

remember that all the heat in the world won't make homes comfortable unless it is properly centrolled

CHRONOTHERM

ELECTRIC or ELECTRONIC CLOCE TMEMOSTAT — for completely automatic day-night heating comfort. Automatically lowers temperature at night for sleeping comfort and fuel saving. Automatically restores daytime comfort nempetature in the morthing.

TIME-O-STAT

CLOCK PHERMOSTAT-for semiautomatic day-night temperature control. Set at bed time for lower fuel-saving temperanue. Automatically starts the heating plant in the morning before the family arises.

ACRATHERM







YES, control means everything when it comes to heating. Probably no equipment in the homes you build will contribute so much to the owner's comfort, convenience and health as the heating controls. For, no matter how well built any house may be, the occupants will never be completely satisfied unless it is comfortably heated.

And comfortable heating demands proper control. There is a Honeywell control or control system to meet the requirements of every home and every variation in climate. Whether you select the fully-automatic Chronotherm, the semi-automatic Time-O-Stat or the plain Acratherm, all operate on the special "comfort" principle that holds temperature right on the beam within a fraction of a degree.

So, to be sure of the best in comfort, convenience and economy, always install Honeywell—the controls known by the public as the leader. Use the coupon below to get your free copy of the book now being ordered by thousands of home-minded families through Honeywell's national advertising.

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Honeywell

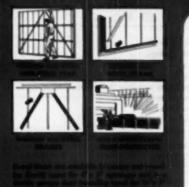
27 BRANCHES FROM COAST TO COAST WITH SUBSIDIARY COMPANIES IN: TORONTO + LONDON + STOCKHOLM + AMSTERDAM + BRUSELS + ZURIOR + MEXICO CITY



Install your doors



ENGINEERED BY JENESTRA PIONEER MAKER OF QUALITY BUILDING MATERIALS



STRONGER, MORE RUGGED . . . Strand Garage Doors provide life-time strength and durability: All welded, ribbed one piece panelstrongly steel-framed and braced. These doors of all-steel construction withstand shipping and handling from factory to completed job, without denting or marring, and will sever sag, swell, warp, ahrink, rot or splinter. They'll hold their fine appearance for a lifetime-a lasting credit to the builder.

GALVANNEALING PROTECTS against rust; even when the doors are exposed to weather for weeks before painting. Galvannealing con-sists of a heavy galvanized zinc coat, oxidized to provide an excellent base for paint without special priming coat.

QUICKER TO INSTALL . . . the one piece door leaf eliminates field assembly of single doors. Packaged hardware is factory assembled; installation is simple and easy for anyone.

LOWER FIRST COST . . . Standardization on 3 models-and large scale production in one plant-make Strand a real value leader. That's why this is the national "best seller" among garage doors, installed by thousands of builders every month.

	STEAND GABAGE DOOR DIVISION Detroit Seel Products Company Dept. AB-3, 2250 E. Grand Bird, Detroit 11, Michigan
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IN YOUR NEXT ISSUE

Four prize-minning house designs, submitted in the American Builder nation-vide architectural competition described in this issue will be featured. Of 43 designs submitted by women architectural studgets in colleges and universities throughout the United States, only one entry had a gable root. The other 42 were flat-cooled moderns. This indicates that there is either a pronounced trend toward extreme modern in our architectural schools, or that those who adhere to the modern school are more aggressive and so enter into competition more readily.

The Ultimate in Opportunities for Merchandizing — National Home Week participation plans for home builders, retail building material dealers, retail building material dealers, realitors, money lending institutions and others will be carried in the April ionae. This comprehensive outline of what can be done in any community, large or small, to help all segments and members of the industry capitalize on NHW promotion, is a follow up on the announcement of broader association sponsorship and participation in NHW announced on pages 82 and 83 in this ioue.

Plus other headline features dealing in an interesting and informative manner with all phases of light construction in the usual complete, well-illustrated Americon Builder manner.

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MARCH, 1950

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Publisher's Page



The Curse of Monopoly

EVER before was the existence, the power and the danger of labor monopolies proved so conclusively as it has been by the recent strike in the coal mines. When the Taft-Hartley bill was being considered by Congress, American Builder repeatedly emphasized that its weakness was that it did not prohibit the existence of labor monopolies, and that no labor management legislation which did not prohibit the existence of monopolies ever would adequately protect the public. But the Act as passed did not try to prevent labor monopolies, but, by regulating them, to prevent abuse of their power. Hence it has permitted a coal strike which has shut down a large part of industry and transportation and has threatened business with general paralysis, and many people with severe physical suffering

Probably President Truman could have prevented the situation from becoming so serious and threatening by invoking the Taft-Harley Act sooner. The President can resort to the courts to halt or prevent a strike only after he has declared it has caused or would cause a national emergency. Whether he will declare a national emergency is discretionary with him. Hence, he may be subjected to political influence to prevent him from making the announcement of a national emergency necessary to invoking the law. And that is exactly what did occur in this instance. Having denounced the law and advocated its repeal. Mr. Truman had his own political reasons for trying to avoid using the Act.

The strike plainly did finally cause a national emergency. And the significant fact is that a single labor union, and even a single man, had the power and disposition to do so much harm to so many people and to threaten so many more people with so much more harm. For, plainly it was the power of monopoly possessed by the United Mine Workers that enabled this union to create the emergency; and it is equally plain that the union had given one man, John L. Lewis, the power to exercise its power of monopoly as he saw fit.

It may be that no man has as much power in any other union as Lewis has in the United Mine Workers. But there is no question that many other unions have as complete monopolies of labor in other vital industries as the United Mine Workers has in its field and hence as much power to threaten the entire nation with disaster.

And after all that has occurred, especially the recent coal strike, nobody in his senses can believe that the labor unions' power of monopoly will not be abused more and more harmfully and dangerously as long as it exists.

The law does not merely prohibit monopolies in business from abasing their power. It prohibits and tries to prevent the existence of manopolies in business on the sound theory that whoever has the power of monopoly is sure to abuse it to the public detriment, and that no amount of regulation of monopoly can prevent its existence from being inimical to the welfare of the geteral public.

The only solution of the problems presented by labor monopolies is to treat them in the same way as business monopolies—i.e., try to prevent their existence on the theory that as long as they exist they will do harm and menace the national welfare.

American Builder is published by the SIMMONS-BOABDMAN PUB-ISHING COEPORATION, with editorial and executive edities of 19 W. Menores Jr., Chicago J., III., 30 Church 16, New York 7, N.Y. Samuel O. Duan, Chairman of the Beach Jones G. Lyne, President Babert H. Merris, C. J. Wegeman, F. A. Clark, Vice President J. S. Canae, Vice President and Sacrobary, John Y. Dubdort, Treasurer,

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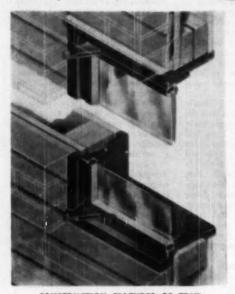


THE NEW Fenestra^{*} Steel Residence Casement Window Unit is the most advanced in design, easiest to install and most foolproof window on the market. This unit combines (1) the popular, high-quality Fenestra Residence Steel Casement and hardware with (2) a complete outside and inside metal trim. The unit provides simplified, low-cost installation of one complete assembly.



The casement window, screen and storm sash retain the familiar Fenestra advantages including Bonderized, prime-painted frames and bronze-lacquered hardware and screen cloth. Trim is galvanized and Bonderized and has many outstanding construction features and advantages (see below).

The complete unit is supplied for all Fenestra Casements.

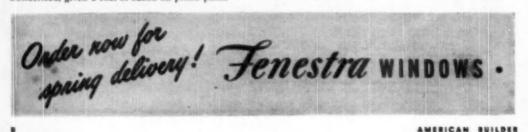


CONSTRUCTION FEATURES OF TRIM

One-piece sections are coped and fitted for secure attachment. Head member laps over jamb members, making rigid, weather-right connections. Outside sill and inside stool project %" beyond jamb for better appearance and weathering. Head and jamb sections 18-gauge, sill 16-gauge, galvanized steel, Bonderized, given a coat of baked-on prime paint.

THESE OUTSTANDING ADVANTAGES Save You Time and Money

- Simplest Rough Opening Properation—locate study and cripples, noil sheathing and cut sheathing flush, some rough opening proporation for frame, brick veneer or stucco.
- Quickest and Easiest Installation-simply plumb and noil window unit to sheathing--window is completely trianeed, both inside and out; no grounds or special blocking required.
- Provides Mould for Mason or Carponter-outside trim makes ideal stop for butting frame, brick and stucco.
- Weather-tight—trim is made of solid sections—no joints to pull open; casement has continuous, double contact weathering between ussh and frame; unit is flashed on all four sides.
- Quality Materials—trim is galvanized steel; casement is hotralled steel; complete unit is Banderized and prime-painted (baked on).
- Prevides "Packet" for Blinds—trim is recessed in head and jambs to eliminate "light lines" around venetian blinds and shades.
- Cuts Cest of Blinds—blinds and shades can be cut to standardized widths.
- Firesofe-steel will not burn.
- Beauty-installed unit has a neat, finished appearance from both inside and outside.
- B. Simple Screen and Storm Sash Attachment—quickly, sofely attached to inside of casement—no ladders, protected from weather and dirt—stay clean, last a lifetime.
- Easy Opening-steel sosh swing instead of slide, can't warp, swell, stick or splinter.
- 2. More Daylight-standar steel sections permit large glass areas.
- 13. Botter Ventilation-swinging sosh deflect breezes into the room.
- M. Easy Washing-both sides of glass washed from inside the room.
- 15. Saves Three Ways-low first cost, low installation, low mointenance.







PREPARING THE OPENING

Locate study and cripples to proper clearances, run sheathing over them and cut sheathing flush. No need to recess sheathing for stops, etc. The Fenestra Unit can be used in buildings combining frame, stucco or brickveneer construction. It eliminates the necessity for frames of two different depths, as required with ordinary windows.

UNIT COMPLETELY INSTALLED IN TWO SIMPLE STEPS

Fenestra's completely trimmed window unit can be quickly and easily installed in the prepared opening by one man using hammer and nails only. Window unit is merely lifted into place in the opening, plumbed and wedged in position, and attached to construction by the two simple operations described below. Rough carpenters can make perfect installations. No finished carpentry required for trimming the window.

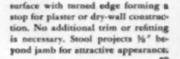
L NAILED TO SHEATHING ON THE OUTSIDE

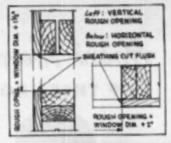
The continuous weathering fin projects all around window opening, parallel to plane of window, and bears against sheathing. Carpenter needs only to nail fin to sheathing through nailholes provided. Trim provides an integral stop on the outside for butting clapboard, shingles, brick concrete block – no other casings or brick moulds required. The completed installation has a finished and pleasing appearance.

2. ANCHORED TO STUDDING ON THE INSIDE

Installation is completed on the inside by inserting strap anchor clips (supplied with unit) into trim and nailing to stude or furring.

Inside face of trim is a neat, finished









Company	DOORS - PANELS	DETROFT STISZ. PRODUCTS COMPANY Dept. AB-5, 2260 E. Grand Bonleward Dennie, 11, Michigan Please tend the complete information on the new Feasure Window Unit: Soci Commans, plan combination outside (Inside Menal Trim. Nume
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	MARCH 1958	•





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OF THESE POPULAR PROFIT-MAKERS?



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NuWAY

WEATHER STRIP

Easiest utrip to sell because it's the easiest weather strip to put on. Can be used on most any type window, storm such or door. Comes in attractive display cortan containing 12-30 ft. rolls, each with nails and instructions. Really a fast netler-on- knew well supplied



Nu-GARD AUTOMATIC DOOR BOTTOM

This new, improved automatic door bottom and draft eliminator is the most efficient, most practical door bottom of them all! Felt section submatically raises to clear carpet when door opens. Standard lengths available in individual cartons with necessary screws and instructions.



Numetal WEATHERSTRIP FOR DOORS & WINDOWS

Your old friend-the leader in weather strip sales for nearly 30 years! Conveniently packaged in sets for windows and doors in individual cartons. A perfect overthe-counter sales item.

DRIP CAPS FOR DOORS AND CASEMENT WINDOWS

Bester Homes



Tust

Very effective for keeping rain from dripping and running under doors and wood casement windows. Very casy to install, no special rabbeting required. Furnished in either breas er alumitumi in any fongthe desired.

These attractive thresholds can play a real role in your sales picture! Available in a wide variety of types and sizes. Three most popular types are pictured alone. Evenished in either brass or Alacromo, with hales drilled, screws furnished. Each threshold individually wrouged in standard lengths up to 144'.

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NEW 1950 CATALOG? Our new 1950 Catalog is just of the press. If you don't have yours yet, send for a

NU-ART

THRESHOLDS

customers. Made of wool felt and entra heavy gauge brass. Furnished in standard lengths-32", 36", 42" and 45"--packed ½ down same length to cartum. Available in either brass

200

40

NATIONALLY ADVERTISED

Consistent advertising in leading national magazines tells millions of readers to buy these quality products from you. Keep well supplied! tell the story-

The most efficient, most practical calking load on the market!



Nu-Glaze

It will pay you to sell Nu-Glaze instead of putty. You make bigger profits? You satisfy customers because Nu-Glaze always "stays put?" Nu-Glaze is time-tested, sells fast and repeats.



It can't be beat! It's the "standard of calking compound quality." A best seller for many years—builds repeat business. Available in ½ pint, pint, quart, gallon, Sigallon cans. Also 55 gallon druma. Nu-Calk will never let you down-order today!



If you need proof of the popularity of Nu-CALK SPEED LOAD just take a look around a construction job that's being calked. You'll see "empties" galore all over the lot! Nu-CALK SPEED LOAD reached this pinnacle of popularity because it's practical and so easy to use. The specially designed cap insures perfect contact with gun nozzle -- can't pull loose from fibre board tube. Glassinelined container is air-proof, moisture proof, practically vacuum packed. Always has a smooth, even flow and easy trigger action.

> CG-4 SPEED LOADER Here's the other half of this unbestable combination. Retails for only \$1.95. It's light, sturdy, famiprosi!

CG-3 STANDARD

10 LOADS TO A CARTON! Packaged 10 loads to each cartom (approx. one gallon) and 4 cartone per elipping case. Freight allowed on 8 cartons or more.

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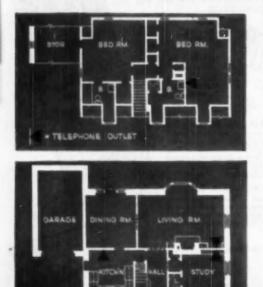
ORDER NOW - Your order will be shipped same day received!

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ALL THINGS CONSIDERED-INCLUDING TELEPHONE RACEWAYS



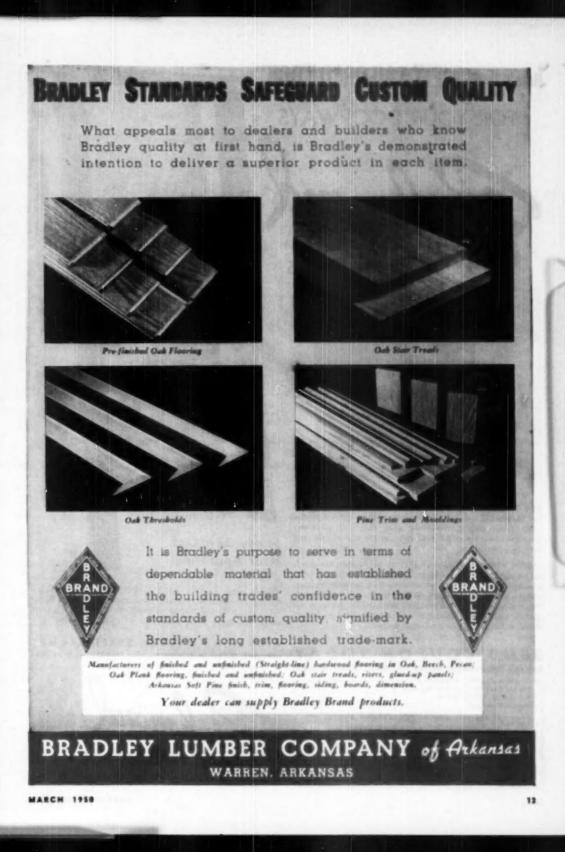
It's especially true in small homes—thoughtful details are often the strongest selling points. And built-in raceways for concealed telephone wiring are one feature sure to impress today's home buyer.

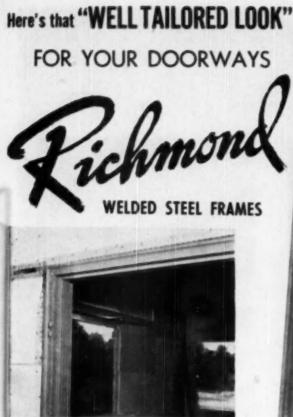
Installing telephone raceways is easy and inexpensive. Simply select the locations for telephone outlets in advance. A few lengths of pipe or flexible tubing, placed inside the walls during construction, will carry the wires to the outlets,

For all homes—large or small—your Bell Telephone Company will be glad to help you plan for modern telephone facilities. Just call your Telephone Business Office and ask for "Architects and Builders Service."

