is N. G. Sires, president and treasurer. O. C. Sires is vice president and George H. Rogers, secretary. The remilling plant is operated as the Sires Manufacturing Co.



EXTERIOR view (8) of large lumber shed at Sires Charleston plant, showing convenient driveway and parking area. (9) Store and office building seen from street. (10) and (11) Two views of interior of store, illustrating full utilization of space for displays and convenient location of order desk. Building was built in 1947

Renew Your Subscription



KRAFT is the most economical material you can use. As a safeguard against destructive weather ... as a moisture-vapor barrier, wind, dust and dirt barrier ... always dependable.

SISALATION Reflective Insulation saves up to 50% - and costs less to apply.

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AB-3-205 W. Wacker Drive-Chicego 6, IN. w York 17, N. Y. - San Francisco 5, Colif. Munufacturers of SISALKRAFT, SISALATION, COPPER ARMORED SISALKRAFT

GILSON MIXERS



MODEL 312-ST-PT 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 Gilad

GILSON BROS. CO.

FREDONIA, WIS.



It's easy to sell



DECORATIVE PLASTIC WALLBOARD

because it's built right, priced right, and has universal appeal.

Arborite's beautiful colors and patterns are no mere coincidence—they were chosen by top-flight decorators to blend and harmonize with any color scheme. Impregnated Melamine Resins protect this beauty. 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.

ON-THE-JOB INSTALLATION

Arborite comes in builder-size panels $-4' \times 8'$ and $2'6'' \times 8'$ which are readily applied with mastic adhesives and trim mouldings. It is $\frac{1}{8}$ -inch thick, which gives it wallboard strength.

Arborite's easy ON-THE-JOB installation means no headaches from expensive shop prefabrication and fitting . . . means time, trouble and money saved.

DOZENS OF USES

Arborite 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.

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 ar wire for full particulars.



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

CRYSTAL the aright icone masonry water repeller ERYSTA

comprehensive wasual

everything you need to know to help you get more of this profitable growing business

Wurdack pioneered in the development of silicones as a masonry water repellent back in 1946. CRYSTAL backs its claims for superiority with on-the-job performance. In Wurdack's new. comprehensive manual you will find:

Information about Silicones What CRYSTAL Is What CRYSTAL Does ... including its 5 Way Protection ... 1. Repelling water. 2. Preventing efferescence.

3. Retarding staining. 4. Protecting mosonry joints. 5. Safeguarding interior decorating.

How CRYSTAL is Applied Where CRYSTAL Can Be Applied Where To Obtain CRYSTAL

Some of these pages are filed in Sweets 1951 Architectural and **Engineering Services Catalog**

WURDACK CHEMICAL CO. 4956 Fyler Ave., St. Louis 9, Mr Please send CRYSTAL. me information Type of Business Address City_ State CHEMICAL COMPANY

4956 Fyler A

Model Pig Hatchery

(Continued from page 115)

The center alley is a solid sandand-gravel concrete slab, 8 feet 6 inches wide, without radiant heat pipes. It was leveled off to the same height as the pen floors, and was then cut back 18 inches in from each side to form a shallow gutter that varies in depth from 2 to 4 inches. The alley floor in the west wing has a 4 inch fall to provide drainage to the outside. In the east wing, the floor was sloped each way to the center, with a drain under the floor, because of the concrete feeding floor at the east end.

Each wing has sixteen 6 foot 8 inch by 7 foot 11 inch pens, eight to a side. Pen partitions and alley gates are high carbon galvanized steel with #7 welded wire filler. They are 3 feet 3 inches high, but stand two inches off the floor, making the total height 3 feet 5 inches. Partitions and gates can be removed to make larger pens. Each pen is equipped with three folding farrow rails : one fastened to the tile wall, and two to the pen partitions, to save little pigs from being crushed to death by the sow. After farrowing, the rails are folded up out of the way. Easy to clean tilting cast iron troughs are installed in every pen gate, permitting hogs to be

fed water and dry feed from the center alley, rather than from inside the

There are fourteen 10 by 28 inch ventilating roof windows on the south slope of each wing, and two 24 by 32 inch, 4-light windows at each end. These allow entrance of much more sunlight than could be gained from side-wall windows alone. During an average noon hour, 1200 B.T.U.'s of solar heat pass through each roof window. At each end of the building are overhead exterior doors. In addition, each wing has two 28 by 32 inch insulated pig doors on the south side, hinged so they can be hooked up out of the way. Sliding doors between the feed room and farrowing quarters keep out dust and drafts

The ventilating system is thermostatically controlled, and provides for a complete change of air every four to five minutes. Two exhaust fans carry off used air, and outlets can be set to remove air at either the ceiling or the floor level.

The downstairs feed room has three grain bins and space for power mixers so that feed can be mixed inside. It is wired for 220 volts to accommodate a 5 h.p. motor. Ceiling height downstairs is 9 feet: in the

(Continued on page 164)



Here's what the men who use ATLAS MORTAR say:

"We like Atlas Mortar because of its workability."

* Actual quotations from satisfied masons and contractors who use Atlas Mortar Cement.

Statements like the above, and others shown here, are typical. The men who *buy* Atlas Mortar praise its consistently fine color, and excellent appearance of the finished job. The men who *use* Atlas Mortar like its easy workability, the silk-smooth way it responds to the trowel. So

> take a tip from the experts. Try Atlas Mortar on your next job.

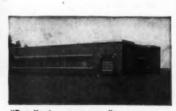
> Atlas Mortar has proved itself not only on the job, but in rigid laboratory tests. It complies with ASTM and Federal Specifications for masonry cement. For further information write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Avenue, New York 17, N.Y.



"Smooth . . . and fat."*Masons like the amooth, easy response to the trowel of buttery, plastic Atlas Mortar.



"True, tight joints."*The satisfactory hardening of Atlas Mortar Cement is proved by its performance under field conditions.



"Excellent appearance."*Contractors appreciate the excellent appearance, color and strength of Atlas Mortar.

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"THE THEATRE GUILD ON THE AIR" - Sponsored by U.S. Steel Subsidiaries - Sunday Evenings - NBC Network MARCH, 1951



Dodge Reports are early news, issued daily, about construction jobs to be built...and about bidding and awards of contracts as these jobs progress. Available to cover your trading area, from a single county to 37 eastern states...issued in a manner to confine information to just those jobs which offer selling opportunities to you.

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Without Dodge Reports ...

- You may never have a chance to bid many of your best opportunities.
- You would spend far more money looking for opportunities than you have to.
- You can't keep informed on the changing factors and may lose out by not knowing whom to see and when to see them.

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Codar Shingles Withstand 136 MPH Wind Test

A wind velocity of 136 miles per hour failed to disturb or distort in any way a roof panel of red cedar shingles subjected to recent wind-tunnel tests, according to the Red Cedar Shingle Bureau.

Bureau secretary-manager W. W. Woodbridge said the purpose of the tests, conducted at the University of Wichita, Wichita, Kas., was to determine the actual intensity of wind required to blow off cedar shingles from a typically-constructed roof panel, and, since 136 mph was the tunnel's maximum velocity, this point was not established.

The University of Wichita's wind tunnel is a return-flow atmospheric type, with a test section seven feet high and 10 feet wide. In this test section, a cedar shingle roofing panel slightly larger than 5x8-feet in size was installed at a 30-degree angle to simulate normal pitched roof construction.

The shingles were No. 1 Certigrade 16-inch, laid at standard 5-inch weather exposure with two 3d nails driven into each shingle approximately six inches above the butt and about one inch from the edges of the shingles. The shingles were applied to 1x4-inch sheathing boards, spaced apart on five-inch centers and nailed over 2x4-inch rafters spaced on 16inch centers. At the top edge of the panel, shingles were laid crossways at five-inch exposure to represent normal ridge or comb application.

Woodbridge emphasized that the äpplication of the shingles followed normal, standard practice in every way, in accordance with the bureau's published specifications.

Model Pig Hatchery

(Continued from page 162)

loft, 13 feet 6 inches. Five hundred bales of straw can be stored on the second floor. A built-in ladder gives convenient access to the loft.

To the left of the feed bins is a 6 by 8 foot boiler room, lined with gypsum board, for the oil-burning furnace and a 500 gallon hot water heater. The latter supplies water for washing and sterilizing the farrowing pens. To allow the radiant heat to be cut off in either wing without damage to the copper tubing, 14 gallons of anti-freeze was put into the system; an idea borrowed from outside snow melting installations.

Five thousand square feet of concrete feeding floor surround the house on the south side and ends.

At present, the farm has a total population of more than 1,000 hogs.



Floor Layers Who Lay 'em, Like 'em BRADLEY UNIT WOOD BLOCKS, THAT IS

No endorsement means more, because these fellows find out fast what's right or wrong with how flooring "works,"

They find Bradley Blocks work right — and say sol That's because Bradley's drying, seasoning and machine work follow proven practices, plus Bradley's special advantage of Straight-line ripping which promotes exact matching of strips in the blocks and blocks in the floor.

Available in oak, beech and pecan, finished or unfinished, for mastic and nailed installation, Bradley Unit Wood Blocks provide smart, modern decorative beauty and enduring service for homes, apartments, offices, libraries, churches and schools.

Related Bradley Premier Products Straight-line hardwood flooring in oak, beech and pecan, Random Width Oak Plank . . . each finished or unfinished; oak stair treads, risers, thresholds and glued-up panels.