BELL TELEPHONE SYSTEM





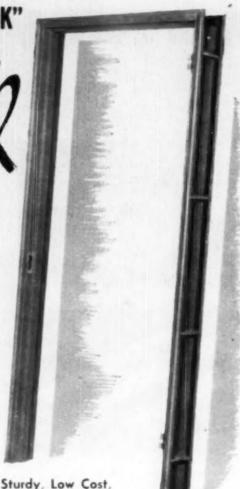


You keep door frame crection time at a minimum by using Richmond welded steel frames with integral moulded trim. These strong, well-built units will help to lower your building costs because the frames are simple and casy to install.

Quality 18-gauge one-piece Richmond Frames are made up of three members—hinge jamb, lock jamb and head member having the corners mittered and securely welded. Hinges mortised and spot welded to frame cannot work loose through usage. Universal brass strike plate is included with an enclosed dust box spot welded to frame. A red oxide primer is applied at factory.

SEND COUPON TODAY for full information about Richmond Steel Frames

The Bishmond Piroproof Do P.Q. Bos 97, Friendo Statia Bishmond, Indiana		pt. 3		
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NAME				
BUSINESS ADDRESS				
CITY		ZONE	STATE	
POSITION	TYPE OF	BUSINES	2	



Sturdy, Low Cost, Neat Appearing!

Tough, long lasting, good looking Richmond welded frames are weather resistant. Since moisture cannot penetrate, size will not change or swell. Frames can't warp or crack and there is no possibility of miters opening.

RICHMOND WELDED STEEL FRAMES are your answer in helping to keep building costs in line?





Look inside a KWIKKET lock. See the advanced design, the simplicity of operation, the rugged, precision-built construction . . . the built-in features that make KWIKKET locks first choice with architects and builders across the nation. KWIKKET's unique cam action locking device provides positive knob locking. The ingenious half-round spindle reduces number of working parts. And fewer parts mean faster, more economical manufacturing operations . . lower unit contal But mechanical design in the whole story. Kwikker

But mechanical design isn't the whole story. KWIKAST locks are exceptionally clean and attractive in appearance ... beautifully hand-finished in satin or polished chrome or brass, or satin bronze.

Builders find that KWIRSET locks save money when they buy them..., save money when they install them. Simple, 2-hole installation cuts time and labor on the job to an absolute minimum. Add to this KWIRSET's high quality and striking beauty and there is little wonder why more and more builders are installing more and more KWIRSET locks.

MATERIAL AND FOREMANSHIP UNCONDITIONALLY GUARANTEED





VAPOR SEALED FROM THE Inside SISALATION

provides BOTH insulation and vapor - barrier helps prevent passage of harmful maisture-vapot walls from inside the house



FROM THE Outside Rugged, warproof SISALKRAFT over exterior sheathing prevents passage of winddriven rain into walls from the outside

WEATHER

SEALED

SISALATION (Reinforced, Waterproof, Reflective Insulation) plus SISALKRAFT (Reinforced, Waterproof, Protective Sheathing Paper) combine the advantages of insulation, vapor-barrier and weather-protection at very lowest cost. They help stop penetration of harmful moisture-vapor into walls from inside, while also stopping passage of moisture and wind from outside. (Meets FHA Vapor-Barrier Requirements, Class A, Federal Specifications UU-P-47).

In addition, SISALATION, bowed in between study, provides two insulating air spaces, plus its reflective insulating surfaces, to help keep homes warmer in winter and noticeably cooler in summer. Heavily reinforced by cross-laid sisal fibres of steel-like strength, SISALATION and SISALKRAFT both remain permanently and effectively in place, for the life of the building. Here is dependable,

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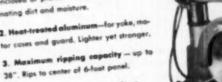
2. Heat-treated aluminum-for yoke, mator cases and guard. Lighter yet stronger.

- 38". Rips to center of 6-foot panel.
- 4. Full work table top-both in front and behind the guide strip.

5. Latches for locating every 0" and 45" position - and cross-cut and rip positions.

Get More Value!

6. Adjustments for different widths of ripping on accurate, pre-loaded ball bearings





10

Power-Packed Ads Ads likethis

ald this Quality Home Right

on a Thrifty Budget

Take a good look at the eye-catching, hardselling ad illustrated here. It's the first of a whole series of smashing Celotex advertimements aimed at booming business for you by stimalating the building of more homes!

And all through 1950, these powerful ads will be reaching and influencing millions of readers in THE SATURDAY EVENING FOST, BETTER HOMES AND GARDENS, SUNSET, PATHFINDER, and other great consumer magazines!

Each ad will spotlight you as the man to rely on for a quality home at common-sense cost. Each ad will

highlight the bonus-benefits that buyers get in homes built with famous Celotex Building Products. It's bound to add up to better sales if you tie in effectively?

CELOTEX

So to make your homes easier to sell in 1950, build with genuine Celotex Building Products. And tie in with this power-packed Celotex advertising! See your Celotex representative now for tie-in material, and details on how to put it to work for you. It's yours without cost. The Celotex Corporation, Chicago 3, Illinois.

will help you sell more homes in 1950!



Both you and your customers profit when you build with CELOTEX Building Products

- Colotan Double-Waterpracted inculating Shouthing takes the place of ordinary shouthing, and forms the protective layer between framing and wall exterior. It insulates, builds, moisture-proofs, all at one low cost?
- Colotes involution Lath forms a right inside wall of insulation, providing a strong, solid, continuous plaster have that reduces danger of plaster eracking.
- Colores: Pack Wool Maskats for fast, easy installation between roof rafters, wall study, finer joints - in new bomes or old. Gives added insulation for extra condext both winter and summer.
- (6) Colorex Triple-Seeled Appleit Realing combines new harmonized designs and colors with complete, lasting pretection signifiant the elements.
- (5) Cele-Reh Oypeum Walkoards build strong. low-cost "dry" walks partitions and calings. Quickly applied directly to framing. Take paint or wallpaper beautifully.

To make your homes easier to sell in 1950...get on the Celotex "Brand-wagon" I Build with Genuine CELOTEX BUILDING PRODUCTS

MARCH 1950

YOUR REMODELING PROSPECTS ... AND PROFITS ARE THICK AS DAISIES WITH

THE Nu Wood AND Balsam Wool SYSTEM

HERE ARE YOUR KEYS TO THIS HUGE MARKET!

THE PLAN—Get the inside track to more modernization jobs with this simple and easily workable plan! Its basis is a remodeling "package" of Nu-Wood interior finish and Balsam-Wool sealed insulation. "Decorate and modernize with Nu-Wood... insulate with Balsam-Wool... and let Balsam-Wool pay for the job in fuel savings" is the powerful appeal.

THE PROMOTION—Full color and black and white consumer advertisements appearing in the nation's topflight home magazines—such outstanding ones as American Home, Better Homes & Gardens, Homie & Garden, House Beautiful, Small Homes Gaide, Housebold, Successful Farming and Poultry Tribune—will reach all sectors of the remodeling market.

THE PRODUCTS—Balsam-Wool and Nu-Wood will set the pace in your modernization jobs...helping you to sell other products such as roofing, siding, paint, etc. Balsam-Wool's enviable reputation, plus its outstanding money-back guarantee, will close many attic remodeling jobs for yoa.

Cut a bigger, richer slice of remodeling profits in 19501 Write us for full information about the Nu-Wood and Balsam-Waal system! Building authorities agree that the 1950 modernization market will be bigger-more active-more profitable-even than in the record your of 1949!



There's a huge backlag of old houses in need of modernization—a backlag accumulated from the depression 30's and the wor 40's.



Not only homes, but stores—theaters—hotels —churches—restaurants—commercial buildings of all kinds—will be modernised this year.



Easier Anancing—such as the "Open End" Martgage, F.H.A. toons and the A.B.C. Credit plan—will provide a powerful incentive to remodel.



Remodeling will accelerate still further as rent decentral extends to further sections of the country.





OFFERS NEW HEATING ECONOMIES FOR

MULTIPLE, DWELLINGS





OIL AND GAS LO-BOILERS Every wonted, seeded fasture for fixed automatic beating is incorporated in these supercompact units. Completely factory-assembled and unitshipped. Two ophinst types; three heat exchanger types; these heat exchanger types; OIL AND GAS HI-FURNACES Complete winter air condilioning equipment - including burner (all or ges), furnice with radiator, blower and air filter - in hore combined in ane space-saving, fullyintegrated unit. Choice of several return air locations. RITCHEN-TYPE OIL BOILERS Finished in glassning whitefor kitchen instellation - these revolutionary units combine and berner, house-hasting boiler, instantanaous water heater, expansion tank, circulating gourp and automatic controls--in ana cohiset.

TIMKEN

Silent Automatic

Here's the modern, money-saving heat that is "Duty-Designed" specifically for your new "garden-type" multiple dwellings-Timhen Silent Automatic Heat!

Whether you're using oil or gas, you save valuable spaceeven eliminate utility rooms - with these super-compact units. A fuel-thrifty Timken Silent Automatic in each apartment means pinpoint control of heating costs-frees owners from expense and responsibility-pleases tenants, too. This equipment is built to last as long as the house-cuts maintenance costs to the vanishing point.

Timken Silent Automatic units are priced in keeping with your construction costs. Write today for full details!

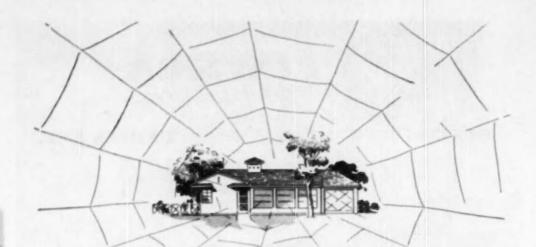
PLANTS AT DETROIT AND JACKSON, MICH. . ODHROBH, WIS. . UTICA, N. Y. . ASHTABULA AND KENTON, OHIO . NEW CASTLE, PA.

MARCH 1950

HERRY AUTOMATIC BYTELOW half And Company - Jordan, Michigan

EAT

GAS . COAL



Don't just let 'em sit there... DO something!

THOSE houses you build . . . don't just let 'em sit there -- unsold!

You can make every house you build more attractive to buyers, more quickly and easily salable — yes, and at better prices, too.

How? By installing floors of WRIGHT RUBBER TILE in kitchens, living rooms, hallways and baths. WRIGHT RUBBER TILE imparts a warmth and radiance to every room that you'll see instantly reflected in your prospect's melting sales resistance.

Home buyers respond enthusiastically to the beauty of WRIGHT RUBBER THE. But its appeal is not to the eye alone. Its quite comfort underfoot, extra long wear, high resistance to stains and damage, plus unequalled case and economy of maintenance, appeal to your prospect's sense of values — and to his pocketbook, too! You can tell him that WRIGHT RUBBER TILE is made by the nation's oldest and most respected manufacturer of rubber tile. Floors laid in heavy traffic areas over 28 years ago still look like new.

Install floors of WRIGHT RUBBER TILE in the next house you build. Then observe how prospective buyers "warm up" to it. See how much more quickly and easily it sells — at your price!

You'll find, in an overwhelming majority of cases, that WRIGHT RUBBER TILE in the houses you build makes that all-important difference between stiff sales resistance and easy, profitable sales to satisfied home buyers! Write for full information.

WRIGHT MANUFACTURING CO. 5202 Post Onk Road . Houston 5, Texas



FLOORS OF DISTINCTION

WRIGHTEX-Soft Rubber Tile

WRIGHTFLOR-Hard Surface Rubber Tile

WRIGHT-ON-TOP Compression Cove Base

MUCH lower upkeep cost!*

Servel's record for rock-bottom maintenance costs figured strongly in the choice of 289 Gas Refrigerators for the Gardencrest Apartments, Waltham, Mass.

Maintenance costs on Servel Gas Refrigerators are lower than they are on motor-driven types—and what's more, they stay low year in, year out. That's the experience of managers of apartments and housing projects from coast to cosst.

It's because Servel's exclusive freezing system operates without a single moving part. There are no pistons, no valves, no pumpa. No motor to wear. No machinery to break down. Instead, a tiny gas flame does all the work.

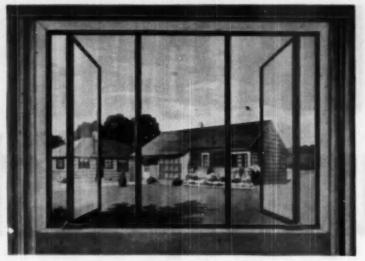
As a result, ownersenjoy a minimum of trouble and expense. Writes one apartment operator"Since installing Servels, I've just about forgotten that I even have refrigerators in the building."

Twenty years ahead of its time, Servel's different principle of refrigeration accounts also for its other big advantages—permanent silence and longer-lasting dependability. And today, the new 1950 Servel—brilliantly styled by the well-knownWalterDorwinTeague —brings tenants and owners the last word in modern refrigerator design, inside and out. For details on the latest models, consult Sweet's or write to Servel, Inc., Evansville 20, Ind.

*For example-

SILENT ... LASTS LONGER

MOBILS, ALA. "After nine years, our 398 Servels cost only 1¢ a month per unit for upbeep." PHILADELPHIA, PA. "Exceptionally low maintenance cost over a period of nineteen years." Modern one-shory home in Scoolerton, Ps., equipped with Lupton Steel Casement Windows-Designed and built by David Lutz, Gwyordd Valley, Penna.



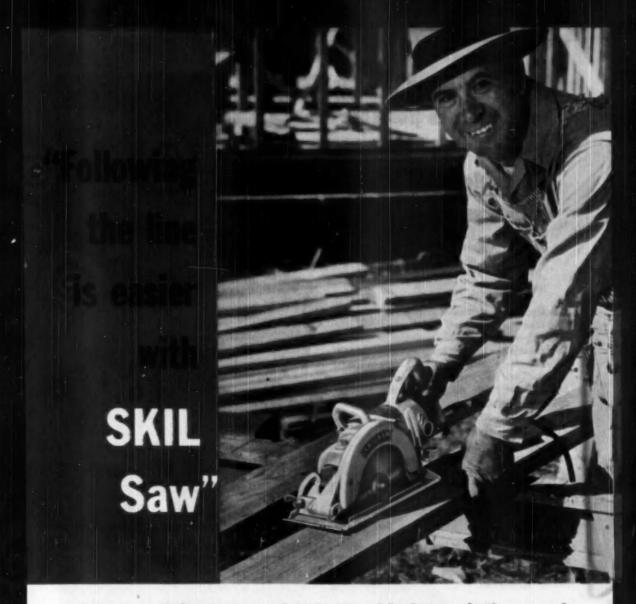
Windows "Make" the Small Home

Lupton Casement Windows are a striking feature of this fast-selling one-story home. Bright room interiors, trim, modern appearance and controlled, draft-free ventilation make Lupton Metal Windows a sound investment for the modest home or the finest custom-built residence.

Check these economy features: (1) Easy-to-install, they save time on the job; (2) Available for immediate delivery from warehouse stock; (3) Complete with finest operating hardware.

Permanent steel frames will not warp, swell, shrink or rattle. Neat, metal frame screens and glass insulating panels are easily attached on the inside of the window. Catalog with list of representatives sent on request.

MICHAEL FLYNN MANUFACTURING COMPANY 700 East Godfrey Avenue, Philadelphia 24, Penna. Member of the Metal Window Institute METAL WINDOWS



You can always see both the blade and the mark



SKIL Saw lets you see what you're doing . . . on every cut. There's no need to look around motor housings. There's no leaning over the saw to see what's going on. Your line of cut is always in plain view. You see the SKIL Saw blade as it cuts. You work in a normal, easy position.

Full visibility, perfect balance and extra power make SKIL Saw easier to use on any job. Tough, heavy-duty construction keeps SKIL Saw out of the shop, keeps SKIL Saw on the job. Ask your SKIL Tools Distributor for a demonstration of easy-handling, hard-working SKIL Saws today.



SKIL Praducts are made only by SKILSAW, IMC, SB33 Enten Aramo, Chicago BB, HL. Pentory Breaches in Principal Cities In Canudo: SKILTOOLS, 110., 44 Particed EL, Toronto, Ont.

"We like <u>Atlas Mortar</u> because it is possible to get a more <u>uniform</u>, <u>workable</u> mortar with less effort"

soys expert mason Mr. Willard Randolph of A. S. Randolph & Son, Datroit Lakes, Minnesota,

Mr. Randolph's statement gives further proof that experienced masonry craftsmen prefer Atlas Mortar Cement. Many similar reports tell how masons like the buttery plasticity of Atlas Mortar, the easy way it responds to the trowel...and how contractors appreciate its satisfactory yield, its strength and color. Its outstanding durability is proved by rigid laboratory tests.

Backed by years of research Atlas Mortar Cement complies with ASTM and Federal Specifications for maconry cement. For further information, write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, N. Y.

OFFICES: Albany Braingham Barton - Okcago - Dayton - Konas City Minneapala - New York - Philadephia Fittaburgh - St. Louis - Wara,



"THE THEATRE GUILD ON THE AIR" - Sponsored by U. S. Steel Subsidiaries - Sunday Econings - NBC Network

JUST WHAT THE DOCTOR ORDERED

A MORE DEALER PROMOTION HOMES SPONSORED FOR YOU BY THE SHINGLE BUREAU...