For further information, call our nearest representative, or address BRADLEY LUMBER UOMPANY of Arkansas WARREN, ARKANSAS



MARCH. 1951



Squirrel cage blowers, accepted and used in air conditioning systems and for forced air heating, are used exclusively in the Trade-Wind Clipper. This forced air discharge, located at the ceiling, traps all wavanted air and expels it instantly. Trade-Wind also has located the motor completely variale the greasy air stream. The motor stays clean indefinitely -requires for less service-and is guaranteed for 5 years. No ether small room ventilator combines all these outstanding adventages. In addition, Trade-Wind Clippers are easy to installthey are competitively priced—and they make every new owner another salesman for the Trade-Wind line.

Get the complete story from your local supply source, or mail the coupon today.

*Important price reduction has just been made on Model 2501.

MAIL THE COUPON TODAY

TRADE-WIND MOTORFANS, INC. 5705 \$. Main St., Los Angeles 37, Calif. 'Please send me the complete story on the Trade-Wind Ceiling Ventilator.

166

Saberson ...

(Continued from page 126)

Munger. Reared on a farm near Xenia, Ohio, Mr. Munger has spent a lifetime working for the improvement of agriculture and farm-living in our community.

"One of the best ways to illustrate the leadership and interest in youth displayed by Mr. Munger is his work in developing and advising the 4-H Clubs of our County. Under his able guidance 4-H Club work has made remarkable progress. In 1920, when Mr. Munger took over youth work, the entire County had only 35 members while today, through years of untiring effort, the County boasts of .684 project members—all actively engaged in some form of agriculture or home management.

"Since first coming to Shelby County back in the cold winter of 1918, Mr. Munger remembers many 'firsts' in our County's agriculture. Too, it must be remembered that winning the confidence and interest of farmers in the early days was not easy. However, Mr. Munger believes that one of the important milestones in gaining the confidence of County farmers came in 1920, when his extension office first introduced a control for the Hessian Fly, then causing widespread damage throughout the state's wheat crop. By placing their confidence in this extension program. many of these distressed farmers were able to 'whip' the fly problem, and later, use other recommended practices to make their farms more productive.

"Along with good agriculture, Mr. Munger has also been interested in the home life of his community. Working with various rural groups, his contributions to the health and welfare of the County cannot be taken lightly. Always a believer in fair play and wholesome companionship, the Mungers have practiced those same fine traits in raising their family of four— Bob, Doris, Ralph and Dick. Indeed, Shelby County has been the beneficiary in having this wonderful family.

"Finally, we ask Mr. Munger to sum up what he believes to be the outstanding part of this work during the past thirty-three years.

"In his own words, he said, 'During the period of 33 years, no cliques or strifes have been present among the people of the County. They have all worked together for the betterment of agriculture in Shelby County."

It seems like a long jump from Moscow to Shelby County. True the miles have been shortened by modern transportation but there is still a vast difference between the philosophies of these two great powers.



Here is the answer to a long time need, a dado with superior performance, that can be set for any groove width from 1/4''to 13'' by merely turning a dial... and without removal from the arbor.

Smooth, accurate grooves up to $\frac{3}{4}''$ deep are cut by "Silvanite" High Speed Tool Steel blades, Rockwell Hardness test 58. Cutting edges stay sharp 4 to 5 times as long as conventional dados. Blades are silver brazed in interlocking aluminum and steel plates, perfectly balanced and self cooling. Will accommodate shafts of $\frac{1}{22}, \frac{3}{4}'', \frac{4}{3}'', a daptable$ for right or left hand rotation. A time,money and temper saver at \$19.75. Selected dealerships available.

See your dealer or write



Saves time for carpenters, painters, paper hangers, contractors, and builders. Also saves trucking and storage space between jobs. Use any 2x4 for legs-2x4, 2x6, or wider for crossbar.



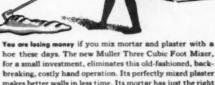
At building supply and hardware stores. Look for the handy display carton. If your dealer cannot supply you, order direct.

> GRAND HAVEN STAMPED PRODUCTS COMPANY GRAND HAVEN, MICH.

Do YOU mix the way the Egyptians did?

Change to the **MULLER** it's better, faster, and costs less!





nor these days. The new multer Three Cubic Foot Mater, for a small investment, eliminates this old-fashioned, backbreaking, costly hand operation. Its perfectly mixed plaster makes better walls in less time. Its mortar has just the right consistency to please the most particular bricklayer and increase his production. Light and portable, the Muller is ideal for inside mixing and holds a full bag batch of most mixtures.

PRICE: \$300 with electric motor and extension card \$320 with air-cooled engine—FOB Factory. Also available in 6 (2 models), 9 and 12 cubic foot sizes.

Cable Address: "Mulmix"

Start now to cut your costs and increase your profits. Write or wire for name of nearest Muller Distributor.

MULLER MACHINERY COMPANY, Inc.

Manufacturers of tilting and non-tilting concrete mixers, concrete carts, martar boxes.

Metuchen 4, New Jersey

Here's how you build a PRECAST JOIST CONCRETE FLOOR

By simplifying forms and reducing costs, the precast concrete joist gives the average small house all the advantages of concrete floors. They, in turn, give builders strong sales arguments: a house with greater strength, rigidity and firesafety; floors that will not shrink, sag, warp or squeak.

Here's how to build a precast joist concrete floor:

- Build exterior wall to a floor height and set precast joists according to setting plan.
- 2 Set bridging between joists at supports.
- 3 Set spreaders between joists and lay forms on spreaders. Also box openings for utilities.
- 4 Lay paper (if used) and place two-way reinforcing bars for

MARCH, 1951

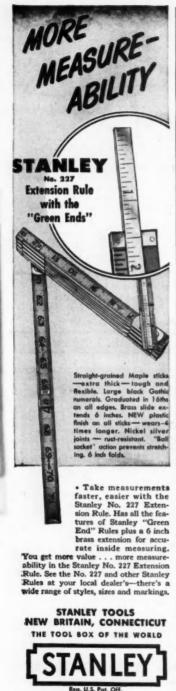


slab. Also place conduits for wiring, plumbing and heating.

5 Place and finish concrete slab, using properly proportioned and mixed concrete. Moistcure from five to seven days. For more details, including design tables and sketches on forming, bridging and so forth send today for a free copy of 20-page illustrated booklet, distributed only in the U.S. and Canada.

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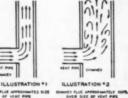
HARDWARE . TOOLS . ELECTRIC TOOLS STEEL STRAPPING . STEEL



Chief Engineer, Janitrol Space Heating Division Surface Combustion Corp., Toledo, Ohio

"What type of chimney should I use in my next house? Should it be designed for eventual use with coal, or should it be designed specifically for gas, the fuel I am going to install now ?"

This is a frequently-heard question in areas where rigid, inflexible, old building codes determine construction. A costly masonry chimney running to the ground is required. The-





PLUE APPROXIMATES SIZE

DIAGRAM of effects of oversize chimney

oretically, such a chimney, with the generally required minimum flue liner size of eight inches by twelve inches, is an "all-purpose, all-fuel chimney." Actually it is not all purpose, when built according to conventional coal furnace designs and specifications.

The thinking back of the requirement of an "all-purpose chimney" is that it permits the occupant of the house to use either coal, oil or gas. Where so-called "all-purpose furnaces" are installed in basements, this is a possibility that may occur. These "all-fuel" furnaces are actually nothing more than coal-designed units which can be adapted to gas or oil fuel with the installation of a gas or oil conversion burner. Such conversions are often very efficient, and where continuity of fuel supply is uncertain, the all-fuel furnace has merit.

However, in most areas with natural gas utilities or mixed gas utilities, there is no reason to question the long-run availability of gas, if gas is available for heating purposes when new houses are built. Shortages have been generally discounted and gasdesigned furnaces, or boilers, have been generally used instead of the allfuel type. In such structures, even where basements are found, no provision is made for storage of coal. In many instances, the compact overall

(Continued on page 170)



Gate City

BUILDERS-you'll welcome these Gate City EXTRA ADVANTAGES

Plan now to include this profit item in your 1951 uilding program. Availability, proven quality, performance, and easy installation are only a few of the GATE CITY advantages that will help to ease your window problems this year.



Performance-tested on thousands of homes, apartment buildings, hotels, schools and hospitals throughout the U.S.A., during the past ten years.





It's New! Big! 4-Color "Double-Barrelled!"

Universal-Rundle's 1951 Advertising Campaign in SATURDAY EVENING POST and BETTER HOMES & GARDENS

Here's the big news of 1951 in the bathroom fixture field! In the Saturday Evening Post, Better Homes & Gardens, and other magazines, the world's finest bathroom fixtures will take a bow, and meet the millions!

More than 14,000,000 pairs of eyes will be stopped by this advertising that will make fixture history. It will employ an entirely different technique to "showcase" bathroom ware to the public. It will show new modern Bathrooms for Americans-designed by Vir.g Smith, one of New York's top designers of interiors. It will present fine fixtures and designs so beautiful that only color photographs can do them justice! And it will offer a 1951 idea and plan-book that will bring eager

home-makers into your store or showroom.



FREE 1951 CATALOG

Smashing national advertising, n ing, direct mail, displays, catalogs, plan-books, newspaper adsl That's the kind of year-round support Universal-Rundle Deal-ers will get in '511 See the complete U/R line in the new 50th Anniversary Catalog. A cyclopedia of fixture facts for every who sells, installs, recommends, or spe bathroom fixtures and kitchen equi For your copy, write us.



On <u>All</u> Your Garm Buildings GALVANIZED SHEETS Give You <u>All 3!</u>



1. **PROTECTION**...of valuable crops, livestock and machinery against elements. Galvanized roofing covers more than ½ of all U.S. farm buildings today!

2. STAY-ABILITY ... Hold at the nail-holes, resist high winds, stay sealed and solid for years and years. Strength of steel—protection of Zinc!

3. ECONOMY ... Reasonable original price ... low repair and upkeep cost ... long years of service ... add up to economy you can count on thru the years.

Now, More Then Ever... PROPER CARE PAYS! When material shortages threaten to limit new construction and replacement, careful maintenance of present structures is essential. A few simple steps with very little labor can make galvanized roofing a lifetime material. 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.
Facts About Galvanised Sheets List of Metallic Zinc Paint Mfrs. Directions For Applying Galvanised Sheets Repair Manual on Galvanised Roofing and Siding
Use Metallic Zinc Paint to Protect Metal Surfaces
NAME
ADDRESS
TOWN AND STATE

Modernize Chimney

(Continued from page 168)

size of gas-designed units has resulted in elimination of the basement, the heating unit being placed in a utility room or garage, or in heater closets, or even in the kitchen.

With such first floor installations, the conversion to other fuels was not even considered in the design of the house. The changeover to coal would be impossible without major remodeling. Yet, even where such is the case, local building codes often require a costly "all-fuel chimney."

If cost were the only consideration, this situation would not be too bad; but the fact of the matter is that in some cases the greater mass and the greater cross sectional area of these "all-purpose chimneys" have resulted in decidedly unsatisfactory chimney performance with gas appliances. In some cases these costly masonry chimneys have turned out to be a liability, requiring a proper size flue liner to be installed within the oversized flue in order to get proper venting action and to overcome the condensation problem.

Now why is this? With coal or with oil a positive draft is necessary to supply adequate air for efficient combustion and for pulling the products of combustion from the heating plant. With gas, however, the case is different. The unit is designed to supply all the air for combustion when it is not connected to a chimney. The purpose of connecting the appliance to a chimney is simply to get the products of combustion out of the house.

Gas-fired central heating appliances which are built and tested in accordance with the American Gas Association Approval Requirements operate with lower flue temperatures. require much less air than coal or oi furnaces, and operate at higher efficiencies. All of these factors taken together result in a smaller volume of flue products at a lower temperature for a certain required heat input. In many cases the heat content of the flue products from such gas-fired central heating appliances is inadequate to properly heat and completely fill the "all-purpose chimney." This results in a recirculation of the product of combustion within the chimney itself and this further reduces the temperature of these products. Under such conditions the draft developed in the chimney may not be sufficient to carry all of the products outside of the building. This shows up as long periods of flue gas spillage and, in some cases, continuous flue gas spillage into the house from the drafthood on the appliance.

(Continued on page 172)



BIL-JAX



Versatile, re-usable Bil-Jax scaffolding saves time and money on all building jobs. Affords maximum safety. Easy to set up, take down. Stores compacity. U. L. tested, approved.





Preferred everywhere by the trade for many years. Made with barbed shanks and suitably plated for maximum resistance to elements. Available in one, two or five pound packages and in bulk. Immediate delivery.



HOMASOTE presents



—the silent, fingertip flush door for passage ways and closets

-developed through two years of constant research and field testing

Highest in quality . . . simple and inexpensive to install . . . silently responding to fingertip control . . . here is the roller door as you knew it would one day be perfected.

This is a hollow core, flush door—regularly sold in unselected gum, paint grade—which can be painted or stained for many beautiful effects—Black Walnut, African Mahogany, Birch, Red or White Oak.

Nova Roller Doors are light, strong and warpresistant. They are ideal for closets, basement storage, garage storage, storage walls and removable partitions.

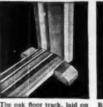
The closet may be one of the standard sizes or extend the width of the room. Two or more doors enclose it entirely. Instead of opening only part of the closet, as with a swinging door, you have full access. And—you don't waste the valuable floor space needed to accommodate a swinging door.

The Nova Roller Door comes cartoned with special side jambs, head and floor tracks and all hardware installed. In less than one hour's time, one man makes the complete installation. *Nine standard opening sizes:* 32", 36", 40", 48", 56", 60", 72", 84", and 96". *Three standard heights:* 6'0", 6'6" and 6'8".

We urge you to write today for the full details.

NOVA SALES







Revolving roller guides operate in head track; vulcanized rubber roller: in floor track – assuring silent, fingertip control.



Side jamb (left) is routed to receive the door; head track (right) is accurately machined for perfect operation of revolving roller guides.

A NOVASCO® PRODUCT

O. TRENTON 3, N. J.



A wholly owned subsidiary of the Homasote Company, manufacturers of the oldest and strongest insulating-building board, Wood-textured and Striated panels.



171



"-Here's time-tried roofing for modern homeslt's FOLLANSBEE TERNE METAL"

IT PACKS A LOT OF SALES PUNCH It's lifetime roofing at the right price It fits into any style of architecture

If you're building ranch-style homes, or Cape Cods —or any other type of modern housing—Follansbee Terne Metal Roofing is the ideal material to match the architecture and the color scheme.

The lifetime durability of Follansbee Terne Metal Roofing is a real magnet for buyers while the color combinations of roof and trim assure a fresh, in-style appearance.

Don't overlook the pulling-power of time-tried Follansbee Terne Metal Roofs. More and more buyers are going to ask about them when they see the pleasing designs and colors in Follansbee's national advertising. So you'll want to read the booklet "Beautiful, Lasting Roofs of Follansbee Terne" to help you answer their questions—write for a copy today.

FOLLANSBEE STEEL CORPORATION

COLD ROLLED STRIP . ELECTRICAL SHEETS . POLISHED BLUE SHEETS . SEAMLESS TERME ROLL RODFING



Sales Offices-New York, Philadelphia, Rochester, Cleveland, Detroit, Milwaukee, Sales Agents-Chicago, Indianapolis, St. Louis, Kansas City, Nashville, Houston, Los Angeles, San Francisco, Seattle; Toronto and Montreal, Canada. Plants-Follanabee, W. Va.



Modernize Chimney

(Continued from page 170)

The effect of an oversize chimney is depicted schematically in illustrations 1 and 2. This is a very frequent cause of excessive humidity in the home. The same sluggish chimney action results in excessive condensation in the chimney, which generally will shorten the life of the chimney itself, not to mention the damage that it can cause to plaster and interior wall finishes when it soaks through from the chimney to the interior wall surface.

For the gas-designed heating system, a small insulated flue, known as the type B vent has been developed. This vent is accepted and listed for this purpose by the Underwriter Laboratories. These vents are made in sizes to correspond to the flue outlet sizes on approved central heating appliances. When properly installed, they perform a job of venting with practically no condensation. This is the result of their low mass and proper area for the amount of flue products handled.

Natural gas is today a competitive fuel in almost every area where it is available. In many places it is by far the cheapest domestic fuel. The use of this low-cost fuel, together with the type B vent, fits ideally with the present demand for low-cost housing. both economically and physically. The vents are much less costly to install than masonry chimneys and can be located almost anywhere in the walls of the house. They are so light they seldom require foundation support. As they are small enough to be concealed in partition walls, they are generally installed in interior walls, which is also highly desirable from the condensation standpoint.

Ronting Tile Cutters Increases Tile Sales

A tile dealer in Belleville, Illinois, has increased his sale of tile through offering a tile cutter rental service. The dealer, Mr. Cy Vernier, has found that many people want to install their own tile and that this service helps them. He has also found that he has identified his store with the tile cutter rental service, and that as a result more people are coming to his place. In the case of large purchases of tile, free use of the rental cutter has helped Vernier build good will.

Vernier uses J. M. J. Model FT-1 floor tile cutters, made by the J. M. J. Products Company of Belleville. These cut accurately any type of resilient floor tile, and are designed for hard usage and wear.

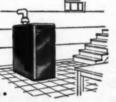


Home - Anywhere.





IN HALL CLOSET ...



IN THE BASEMENT ...



With Janitrol gas heating you conserve floor space ... you also have complete freedom in arranging floor plans because most Janitrol units can be installed where it is most convenient without in any way affecting the heating efficiency.

20

Whatever your heating requirement for small or large house, apartment or commercial building ..., whatever type of heating system is best suited ... it is just plain good sense to include Janitrol time-tested performance and to capitalize on Janitrol's greater sales, appeal.

BELOW-LEFT: For Thurston Avenue Apartments, Buffalo, N. Y., Builder, R. C. Dewey, selected famitrof Triple Service Hot Water Systems.

BELOW: Architect J. Hubbell and Builder Wm. R. McKee specified Janitrol Winter Air Conditioner for residence of Dr. M. F. Webster, Dallas, Texas.

MULTIPLE HOUSING PROJECTS...IN CUSTOM-BUILT RESIDENCES 1 N



ATEVER THE HEATING NEED YOU CAN MERCHANDISE JANITROL **HE-TESTED PERFORMANCE** TI

87 70

TRIPLE SERVICE UNITS

The single us

iant or convector her



WINTER AIR CONDITIONERS in Ja nitrols are unr tched for high efficiency and Six me tals fas every heating need. Most are factory assembled to simplify clory asse

GRAVITY FURNACES

Completely automatic, de-signed for easy installation, here's economical heat at low cost. A soundly con-structed furnace that provides lasting complete, care heating comfort.



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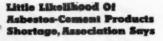
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For Complete Specifications, see Sweets Catalog or write for Catalog 4-C SURFACE COMBUSTION CORPORATION . TOLEDO, OHIO MARCH, 1951 173



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. Basie length, 24 ft., 17½ ft. maximum lift, 8 ft. extension available. Balanced up to 40 ft., approximate maximum lift 28 ft. One contractor reports . . . im MULKEY ELE-VATOR 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-4 • Kanscas City, Mo.