The Certigrade National Home promotion last year brought thousands of building material asks to retail lumber dealers throughout America. This year, four new shingle and shake boms will be featured in full page, color advertisements in the Saturday Evening Post, Country Gentleman and 25 other magazines. Plane of these homes will be available to prospective builders only through retail lumber dealers.

Yee, millions of families will be advised to see a lumber dealer for "Quartet" blueprints and materials. This program can net you large profits. Contact your Association Secretary for full information on the Quartet plan.

BACKED BY A GREAT ADVERTISING PROGRAM

Page offer page of advertising in the fortundry Draning Past. Country Backlessen, American Builder, Preschaftlich, American Builder, Preschaftlich, News and other sengenisses will feature three desites premotion themse daning 1980.



...AND THIS ATTRACTIVE ROADSIGN WILL BUILD YOUR SALES

Approved by the Hotlanet Retail Lomber Dealers Accession, this attractive read sign is evaluable to you from your regional lember essociation. The signs show the famous Cestigreets National flows, Bulls, excetted and maintained by an estdear edventicing firm, you may use these signs, at nomined cest, to publicite your firm in your community. Order now theorem your essociation secretary!

RED CEDAR SHINGLE BUREAU

5510 White Building, Soattle Metropolitan Building, Vancouver, B. C., Canad



Δ

AME HEI



That's what one building man says about this amazing new kind of window screen

to me in selling houses

ALUMINUM TENSION SCREENS

Read what other builders say:

- "Very simple to install with no maintenance problems." E. L., Building Supt.
- "One man can easily install Durall screens in five houses a day with 15 screens in each."
 G. A. J., Carpenter,
- "Tve been selling houses 15 years and I've had more favorable comment on Durall screens than any other item." C. D. K., Real Estate Salesman.
- "When they are up, they're up. No rechecking, refitting or adjusting. Never have any complaints." G. A., Carpenter Foreman.

Yes, the men who have used this remarkable new screen are giving it "rave notices."

Once you've used Durall yourself, you'll see why everybody likes Durall.

Durall is a completely new idea. It features

streamlined tension design and durable allmetal construction. It's aluminum, light, flexible, easy-to-handle, rustfree and paintfree for a lifetime!

Durall has no side frames to cut, fit and refit. It's wonderfully easy to put up or take down from inside. It rolls up for easy, compact storage. And it will stay good looking and serviceable for years to come.

Naturally these advantages make a big hit with home buyers. Put this sales-making, "plus" in your houses and you'll join the hundreds of building men throughout the country who are already singing Durall's praises.

The present price at retail is only \$3.75 for an average size!

FREE BOOKLET? Write today for complete information about Durall, the new kind of window screen. Address: Desk AB-3. Or contact your building supply or sash and door jobber.



NEW YORK WIRE CLOTH COMPANY . 445 PARK AVENUE, NEW YORK 22, N. Y.



WIRING NEWS

A PERIODICAL DIGEST OF WIRING IDEAS FROM THE GENERAL ELECTRIC CONSTRUCTION MATERIALS DEPARTMENT



Dream-home Lighting at Budget-home Cost

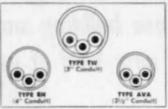
Today's prospective home buyers are harder to "sell." They insist on modern planning and conveniences... they look for extras ... they demand proof of quality before they buy. That's why architects and builders recognize the value of the General Electric remote-control wiring system as a spur to added home sales.

This step-saving, new wiring system at last makes dream-home electrical control a reality. Simple and economical to install, it is easily demonstrated to the prospect. Unobtrusive flush switches at convenient locations give instant, positive ON and OFF control of any light or electrical apparatus. And, while you're demonstrating remote control, you'll have the added "sell" of the General Electric monogram.

For Low-Cost Homes

General Electric remote-control system is practical for even budget-price housing. Designed to fit in with existing techniques, remote control requires the same tools and methods needed to install present power circuits. Small relay suspain into knockout of outlet box. Inexpensive wire can then be run from relay to centrally-located transformer and conversionly-placed ewitches.

For further information why not contact your General Electric Construction Materials distributor, or check item (A) in the coupen below.



Here's How You Can Get 49% More Current Per Raceway

Now, there's a really easy way to increase circuit capacity without increasing raceway size — just rewire with General Electric Deltabeston® asbestos-varnished cambric cables!

Insulated with heat-defying asbestos, Deltabeston AVA cables meet the requirements for small-diameter cables in heavyload jobs involving high temperatures. That's why at normal ambient temperatures (in dry locations, as specified by National Electrical Code) AVA cables can deliver up to 49% more current per raceway than ordinary types of building wires.

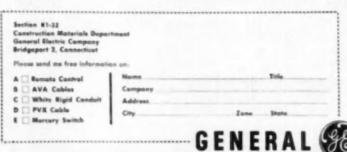
Saves on New Work

In new construction, too, because of their heat-resisting asbestos insulation, AVA cables often permit smaller conductors, reduced raceway sizes, and over-all savings on weight.

If you have not considered asbestosvarnished cambric cables for space and materials savings, you'll do well to figure them in on your next heavy-load job. It may amaze you to discover what real savings Deltabeston AVA cables can offer.

For further information, consult your local General Electric distributor, or check box (B) in the coupon below.

* (This figure was worked out for AVA robles of 1000 MCM. Other sizes after similar savings.)



You Know You're Right With "G-E White"

There's no question about it. You get top wiring protection when you use General Electric white rigid conduit.

.

* Years of Protection

Carefully controlled in manufacture from raw material to final impection, G-E White offers the advantages of a uniform, high-quality product. Top-quality steel, hot-dip-galvanized, inside and outside, means years of protection from atmospheric corrosion. Smooth Glyptal® finish adds plus protection, makes wire pulling easy and fast.

Installation Features

During installation you'll appreciate the uniformity of G-E White. You'll like the way it cuts waste by eliminating flat bends. The electrical contractor will like its sharp, clean threads, too.

For top protection specify General Electric white ragid conduit. And remember General Electric also supplies a complete line of fittings and accessories. For information on conduit, check bea (C) in coupon.

Light Weight Makes Light Work Of Residential Wiring

Light weight . . . small diameter . . . easy stripping. These features make General Electric PVX[®] nonmetallic-sheathed cable a real time saver in all types of residential work.

Built to Last

Glass-and-cotton braid resists both moisture and flame. Individual conductors are insulated with a Type T thermoplastic compound and spiral-wrapped with impregnated crushed-paper armor to provide maximum dielectric and mechanical strength. Check PVX at your local G-E distributor's, or check box (D) in the coupon.

Silence Makes Sales

In homes, stores, plants, offices, and hospitals, the silent General Electric mercury switch is a selling feature hard to beat.

Demonstrate it. Show customers how smooth--how quiet it is. Tell them it stays on the job for more than a million ON-OFF cycles. Yes, you'll find extra "sell," extra quality in General Electric mercury switches. Check box (E) in coupon for complete information.

ELECTRIC

85% of all Prospective Home Owners want Oak Floors



"GET OFF ON THE RIGHT LOOK"



"I like to see my prospects get off on the right *look* when I take them through my houses, because I know that it's the nature of that first look that makes or breaks a sale.

"That's why I make sure my houses have oak flooring. We salesment know that 85% of our prospects want oak in their next home. So, it makes the job of selling a lot easier if the important half of a couple sees something she wants quick, like oak floors, for instance. Yes, getting a prospect off on the right *look* is the safest way to start a sale."

See our catalog in Sweets

NATIONAL OAK FLOORING MANUFACTURERS' ASSOCIATION DEPT. 5-3 • 814 STERICK BUILDING • MEMPHIS 3, TENNESSEE

Nothing helps sell a house faster than Good Oak Floors



for quick, positive use

In every bundle of Truscon Metal Lath you will find an identifying card, giving you the exact specifications of the material you are handling. This is a Truscon service feature that helps you in many ways: saves handling time, eliminates inconvenience, speeds work, ends the possibility of using the wrong product on the job. Specify Truscon Metal Lath and Accessories to get the best in quality, service, and exact product to meet your professional needs in doing an artistic job.

Write for free illustrated literature describing over

40 items in the Truscon line.



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Truccon Steel Company Manufactures a Complete Line of Matal Lath and Accessories, including Practically All Items Necessary in Insens a First-Class Plantering Jub in Any Type of Building Construction. TRUSCON STEEL COMPANY Bidaudary of Rep Dia Breat Comparison YOUNGSTOWN 1 OHIO Warahousen and saids affices in principal (Stee

Delta's low-cost, portable job shop outmodes ordinary power saws!

Makes money for you these ways:

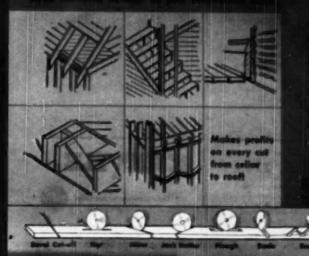


"Double

2 fully-usable 360° radial movements above the table!

The correct speeds for your special jobs!





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ADD: 8. Viet	no Ave., M				
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KENTILE FLOORS suit every type of store

Unlimited variety of design effects with this law-cost, long-wearing flooring.

Kentile's 23 colors . . . plus feature stripe and special inserts . . . give wide latitude for design effects. This floor blends with any type of interior . . . and londs itself particularly well to open front store design.

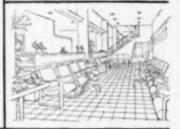
Yet for all its decorative appeal, Kentile is outstandingly low priced and famous for resistance to wear. Despite constant foot traffic Kentile keeps the fresh attractive appearance that builds business for the retailer. Cleaning is a simple matter with this smooth-surfaced, dirt-resistant asphalt tile. Colors go through the material—can't wear off.

Kentile can be installed on any smooth firm underfloorno expensive sub-base necessary. You can specify it for use on concrete below grade or on sound double wood floors with top tongue boards not over 3' wide.

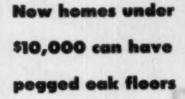
EFROME SIZES FOR EVERY INTERIOR. Kentile is made in $9^{\circ} x 9^{\circ}$ equares. Also in special sizes $-3^{\circ} x 3^{\circ}, 3^{\circ} x 6^{\circ}, 4^{\circ} x 4^{\circ}, 4^{\circ} x 4^{\circ}_{2}, 4^{\circ}_{2}, x 9^{\circ}_{2}$ and diagonal tile of all sizes. Standard Kentile is $\frac{1}{2}$ inch thick with $\frac{1}{2}$ inch also available.

DAVID 8. KENNEDY, INC., 38 Second Avenue, Brooklyn 15, N. Y. 330 Fifth Ave., New York 1, N. Y. * 705 Architect: Bidg., 17th and Sansam St., Filiadelphia, Pa. * 1211 N.B.C. Bidg., Cleveland 14, Ohia * 225 Moore St., S.E., Atlanta 2, Oa. * Kensea City Mechandisa Mact Inc., 2201-5 Grand Ave., Kensea City 6, Ma. * 1440 11th St., Danver 4, Cola. * 4532 South Rolin Ave., Chicago 32, Bl. * 1113 Vine St., Houston 1, Tasas * 4301 Santa Fe Ave., Les Angeles 58, Calif. * 95 Machol St., Calif. * 4532 South Rolin, Boston 16, Mass.









For years, pegged oak floors laid in random-widths have meant luxury and quality to style-conscious home owners. But the high cost of installation has limited their use to higher priced homes.

Now Bruce has developed the new Ranch Plank Floor that is moderate in cost because it's pegged and completely finished at the factory and is installed exactly like strip flooring. The alternate 234" and 334" strips give the beautiful decorative effect of a random-width plank floor. But Ranch Planks have none of the installation problems and expansion has ards of wide oak planks.

Architects and interior decorators praise the new Ranch Plank Floor for all types of homes and apartments. Owners say it's one of the most admired features of their homes.

Give your homes this plus value that lifts them out of the ordinary class. See our catalog in Sweet's 1950 File. For complete data and new booklet with color photographs of Ranch Plank Floors, write: E. L. BRUCE CO., MEMPHIS 1, TENN.

Bruce Ranch Plank Floor



IT'S PEGGED AND FINISHED AT THE FACTORY



• Home owners like the comfort and convenience of self-insulating windows. They enjoy freedom from bothering with storm sash spring and fall. *Thermopane**all through the house gives them what they want. It adds salability, creates long-lasting satisfaction with the home.

Fifteen companies now manufacture **oluminum** casement and double-hung windows to accomodate *Thermopane*. Ten manufacturers make casement and double-hung **stoel** windows for *Thermopane*. Eight manufacturers have standard **wood** windows available in both double-hung and casement styles for *Thermopane*. Many local sash houses regularly fabricate to order double-hung and casement wood windows as well as framing for inexpensive window walls. Write for a list of *Thermopane* window manufacturers.

Thermopane is made in more than 80 standard sizes for all types of sash—wood and metal. Contact sash suppliers for information on types and sizes available. Write for a list of standard sizes of Thermopane units, or see your L.O.F. Glass Distributor.

A ved in the

decempts, Sand"

Commont windows — Thermopane is a simple answer to the problem of insulating them. The entire such is operated at will because Thermopane is glazed into it.

Double-hung windows - there are 28 standard-sized Thermopone units to fit the most commonly-used dimensions of this type of sash.

.

Window wolls and picture windows-Thermspane units are available in sizes to fit standard wood, steel and aluminum picture windows.





Thermopane

MADE ONLY BY LIBBEY-OWENS-FORD GLASS COMPANY 3535 Nicholas Building, Tolade 3, Ohio

FOR BETTER VISION SPECIFY THERMOPANE

MADE WITH POLISHED PLATE GLASS

How to nail up Cushiontone ceilings

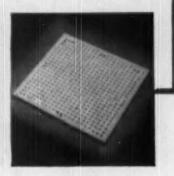
One reason Armstrong's Cushiontone[®] is so popular is because it's easy to install. While it is often applied with an adhesive, Cushiontone can be nailed in place on most jobs and is designed with special holes for nailing. The essential steps are shown below,



1" x 3" furring strips are applied 12" on centers across ceiling joists or uneven plaster. Center first strip to assure matching the along walls. Over concrete, it is best to use $2^{-} \times 4^{-}$ furring, not over 24° o.e., and cross-for with 1" x 3" strips.



2. Furring should be level. Lay a spirit level along length of each furring strip and across strips at one-foot intervals. Shim where necessary for level surface. To prevent "breathing," apply building paper over furring as Cushiontome is erected.



VIES VIES NO NO

The proper nails to use are fat-head or collar nails, with bead 's" to 5/32" in diameter. Nails should be at least 's" longer than the thickness of Cushiontone. Flat-bead nails should be set, but collar sails can simply be finished flock with surface.



5. Install Cushiontense, starting in the center of the ceiling and work toward the walls as building paper is applied. Start nails into Cushiontone before positioning for nailing. For finishing, use standard wordd modelings at joint where ceiling and walls meet.

Available through lumber dealers

3. Short-drilled holes in Cushiontime, marked red above, provide extra

nail-holding strength. Use one nail

in each corner of 12" x 12" units.

Use the shallow holes midway

along the sides when applying units

trimmed for fitting.

Now made available through lumber dealers, Armstrong's Cushiontone presents a real profit opportunity on both new and remodeling jobs. Cushiontone is nationally known-low in cost-easy to sell. For complete information and samples, contact your Armstrong wholesaler or write to Armstrong Cork Company, 1603 Stevens Street Lancaster, Pennsylvania.



Armstrong's Building Materials

MARCH 1958

SAVS MR. WETWALL, "Y'll enjoy wetting and warping and mildewing every shull be this new SAYS MB. DRYWALL falles Mr. Homsante), "You won't have the chance! FII keep them dry and creatight and the wells milderfreib, for the life of the house."



L CONSTRUCTION

 Why pay extra money for good quality, dry tumber and then soak it with water - by plastering?

With Dry Wall Construction the owner will never have cracked walls, falling ceilings or buckled floars. Dry Wall Construction is the modern, up-to-date, common sense and fast method – the greatest advance in 300 years of building construction,

For 32 years Homasore has been used for Dry Wall Construction – in millions of dollars of private homes, Since 1936 its use has been supported by intensive research costing more than \$500,000.

Dry Wall Construction - with Homason: Big Sheets - offers many major advantages The average wall is covered with a single

sheer; barron strips and unsightly wall joints are eliminated. Joints are made at doors and windows, as desired. Labor costs are mini-

If Rameses had had Homasote...

inneed of planer, dry walls and ceilings would now have been the accepted method. It would have been impossible to

gain acceptance for a material that creates the annoyances, expense and perils of cracked walls and falling ceilings.



home, free from dampness -- with dependable insurance against musty clonets and mildewed walls --. You provide added protection against fire. In a hot fire, non-fibrous products crack and fall from the wall when cold water from a hose strikes their surface; the whole wall is opened up. Also -- light density, porous, word-fibre products burn readily. Repeated case histories, however, show that Homasote (hard-pressed, dense, wood fibre) stays on the wall and protects the studs against charring.

Dry Wall Construction -- with Homasote Big Sheets -- means walls that are permanently crackproof, ideal for paper of paint, lending themselves to modern decorating effects, modern mouldings and trim.

Let us send you performance data and illustrated literature on Homasote and allied products.