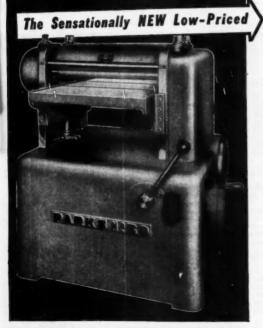


While some types of asbestos fibers have been placed on the National Production Authority's list of 55 essential minerals which must not be hoarded, there is little likelihood that fiber shortage will curtail the manufacture of asbestos-cement building materials, according to Chester C. Kelsey of New York, manager of the Asbestos-Cement Products Association.

The anti-hoarding ban applies only to certain grades of long fiber used principally for fireproof textiles and electrical insulation, Mr. Kelsey said. Asbestos building materials, which include roofing and siding shingles, building board and corrugated sheets, are made form short fibers combined with portland cement.

For each ton of long fiber mined, many tons of short fiber are produced, Kelsey explained. Thus, he said, any steps the government takes in the future to increase production of long fiber asbestos may be expected to make more short fibers available for asbestos-cement products.

> Don't miss American Builder's April Directory issue



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

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able 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, coolrunning 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 Precision since 1840





J. L. PETERSON sets up shower stall

Shower Stall Contractor Finds Growing Domand

Six years ago a Hawthorne, Calif., tile setter's helper, J. L. Peterson, was hired to install a glass block shower stall in a Los Angeles area residence. He liked the results achieved with the material and made a decision to leave his tile setting and become a glass block shower contractor.

Peterson interested several speculative builders in the idea, stressing the attractiveness of the material as a selling feature and its low cost. He got several contracts.

The demand for Peterson shower stalls grew rapidly and it soon became necessary to increase his job efficiency in order to meet a pace of two—and sometimes three—units a day with only one helper to assist him.

Approximately 96 six inch glass blocks (12 being corner block) are used in each unit. The panels are built on a six-inch base at the floor line and runs up 12 courses to a height of six feet. All stalls are open at the top to permit steam to escape.

The end of each glass block panel at the door opening is finished with a tile coping that matches other tile work in the room. Shower doors are hung on a fibre plug drilled into the mortar joints.

In addition to being decorative, the panels are easy to keep clean; and they bring in ample light whether the shower is used in the day or at night when artificial lighting is required.



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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.

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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.



New-Type Suspended Acoustical Ceiling

The new Lincoln Electric plant in Cleveland, Ohio, designed by the Austin Co., features a new-type suspended acoustical treatment for direct-to-metal acoustical tile suspension in the general offices, personnel, dispensary and cafeteria, involving about 39,000 square feet of ceiling area.

Lincoln executives said the method, which uses aluminum members and is designed to save one



WORRMAN INSTALLS 12-inch keried acoustical tile by sliding kerf over the lower i-runner flamge. As the tile is pushed into position, the rear kerf mates with exposed flamge of the reinforcement 7-spline

standard erection step, cut down 30 per cent in installation costs. The four-piece suspension system takes any 12 x 12-inch kerfed acoustical tile.

Basic unit in the suspension installation is an aluminum I-runner with $\frac{5}{8}$ -inch flanges. Perforations at 1-inch intervals along the web of the runner enable the 12-foot lengths to be wired to carrying channel at any point along the runner at the convenience of the workmen.

I-runner splicers keep the 12-foot long sections rigidly in alignment as tile are installed. A fibre spline used in the center serfs between the tile provides an air-tight ceiling to eliminate breathing.

As each pair of 12×12 -inch tile are installed on the flanges of parallel runners, the tile are locked in place by an aluminum T-spline. The $\frac{5}{26}$ inch flange of the T-spline fits into the exposed kerfs extending runner-torunner to provide lateral support to the adjoining tiles. Thus, each tile is supported by an I-runner flange and two T-splien flanges.

Erection of the four-piece system was done conventionally. Carrying channels were tied to hangers that had been inserted in the pan-type concrete forms used for the first and second floors. No. 18 tie wire was used to fasten the 12-foot aluminum 1-runners to the channel 24 inches O.C. centers.





Now you can include a modern Frantz over-head garage door in the most modest building budget. Home owners get the pleasure and convenience of this smooth-operating unit; you get the pleasure and profit from the time-saving, trouble-

free installations. The Frantz No. 77 Unit includes mill-made door and famous "Over-the-Top" Hardware complete. Write for free descriptive folder today.





FRANTZ MANUFACTURING CO., STERLING, ILLINOIS MARCH, 1951



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Lodgepole Pine is a fine siding material. Its insulation qualities make it ideal to use for sheathing, subflooring, and roof decking. For architectural woodwork and paneling, which demand high dimensional stability, and good paint and stain holding Gualities, Lodgepole Pine may be specified and used with confidence.



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Idaho White Pine, Ponderosa Pine, Sugar Pine

Larch, Douglas Fir, White Fir, Engelmann Spruce, Incense Cedar, Red Cedar, Lodgepole Pine.



Milwaukee Installs New Officers



Photo courtesy Milwaukee Sentinel

THOMAS P. COOGAN, 1950 president of NAHE, discussed the outlook for home building in 1951 when he appeared as quest speaker at the Milwaukee Association's annual installation of officers' meeting. Milwaukee builders pictured with Coogan are (seated, from left) James R. Baer, national director: Francis Schroedel, secretary-treasurer: Coogan; Elton A. Schultz, outgoing president and director; (standing, from left) Harris K. Evans. president; Sid Dwyer, 1st vice president; and Harry Forman, director.

A record number of members and guests attended the Milwaukee Builders' Association's dinner-dance at the Milwaukee Athletic Club in honor of their newly-elected officers. Harris K. Evans, formerly vice president, was installed as president to succeed Elton A. Schultz.

Elected to serve with Evans are Sid Dwyer, 1st vice president; Alfred Wetor, 2nd vice president; Francis Schroedel, secretary-treasurer, and Roy F. Healy, executive vice president. Directors for 1951 are Morris Anosov, Harry Forman, Phil Herriges, (Mrs.) Henny Mollgaard, Al Zielinski, Elton A. Schultz, and Theodore Novak.

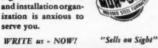
In a review of the year's accomplishments out-going President Schultz reported that the association had made substantial progress as an organization and that public relations were markedly improved since Roy Healy had joined their staff as executive vice president.



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CARPENTRY ESTIMATI

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You can earn higher pay when you know how You can earn nigher pay when you know how to estimate. Here is everything you need to know "take off" a bill of materials from 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 :

SIMPLIFIED CARPENTRY ESTIMATI

Shows you, step by step, how to figure mate-rials needed for (1) foundation, (2) framing, (3) exterior finish, (4) interior finish, (5) hardware, and (6) stairs. Gives definite "takeoff" rules, with many helpful quick-reference tables and short-cut methods that simplify the work.

SPECIAL FEATURES: Lumber Checking List. Mill-ware Checking List. Materials Ordering Information. Quick-Figuring Tables for estimating concrete footings and walls, concrete piers, window frames, door and window areas, sak weights, nail quantities. How to figure labor hours per unit of work. Rules for linear, area and volume measurement. Mathematical reference tables, including dec-imal equivalents, lumber reckoner, conversion of weights and measures, etc. ate.

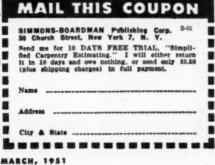
TURN TO CHAPTER 8, when you receive this book, Boort Cuta" you can use for quick figuring of board foot-age. Here are simplified ways to estimate lumber needed for foors, walls, ceilings, roof, door and window frames, inside trim for these frames, inside trim for inside doors, and drawers and cabinets. This chapter alone can be worth the entire price of the book to you!

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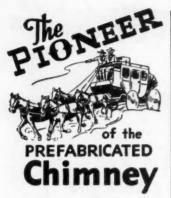
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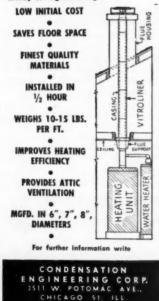
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Time tested, proven practical—easily and quickly installed—VITROLINER of-fers the modern home builder these money saving advantages



Public Housing ...

(Continued from page 32)

John M. Dickerman, director of the legislative department, NAHB,

Dickerman opened the meeting with remarks on the national public housing law passed in 1949 which authorizes the construction of 810,000 housing units during six years. To date, however, Dickerman said, he doubts that public housing authorities have actually started more than 15,000 dwelling units. Dickerman called for dynamic action at the local level to prevent its spread. Such local action, he said, will demonstrate to members of Congress the people's true feeling about this issue.

Flint Stops Public Housing

Specific and successful battles against public housing in Michigan and California were described by Page and Hennessy.

Although the city of Flint, Michigan, had received authorization for the construction of 1000 public housing units, public housing in this city was defeated. With the help of members of the Civic Research Council, a Home Protection League was organized in Flint which secured petitions and brought about a vote for a repeal of an ordinance that had originally authorized the housing commission.

The situation in California was more difficult since the state laws were so construed as to make public housing an issue that need not be voted upon by the public. Since a referendum was not provided for to approve public housing, the city of Oakland proceeded with a public housing plan in spite of citizens' protest meetings at which 80 per cent of those in attendance opposed such a program.

A Committee for Home Protection and other cooperative groups in California took on the tremendous task of securing an amendment to the state constitution making a referendum on public housing mandatory. By a narrow margin, this amendment became part of the state laws,

Suggested Local Action

That the public housing problem is a local one and must be dealt with by local groups was the reiterated opinion of the panel. Panel members suggested that local builders take active interest in civic land planning commissions. Local groups should not ignore the need for slum clearance, Mr. Dickerman pointed out, and referred builders to the success of the Baltimore plan. These arguments against public housing were expressed by the panel :

a. Tax-exempt public housing deprives cities of needed revenue;

b. Public housing is a step toward socialism and is an implement of moral destruction .

c. Private builders can build dwelling units more economically than can government-sponsored groups;

d. Arbitrary assignments of land for public housing use frequently are uneconomic and do not allow the land to be used for the best economic purposes.



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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 core, permanents, tint-ing, 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 answerla use, processions another or projection of the second 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 guaranteel The "Lifetime" is wonderful for the whole family — even the pup!

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Write today for complete details—The "Lifetime" Shampoo Spray will pay off handsomely for you! SPECIFICATIONS: four foot hase (longer lengths available). Wall hook tapped out with 35" I.P.S. female inlet, hose screws 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!



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These are details that buyers see; that builders emphasize; that help sell houses quickly.

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No wonder successful builders pay so much attention

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NYERS NEW MATER SOFTENER LIME (is every purse and purpose. Models include the completely automatic SOFTMASTER; the semiautomatic AUTORINSE; the low-cost, manuelly contrailed MYDROCHIEFeach the top value in its respective price class.

WYERS WATER SYSTEMS provide the best in running water service for homes built beyond city mains. Ejecto and Reciprocating Types to match all well conditions and capacity requirements — each GUAR-ANTEED IN WRITING.

THE F. E. MYERS & BRO. CO. Dept. T-106, Ashland, Ohio

Ohio Group Pledges Defense Aid



PLEDGE OF AID in strengthening national defense was pledged by the Home Builders Association of Mahaning Valley at annual president's ball. Pictured at meeting are. left to right: Ciyde E. McGranaham, executive sacretary: Luther T. Patterson, president: Frank W. Cortright. NAHB executive vice president: Roy W. Thillberg, vice president; Milton Rudick, secretary: and Chris Bode. Ir., treasurer. Cortright was quest speaker

An eight-point program to aid in strengthening national defense and to promote national welfare was pledged by the Home Builders Association, of Mahoning Valley, Youngs town, Ohio, at a recent meeting.

Among the points promised by the association were full priority for welfare and defense, good housing for the armed forces, maximum efficiency in the use of manpower and machines and vigilant cost control for the public's benefit.

Guest speaker was Frank W. Cortright, NAHB executive vice president.

Civil Defense Aid Pledged

A pledge of service in case of emergency has been made by the Home Builders League of South Jersey to the division of civil defense. The pledge, made by Harold D. Sarshik, chairman of the education and special events committee, includes personal service of members, services of craftsmen and use of equipment. In making the offer, the league called attention to the speed with which specialized groups could be organized.



Let it rain, sleet, hail or blow. With BILDRITE on the job, durability and bracing strength are assured.

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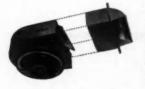
INSULITE DIVISION, MINNESOTA AND ONTARIO PAPER COMPANY

Gives houses more sales appeal

FASCO AUTOMATIC KITCHEN VENTILATOR

Modern kitchen efficiency, beauty and comfort are the first concerns of every new-home-minded woman. That's why so many builders find it easier to sell homes equipped with FASCO Kitchen Ventilators. They spell real kitchen comfort to any housewife . . . keep her working room clean and cool at all times by instantly expelling steam, grease and cooking odors. A FASCO-ventilated kitchen instantly appeals to every housewife.

Inexpensive FASCO Automatic Ventilators move more air for less money. The FASCO Outside Wall Ventilator (illustrated above) completely changes the air in the average kitchen every 3 minutes—quietly and economically. Positive weathertight seal is provided, all outside parts are rustproofed. Designed for quick, easy installation, fit any well thickness. Available in 8" and 10" blade size models.



FOR CEILINGS, INSIDE WALLS The Face "Ceil-N-Vall" Ventilates has the new FASCO Techo-Radial impelier. It delivers more air through a 10" standard duct—with less noise —than any other type of blade or wheel used for this purpose. Eliminates drafts and air re-ciculation. Single or 3-speed operation. Easily mounted in ceilings, through cabinets, or in inside wall directly above down

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> Price \$185.00 complete with tripod*

Now David White offers you, at the lowest price anywhere, the finest of Universal Level Transits with $4/2^{\prime}$ protected arc, internal focusing and coated optics.

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Don't wait if you're in the market for a new all-round practical builder's instrument—see the improved new David White Model 3000 Universal Level Transit now.

You'll find this instrument properly used will be your best insurance against costly layout and building errors. The new $4/2^{\sigma}$ protected arc means easier, more accurate readings, less likelihood of instrument damage through accident. Internal focusing asures you of dust and dirt-free inside lens surfaces, better protection for optical parts and mechanism. Coated optics mean clearer, distortion-free images, sharper definition, positive readings at greater distances and under adverse conditions. Instrument spindle supported on ball bearings for perfect horizontal adjustments.

Ask our nearest dealer to give you complete information on this and other fine engineering instruments. Or write direct to David White Co., 311 W. Court St., Milwaukee, Wis,

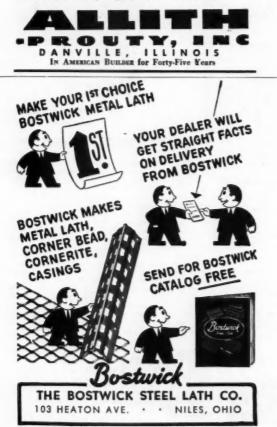
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Combine the expertly-designed Allith garage door hardware with your own or any standard door. Result . . . a rugged, easily-operated overhead door that gives full and lasting customer satisfaction.

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.



Letters

(Continued from page 39)

cold weather, came through the ceiling. Our solution for Mr. Ogborn, in general, was to use a vapor barrier. Mr. Daniel, who saya he had his first difficulties with the condensation problems 62 years ago (and has had a "few hundred" condensation problems since), undoubtedly offers a superior solution.—The Editors

Radiant Heat And Floor Coverings

Sirs: For some time I have been reading articles on panel or radiant heating in various magazines including *American Builder*. But nowhere have I found data regarding the effect of various floor coverings such as wood or asphalt tile, rug pads, rugs, etc., on the efficiency.

> W. Junkert 4715 Oakwood Place, Riverside, Calif.

Mr. Covert Robertson, Jr., 822 N. Woodward Ave., Royal Oak, Mich., has done a considerable amount of research on the effects of floor coverings on radiant heat efficiency. His homes, incidentally, won first prize last year in a design contest sponsored by the Michigan State Home Builders Association.—The Editors

"Newest in Equipment"

Sirs: This is to express my thanks and appreciation for your magazine ... I find it very interesting in all items, especially in that it shows all that is the newest in equipment and methods. I am especially anxious to learn where I might locate more of the ultra modern kitchens as pictured on page 32 of your August (1950) issue.

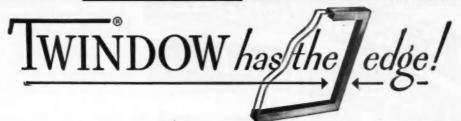
> Arnold E. Bartell Oakfield, Wis.

Suggested Booklet

Sirs: The Material in the December issue of American Builder on lumber is so good I wonder why you do not have it published in booklet form. If succeeding articles are anyway near as good, the whole series might well be republished... How about it as material for the 30 day courses in the 19 or so universities?

> Arthur Clifford The A. W. Burritt Co., Bridgeport, Conn.

For those much-in-demand large window areas ...



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

I new homes, as well as in renovating work, buyers and owners want larger window areas to bring the outdoors into the home and to make fuller use of natural daylight to produce brighter and more cheerful rooms. But they want all these advantages without sacrificing comfort and heating and air-conditioning economy.

Twindow, Pittsburgh's window with built-in insulation, is the solution. The result of more than fifteen years' experience in the manufacture of double-glazed window units by the world-famous Pittsburgh Plate Glass Company, Twindow is a high quality, thoroughly dependable and economical unit.

Made of two panes of Pittsburgh Polished Plate Glass, it has nearly twice the insulating efficiency of ordinary, single-glazed windows. Twindow minimizes downdrafts near windows. And, under normal conditions, it reduces the tendency for condensation to form. Over the



years, it effects substantial savings in heating and cooling costs; it permits the use of smaller heating and air-conditioning equipment.

Forty-seven standard sizes of these completely prefabricated Twindow units, adaptable for either steel or wood sash, are at your disposal to fill almost any need. The stainless steel frame is an exclusive feature of Twindow construction which helps to make your job easier. Handling is much safer and simpler. You save time on the job, because Twindow is installed like a single pane of glass.

We'd like to send you all the facts on Twindow. The coupon will bring them to you, without obligation on your part. Why not fill it in and return it today?



MARCH, 1951



Association News, cont'd

"Builders' Shop Talk" Provides Helpful Hints

With the prompting of Earl Smith of Berkeley, Calif., discussion leader, the Builder's Shop Talk program proved one of the most popular features of the convention. Each day of the meeting builders from all sections of the nation expressed their opinions in a free-for-all debate.

Basement versus basementless houses, slab floors, crawl space, perimeter heating, and fabricated plumbing trees all came in for their share of comments.

Of particular interest was the great amount of information given out by builders from Maine to Texas and Minnesota to Florida on the problems of condensation. This subject along with the problem of posts and beams, which is being considered by FHA in many sections of the country in place of curtain walls around the exterior of the house, occupied much of the interest of builders.

Of equal interest was the subject of plumbing. A great variation of prices was noted for the assembly of fixtures for a normal house. These varied from \$450.00 to \$1200.00. The \$450.00 price created a storm of comment due to the fact that the majority of builders could not possibly approach this figure.