Oldest and strengest insulating and building board on the market

HOMASOTE COMPANY		DEPT.	36, Trenten 3, Bow Jors	ay.	
Send me literature as che	ich.	(ed)			
Standard Homasote			Sote Ashestes Board	¢	3
(Big Sheets)	٩.		The Nova Roller Door	1	1
(Tiles and Pastols)	¢	3	The Nova-Shingle and		
Wood-textured Homosole (Patters)	£	1	the Nova-Speed Shingling Clip	4	,
Name				_	
	1.8	Seale .	print in pencil)		
Address					_



... the ECONOMICAL lock to install

30% FEWER PARTS - 50% SMALLER MORTISE - 75% LESS INSTALLATION TIME

Using the same tools, the total of handling, mortise, installation and assembly time is chopped 75%. Precision made to withstand rough day-in, day-out handling on any building, the INTEGRALOCK has all the advantages of pre-



war mortise and unit locks, PLUS trouble-free use and economical installation.

Install the better lockset that users appreciate. Save money by saving time with INTEGRALOCK. Write for the name of your nearest Sargent dealer.

4500 LINE All purpose. For economical buildings and for interior doors of buildings guarded by INTEGRALOCK.

Sargent and Company CHICAGO NEW HAVEN NEW YORK

城城城教教林林林

Ask Mr. and Mrs. America:

ONE out of FOUR says

Youngstown

随波教教教教教教教教教

Here's PROOF that Youngstown Kitchens add. sales appeal and value to new houses !

In a recent independent consumer survey, 24% of all people interviewed knew Youngstown Kitchens by name—five times as many as could name any other single make! That's proof that your prospects know Youngstown Kitchens... and that's why Youngstown is the World's Largest Makers of Steel Kitchens!

Here are six of the many advantages you get with Youngstown Kitchens:

- Installation is faster (units come ready for installation).
- Delivery is timed for when you need the units (no warehousing; lower handling costs).

- 3. No painting or touching up.
- No fitting of doors and drawers—all hardware attached.
- Original cost estimate is right (no hidden extras or inexact guesses).
- Youngstown representatives can often make real savings in equipment costs if they are consulted at the planning stage.

Let us prove to you on specific building jobs that you profit more with Youngstown Steel Kitchens. Send us your plans, and let our kitchen-planning experts show you how Youngstown Kitchens mean solid savings for you.

Youngstown Kitchens

MULLINS MANUFACTURING CORPORATION . WARREN, OHIO World's Largest Makers of Steel Elichees



Reduced to



at a

all these great saw features

HUNDREDS OF USES The Home-Utility 6" Elec-GIVE YOU REAL VALUE! tric Saw is ten times faster than hand sawing for hundreds of building jobs! You can use it to speed up such jobs as sawing stair stringers, sawing lumber to construction length, trimming stock size millwork to fit, making pocket cuts in walls, cutting transite with abrasive discs, fitting interior trim and moulding, etc.!

EASY HANDLING Perfectly balanced, compact, the REDUCES FATIGUEI Home-Utility 6" Saw weighs only 91-2 lbs. Comfortable handle is close to blade for easy onehand control. Cutting guide is always visible. Sawdust blown clear. Operates from any standard power line (A.C. or D.C.) or portable generator-115-220 volts.

MANY FEATURES FOR

MAXIMUM SAFETY: The Home-Utility 6° Saw's telescoping lower blade guard slides open to expose the blade as the saw-cut is started. As the Saw leaves the work, this guard springs closed automatically for complete safety. Instant-release trigger switch. Ground wire prevents shock if tool shorts.

UNMATCHED GUALITY Driven by a powerful Home-FOR LONG SERVICE! Utility universal motor, built by Black & Decker specifically for power sawing. Full-size ball bearings throughout. Sturdy aluminum housings. Tough gears for years of service. Just what you'd expect of Black & Decker's 39 years of outstanding electric tool building.



MARCH 1958

Articles reproduced from Januar and March lances of Batter Hones & Gardens,

Recipe for success : "Catch 'em While They're Deciding"

T's in the home that families decide to remodel a wall, install a new window or heating system, and plan to build their new home.

So it's only natural that Better Homes & Gardens stands out as "America's 1st Point of Sale" for your lines,

Not just because BH&G goes directly into more than 3,000,000* homes. Nor even because the homes have far-above-average incomes-and brisker buying habits.

What does the trick is BH&G's helpful, reanted 100% service content on good living which includes more building editorial than any other major magazine. This puts readers in a buying mood—and they welcome advertising that catches their eye while they're making up their minds.

Net result: Brands advertised in Better Homes & Gardens move faster.

\$3,283,000 IBC and going to 3,500,000 atom.



3,250,000

Over 3,000,000 select homes will decide on these brands - pre-sold in Better Homes & Gardens January February and March Seenes_

APPELANCES.

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Youngstown Kitchens Food Waste Disposer

AWNINGS, BLINDS & SHADES

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FARS Accept Kitchen Fan American Kitchese Ventilator Kitchen-Are

FLOORS Bruce Blandwood

FLOORCOVERINGS, HARD Armotivong's Asphalt Tile Armotivong's Asphalt Tile Armotivong's Limbour Formant Babber Tile Romendy Babber Tile Romendy Babber Tile Restile Seame Linekrom Wright Bubber Tile

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MINTELLANEDES Majestie Garliage Receis Majestic Incinerator Johns Mazesille Reeding

A Screened Market 3,250,000 of more than 3,000,000. Better Homes

MARCH 1950

Proved in '49

Just one of many letters from builders who found that:

- ... a better electrically planned home
- ... equipped with electric appliances
- ... and effective premation

SELLS MORE HOUSES

Saddle Wood Hills

Supervise States of States

P. Statement & Day and Antiparty of Antipart

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BRILDERS - FREIREERS

. . Ready for YOU in '50

THE 3-POINT PLAN

... to help your Exhibit Home sell more houses

The successful experience of Tandy & Allen, developers of Saddle-Wood Hills, with the 3-Point Plan was repeated by other builders throughout the country . . . so we are extending the plan to more builders in 1950.

The 3-Point Plan Includes:

- A selection of "electrical packages", to offer your prospects as a selling feature.
- 2 Better planning of kitchens, laundries, lighting and wiring as a plus selling feature.
- 3 Advertising and promotion material to sell these features of your home.

Whether you are planning an exhibit home for National Home Week, or at any other time, the 3-Point Plan can be applied successfully.

Write today for the 3-Point Plan Book and a 32-page book of ideas on electrical features to help sell your houses. Ask for B-4691.

YOU CAN BE SURE .. IF IT'S Westinghouse



Bathar Homos Baroos WESTBHOHOUSE BLECTS P.O. Bas 868, Dopt. A Physics and the Solar A Physics and the Solar of Ideas-B-4(9).	83		year Bank
Name			
Address			
City	Zone	Seare	G-10088

WITH ELECTRICAL

LIVING FEATURES Westinghouse

MARCH 1950

THE MOST INSULATING EFFICIENCY IN THE SMALLEST PACKAGE!

Reynolds Aluminum Reflective Insulation

With just a 15-lb. package under each arm you've got 500 iquare leet of high-efficiency insulation, ready to tack or staple in place (250 sq. ft. to the roll; 25".

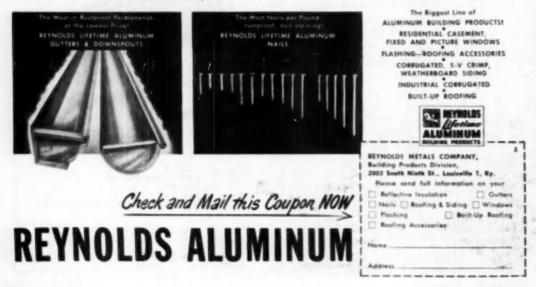
53" and 36" widths). And you've got a vapor barrier that rates top of the list in the National Bureau of Standards Report BMS63. All at extremely low cost?

This aluminum reflects up to 95% of radiant heat ... away from the bouse in summer, back into the house in winter. It's aluminum foil mounted to both sides (Type B) or one



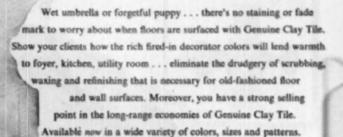
side (Type C) of tough kraft paper. Pressure-embossed in attractive design for extra solidity...clean, pliable, easy to cut and handle.

Type B is the ideal insulation and vapor barrier under floor joists over unheated crawl spaces. It divides stud space in side walls to provide *two* reflective faced air spaces. Excellent over ceiling joists or under rafters. Especially important under new FHA vapor barrier requirements. Mail coupon for full details. **Reynolds Metais Compony**, Building Products Division, Louisville 1, Ky.



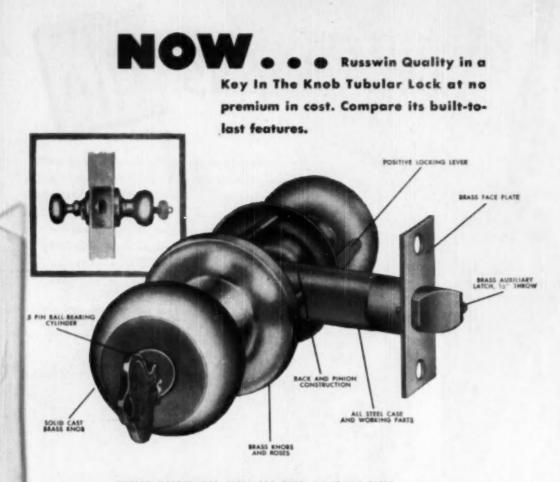
ON'T WORRY ... IT'S Lile

THE MODERN



The Tile Council of America, Room 3401: 10 East 40th Street, New York 16, New York. Room 433: 727 West Seventh Street, Los Angeles, California.

SMULINE CLAY



NEW RUSSWIN KEY IN THE KNOB LOCK

For Residential and Apartment House Construction

- 1. Needs only ONE mortise, for quick installation.
- Has special auxiliary latch to dead lock latch bolt—prevent manipulation when door is closed.
- 3. Reversible for any hand of door.
- 4. Removable cylinder for keying.
- 5. Russwin Ball-Bearing Cylinder assures long life and ease of operation.
- No key operation required to lock door when leaving—simply operate locking lever.

Isn't this what you've been looking for ... a RUSSWIN quality lock in the Key In The Knob Style? Try it on your next job. Write for descriptive folder now! Russell & Erwin Division, The American Hardware Corp., New Britain, Conn.





He won a National Championship

...but you'll reap the benefit!

THIS YOUNG MAN IS Charles G. Adams of Conway, Ark.-one of 12,000 brickmason apprentices enrolled in a nation-wide training program being promoted by SCPI.

Recently these young men demonstrated their skill in a national bricklaying competition. A passing crowd of more than 300,000 at the finals in Cleveland, Ohio, saw Adams defeat the best apprentices from every state to become Champion Brickmason Apprentice.

His fine work, and that of all the other contestants, showed that this training program is getting real results—results that will make you and your customers "winners" for years to come.

Every time you design or build with structural clay this training program will pay you valuable dividends—in decreased building costs, efficient workmanship, quality construction and satisfied buyers.

These are the goals Charles Adams and his fellow apprentices are learning to work toward. These are also the goals of SCPI and the various educational, labor and government groups cooperating in this program.

We at SCPI think the excellent progress of the program to date is a healthy sign of a bright future for the building industry and for all of you associated with it.

MAIN OFFICE

STRUCTURAL CLAY PRODUCTS INSTITUTE 1520 18th Street, N. W., Washington 6, D. C. UCTS INSTITUTE, 341 State Street, New Haven 10, Conn.; 1949 Grand Central Terminal, New York 17, N.Y.; 1518 Walnut Street, Philadelphia, Penna.; 305 Market Avenue, North, Canton, Ohio; 502 Benedum Trees Building, Pittsburgh 22, Penna., 228 N. LaSalle Street, Chicago 1, Illinois; 1201/2 Welch Avenue, Ames, Iowo; 208 Kittredge Building, Denver 2, Colorado; 55 New Montgomery Street, San Francisco 5, Calif.; Central Building, Seattle 1, Washington. **Clay Products Association of the** Southwest, Littlefield Building, Austin, Texas, First National Building, Oklahoma City, Oklahoma.

regional offices to help you -

STRUCTURAL CLAY PROD-

MARCH 1958

Arrowhaad K-1890-C, vitzoous china lavatory built into a dreming table. Nize: 20x18". Basin: 15x10% '. Contra fitting with Synchro drain.

New!

KOHLER Vitreous China and Enameled Iron BUILT-IN LAVATORIES for Dressing Table and Cabinet Combinations



Arrowhead #-1892.P, vitreous china, 20x18". Combination fitting with Synchro drain.



Takas K-3918-C, enameled iron, 20x18". Centra fitting with Synchro drain. (This lavatory also available with combination fitting. Specify K-2819-F). These new Kohler lavatories, with flat rim for building-in, open fresh opportunities for you among home-planners who wish to follow a new and increasingly popular trend in bathroom installations, or to modernize old bathrooms. They provide a basis for many attractive dressing table and lavatory combinations that join smartness with convenience. This makes them ideal, also, for any small space suitable for converting into a washroom—and many will welcome the idea of installing them in bedrooms or dressing rooms.

Like all Kohler lavatories, these combine beauty of design, fine materials and unexcelled workmanship. The vitreous china Arrowhead is made of carefully selected imported and domestic clays. The enameled iron Tahoe is protected against cracking and crazing because the Kohler enamel is fused to a base of non-flexing iron, cast for rigidity. The glass-hard surfaces of all Kohler lavatories are exceptionally easy to keep clean and lustrous. Chromium-plated brass fittings are engineered to Kohler high standards of efficiency and durability. Kohler Co., Dept. 5-P, Kohler, Wisconsin.

Kohler 1950 Advertising

Substantially increased for 1950, Kohler advertising will reach millions of consumers, with full-page 4-color advertisements in The Saturday Evening Post and leading home magazines. Additional advertising will be directed to the farm market, architects, builders, and executives of hospitals, factories, schools, tourist courts, hotels and other institutions.

KOHLER OF KOHLER



RIKINGLY STYLED BY

STRI-TEX...Dramatic, New Asbestos-Cement Siding... is another long step ahead in Flintkote Product Development

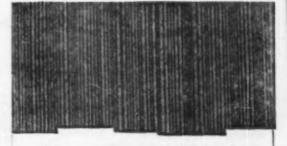
HERE'S

Designers, Builders and Homeowners have been waiting a long time for a sidewall material such as Stri-Tex. Here's a sensational new development that combines the time-proven durability of Asbestoa-Cement Sidings with striking, colorful eye-appeal that matches the most expensive and beautiful sidewall coverings. Currently being produced in Brown, Green and Gray... other new colors will soon be available.

Use Stri-Tex for new construction . . . or apply it quickly and easily right over old sidewalls during remodeling. Wherever it's used, the soft, textured beauty of the striated design adds unique beauty to any building.

Here's another opportunity to get out in front with Flinthote! Don't fail to get complete information on this spectacular new siding product. A note will bring you full details.

THE FLINTKOTE COMPANY, Beilding Materials Division, 30 Rockefeller Plaza, New York 20, N. Y.



FL

Seri-Tex gives you all the well-known advantages of Asbestos-Cement Siding, combined with beauty to please even the most exacting of today's discriminating homeowners.

FIREPROOF TERMITE- AND VERMIN-PROOF BOT AND DECAY PROOF NO PAINTING MAINTENANCE

KOTE!



MARCH 1958

MENGEL Solid-Core Flush Doors Expand INTERNALLY-But <u>NOT</u> EXTERNALLY!

Want the facts about a

REALLY STABLE

SOLID-CORE DOOR?

Mengel Solid-Core Flush Doors represent a radically new Standard of Stability. Their unique construction does not undertake the impossible job of preventing expansion and contraction caused by changes in humidity — it controls these forces to an extent hitherto unknown.

All Mengel solid hardwood core members are deeply slotted at frequent intervals both with and across the grain. These slots effectively absorb expansion and contraction. Thus the solid wood between the slots can expand and contract as the weather changes, without in any way affecting the stability of the door itself! Futhermore, Mengel's exclusive key-lock dovetails and waterproof hot-press phenolic bonding keep the entire assembly permanently tight....

Get all the facts about Mengel Solid-Core Flush Doors--the really stable doors that co-operate with nature on the *inside*, ignore it on the *satiide*! The coupon will bring you full information.



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BUMIDETY Departmenthere has

the shiel wood between the plate, thereby revenuence to worked at the slott, wether changing the dimension of the door itself.







THE MENGEL COMPANY Plywood Division, Dept. AB-6, Louisville 1, Ky.

Gentlemen: Please send me complete information on Mengel Solid-Core Flush Doors.

Name	
Firm	
Street	
City	State

Proposed Co-op Plan to Serve Middle Income Groups

OME BUILDING heat all time records last year with 1,019,000 starts. In 1948, a total of 931,300 new houses were started, and in 1947 the total was 849,000. The private building industry has no need to apologize for its record during the most critical housing shortage in history. The Administration thinks otherwise, however, and last August Congress enacted a public housing program to build \$10,000 units over a six year period. Now the Administration is concerned over the inability of "middle income" families to buy new homes and proposes a "co-op" housing hill

Visible results of the Federal government's efforts to house lowincome families will begin to appear in 250 cities and towns during 1950-51. Public housing will become a reality in such places as Dothan, Ala. where 148 units are programmed; Winslow, Ariz., 50 units; Willimantic, Conn. 100 units; Decatur. Ga., 100 units; Collinsville, Ill., 100 units; Muncie, Ind., 600 units, and Hamtramck, Mich., 190 units, Most larger cities now have some public housing units in operation. Birmingham, Ala. will get 3,000 more : Los Angeles, 10,000; Washington, D.C. 3,500: Chicago, 21,000; Detroit, 10.-000; New York, 20,300; Cleveland, 6,000, and Philadelphia, 10,000. These are rental units which are expected to be operated at a deficit.

In most cases the number of units proposed is as much or greater than a year's normal production of new homes by private builders in these areas. The demand for materials and labor will, therefore, be doubled if private builders match their last year's record.

The "co-op" housing bill is in the discussion stage. If enacted it will add to the pressure on supplies of building material and labor. The Administration believes that the public housing program will help to provide modern housing for the low-income groups, but is concerned about those in the middle income group. The housing administration states that the middle-income housing market is being served inadequately by private industry.

According to the best information available the middle-income group, comprises families with incomes of between \$2,000 and \$5,000. About 52 per cent of families are in this bracket. There are 26 per cent of families with incomes of less than \$2,000 and 22 per cent with incomes of more than \$5,000.

Presumably public housing will provide for families whose income is less than \$2,000, cooperative housing for families with incomes of \$2,000 to \$4,000, and FHA insurance for unorgages of those whose incomes are \$5,000 or more.

FHA figures, however, for the first six months of 1949 show that the people whom the government seeks to aid with public and cooperative housing were the building industry's best customers. About 70 per cent of the new houses were bought by families with incomes of less than \$5,000. About 15 per cent were bought by families with incomes of \$5,000-\$6,000 and 15 per cent by families with incomes of \$6,000 and over.

Cooperatives in the housing field have been tried before. In the postwar period their growth has been spotty. It is now proposed that the Federal government create a new type of mortgage bank to provide credit. The bank would be known as the National Mortgage Corporation for Housing Cooperatives. A housing co-op would be able to obtain loans up to 50 years at about three per cent interest on dwellings either singletamily or multi-family.

First of all the Treasury would pait up \$100,000,000. In return, the Treasury would receive stock values at that ansemt in the usew National Mortgage Corp. Then the corporation would sell government-backed bonds to banks, business firms and the general public to raise money for cooperative building loans.

The Mortgage Corp. would be given, under present plans, authority to lend up to two billion dollars over a period of years. The first 300 million of that amount would be loaned before July 1951. Launs would be made to unions, universities, veterans organizations or other groups.

Cooperative groups could build rental units or owner-occupied units. Rents would range from \$45 to \$73 a month, not counting utilities.

On the surface, the plan would eliminate to a large extent the selling and financing problems of builders. Mortgage hankers would be hard hit if a substantial amount of hone financing were to be done this way.



There's never been a building product that sells bomes faster...

AUTO-LOK

the weatherstripped ALUMINUM AWNING WINDOW

Builders everywhere are reporting quicker sales, happier hapers, and increased prestige for themselves, when they use Auto-Lok, the amazing Aluminum Awning Window.

Prospects become home buyers as they linger longer examining the perfection of Auto-Lok. This is the window with everything they have been waiting for ... vents that open to almost 90 degrees...protection during the rain with vents open... vents that drop down for easy cleaning from the inside...PLUS, positive protection against all climatic extremes.

Automatic locking AUTO-LOK windows are actually "Sealed Like A Refrigerator" because of the patented Auto-Lok hardware that is responsible for the tightest closure known in the window industry.

Save time and money with AUTO-LOK's simplified installation' They come to you complete with factory installed weatherstripping, built in hardware, and removable aluminum screens that can be replaced by storm sash (no tools required). There are 48 standard and modular stock sizes, and many combinations available. This wide range of types makes AUTO-LOK adaptable to every type of architecture.

For full details consult SWEETS, or your nearest AUTO-LOK distributor (name on request). Catalog available, write: Department No. A-3-B, LUDMAN CORPORATION, P. O. Box No. 4541, MIAMI, FLORIDA.



THE WIllimate IN AWNING WINDOWS ENGINEERED FOR LEADERSHIP BY LUDMAN CORPORATION, OPA LOCKA, FLORIDA

it's

sealed

like a

efrigerator

SPOKANE — Four and one-half months after rent controls were lifted in this city rents were leveling off at about 14.3 per cent above the controlled schedules, and the construction of new homes increased 84 per cent over the same period in 1948 when controls were in force.

Hews, Views and Comments

On and Off the Record

RENTAL HOUSING—1200 locked up units were returned to the market for rent following the removal of controls, and many units previously held for sale were made available for rental. Realtors reported that the sale of existing homes paralleled the record of new construction.

CONCLUSIONS James P. Dillard, chairman of the rental advisory board reported that removal of controls set in motion all of those factors that tend naturally to keep rents under automatic control; that cleaner accommodations are being offered because owners find it necessary to clean and decorate rental units.

CONNECTICUT — Chester Bowles, former director of OPA, and currently governor of Connecticut, has a new state housing bill. It provides for mortgage interest rates to the home buyer as low as 1½ per cent. For the speculative builder it proposes money at 3½ per cent. For fity dollars a house the speculative builder can obtain insurance that the house will be sold even if the state has to buy it. That is a new wrinkle for putting an end to free enterprise.

MANAGEMENT—Ned A. Ochiltree, president of Ceco Steel Products Corp., stated at the annual service award dinner for Chicago employees that "The world owes no one a living, but it does owe everyone the opportunity to earn one," It would be a good idea to display that statement prominently in every class room in every high school and college in the country.

MARCH 1958

The major trouble with the entire world today is the distorted thinking that leads too many people to believe that the world does owe them a living. The result is everything from petty larceny to grand confiscation of private property by governments.

S. 2246—It is also known as the Sparkman Bill, although it is quite evident that Senator Sparkman had about as much to do with writing the bill as a Chinese coolie. The bill contains the grand and benevolent statement that its purpose is to aid the middle income group to provide itself with housing. The statement, however, is only a mask for the true purpose, which is another long stride in the direction of completely socialized housing.

DISCRIMINATORY — The bill provides for subsidy aid to 265,000 middle income families. Since there are about eight million so-called middle-income families, the bill proposes to aid one family in thirty. Even the one in thirty, whoever they are and however they are going to be chosen, need that kind of aid about as much as any of its members need a third leg.

NEXT—If this bill passes there should be no question in the mind of anyone that 1952 will see a bill proposed to grant subsidy aid to the upper-income group "to aid them in their pitiful quest for housing they can afford."

HOUSING—Anyone in any income group except the lowest can afford a new home today. But no housing bill has been proposed to aid the lowest-income group. Its members cannot afford to pay the rent required for the houses authorized under the Housing Act of 1949.

WEAKNESS—The inherent weakness of socialism is the false premise that government provides bounty for all of the people.





without brazes cavers that completely hide spring, as shown above.

PERMITS REMOVAL OF SASH WEIGHTS, INSULA-TION OF MULLIONS.

Slash Labor Costs'

-106 -00

Simple installation allows one man to easily install 20 or more windows in 8 hours. No high-priced skilled labor needed. This means you can get more satisfied customers at lower cost . . . higher profit!

Tops in Operation!

Smooth, positive action; accurate balance; finger-tip, control plus the perfect seal against draft, dust, moisture. No wood-towood contact. Prevents sticking windows and window rattle.



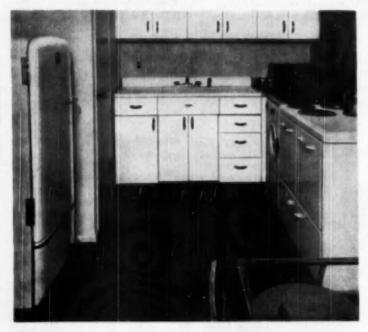


These beautifully modern fourroom homes in Teaneck, N. J., have a spacious attic where two additional bedrooms and bath may be furnished. The completelyequipped kitchen includes an automatic Electric Range because, as Mr. Williams says, "electric cooking is a part of modern living."

"In our experience," says builder Cy Williams,

Value Sells Houses ...

and that means up-to-the-minute features like the automatic electric range"



ELECTRIC 84864 SECTION - Instianal Electrical Manufacturers Association, 123 East 44th Street, New York U, N. Y. ASHIBAL - COLERATOR - CROSLEY - FEODALE - OD-BRAIL ELECTRIC - GIBSON - HOTPORT KEIVEATOR - LEDO - HONARCH - NORDE - GUALITY - UNIVERSAL - WESTINGHOUSE "Our aim," says Mr. Williams, "is to provide real living well within the reach of home buyers. The sales of our Sun Ranch Homes show that we've accomplished this. People are quick to appreciate an economical house that includes features usually found only in more expensive homes including modern, automatic Electric Ranges."

The scientific U-shaped kitchen, like the rest of the house, has the most modern features. Its up-to-the-minute equipment includes a modern, automatic range, and - OF COURSE...IT'S ELECTRIC!



EDITORS' Round Table

FLOYD QUIGG, the Washington reporter who edits and publishes Wood Industries Weekly, recently unearthed one of the most interesting documents this staff has seen for a long time. It is the statement of Mrs. Patsy L. Allen before the Senate Banking and Currency Committee on December 12, 1949.

MRS. ALLEN was representing the Marshall Heights Self-Help Co-operative, a group of Washington Negroes who believe in standing on their own feet. Mrs. Allen's statement follows.

"MY NAME is Patsy L. Allen, I ant appearing here as treasurer of the Marshall Heights Self-Help Co-operative, which some of us organized to help get through the depression. I am also chairman of the Pioneers Committee of Marshall Heights, which some of us organized to help us get through this redevelopment trouble that is worse than the depression was. At least in those days our own government was not trying to take our own homes away from us. We are all ready to speak for Marshall Heights as we have built it up, and we are all ready to fight for it, too, in any way that is necessary.

"You can't blame citizens for clinging to their homes, especially when these homes are the total of all we have on earth, built with our own hands, the hard way. We icel that our fight to keep our homes is a very just one. We have given at least some indication that we of Marshall Heights are not resisting improvement of our neighhorhood. We are in favor of it. More than that, we have been asking for it for years. But, we want to do it ourselves, and not be forced out of our homes that we have built here, by years of hard work. We believe that after we have bought and paid for these lots, and have bought and paid for these materials, and then have built our homes with our own hands, we ought to be secure in them, in the Capital of the United States. We believe it is the government's job to keep us from any attack that would take these homes away from us, and it has been a terrifying thing to find that instead of protecting us in our homes our goyernment has been leading the attack (Continued on page 59)

MARCH 1950

PULL UP A CHAIR.... and let Wood tell its story!

There's a confort reason for using wood windows! Sit close to one on a winter day . . . feel how the natural insulating qualities of wood help create confort by resisting the transmission of cold. In summer you can feel that wood windows do not "heat up" readily.

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

for friendly living Ponderosa Pine VOODWOEK Apt. SAB-L 55 5. Dearburn St. houge 5, Illinois Please send me a copy of "Tuday's Lice Horses." (Please print.)

Check these outstanding Mueller Climatrol features



Al-unided heavy-gauge steel heat-onchanger - officient underft design, with out encousing harizantial travel. High crows short, on impringement of flame. Harizantel flow outjut on director.

- Wijd construction -- two heavy desceads previde out-of-frank supeart along bottom of entire unit. Cabinal interior final with fullined autostor insulation. Hamping bracksh superiord for supportion.
- Acceled filters burner cost lean with deiled ports. Single arouning shutter prevents despire, testant lanition, no crosslighting problems.
- Sectored correctly at side in vestibule metching cobinet, may be mounted an oither side of salkinet.
- Outer, high-delivery blower -- centelfogel true, multi-blade, maerted an rebber, Mater is continuous duty, single speed, resilient mounted.

Plosible installation - cold-oir return mov be installed on either side, back, or bottom of cobinct.

Steed right — 60,000 and 90,000 Bis inout connection: AGA approval for natural, monetectured, butane - air, and LP-pas, and for high-attitude installation, Shipped completely 'sucathilad.

Also evenlights as blower unit heater --Type 151-In fear sizes: 60,000, 90,000, 120,000 and 150,000 Bie Input.

Announcing the new Mueller Climatrol Type 155 Horizontal Winter Air-Conditioner

Designed to meet your specific requirements for ranch-type, small and basementless homes

The new Type 155 gives you just what you have wanted in a horizontal winter air-conditioner — a compact, flexible unit which meets your *bighest standard* for value and efficiency.

Its space-saving dimensions and installation advantages offer many building economies. You can omit the utility room and expensive masonry chimaey.

The Type 155 is ideal for attic installation; rigid enough for cralle-suspension in small-home basements; and compact enough for crawl-space installation in basementless homes. For perimeter heating, radiant warm air, forced air beating. The Type 155 is designed to match the high quality of Mueller Climatrol floor furnaces. Heavy-gauge materials, careful construction, skilled engineering, smart design, and fuel-thrifty operation - all combine to make it the ideal answer to the modern trend in home and heating design.

Your clients and customers want the latest and the best the borizontal winter air-conditioner, backed by 93 years of leadership. Write for full details on the new Type 155 today. L. J. Maeller Furnace Company, 2111 W. Oklabama Ares, Milicankee 15, Wisconsin,





against us, through its Planning Commission and its Redevelopment Land Agency.

"Our situation has been made even worse because our government has been helping those who are trying to take our homes away from us, in order that certain government officials can have jobs, can spend money which they did not earn by taking from us the homes which we DID earn. And in order that certain private builders can be given our land at a low price for their profit. If the government can do such things to us property owners in Marshall Heights it can do the same thing to any property owner anywhere. We can show you how we have been solving our housing problems and have been making steady progress at it. It has been slow, but we have paid as we got our improvements and we did not ask the government to go in debt to do it for us. You may talk about somebody owning his own home because he has a 10 per cent equity in it under FHA. Most of us in Marshall Heights have a ONE HUNDRED PER CENT equity. Our homes are debt-free. We had to build with what we could save out of current earnings. or wages, and now we have them. They are ours. At least we THOUGHT they were ours until this redevelopment nightmare came along.

"We are not alarmed over the cost quoted for improvements in Marshall Heights if the redevelopment does not go through. Think what the cost to us will be if the redevelopment DOES go through. We will lose our homes. These costs that seem so high to people who are not accustomed to fighting their own way like we are-we can take care of them. If the District will do its part, especially by putting in water and sewer, paving streets and sidewalks, as has been done in other parts of the city, we will have no difficulty in financing our part, although in some cases, the costs may be as much as \$3,000 It would still be less than we would have to pay for shelter somewhere else, if the Land Agency is permitted to take away from us the homes we already have clear of deht.

(Continued on page 61)

MORE DOLLARS AND SENSE!

-FT.

WEIGHS

3/2 LESS

8001-P800F

JOINTS

More Facts that <u>Prove</u> Bermico Cuts Building Costs

Bermico's convenient 6-foot lengths store more actely with for less breakage... are easier to handle on the truck or job. Bermico weighs only 15 as much as other types of pipe. A cinch to lay, too. No joining compound needed. A few hammer blows and Bermico joints are tight... and stay tight even when the ground shifts underseath

Small wonder builders find that Bermico eaves money, time, effort all along the line. Bermico is a hit with customera, too. It's rootproof, leakproof, watertight . . . unaffected by temperature extremes . . . Bermico assures a smooth, dependable high capacity water flow.

That's why, today, millions of feet of Bermico are in use in house to server connections, septic tank disposal and drainage systems.

Bermico can cut your costs for time and labor and increase your profit as well. Drop us a line and get the whole story of why it pays to insist on Bermico Sewer Pipe.

SEWER PIPE

PRODUCT OF BROWN COMPANY

Dept. A-13, Brown Co., 500 Fifth Ave., N.Y.

RMICO





Photographs of the home of John Brandt, in Edina, Minnewsta. Norman R. Johnson, architect. Carl M. Hansen, builder.

ANDERSEN Hall

ON THREE SIDES of this comfortable den, windows are the walks—adding to the coziness of the room an extra measure of friendly sunlight, an extra portion of the view.

Andersen Complete Casement Window Units with one light glazing make these WINDOWALLS that simultaneously perform the function of windows and walls.

Note the harmonizing effect of using wood windows in a home paneled with wood. Note, too, that this room can be naturally ventilated with such that operate.

Specification data on ANDERSEN WINDOWALLS is in Sweet's Architectural and Builders' Catalogs, or will be sent by us upon request. See your local lumber or millwork dealer for further information. TRACEARS of ANDERSEN COMPONENTS.

Andersen Cosporation

BATPORT - MINNESOTA

EDITORS' Round Table

(Continued from page 59)

"We have put into practice a tradition that has helped to make America what it is today. When the Filgrims landed at Plymouth Rock in 1620, they cleared land and built homes. We cleared Marshall Heights, and we have built homes. When my husband and I bought our land it was in the woods, and the way streets were marked was that the trees were cut down. They were still there, but at least they had been cut down. Now we have our home, and these hands of mine helped build it. Is that an unforgivable sin in America?

"Could you imagine a more discouraged group of home owners than we? Who can say we are not entitled to be discouraged when our own government is trying to take away from us what we have built? Would it be a step forward to demolish, dismantle or raze our homes, and with them destroy a tradition that has been the framework of making this great country what it is today. It has been said that we do not have improvements that are necessary in 'decent' housing. How could we go forward with improvements, with District officials resisting us for years in our attempts to get sewer and water, and the streets that go with the improvements?