William Kapple, a member of the staff of the Small Homes Council of the University of Illinois found himself the center of comment from all builders, based upon his opening remarks in relation. Because many builders are experiencing much difficulty in combating these problems, the findings of the Small Homes Council, as related by Mr. Kapple, were of great benefit to them.

Must Have Civic Group, Builder Cooperation, Land Planners Say

The cooperation of both the builder and local government groups is essential for effective land planning.

This was the consensus of the panel which discussed "What's New in Land Planning" during the NAHB convention. Some of America's outstanding home builders who have secured this cooperation in the development of outstanding projects were given awards during the session.

David D. Bohannon, San Mateo, Calif.. acted as moderator for the forum. Other participants were Cushing Daniel, Standard Properties, Inc., Washington, D.C.; H. Evert Kincaid, planning consultant, Chicago; John C. Taylor, chairman of the board, J. C. Nichols Co., Kansas City, Mo.; L. E. Fite, president, L. E. Fite Co., San Antonio, Texas; and Seward H. Mott, Director, Urban Land Institute, Washington, D. C.

Taylor keynoted the evening's discus-(Continued on page 190)

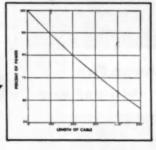
The Longer Your Cables the Weaker Your Power

Carryable Generators

HOMEL

Use

and get peak production from power tools



Power tools have fully come into their own. Builders know they save time and costs. But there are two problems still to be considered.

(1) The time, trouble and expense involved in installing electric power and,
(2) the loss in power in running long

cables from a central outlet, as shown in the accompanying table.

A Homelite Carryable Generator Solves Both of these important problems Set up a Homelite Gasoline-Engine-Driven Generator on the job and you get *immediate* power. Set it right at the spot where you're operating tools and you don't have long power-hungry cables. You'll get *more* power for your tools. You'll stop tools from bogging down under overloads. You'll keep your tools sharper, more efficient and free from damage and need of repair.

Yes, put a Homelite on the job and put new life into your power tools.



CARRYABLE PUMPS • GENERATORS • BLOWERS • CHAIN SAWS



New Hunter Package Fan is easily installed in any attic, any home

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

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



Low-Cost Installation — This photo shows how easy it is to install the automatic shutter models. Fan unit is simply placed over the ceiling opening . . . no fastenings needed. Shutter unit fastens to frame around ceiling opening.

Hunter PACKAGE Attic Fans



Hunter Fan and Ventilating Company
381 South Front St., Memphis, Tenn.
Send copy of "How to Cool for Comfort" to:
Name
Address

City & State

Association News, cont'd

Land Planners Say

(Continued from page 188)

sion on land planning when he said that "Zoning laws are definitely helpful to the home builder. Properly drawn and properly administered, they serve to protect and preserve a residential neighborhood which means permanency to residential values."

Echoing his colleague's opinion, Fite also pointed out, however, that "there is urgent need in most communities, particularly those without planning commissions, to re-examine and modernize their subdivision regulations. . . In some communities the governing bodies still favor the old checker-board type of subdivision layout with cross streets every three to four hundred feet. Such a reourierment is unsound and expensive."

Cushing Daniel spoke of the conflict that frequently exists between the developer and the civil authorities over the allocation of costs for improvements. Costs of streets, sewers, water systems, and other utilities, he said, should be borne in part by the city as a whole for projects adjacent to or part of municipalities.

Daniel suggested that builders work with the municipality when regulations are being formulated, preferably through the local home builders association.

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Portable Powerful Accurate

Designed for the building trade, this fast-criting, versatile saw ccuis raflers without marking or handling material twice. It can use you from 3208 to 5400 em small home jobs. You over it to yourrell to get full information on the speedy, accurate, cost-saving WALLACE NO. 1.

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BUILDERS SAY: N

IT COULDN'T HAVE COME AT A BETTER TIME...

Gold Bond MAT-THICK SEALED BLANKET

Meets F.H.A. Specs. Priced low enough for use in even the lowest cost homes

NOW, with Regulation X cutting into sales, and high costs cutting into profits, here's a timely product that actually reduces your building costs! Gold Bond means Top Quality to both consumers and builders, yet Gold Bond Mat-Thick Sealed Blankets are priced so low you can't afford not to use them.



HIGH INSULATING EFFICIENCY! Blankets are completely enclosed with breather cover

on three sides, and vapor barrier on the fourth side. They're made of fireproof rock wool. Meet F. H. A. requirements.

LOW APPLICATION COSTSI Save as much as \$10 on an average 1,000 sq. ft. house! Rugged, lightweight sealed blankets go up fast...fill usual eight-foot wall height from floor to ceiling in

You'll build or remodel better with Gold Bond one operation. Tough, heavy-duty nailing flange. Wool adheres to blanket on all four sides, takes rough handling, cuts spoilage. Available in 8-ft. lengths and 15" widths (23" widths in some areas). At Gold Bond Lumber and Building Supply Dealers. More and more alert builders are switching to them every day!

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Fireproof Wallboards, Decorative Insulation Boards, Lath, Plaster, Lime, Sheathing, Wall Paint, Rock Wool Insulation, Metal Lath and Sound Control Products.

MARCH, 1951





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"



away without jockeying.

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 6-5, 11-5 and 16-5

Power Londer Mixers.

THE JAEGER MACHINE CO., 521 Dublin Ave. Columbus 16, 0. . Distributors in 130 Cities al the U.S. and Canada

OTHER



THE NEW MIRROR BUILD-ING, LOS ANGELES, Rowland H. Crawford, Architect, uses Pittsburgh Plate Glass Company "Herculite" doors-all of them equipped with Adams-Rite Series 0161 horizontal locks. These locks can be used in any tempered glass door, top or bottom channel. They take the place of 2 locks and are available with single or double bolts and 1 or 2 cylinders.

ADAMS-RITE INSTALLATIONS

Write for catalog.



Association News, cont'd

Ponderosa Pine Woodwork Names Pilkington Manager

D. G. Pilkington has been elected general manager of Ponderosa Pine Woodwork, association directors announced recently. Pilkington will occupy the position formerly held by E. W. Ruddick. As general manager, Pilkington will

carry on the group's promotional program and will also take an active part in the Joint Wood Window Promotion pro-



D. G. Pilkington

gram, a cooperative campaign of Ponderosa Pine Woodwork, Western Pine Association, and woodwork manufacturers and jobbers throughout the country.

Before taking his present position, Pilkington served from 1943 to 1950 as western advertising manager of Progressive Architecture magazine, From 1936 to 1943 he was in charge of sales of lumber dealer products in the Chicago area for National Gypsum Co.

Report Builders, Public More Design-Conscious

Confidence that the ground has been broken in making builders and the public design-conscious marked the "Better Design for Today's and Tomorrow's Houses" panel discussion at the convention.

The panel, composed of a number of prominent architects and builders, discussed many design problems and made specific comments on features of the winning entries of the NAHB-Architectural Forum design contest.

Clarke Daniel, moderator and Washington, D. C., home builder, spoke of great strides in structural design of the home to result from the rearmament program. He said that "Out of the difficulties of war-time economy come great pressures that help to overcome traditionalism, 'stick pat-ism' and 'just won't learn-ism.

It was generally agreed that closer cooperation between architects and merchant builders was beginning to produce better design and would become an increasingly important factor in producing better homes in large-scale developments.

Some of the typical comments by panel members were:

(Continued on page 194)

Look to

For Efficient, Low Cost, Automatic Gas Heat



TEMCO FLOOR FURNACE

- Shallow construction-251/2" deep.
- No costly excavating necessary.
- No basement or heater room required.
- Leaves all walls free for furniture arrangement.
- Triple coated outer jacket.
- Rust-proof burner parts.
- · Percelain Enamel Haat Chamber carries 20 year warranty.

Here's how...

to give a customer the kind of planned-forliving home he wants at a cost he can afford to pay. One of these time-tested TEMCO Gas Heating Units can provide an abundance of automatic heat without sacrificing space or planning flexibility.

Built for natural, manufactured or L-P Gas by America's Gas Appliance Specialist, these two low cost TEMCO units have specific features which eliminate many of the problems of heat planning in every type of construction. Check these features. Then write for full information and specifications, and you, too, will look to TEMCO for efficient, low cost automatic gas heat.

TEMCO WALL HEATER

TEMED

- Ideal for slab construction.
- Excellent for second story installation.
- · Easy to install.
- Fits standard 16" O. C. stud construction.
 Available in single and dual wall models.
- Finished in attractive Hammer Tene.
- Prinished in directive Hommer Tone.
- Famous TEMCO "Lifetime" Porcelain Enamel Heat Chamber.

Builders of Over 1,000,000 Gas Heating Units

Please forward specifica Gas Floor Furnaces	Baco Div. 8-300, Nashville 9, Tennessee ations and complete details on TEMCO Gas Wall Heaters.
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ADDRESS	
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COUNTY	STATE

The ONLY Picture Window That OPENS Electrically



Association News, cont'd

Washington Attorney Named NRLDA Counsel

John H. Else has been appointed national affairs counsel for the National Retail Lumber Dealers Association, it has been announced by NRLDA executive vice president H. R. Northup.

Else served for the past four years as administrative assistant to former



John H. Else

Senators Clyde M. Reed and Harry Darby in Washington, D. C. A graduate of the University of Kanasa Law school, he formerly lived in Topeka, Kas., where he served as assistant county attorney.

In his new position, Else will analyze legislation affecting the retail lumber and building materials industry and will service NRLDA's national affairs committee.