REGARDLESS of the merits of the case being argued by Mrs. Allen, the encouraging and stimulating thing about her statement is that there is at least one group of lower-income citizens who propose to pay their own way, and neither want nor are willing to accept government dole or government subside

AND regardless of what kind of houses are in Marshall Heights, the fact remains that the people who cleared the ground and built the houses, and now own them, like what they have, and are proud of an accomplishment.

IF MRS. ALLEN and her neighhors have built a community that is unsafe and unsanitary, and therefore detrimental to public health and safety, the community, in spite of the good intentions of its founders, should go. If, however, some people merely do not like it, those people, in or out of government, have no right to interfere.





Ceco Casements ... Engineered

CECO

TEE

Anyone looking out of a Ceco casement for the first time experiences something in better living. The eye crosses easily to the beauty of the outdoors. There is no limit to the sense of space. And to live with Ceco casements for even a short time, is to appreciate truly sound value. For here, beauty and utility indeed are effectively combined. We believe all this can be attributed to a word-ENGINTERING. Actually, there are three phases of window engineering at Ceco...1. Creative engineeringa ceaseless search for the new to blend with modern architectural effects. 2. Production engineering-organization of manufacturing processes to

In construction products CECO ENGINEERING



for Better Living ...

assure the lowest cost for quality. 3. Field engineering—here products are proved by practice. All this means meticulous attention to little things—to perfection of detail. That is why we say, in steel casements— CECO ENGINTERING MAKES THE BIG DIFFERENCE. When you build with Ceco, you know you've used the very best...you're sure of economy too.

CECO STEEL PRODUCTS CORPORATIOM General Offices: 5601 West 26th Street, Chicago 50, Illinois Offices, worklasses and fabricating plasts in principal cities

makes the big difference



Advantages of

Controlled Ventiliation -- Ventiletors open to any position, capturing stray breezes. Ventilation possible up to 100%.



Beay To Open and Class - Windows will not alick or warp. Open effortlassly under all warther conditions.



Mare Light-Sender frames and mentils provide up to 30% mare light, assuring better vision, more view, too.



Mere Wall Space - Horrow frames parmit up to ½ more wall space. A special advantage in small fasmes or opartments.



Bosy to Wash—Both sides of Caco congments can be washed from within, Thorp are no ladders to climb.



Easy To Serven-Coco casoments are screened on the inside. Storm windows are applied on the inside, too.



Another ELJER Extra at No Extra Charge



Here's the heart of Eljer's "No-Splash" Stream Control. It eliminates the annoyance of water splashing in a basin by effectively screening the

water flow to a soft, smooth, controlled stream. It's new . . . inconspicuous . . . another Eljer improvement . . . another Eljer extra . . . at no extra charge.

 all B-9350-R and B-9359-R center-set lavatory fittings.

Remember, the first cost of Eljer Brass Goods is only a very few cents more than ordinary, cheap fittings... an insignificant factor in the total cost of even the lowest-priced house.

It will pay you to sell Eljer Quality Brass... and when you install Eljer Plumbing Fixtures, be sure to use Eljer Brass Fittings. Clients do appreciate Eljer extras... like the "No-Splash" Stream Control. See your Eljer Distributor or write Eljer Co., Ford City, Pennsylvania.

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









'Public Housing Snarled In Red Tape' Lockwood Tells Cincinnati Group



RODNEY M. Lockwood, (left) NAHB president, chuts with Joseph J. Bobers, president of the Name Builders Association of Greater Cincinnati, and Cliff W. Springmeier, Cincinnati trustee, at meeting in Ohio city at which Lockwood spoke against public housing

Speaking before a recent trustee and general meeting of the Home Builders Association of Greater Cincinnuit, NAHB President Rodney M. Lockwood declared that "While the public housing program is snarked up in the usual government red tape, the private building industry is gretting the job dowe."

Lockwood, who was guest of the Cincinnati group at the Hotel Gibson, estimated that not more than 50,000 public housing units would be started in 1930. He added that "... before the planners have even started on their program to help the lower-third income group they are attempting to rush through legislation to take over housing for the middlethird income group through government cooperatives."

The NAHB leader said that "The public housers atill have their bead in the clouds, planning \$11,000 to \$12,000 homes." pointing out that private industry's production record for the last two years is more than two million homes for which, according to a Federal Reserve Board survey of consumer finances for June, 1948, buyers paid a median price of from \$7,500 to \$85,500.

Lockwood declared that competition from the government in the bousing field would tend to push prices upward and would also squeeze the small builder out, of the market, especially when "Uncle Sam is paying half the rent ball."

New Seattle Officers Announced

Harold Larsen was elected president of the Scattle Master Builders Association at the group's recent annual meeting. He ucceeds V. O. Stringfellow who was awarded a Master Builder diamond pin infignia in recognition of his services the usat year.

Other new officers are Harold Raber, vice president; Ross Hebb, secretary;

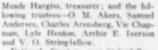
Los Angeles Institute Names W. H. Evans to Presidency

William H. Evans has recently been elected president of the Home Builders. Institute, Inc., a Los Angeles countywide association of large-scale builderdevelopers of residential projects. He succeeds Arthur A. Beliveau of Alhaeobra.

Exans, president of Economy Homing Corp., huilder of Lincoln Village in Long Beach, participated in the creation of the Federal Housing Administration and served as associate director of FHA for Southern California in 1935.

His election to the Institute presidency is in recognition of his many contributions to private boasing including his FHA activities, developer of the circulating floor plan for small homes, two bedroom garden-type homes, and introduction of a written guaranty for new homes.

During the middle '30s Evans mude a boosing tour of Europe for the U.S. Government which included Sweden and Russia. He has just completed a twomonth boasing survey in five countries of South America for a special report to the bomebuilders of Southern California.



National directors are Stringfellow, F. R. McAbee and Albert Balch. Harold Larsen, Stanley Long and Samuel Aodersen are alternates.



F. B. McABEE, post precident, giving onth of office to new officers and trustage of Beatle Moster Bullders Association. They are field to right: V. O. Bringfellow, 1965 provident; Harold Lorson, precident; Harold Baber, vice president; Base Habb, secretary; Meede-Hargies, treasurer; trustees Vic Chapman, Lyla Henton, Charles Arenaberg and Samuel Actionse.



Cy Sweet Says -

C. B. SWEET, President, National Rotall Lamber Dealers Association

The year 1950 had burely started before the American people were treated to two stirring speeches by their President. At least the speeches should have stirred the average American to the realization that the time is growing very short for him to prevent the utter destruction of the monomic system and the moral fibre of his country.

In the first message to the secand session of the Elighty-First Congress, the President again reccommended and demanded legislation which would carry the country further down the road to socialism. He asked for increased social security, additional aid to education, expanded public health and hospitalization coverage, continuation of rent control, price support for farm products not now covered, and public housing for the middle income group. The latter request came before a start had been made to fulfill the legislation he got last year for homing the lower income group.

Another statement which was made in this message, and which I am afraid many people may have overlooked, was that every worker was entitled to a minimum yearly income of \$5000. To illustrate the far reaching affect of such utterances by our President, I would like to recite an actual situation which occurred in my own home town.

A young man, a college graduate in aeronautical engineering, who had been steadily employed by a local concern new in the indostry, but which has been endeavoring to get a foothold, made a request, or I should say a demand of his employer for an increase in salary. His statement was, "Urless I can get a raise in the oext six meeths I intend to look for another job. I am only making \$4800 per year, and the President says everyone is entitled to a minimum of \$5000 and I feel I am better than the average and entitled to more than the miniimum."

How many other young men have been so affected by the President's statements and what will be the outcome of this line of thought?

The second message to Congress dealt with the budget for the coming year. Here again it would seem no consideration was given to the welfare of the people, but merely a desire to spend and spend. Should it not be a sobering thought to realize that all the Presidents of the United States from President Washington through President Rossevelt's second term, spent only \$179,620,113, de5, while President Truman has spent from fiscal year 1946 to September 30, 1940; the sum of \$191,-081,394,191.

I have come to the conclusion that the answer to the flying succer phenomenon is simply President Truman drifting in the "wild blue youder" conjuring new ethereal schemes.

Northwestern Lumbermen Add Two to Staff

A steady growth since 1944 to a present membership of more than 2,200 humber and building material dealers has resolted in an expansion of the operating staff of the Northwestern Lumbermens Association, Minneapolis, the secretary, W. H. Badeaus, has announced.

The two new staff members are F. P. Longeway, named an additional field secretary, and R. V. Miller, manager of the Association's Traffic Department.

Longeway, a 1940 graduate of the University of Minnesota, has had a number of years' experience in organization and merchandising work in fields related to humber and building material distribution.

Miller has had 20 years' experience in carrier and industrial transportation. Most recently be handled all traffic for



F. P. LONGEWAY R. V. MILLER

the movement of materials and equipment incident to the construction of the Trans-Arabian Pipe Line in Saudi Arabia.

Badeaux said that the Association's Traffic Department has returned nearly \$200,000 in cash to members during the past three years, as a result of claimachecking services; and that more than 1,000,000 freight bills have been checked for member yards.

'Seal of Dependability' To Identify Homes Built by Chicage Association Members

As a project in its sustained public relations program, the Chicago Metropolitan Honne Builders Association is redesigning its seal as a "Seal of Dependability" and concurrently conducting a circularized publicity campaign to assure home seekers that they can rely on the ethics of builders who display the seal.



REDESIGNED official insignin of Chicage Association emphasizes dependentility, will distinguish homes built for cale by memhere. Its form is a decalcommola transfer

The project was expedited because of a case in Chicago where deposits on homes were alleged to have been stolen. The incident was responsible for a great deal of hesitancy on the public's part in entering binding contracts and also for nullifying some of the association's gains in building public confidence.

It is proposed to place the new seal on a window or other part of every home under construction and for sale by association members. All seals will be numbered and receipted to prevent their falling into the hands of persons for whose operations the association cannot vouch.

A small circular requesting home seekers to look for the "Seal of Dependability" on any home they may be planning to purchase will be widely distributed when use of the seals is begun. It will stress the point that business with association members may be done with confidence.

California School Named For David D. Bohannon

David D. Bohannon, NAHB director and mationally-known subdivider, was recently honored by residents of San Lorenzo, Calif, when a new six-classroom elementary school was dedicated as the David D. Bohannon School. Bohannon was the developer of San Lorenzo Village.

A crowd of around 600 persons attended the dedication ceremonies in which a number of prominent persons in the section participated.

New Western Pine Directory

The Western Pine Association has announced the publication of its 1950 Directory of Membership, which lists 308 sawmills, their locations, sales office addresses and a percentage breakdown of their production by species. This includes Fir, White Pine, Ponderosa Pine, Sugar Pine, Larch, Spruce, Red Cedar and Incense Cedar.

Copies of the directory may be obtained from Western Pine Association, 510 Yeon Building, Portland 4, Wash.

Northeastern Dealer Meet Registration Exceeds 4,000

John W. Dain, president of the Dain Supply Co., Mahopac, N. Y., was elected president of the Northeastern Retail Lumbermens Association at the 56th anoual convention at the Hotel Statler, New York City, January 23, 24 and 25. Total registration was 4,271. There were 117 exhibits by manufacturers and distributors.



JOHN W. DAIN

Other officers elected are: Russell L. Fish. Scituate, Mass., first vice president; Frank H. Morin, Fulton, N. Y., second vice president; J. Harold Stacey, Wisdoor, Vt., third vice president; Deyo W. Johnson, Ellenville, N. Y., fourth vice president; Oliver J. Veling, Buffalo, N. Y., treasurer, Directors elected are William P. Miner, New London, Com.; Richard K. Miles, Arlington, Vt.; Harold W. Greatorex, Mcredith, N. H.; Sheldon D. Robinson, Tatnston, Mass.; Leon R. Ogilvie, Wilton, Me.; Charles E. Hopkins, Providence, R. I.; Mark B. Cowles, Springfield, Mass.; Arthur J., Ford, Endicett, N. Y.; F. S. Heberlig, Port Jefferson, N. Y.; Jay LeFevre, New Paltz, N. Y., and Frank Saturn, Ithaza, N. Y. Chester R. Hubbell, Allainy, N. Y., was chairnuan of the nominating committee.

Upon recommendation by a committee headed by Norman P. Mason, North Cheimsford, Mass, former president of the National Retail Lumber Dealers Association, the convention voted to change the by-laws of the association to make Paul S. Collier, secretary-manager for many years, the executive vice president.

Dallas Membership Drive Nets 151



MEMBERSHIP chainsen Hab Hill of the Humo Builders Association of Dallan announces to membership drive team members at funcheon which olimosad recent drive that 131 new members have been added, elevening association rester to 483. Team led by Arnold Well set the pace with 28 new members, with Well taking the individual henory price with 11

Westchester, N.Y., Builders Name F. P. Tufare President

Frank P. Tufaro of Hartsdale, N. Y., was inaugurated as 1950 president of the Home Builders Association of Westchester, Itic., at a meeting in the Roger Smith Hotel, White Plains, N. Y., Jan. 9. Other officers named for 1950 are Robert Beckley, vice president: Joseph M. Baltz, treasurer and James E. Cook, secretary.

One of the major projects of the group in 1950 will be to cultivate better relations with the building trades, according to President Tofaro. In accordance with this policy, a series of meetings are being arranged where the builders join with labor leaders in discussing mutual problems dealing with building trends, noning, and similar subjects.

Eugene J. McCarthy, Jr. of Scarsdale, chairman of the mortgage finance committee, reported at the January meeting that the FHA has begun to recognize that Westchester land values and development costs are higher.

Joseph Mumon, of Moant Version, chairmain of the legal committee, predicted that more mortgage money will be available in 1950. One of the reasons be cited for this is the fact that labor pension funds are being thrown into the mortgage market.

Other committee chairmen are: Robert Beckley, Hartsdale, Iahor; Nat O. Mason, Tarrytown, building code; Alan Carnoy, Larchmont, membership; James E. Cook, Mount Vernon, public relations; Joseph Baltz, New Roebelle, finance; and Henry Grant of Eastchester, land planning and public utilities,

Fabian Crystal, of New Rochelle, the retiring president, was installing officer. The members presented him with an attache case in appreciation of his work as president,



THE 1856 officers of Home Pullders of Westchester, Inc., one of the metropolism New York chapters of NAHB, left to right; Joseph Muson, counsel; James E. Cosk, socretory; Frenk P. Tubro, president; Rubert Beckley, vice president; Joseph M. Balts, tenucrer

Lockwood Attends Milwaukee 1950 Officer Installation



NATIONAL President Bodney M. Lockwood (right) talks with two presidents of the Milwowkee Builders Association—Ellon A. Schults (center), newly-elected head, and Roland J. Tesko, his predecessor, Lockwood was quest of Milwowkee chapter at officerinstallation meeting

Rodney M. Lockwood, NAHB president, was guest of the Milwaukee Builders Association at a recent dinnerdance meeting at the Astor Hotel, Milwankee

Newly-elected officers of the Milwaukee group were installed at the meeting. They are: Elson A. Schultz, president: Harris Evans, vice president; and Alfred J. Wetor, secretary-treasurer.

In a speech to the assembly of about 200 persons, Lockwood urged that public housing for low and mobile income acoups he "hattled all the way" if the

Nominate 3 for Urban Land Institute Board Vacancies

Nominations to fill three vacancies on the Urban Land Institute's beard of trustens have been submitted to members by the Institute's nominating committee. Nominees are J. Trussan Streng, president of Massachusetts Minital Life Insurance Co, and Charles Fleetwasd, vice president of the Prodestial Insurance Ca, of America (three-year terms); and Dr. Ernest M. Fisher, director of the Institute (or Urban Land Use and Blowing Studies, Columbia University (theo-year term).

Nominated for reelection to the board for three-year terms are: William H. Ballard, Boston, Van Holt Garrett, Denver, Nosston C. Farr, Chicago; Philip W. Knivkern, Philadelphia; Warren L. Morris, Cleveland; Walter S. Schmidt, Cincinnati; Howard J. Tohin, Milwaukee; A. J. Stewart, Louisville; and Frank H. Ayres, Los Angeles.

Members of the nominating committee are Charles E. Joern, Foster Winter and Howard J. Tobin. nation's "trend toward socialization" is to be halted.

The NAHB head said "Now we have to fight it out locally to see that voters get a chance to express their opinion on whether to proceed with public honsing. Wherever voters have had a chance in cities thus far, they have turned it down."

Kentucky Dealers Name B. E. Eubank President At Annual Convention

Ben E. Eubank of Lexington was elected president of the Kentucky Retail Lumber Dealers Association at the group's 45th annual convention, held recently in Louisville. Official registration for the neeting was 786 persons.

Prominent speakers included Blaine Fulton, 1649 president of the Kentucky association, 11. R. Northup, NRLDA usecutive vice president; Eric Dehn of London, England; R. A. Hill, advertising sales director, National Paint, Varnish and Lacquer Association, Adolph Pfund, secretary, Woodwork Jobbers Service Bureau; H. C. Berkes, secretary-manager, Southern Pine Association; and Ralph W. Carney, vice president, the Coleman Co. Wielsita, Kansas.

Attendance at business meetings was exceptionally good this year, according to Don A. Campbell, Kentucky secretarymanager. Exhibitors reported that interest in displays was very high. Approximately 60 firms were represented.

Other new state association officers are: Sam Levy, Louisville, vice president. Don A. Campbell, Lebanon, secretary.

Clarke Daniel Heads Washington Association

A capacity number of members and guests attended the annual dinaser and installation of officers of the Home Builders Association of Metropolitan Washington in the Statler Hotel, Jan. 9.



CLARKE DANIEL. President

Clarke Daniel, the new president, was formally installed, succeeding William S. Baules. Other officers for 1950 are : Alvin L. Aubinoc, first vice president; Russell B. Martin, second vice president. James W. Pearson is executive director.



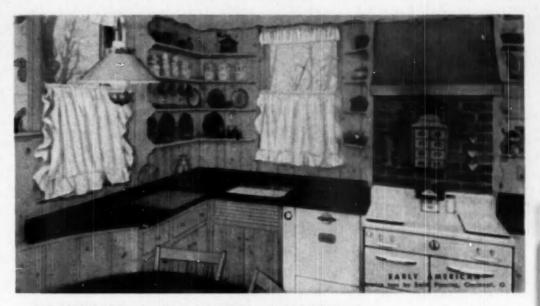
BUSSELL B. MARTIN, ALVIN L. AUBINOE. Second Vice President First Vice President

Members of the board of directors are : Edward R. Carri J. Garrett Beitzell; Vernou Briggs: Robert R. Furman; Carl Freeman; A. Milton Talbert: Harry Boswell, Jr.; L. Lee Potter; J. Wesley Buchanan; Clyde J. Verkerke; Morris Calritz; Frank Calcara; D. E. Gingery; Carl C. Crampton; T. Girard Lee: Waverly Taylor; Robert Tifley; Arthur Pomptonio.

National President Rodney M. Lockwood of Detroit, was the featured speaker. Lockwood reviewed developments in NAHB during the past 12 months and also outlined what the National has been doing on legislation and government humeau contacts. He gave the Washington group a brief summary of legislation on cooperative housing recently introduced in Congress.

Following the formal business an entertainment program was presented with Edward R. Carr as master of coremonies.

Roop Up With The News Renew Year AB Subscription



FORMICA FITS ANY FASHION

Decorative themes in kitchens may change from home to home. But beautiful hard working Formica fits them all.

Formica helps sell the rooms that sell the house. Colorful Formica surfaces wipe clean with a damp cloth, never need painting or refinishing. Alcohol, boiling water, fruit juices, mild acids and alkalies fail to dim its lossing luster.

In every style and kind of kitchen home makers are asking for Formica by name and looking for its famous label. Write for new color literature of idea stimulating uses for Formica in the home. Formica, 4514 Spring Grove Ave., Cincinnati 32, Ohio.

Look under ""Plastics" in your Classified phone book for the name of a local Formica fabricator.



New 16 AM rater sound movia "Living With Fermics" pictures user and how it is made. Available new for group shewings. Write for film.



THE ULTIMATE IN QUALITY CABINET HARDWARE

4-Star Feature by NATIONAL LOCK



NATIONAL TUTCH LATCH Equipped with Totch Latch, kitchen cubinst deers open at the touch of finger, wrist or othew. Hold so everity when classed. Totch Latch see be easily applied to interfar of used sitchen subjects. Conceded free astronati view.



BUTTS AND HINGES

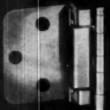
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NAHB CONVENTION REVIEW

Thomas P. Coogan Named NAHB President



THOMAS P. COOGAN 1850 President

New President's Policy Statement: "U. S. to Remain Best-Housed Nation"

"Home builders are determined that America shall continue to be the best housed nation in the world."

That was part of the statement issued by the new NAHB President Thomas P. Coogan following announcement of bis election, "At the same time," the statement continued, "we can and will continue to produce rental accommodations at ever increasingly lower rent levels for those who desire them."

For the purpose of achieving this, the statement indicated that builders will produce for the "broadest and most stable market."

The statement recognized FHA as providing a facility essential for maxi-

num production of homes, stating that "the advent of FHA gave to the home producing and home finance structure a needed etabilizing influence."

"We call upon the FHA to continue constantly to adapt its procedures to changing conditions in order that its beneficial effects may remain available to the home boyer."

Concerning veteran's bousing, the President's statement said "the present proposal to terminate Sec. SOS (a) is ill-considered and unfounded"; that this would "eliminate this section which has benefited the veteran by enabling him to acquire a home while preserving for

(Continued on next page)

Well-known, popular Miami, Fla., builder succeeds Rodney M. Lockwood; Atkinson, Brockbank, Manilow, Naverstick elected to major offices.

Thomas P. Coogan of Miami, Fla., is the new president of the National Association of Home Builders, elected by the delegates to the 1950 convention and exposition. He was formally installed in office, succeeding Rodiney M. Lockswood of Detroit, at the big annual banquet which climaxed the meeting.

Coogan, first vice president in 1949, started in the building business in 1925 and since then has become one of the nation's leading builders.

Elected first vice president was W. P. "Bill" Atkinson of Oklahoma City, who was the 1949 second vice president. Alan Brockbank, Salt Lake City, Utah, was named second vice president and Nathan Manilow, Chicago, was reelected treasurer. Joseph Haverstick, Dayton, Ohio, is the new secretary. Frank W, Cortright is executive vice president.

Giogan formed his present firm, Thomas P. Googan and Go., in 1941 and did considerable wartime airport construction work in the Southern states. In 1944 the firm built much of the war housing in Southern Florida. In 1946 the Coogan organization began the construction of one of the first large-scale home projects of the postwar period, Essex Village, at Hialeah, Fia. More than 700 homes, 70 duplexes and 112 apartments have been completed and occupied in the development.

On this project Congan pioneered the introduction of site-fabrication methods which have resulted in reduction of construction costs. He became a national officer in 1948 when elected secretary.

His other association posts have been: president, Builders Association of Southern Florida; national director for three years; and regional vice president in 1947. He has received especial commendation for his work as chairman of the mortgage finance committee.

President Coogan studied engineering at the Massachusetta Institute of Technology. He is currently president of the Technology Club of Southern Florida, composed of MIT alumni, and is also a member of the Boston Society of Civil Engineers.

New NAHB regional vice presidents are: Irvin R. Stitch, Hartford, Conn. (Maine, Verment, New Hampshire, Rhode Island and Massachuaetts). Albert Bartlett, Syracuse, N. Y. (New York State, enclusive of New York City). Stephen Kowach, Jr., Pittshurgh,

(Continued on next page)



W. P. (Bill) Atkinson First Vice President

Policy Statement

(Continued from page 71)

future use a substantial portion of his veteran's benefits." The statement urged that the budget of the Loan Guaranty Division of the VA be maintained "at an adequate amount in view of the magnitude of its job...."

Opposition to the ameniments to S. 246 which seeks to provide special financing for cooperatives "which is more advantageous than that available to all other horrowers" was expressed. The statement also expressed opposition to direct Federal lending from public funda.

Concerning FNMA, the statement said its present high volume of purchases is caused solely by the disparity between FHA and VA interest rates. "VA and FHA permissible rates must be brought into harmony to recognize the lowest feasible economic rate set by competitive demands for investment funds, and not by governmental decree," it was stated.

Provisions for a permanent device for financing rental bossing by amendment of FHA Sec. 207 was recommended. It should provide 90 per cent loans and the modernization and streamlining of procedures to make this section workcable, the statement said.

Mortgage finance institutions and government agencies concerned with housing were called upon "to take into account today's cost and income levels so as to encourage home overership by families of modest means."

The enactment and enforcement of proper safety, health and sanitation codes will help promote an adequate standard of safety, sanitation and decency, according to the statement. "We deplore the tembincy in some quarters to seek to divert a slum clearance and redevelopment program from its basic purpose by using it as an excuse for more socialized public housing," the NAHB President

(Continued on Column 3)

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Alan E. Brockbank Second Vice President



Joseph Haverstick Secretary



Frank W. Cortright Executive Vice President



Nothan Manilow Treasurer

Googan President

(Continued from page 71)

Pa. (Pennsylvania and Delaware). J. Wesley Buchanan, Washington, D.C. (Maryland, District of Columbia, Virginia and West Virginia), J. C. Long, Charleston, S.C. (South Carolina and North Carolina). B. A. Martin, Atlanta, Ga. (Florida, Georgia and Alabaraa). David Satin, Kalamazoo, Mich. (Michigan and Ohio). Albert Thompson, Indianapolis, Ind. (Illinois and Indiana). John L. Moravee, St. Paul, Minn. (Wieconsin, Minnesota, North Dakota, and South Dakota). O. G. (Bül) Powell, Des Moines, Iowa (Iowa, Missouri, Kansaa and Nebraska).

Frank Robertson, San Antonio, Texas (Texas and Oklahoma). C. Taylor Burton, Salt Lake City, Utah (Utah, Montana, Idalio and Nevada). Franklin L. Burns, Denver, Colo. (Colorado and Wyoning). Wayne Guthrie, Spokane, Wash. (Washington and Oregon). William H. Evans, Los Angeles, Calif. (Southern California). James P. Bourne, Louisville, Ky. (Kentucky and Tennesser). Earl Colomb, New Orleans, La. (Arkansas, Louisiana and Mississippi). Dale Bellamah, Albuquerque, N.M. (Arizona and New Mexico). Carl Gellert, San Francisco, Calif. (Northern California). James Graham, Long Island, N.Y. (New Jersey and Metropolitan New York City).

Elected directors at large were: Cedric Roberts, Los Angeles, Calif.; W. Hamilton Crawford, Baton Rouge, La.; Charles Malowney, Springfield, Ohio; Lawrence Pearce, Jacksonville, Fla.; William E. Dixon, Jr., Pittaburgh Pa.; Joseph Entress, Rochester, N.Y.; Lother J. Boggs, Atlanta, Ga.; and E. M. Spiegel, Passaic, N.J.

said. FHA insurance for such projects up to 90 per cent of production cost was recommended.

General Sessions Draw Record Crowds

"The most vital issue in American history is the one that faces us today-the great issue of socialism versus the American way of life."

This statement was made by Rodney M. Lockwood at the opening general session of the 1950 NAHB Convention and Exposition in Chicago. "In spite of all the terrifying things we read in the newspapers and magazines about A-Bombs and H-bombs, traditional Amercian freedom is less in danger from foreign attack than it is from creeping paralysis from within," be stated.

The great majority of Americana, Lackwood said, believe they are opposed to socialism and are sure they are opposed to communism. "Unfortunately," he maintained, "most of them do not know how to recognize socialism when they see it—nost do they know how it can be established or what its effects will be."

Speaking of socialism in Great Britain and Russia, the past NAHB leader said that it was installed in the former by a "debauchery of democratic processes, and, in the Soviet Union "established and maintained by force."

The only way that the advance of socialism can be stopped in this coustry, Lockwood declared, was to bring it into the full focus of the American people and "fight it out" in the arena of national politics.

In another speech at the convention's opening, Nicholas F. Molsar, former NAHB secretary, took his audience for a "trip across the American scene" stressing the current threat to liberty.

He pointed out that farmers of America are giving cheriabed liberties for subaidies and that the members of our labor ranks are sactificing sacred principles of freedom for security while recommending merciless taxation that kills risk capital and enterprise—foundations of the American concept of individual liberty.

Downs Predicts Slump

James C. Downs, Jr., business economist, and president of the Real Estate Research Corporation of Chicago, advised that builders must strengthen their operations in anticipation of a "sharp over-all drop in the private building market" likely to occur in the last six months of 1950.

Speaking in the second general session of the convention, Downs said he believed the general level of construction activity will remain constant throughout the year, since the slump in private building projects will be taken up by government hodsing developments.

Four factors influence the trend of the building business, according to Downs. They are: 1-the quantitative demand, 2-the purchasing power of those making the demand, 3-pressure on the potential purchaser to buy, 4attitude toward saving money. Pent-up investment funds and political forces that operate outside the economic system also qualify the building market, he said.

The builder with "savey," with merchandising techniques, and with an organized system to capture some portion of the "unexplored market" will survive during the next year, Downs concluded.

Raymond M. Foley, HHFA administrator, commended the industry on its volume of more than L000,000 starts it. 1949 and greater concentration on housing in the lower-cost market but rtated that this probably could not have been accomplished without the most liberal financing aids ever made available by the government.

Making the major speech of the second general session. Foley said that "without the help of the FHA-insured financing, VA-guaranteed loans and billions of dollars made available from the Treasury through FNMA, we probably would not have been able to reach a million starts in 1949.

"Particularly, if it were not for the FHA Title VI aids, originally designed only to meet the special needs of wartime, on an emergency basis, we prohably would have fallen well below the million mark because of lower rental boasing volume," Foley said.

Rental Housing Nooded

Among future needs listed by Foley were: more privately built rental housing at lower rents; entry of long-time cquity capital which can be satisfied at a low interest rate; a revised view of necessary profit percentages; more moderate-priced houses for larger families; and considerable addition to the size of the small economy house commonly offered now below \$6,000.

Franklin D. Richards, FHA administrator, in the second general session described the home building industry's 1949 record as "a real incentive to private enterprise to center its efforts on further progress toward the goal of a decent home for every American family."

T. B. King, director of Loan Guaranty Service, Veterans Administration, told delegates assembled for the second session that "more and more the bayer is to be your master." Further, he said, the disparity between purchase prices of new homes and the ability to pay, especially of veterans, is a pressing problem that builders must solve if they could not curtail output because of a shrinking market.

During 1949, according to King, the needian price of homes purchased by veterans with GI loans was \$9,100, requiring an annual income of \$4,000 or more, yet only one-fifth of World War II veterans have such an income. Almost half of these veterans, with incomes between \$2,000 and \$3,500 co.dd probably afford to buy houses priced no higher than the \$4.500 and \$7,500 ranges.

"Setting Tomorrow's Homes" was the key theme of a panel discussion in the third general session of the correcttion.

W. P. "Bill" Atkinson, NAHB first vice president, opened the session with a query of whether are not today's huilding salesmen have lost the art of selling. Edward G. Gavin, editor, dimersion Builder, answered by asserting that the shill has at least somewhat airophisd and that it must be restored now in preparation for the tight market to follow this year's steady business.

Gavin continued with remarks on specific selling techniques. Although the power of a woman should never be overlooked, builders should never be overlooked, builders should never be buyer, he said. Gavin pointed out that house salesmen frequently direct their efforts to the female half of the buying family and are not equipped to answer the male member's questions with intelligence and discretion. Successful metrichandising begins on the drafting board, Gavin naid.

The word "free" plays an important part in the advertising programs conducted by Jack Seale, builder, Amarillo, Texas, who described his firm's activities. His company gives away fruit trees, kitchenware, and other items to all families registering at his displayed homes.

Builder Must Accept New Designs

Alan Brockbank, builder, commented on the NAHB programs, particularly the slogan ideas intended to give continuity to merchandising plans. He also stated that the builder must recognize the trend of design if he would stay in business. These years are the transitional plans of an evolution toward the new type of house that will represent the best of builder-architect cooperations.

Senator Harry P. Cain, in the third assaion, struck strong blows for home ownership; strongly recommended the United States go back to a gold standard, and roundly criticized our nation's banks and government for failing to protect the buying power of the dollar properly.

Highlight of the final general session was a speech on Climate Control by Elizabeth Gordon, editor of House Beautiful. Other speakers on this subject were David D. Bohannon, builder, and Helmut Landsberg, Climatologist, Washington, D. C.

Builders of America are not only doing something about the weather and climate, Bohannon said, but they are making it sell homes for them.

Climatology is merely adopting your land site so that full advantage is taken of the prevailing climatic situation in your area. Bohamon pointed out

Editors and Builders Share Spotlight Together In On-Stage Conference

What will happen to the price of average small homes in 1950?

This was one of the prime questions that conterned members of the press during an On-Stage Press conference in Hotel Stevens, Chicago, during the 1950 NAHB Convention. The question, ashed by Real Estate Editor Jack Holton, of the New York World Telegram and Sun, was answered by Builder Fritz Burns of Los Angeles.

"The prices of homes in this price bracket will remain about the same," said Barns. In spite of rising building costs, the price of homes will be sustained at about the same level due to improved building efficiency, he stated.

Builder members of the conference, moderated by Walton Onslow, director, of public relations for NAHB, included Robert Gerholz, of Flint, Mich.; Joseph Merrion, Chicago; Edward Carr, Washington, D. C.; Fritz Burns, Los Angeles, Calif.; David Bohamon, San Mateo, Calif., and Joseph Myerhoff, of Baltimore. NAHB Past President Rodney J. Lockwood was also on the luidders table at the conference.

Members of the press at the conference included Jack Kempson, Newark Evening News; Angus Thuermer of the Associated Press; Jack Holton; AI Chase, Chicago Tribune; Conrad Harness, Washington Post; Lee Cooper, New York Times; Mrs. Nell Gross, St. Louis Globe-Democrat, and Jim Chandler, of the Cleveland Press. All press members are real estate editors of their publications.

Other questions asked by members of the press concerned the effect of low rents on home buying, the need for more expandable type homes, and Chicago's housing problems. Some of these questions and answers follow:

Jack Kempson: "What is effect of low rents on price of homes?"

David Bohannon: "It is not sufficiently emphasized today that it is cheaper to buy a home than to rent."