Design-Conscious

(Continued from page 192)

Kenneth E. Wischmier, St. Louis architect: "Under the present and foreseeable economic situation the average family purchasing a home will look for the greatest amount of usable area and the least unnecessary ornamentation . . . a structure which derives its character and charm from a simplicity of design and use of good materials."

Morgan Yost, Chicago architect: "The first requisite is good design. It is not enough to be progressive. That is the crux of the whole matter. Design may be progressive in that it has new ideas of construction, maintenance, ease of housekeeping, etc., but unless all these ideas are incorporated into good design it is doubtful that many sales will be made."

Cy Williams, Roslyn, N. Y., builder: "The post-war home building market did not deliver to the home owner the fanciful home the public had been led to expect. It did, however, surprise many operative builders, realtors and conservative mortgages by public acceptance developed for the architectural innovations embodied in the so-called "ranch home" of the east."

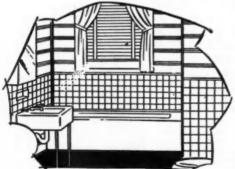
AMERICAN BUILDER

ARE TURNING TO

to

Grani-lite's new and different colors in granite-like finish make it easy to decide upon . . . easy for you to sell. Most dealers who have seen actual samples of Grani-lite are now Grani-lite Dealers. It's been "love at first sight" with dealers and consumers alike. The resemblance to real granite gives it the quality and character of being a best seller in the years ahead. If you are turning to remodeling sales, you'll want Grani-lite panels as your first choice decorative wall and ceiling material.

REMODELING SALES



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DEALERS Turning

5 NEW and DIFFERENT COLORS 4 MOST POPULAR PATTERNS

Why You Should Become a Grani-lite Dealer NOW!

Regardless of what's ahead . . . further government restrictions on new construction or just those now in effect . . . remodeling jobs will be your salvation for the future. *Grani-lite*, the quality wallboard with new and added beauty is the answer to getting more of the increasing number of remodeling jobs. There is no time to lose in getting ready for those opportunities. Remember — in times of scarcity the dealer with the material gets the business. Don't delay. Be a stocking *Grani-lite* Dealer NOW!

Also MAKERS OF WAL-LITE, SATIN-LITE and LEATHERBORD

If Samples are not available from your Jobber, write direct to our factory.



MARCH, 1951



CEDAR-LUX is readily applied by the everage la-borer on the job. We pointing skill required. With CEDAR-LUX is cash yee only a few dollars to "feature" a Cedwized Classit as "standard aujument". Using genuines cadar wood be many times determined Combine Cedw wood be many times determined. Combine Cedw wood be many times determined. Combine Cedw wood be many times and the combine Cedw wood be many times determined. Combine Cedw wood be many times determined to the cedw wood be many times determined to the cedw wood be many times determined to the cedw wood be and the cedw retain that weedy, cedw smell and give protection against moths fer years. Not a substitute for cedwr. If IS CEDAR Crushed cedwr scientifically traderd. Can't was dell Can't rob off Cedwr oder stays in Perfect protection fer fort, valuable weerables.

TAKING THE BRUSH ON! COUNTRY BY SPRAY ON! STORM TROWEL ON!

-STUDIOS -DENS RUMPUS ROOMS

FOR

CEDAR-LUX covers hereive to filmon square fort per pound, Just mis with plein water and point an-travel an-approv an. Drice three times as hard as pleater. Light pink in caler. To suit to cadrize closes, bares, do dens, rumpos To SuitDess AND COM-TRACTORS.

Write for the whole story about CEDAR-LUX



Association News, cont'd

Attendance 3,800 at Northwestern Lumber **Dealer** Convention



R. C. Enecht

All previous attendance records were broken at the 61st annual convention of the Northwestern Lumbermen's Association when 3,800 lumbermen registered for the threeday event at Minneapolis Auditorium January 16-18.

R. C. Knecht of Rapid City, S. D., was elected president for 1951, suc-

Low Cost . . . Low Wattage



produce and maintain any desired temperature between 40° and 80° F-immediate healthful infra-red rays - turning itself on and off as needed.

With BUILT-IN THERMOSTATS or MANUEL Control

1000 - 1250 - 1500 Watts . . . 120 and 240 Volts. Only 17¹/₈" high x 12⁵/₈" wide !

MARKEL

ELECTRIC PRODUCTS, INC.

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ceeding R. V. Porter, Oskaloosa, Iowa, the 1949 and 1950 leader. Porter and C. M. Heimbach, Duluth, Minn., were named directors-at-large: R. W. Kemerer, Minneapolis, was reelected treasurer; and W. H. Badeaux, Minneapolis, was returned as secretary.

Vice presidents from the four states making up the association are E. F. Buffmire, Grand Rapids, Minn.; Cole Berry, Des Moines, Iowa; John Alsop, Fargo, N. D.; and Myrle V. Hilton, Vivian, S. D. Alsop and Berry were reelected

Oklahoma NAHB Chapters Name 1951 Officers

New officers have been announced by the following affiliated associations of the Oklahoma State Home Builders Association:

Oklahoma City: Thomas W. Poore, president; Jerome F. Haag, first vice president; Robert T Fritsche, second vice president; Med Cashion, Jr., secretary; and Harry C. Levy, treasurer. Enid: Herman Kurz, president;

Robert L. Hite, vice president; and K.L. Schomberg, secretary-treasurer. Norman: Bob Barbour, president;

Lonnie, Cadell, vice president; and Ralph Orr, secretary-treasurer. Miami. J. G. Haralson, president;

Mrs. F. C. Ernst, secretary-treasurer.

Tulsa: I. A. Jacobson, president; Charles Skaistis, vice president; and Mrs. George Wilder, secretarytreasurer



MARKEL Built-In HEETAIRE Model 241 TE

Tested and listed under re-Y. examination service by Underwriters' Laboratories, Inc.

WRITE for all the details — and the nar of our nearest HEETAIRE representative.



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Buffalo 3, N.Y. AMERICAN BUILDER

Your Customers will thank you every time they open their Getty-operated windows!

Easy to install. 2 measuremental 6 acress That's all

GETTY operators, on wood or metal casements, are an important homeowner convenience—one that should be considered in many of your installations.

To the delight of the women, a GETTY operator responds to the slightest touch, moves the window quickly, secures it rigidly at any opening desired. And because it operates through the screen, there is no necessity to take the screens out and replace them every time the window is opened or shut.

GETTY operators occupy small sill space, are graceful looking, permit

drapes, blinds or any other window decor to fall in place properly. And are they *economical!* Their cost low to begin with—is a negligible quantity, considering the years of faithful service they provide.

Homeowners will be grateful for the GETTY operators you install, and the discriminating judgment back of their selection.

Write for our descriptive brochure. It contains complete information on our three types of operators (internal gear, external gear, horizontal drive) and our specialty hardware for every kind of *wood* and *metal* casement.



Permits 100% window opening



No need to remove screens and disturb blinds when opening or closing windows!

& Co., Inc.

DELPHIA 40, PA.

3348 NORTH 10th STREET

GETTY OPERATORS ARE FOUND ON MORE CASEMENT WINDOWS THAN ALL OTHER OPERATORS COMBINED



This is somewhat extreme, but it's a fact that BLO-FAN moves more air-quickly, quietly and efficiently!

... At low to medium speeds,

Blo-Fan handles the normal volume of

steam and fumes easily, but for emer-

gencies (like burning the toast or

grease in the broiler), turn Blo-Fan to

high speed and you can clear the

allows the housewife to control the

rate of ventilation in her home as easily as she controls the speed of her

Spot Ventilation at the Point of Air Pol-lution. For Kitchen, Bath, Game Room,

THE MOST IMITATED

HOME VENTILATOR IN AMERICA

inspiers in 358 cities

This exclusive Blo-Fan feature

room immediately.

d Laundry.

Stacked by more than 650 who

carll

It's easy to understand why when you study the design of the -Blo-Fan blade



Remember, if it hasn't got this blade, it isn't a Blo-Fan.

... This blade combines only the positive principles of both fan and blower. The fan element literally scoops up the air and feeds it to the blower element which expels it with great force. Actually, Blo-Fan lowers "shock loss" of the average blower to an irreducible minimum... That's why Blo-Fan moves more air at moderate speeds than either a fan or blower type ventilator



And, on the subject of speed, Blo-Fan Model 210 is equipped with a 9-speed switch . . .

PRYNE & CO., INC. BOX 8-351, POMONA, CALIFORNIA Factories: Pomona, California; Newark, New Jersey Warehouses: Los Angeles, San Francisco, Chicago, Atlanta

Association News, cont'd

Summer Installed As NAREE Houd

Alexander Summer of Newark, N. J. was installed as 1951 president of the National Association of Real Estate Boards at a recent banquet in the Statler Hotel, Washington, D. C. He was elected during the annual NAREB convention in November and succeeds Robert P. Gerholz. Flint, Mich.

Approximately 500 Realtors from all sections of the country attended the installation and other sessions of NAREB and its affiliated institutes.

In addition to Summer, other newly-elected NAREB officers installed were H. Walter Graves, Philadelphia, treasurer, and the following regional vice presidents:

Fred B. Mitchell, San Diego; Ben Schlossberg, Jersey City; G. Roscoe Hemstock, Hammond, Ind.; Walter F. Perschbacher, Grand Rapids, Mich.; H. Leonard Paret, Sharon Hill, Pa.; Howard R. Sisson, St. Jo-seph, Mo; Ann F. Pardy, New London, N. H.; Leo Mendel, Birmigham, Ala.; Fred Darnell, Seattle, Wash.; Clarence E. Stauss, New Orleans; Otto Knudsen, Eagle Grove, Iowa; Henry V. Koonts, High Point, N. C.; and Burke C. Payne, Phoenix, Ariz.

New Officers Named By Dayton Association

Melvin E. Kimmey was installed as 1951 president of the Montgomery County (Ohio) Builders Association at a recent dinner meeting in Dayton. He succeeds Joseph Haverstick.

Also inducted into office were Anthony Wenzler, vice president; Ralph Sharp, treasurer; and Richard Rutmann, secretary

Approximately 225 persons attended the dinner, at which Haverstick served as master of ceremonies. Guests were city and county officials and Charles Malowney, NAHB director-at-large.

Philip Kniskern Heads Urban Land Institute

Philip W. Kniskern, a Philadelphia realtor, has been selected as 1951 president of the Urban Land Institute, the board of trustees has announced. Kniskern, president of the First Mortgage Co. of Philadelphia and chairman of the board of the First Federal Savings And Loan As-sociation of New York, replaces another Philadelphian, Richard J. Seltzer, as head of the institute.

Named as vice presidents were Warren L. Morris, Cleveland, and F. Pogue Waguespack, New Orleans, Seward H. Mott, Washington, D. C., is the new secretary, and L. D. Mc-Kendry, Chicago, has been reappointed treasurer.

AMERICAN BUILDER

I SATISFY-my customers when I install NU-STYLE KITCHEN CABINETS

Mr. Robert Drake Contractor, Lockport, Illinois

CUSTOMERS APPRECIATE THE FLEXIBILITY THAT NU-STYLE CABINETS OFFER:

- in decorating, the Homemaker appreciates it that she can choose between colors, or if desired a natural wood finish to suit her individual taste.
- in arrangement, graduated sizes of Nu-Style Sectional Units enable the Homemaker to arrange the kitchen according to her individual needs.
- in practical use, the rounded corners and the smooth, flat surfaces simplify cleaning. The door and drawer handles are within easy reach.
- in perfect harmony, the design of Nu-Style Cabinets harmonizes perfectly with modern ranges and refrigerators.
- in cost, Nu-Style Cabinets are economical because they are mass produced by the latest modern methods and offer a real saving in semi-assembled form.

CARR, ADAMS & COLLIER CO., DUBUQUE, IOWA





Perfect for Storage in Other Rooms as well. Units Fit Any Shape or Size Room



All parts are completely machined, ready to assomble. All hardware is included. Simple, illustrated instructions in certon guide ctep by step in the essembling.



Manufacturers of the Famous Bilt-Well Line • Mantels & Telephone Cabinets • Multiple-Use & Linen Cabinets • Stair Parts • Nu-Style Cabinets • Superior Unit Wood Windows • Exterior & Interior Doors • Entrances • Shatters • Clos-tile Casiements • Carr-dor Garage Doors • Basement Unit Windows • Lawvers & Gable Sash • Breakfast Nooks • Combination Doors • Screens & Storm Sash • Corner (China) Cabinets • Gli-dor Cabinets • Ironing Board Cabinets



When you insulate with FOAMGLAS... the insulation lasts!

Placing Locks At Different Positions On Doors Offers Several New Advantages

A simple device, the "long backset," now makes it possible to place locks at several different distances from the edge of the door to the center. And there are several advantages.

The first thing prospects see when they inspect a new home is the front door. The first thing they reach for



"LONG BACKSET" offered by Schlage

is the lock on the door. The first impression the entrance makes is important, and architects have been quick to realize the value of eye-appealing doors. With the long blackset device more attention can be paid to door detailing to achieve better appearance.

Other practical benefits inherent in the long backset, according to the Schlage Lock Company, are protection for small children. The chances of pinched and bruised hands caught in the slamming of doors are lessened.

Block Flooring Adds Decoration to Basements

Transforming idle basement space into useful, enjoyable recreation rooms has gained such popularity as to be all but customary with owners whose homes have basements. Mindful of this fact, builders can do the job themselves at the time the home is built, and thus add a valuable sales feature to the completed home.

One excellent place to obtain decorative effectiveness in basements is in the floors. Since the floor will probably be the first thing in the basement to catch the home buyer's attention, money spent here may be well worth while.

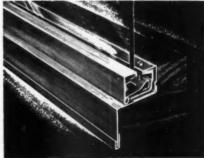
One of many effective floor treatments for the basement is wool blocks, which may be quickly and easily set in mastic. Properly installed, these blocks provide a strikingly handsome, decorative quality.



KAWNEER GLAZING ASSEMBLIES WILL HELP YOU SOLVE TODAY'S MODERNIZATION PROBLEMS

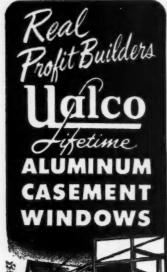
The new Kawneer line comprises a complete variety of glazing assemblies which answer every current architectural requirement.

Kawneer assemblies are unequaled in modern styling, sound engineering and precision workmanship. Simplified installation reduces labor costs. Write today for construction details. The Kawneer Company, Dept. AB-67, Niles, Mich.





Store Frant Motals • Aluminum Roll-Type Awnings Modern Entrances • Aluminum Facing Materials



.. in Modular Sizes, Tool

When bidding or planning construction of apartments, housing projects, or any type of residential or commercial building, you'll find countless advantages in specifying Ualco Lifetime Aluminum Casement Windows!

Only Ualco offers you modular sizes in aluminum casement windows among the 120 sizes plus many variations... lowest price... easiest handling...rapid installation ... and, superior design and construction.

For complete details write for FREE Ualco catalog. See our catalog in Sweet's Builders and Architectural file.



202

INDUSTRY BRIEFS

Bror G. Dahlberg, founder of the Celotex Corp., resigned as chairman of the company's board of directors after reaching his 70th birthday recently. Dahlberg was president and chief executive officer of Celotex until he became board chairman in 1948. He will continue his association with the company as a director and also in a consultant capacity.

....

Edward J. Sorenson has been appointed manager, builder division, Hotpoint, Inc., Edward R. Taylor, general sales manager, announced recently. Sorenson, who has had wide experience in market development and distribution, was recently with the division handling major department and furniture store accounts.

* * * * *

W. H. Atkinson has been named sales manager of the Harnischfeger Corp., houses division, Port Washington, Wis. Atkinson was formerly with Owens-Corning Fiberglas Corp., and more recently with the Per-Fit Products Corp., a subsidiary of the Spickelmier Co.

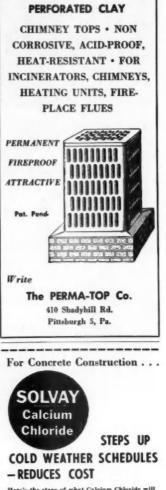
* * * * *

The appointment of **W. A. Matheson** as director of dealer relations of the **American Bildrok Co.**, manufacturer of lightweight aggregate building materials, has been announced by Thomas H. Coulter, president of Williams Oil-O-Matic Heating Corp. When that company merged with the Eureka Vacuum Cleaner Co. five years ago, he became executive vice president, and is now a director of the combined Eureka Williams Co.

* * * * *

Stewart W. White has been appointed sales manager of plywood and doors of the Georgia-Pacific Plywood and Lumber Co., it has been announced by Paul B. Shoemaker, vice president of sales. Prior to joining Georgia-Pacific in 1948, White spent 15 years in sales and administrative positions with the Pacific Mutual Door Co.

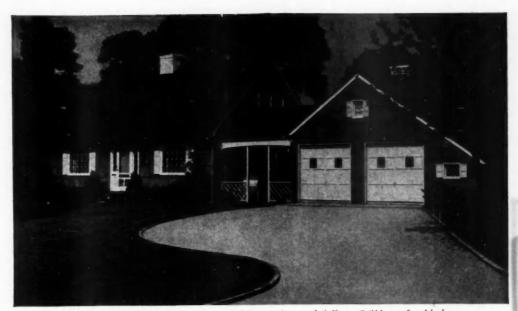
General Controls Co. of Glendale, Calif., manufacturers of automatic heating, refrigeration, industrial and aircraft controls, is planning to build a new factory in the midwest, it has been announced by W. A. Ray, president. The company has purchased a $4\frac{1}{2}$ -acre site in the Chicago suburb of Skokie, Ill., and intends to start construction early in 1951.



Here's the story of what Calcium Chloride will do for cald weather concrete construction ! You can step up cold weather schedules, redety protection into a start of the schedule of the protection of the schedule of the schedule of the calcium Chloride to your concrete whit. For details, send for "The Effects of Calcium Chloride on Portland Cement," a 40-page semi-technical book-giving details of carefully centrolied tests made in the field and in the laboratory.

BOOK AVAILABLE ON REQUEST-For your copy fill in and mail this coupon todaythere's no obligation.

SOLVAY Allied Che 40 Rector	sir.	al i	Dy	e Co W Ye	rporati ork 6,	N. Y.		
Please set Chloride d	nd m (ort	cop	y of Cem	ent."	Effects	ał	Colcium
Name								
Title								
Compony								
Address								
City				Z	one	State.		



A Heatilator Fireplace is an important "extra value" feature in this custom-built Houseng Guild home on Long Island

"I give customers Extra Comfort at no extra cost with HEATILATOR FIREPLACES!"

says ROBERT J. FOUNTAIN, Vice-President of Housing Guild, Inc.

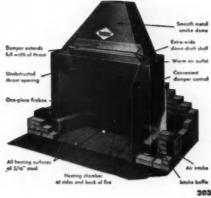
Mr. Fountain, a leading Long Island builder, has used over 100 Heatilator* Fireplaces in this big development. He gives his customers genuine Heatilator Fireplaces that circulate heat instead of wasting it up the chimney. He's found that the Heatilator name makes it easy to close sales faster.

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