Jim Chandler: "What about the expressed need for houses that can be expanded with an expanding family?"

Joseph Merrion: "Houses should be espandable, and in most cases throughout the country, builders are realizing this and are making provisions for it."

Edward Carr added to this answer: "I think the average person, when his family increases in number, wants to move to a larger house. Many homes are not practical to expand," he said.

Mrs. Gross: "Isn't there a chance of overbuilding in the under \$10,000 class?"

David Bohannon: "Yes, There is a chance of overbuilding in any price bracket."

Lee Cooper referred to the present mortgage debt of \$35 billion, and asked if there was not danger of having such a large dabt.

(Continued column three)



FOUNDERS of NAHE Women's Auxiliaries. Left, Mrs. B. Lue Bottilyon of Salt Lake City, and Mrs. Melvin Kimmey of Clayton. Ohio.

Dayton, Salt Lake City Local Chapter Auxiliaries Studied at Convention by NAHB Women

An interested convention audience beard two women explain the organization and operations of the only NAHB local chapter auxiliary groups during the annual conclave held in Chicago.

Currently, there are two auxiliaries in existence-one in 'Dayton, Ohis, founded by Mrs. Melvin Kimmey and one in Salt Lake City, Utah, founded by Mrs. B. Lue Bettilyon. These groups were founded to promote close friendships and pleasant relations among wives at the local level.

"We have found some of our most active women are not the wives of the most active men builder-members but that the interest of the wife in the organization stimulates the man's interest in his organization, and vice versa," Mrs. Bettilyon reported.

The local auxiliaries have helped the national association in legislative matters with word-of-month advice, letters-to-congressmen programs, and, if appropriate, with appearances before the state legislature.

NAHB Officials ask Congress To Investigate Cooperative Housing Bill before Voting

During the general sessions of the annual convention, NAHB officials denanded a congressional investigation of housing cooperatives before a final vote ia reached on the so-called "middleincome" cooperative housing bill now pending before Congress.

"Certainly Congress does not want to underwrite another housing fiasco like the Lustron deal without knowing all the facts," presiding officer Rodney M. Lockwood said.

Lockwood stated that many cooperatives have lost money in producing dwellings at costs higher than those of similar dwellings constructed by private builders. He denounced the proposed \$2 million bill as "another excursion into government-subsidiced socialism."

Women's Program Popular

A popular convention feature was the Women's Program for Home Builders, staged at the first general session in the Grand Ballroom of the Stevens Hotel. The program was planned and presented by a committee of women, headed by Mrs. Henny Mollgaard of Milwaukee, Wis, who presided. Committee vice chainnen were Mrs. Maude Butler, Tulsa, Okla., and Mrs. Henry Chalaron, New Orleans, La.

Mrs. Mollgaard set the tempo of the meeting in her opening address when she advised her audience, "Woman's place is in the home--in designing it, selling it, living in it, and making it more livable not only for herself but for ber family. It is our aim this morning to impress you who are building the majority of homes in America with the features women want in their homes."

"A big asset in the sale of the 1950 homes will be the use of modern types of wallpaper," Florence Myers of Katzenbach & Warren, Inc., advised. The speaker made the observation that the development of wallpaper design has so closely followed architectural styles that it cannot be disassociated from them.

"Improved, augmented, flexible home illumination provides the most convincing answer to the problem of better merchandising in 1990," according to J. H. Blitzer, vice president of the Lightolier Co. "Correct illumination adds eye appeal to interior furnishing, makes entertaining more enjoyable, protects cyesight and health and provides an emotional litt." Blitzer illustrated his points with the help of slides.

"The needs of young families with children are extremely practical," accorded to Mrs. Maxine Livingston of Parents Magazine. "First, and most important, the house must encourage congenial family relationships—and that includes providing • place where children can 'raise rumpus.' in good weather or bad, without interfering with the rest of the household."

"Surveys by the Rahr Color Clinic prove that the majority of women consider color before design," Beatrice West, Rahr color stylist, informed her audience. "Therefore can builders afford to ignore color—or to abuse it?".

Awards to winners of the small home design contest for women students of architecture in the United States and Canada were highlights of the session.

David Bohannon: "This must be analyzed on a rent paying basis. The fact that amortization periods are set up on ability to pay assumes that people will continue to be able to pay." He believed that mortgage money is "the safest we have."

When Robert Gerholz suggested, for example, that the \$35 billion be related to the public debt, Cooper interrupted.

"I don't like to relate anything to the public debt," he stated, "because that is something beyond my comprehension." Applause from the audience indicated

that most people agreed with Cooper.

Winning Chapters in NAHB membership contest receive awards at special ceremony

Nine local associations which won homory in the NAHB 1949 membership contest were presented awards at a special ceremony during the annual convention at Chicago. Awards were based on the percentage of increase between January JJ, 1949, and January JJ, 1950. The local associations receiving awards are:

Group I-chapters which had 300 or pore members on January 31, 1949: First place, Home Builders Association of Dallas, Texas, membership increase of 90, or 23.6 per cent; second, Seattle Master Builders, 61 new members, increase of 17.3 per cent; third, Home Builders Association of Metropolitan Washington, D.C., 38, increase of 8.5 per cent.

Group II-60 to 300 members: Milwankee Builders Association, 248 new members, increase of 130.5 per cent;



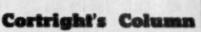
Left to right: James Pearson. executive director. Home Builders Assn. of Washington. third prime: Harold L. Larsen, president. Seattle Master Builders Assn. second prime; and H. Leslie Hill, president. Home Builders Assn. of Dallan. Erst prime.

Home Builders Association of Hartford County (Conn.), Inc., 76, increase of 89.4 per cent; Utah Home Builders Association, Salt Lake City, 69, 82.1 per cnt.

Group 111-60 or less members: Albaquerque, N.M., Home Builders Assoclation, 76 new members, increase of 30 per cent; Home Builders Association of Westchester County, N.Y., 37, 168,1 per cent; Birmingham, Ala., Association of Home Builders, 63, 152.5 per cent.

On hand to receive the awards were H. Leslie Hill, president of the Honie Builders Association of Dallas; Harold L. Larsen, Seattle president; James W. Pearson, Washington executive director; James R. Baer, Milwaukee, national director and chairman of the local membership drive; Executive Secretary Clayton W. Johnson, Hartford; A. B. Nichson, president, Utah Association; Dale L. Bellemah, Albuquerque president; Frank P. Tufaro, Westchester County President; and Richard H. Brown, Birmingham president.

Presentation of the awards was by William G. Powell, chairman of the national membership committee.



FRANE W. CORTRIGHT. Executive Vice President, National Association of Name Builders of the United States.



The home building industry is riding the creat of the highest wave in history. It is a precarious position because of the height of the wave and the speed with which we are moving.

The economic history of this country and that of our home building industry is that such waves—or cycles, if you please—move on for varying periods of time and then crash on the shore, when builders and other businessmen are swept down and out in the powerful undersow of a depression.

Of course, the next wave builds up and out business, in the wake of the general economy, follows the pattern of boom and bust, with its consequent hardship and personal loss.

If you doubt that the high wave crest upon which we are riding can crash, I suggest that you consider the cumulative effect of only three immediate possibilities—id Congress does not promptly increase the authorization for Fannie May, for FHA Section 203, and if they do kill off and eliminate Section 505A loans, what do you think will happen to our current recordbreaking level of monthly starts' My guess is that it would be cut in half!

Beyond this, there are certain hazards which may well reduce out volume. Here are a few:

The constantly more burdensisme tax-load being placed upon the people. The ever-increasing wage levels demanded by labor.

The inflationary spiral which is destroying the purchasing power of our money.

Our general march into a social welfare state.

The demand for collectivist non-profit cooperative housing.

The increasing domination of our industry by government.

The current program of socialized public housing.

All of these things we must fight and I say to you many of them we can lick! In view of the extreme violence of the cyclical swings of out home building economy in the past, the great height of the waves of out properity and activity, and the great depths to which we have been swept daring periods of depression, it is indeed fortunate that your industry is organized to define and to anticipate these problems, to take action to prevent their recurrence in the months and years ahead.

In you men individually--in your local associations and in your national association--lies the hope of the industry--the hope of the home owner of comperow---and the hope for a FREE AMERICA!

Looking back over the last eight years, I have been privileged to watch the growth of your mational association, to appraise its accomplishments, and to amens its ability to serve you in securing stability of construction and the opportunity to continue as a reasonably free industry.

Home Builders-locally, state-wide and nationally-have learned the power of a united front, have learned the near miracles which can be accomplished through intelligent, concerned action.

The story of your national association's growth is wristen in the production of a million homes by private enterprise during the war years and nearly four million new homes since then. It is a surry which would fall a dozen volumes and require a thousand pictures. A brief history and outline of what your national association is, of whom it is comprised, and how it functions has been recorded on a film prepared for viewing by your local associations throughout the country, to help in your membership work. I hope that you will wish to arrange for its viewing at an early meeting. It is not a dismatic presentation but rather tells a simple story, an explanatory story designed to ansist yous in answering the question, "What does the national association do for me?" It is our hope that it will answer that question autisfactorily.

Winners of Architectual Contest Honored at NAHB Convention

The competition sponsored by American Builder and NAHB was limited to women architectural students of the United States and Canada. One hundred and four entries from 31 schools were received. Six prizes and 7 honorable mentions were awarded.





Elizabeth Graham Bell. first prize

AWARDS to winners of the American Builder Prize Home Competition was the highlight of the opening session of the National Association of Home Builders Exposition and Convention held Feb. 20, 1950, in the grandhallroom of the Hotel Stevens. The contest sponsored jointly by the American Builder and the Women's Division of the NAHB, was the first of its kind

ever limited to women architectural students. All of the student contestants are at present ataccredited tending colleges and universities throughout the United States and Canada. The presentation of the cush awards were made by Edward G. Gavin, editor of the American Builder, after which the young ladies gave a hriel autline of the relative merits of their entry.

First prize of \$500 was presented to Elizabeth Graham Bell, a sophomore at Carnegie Institute of Technology. She described her plan as having achieved a sense of spaciousness by the addition of large entrance hall which serves in the dual capacity of being an added social center in the evening and a playroom for children during the day. To prove the practicability of the house, Miss Bell mentally lived in every room and in her imagination went through all the normal functions of a housewife for three weeks while the plan was in process of development. The result of this test convinced her that the plan would work.

Second prize of \$200 was given to Sonia Jean Albert who will be completing her studies in architecture at Yale University March 28, 1950, after which she leaves immediately for Stockholm, Sweden, to take a position as a designer with a firm of architects of that city. In describing

her design Miss Albert said that it was developed around the three C's of modern, contemporary planming, namely, comfort, convenience, and closets, instead of the two C's of traditional planning referred to as Cape Cod. Also, she attempted to make a house that would be fun to live in for any typical family in any section of the country.

Third prize of \$100 was a warded to N an cy Hopkins, Margaret Sinclair and Josephine Willrodt, all advanced students in the school of architecture and landwape architecture at the



REPRESENTATIVES of the sponsors discussing the movits of the prise winning design. Reading from left to right they are: Edward G. Gavin. Editor. American Builder: Martin C. Hagyett. Executive Vice President of Chicage Metropolitan Home Builders Association: Henny Mollgaurd of the Mollgaurd Co. realitors and builders. Milwaukee. Wis.: and Robert H. Morris, publishing director. American Builder.



Nancy Hopkins

University of Illinois. These three young ladies collaborated on one drawing on which they prepared a design they refer to as the "Sun-back house." In describing their entry, Miss Sinchair, who was chosen as the spokesman for the trio before the assembled home builders, said that the house was designed from the outside in; referring to the fact that the garden area at the rear of lot was the focal point around which the rooms of the house were oriented. Supervision of the play area from the kitcher was particularly good.

Fourth prize of \$100 was awarded to Nancy C. Reeves of the school of architecture, University of Texas. This design also laid stress upon rear yard living with service units placed to front of property. Excellent circulation was evidenced in the room arrangement.

Fifth and sixth prizes of \$50 each were awarded respectively to Mrs. Ruth Rost of Miami University, Oxford, Ohio, and Bette Peek, University of Texas, Austin, Texas. In addition to the above prize winners seven drawings were set aside for honorable mention because of the thought and consideration given to the solution of the problem, and the excellence of the drawings.

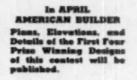
The presentation of the cash awards by the American Builder to the three top winners at the opening session of the convention, was made possible through the generosity of the NAHB, who invited the young ladies to be their guests during the first three days of the convention and exposition.

The selection of the winners was based upon a point system employed by the seven person jury of awards consisting of architects, builders, building magazine editors and a housewife. A total of 104 entry blanks were received.

The program called for the design of a dwelling for a model income American family consisting of father, mother and two children, one a boy and the other a girl. The dwelling not to exceed 1,300 square feet of livable floor area, excluding laundry area, beating area,



Margaret Sinclair



basement, attic and garage. Dwelling to be placed on a site baving a depth of 150 feet and a frontage of 75 feet along a paved street running in any compass direction the entrant may choose. The dwelling to occupy not more than 62 feet of the width of the site. The design to be of a type that is marketable to the public and attractive as an investment to builders and lending agencies, and which can be executed into a finished home by the average builder, at costs not considered excessive, unconomical or wasteful in relation to the floor area.

It was regretted by the jury that there was a tendency on the part of the en-



Josephine Willrodt

trants to disregard the stated intentions of the program, such as . . . to secure plans that would be marketable to the public and attractive as investments to lending institutions. Practically all entries leaned to the flat or semi-flat roof design, and all without exception confined the living area to one floor. In seeking a reason for this condition, it occurred to the jury that perhaps there is too much of a tendency on the part of the designers, under the competitive stimulus, to attempt the "brilliant" solution, and overlook the obvious virtues of the direct and unpretentious answer to the program.

The project was an education effort on the part of the sponsors to develop sound ideas and better understanding of the ever-present small house problem. As a result of this experience, the conclusion has been reached that a competition is a fair and just method for finding praisesworthy solutions for any given architectural problem. It has the further virtue of discovering and encouraging fresh and vigorous architectural design talent.



MEMBERS of the jury of awards with the prize winning entries before them: reading from left to right are: Walter T. Anicka. architect. Ann Arber, Mich.: Bobert E. Sangater. editer, Small Homes Guide: Arthur V. Hansen. architectural editor. American Builder Mrs. Bohert H. Martis. heusewite. Highland Park. EL: Charles E. Joern. builder. La Grange Park. EL: Prank Lee Cockran. architect. Chicogo. EL: Martis H. Breun. architect and builder. Oak Park. EL: Selection of the winners was made February 8 in the offices of the Chicogo Metropolitan Home Builders Association. Delegates Arrive - Exhibits - Meetings Attract Thousands



PACIFIC Northwest group from Portland. Ore., traveled furthest by train



Stondy stronm of visitors kept exhibit personnel on toos.



MEMPHIS, Tenn., represented the Mid-South.



ALL seven NAHB past presidents get together: (left) Robert P. Gerholz. David D. Sekannon. Edward R. Carr. Milton J. Brock. Iosoph Meysthoff. Rodney M. Leckwood and Fritz B. Burns.



CONVENTION and Exposition culminates menths of planning for Paul S. Van Auken and staff shown above (from left): Irene House, Damon Elder, Van Auken, Doris Bades, and Frances Jacoby.

Read AMERICAN BUILDER Every Month!

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A contingent of 50 Long Island delegates arrived in town Sunday A.M.



ABOVE. executive staff of NARB. Standing (from left): Richard Saunders: Wm. I. Tobin: Carl G. Lana: Radnoy Lackwood. 1949 president: Frank W. Cortright. executive vice president: Walton Onalow, public relations director: John Dickerman. Seated (from left): Mildred Clark: Peggy Rayner: Maud O'Neal: Ruth Noll. Staff was photographed just before leaving Washington for convention.



Beautyware

gives them at the lowest price in history!

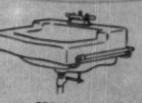
Briggs faur exclusive decorator colors, plus white, now available in both porcelain enamel steel and vitreous china.

Briggs Manufacturing Company 3001 Miller Ave. Detroit 11, Mich.

#10% additional charge for est. and ware applies to complete and including Briggs brace filmings. IVORY

BLUE

ANDSTONE



SEA GREEN

NATIONAL "GOOD AMERICAN HOME" PROGRAM Features Kelvinator Kitchens Exclusively . . .

DRAWS OVER 30,000 ON OPENING DAY IN DETROIT!



Featured exclusively in the "Good American Home" Program, this typical Kelvinator Kitchen is summed up by one prominent Detroit builder who says it "gives my \$8,300 home that \$15,000 look." For beautiful kitchen layouts that fit suggested "Good American Home" designs, write to Dept. AF, Kelvinator, Division of Nash-Kelvinator Corporation, Detroit 32, Michigan.

Sensational Sales Reported from First Day!

"Terrific!" "Unbeard-of!" That's what members of the Detroit Builders' Association said as they saw 30,000 Detroiters, representing home-hungry America, brave bad weather for the first showing of low-cost homes in the new "Good American Home" Program on Sunday, Jan. 22. The results wrote history. People moved two-ahreast in blocklong lines the entire afternoon, looking—asking —and many *huying on the spot*! Builders tallied up prospects and sales they had not dreamed possible. Never before had Detroit builders seen such a response to a home-selling program.

Watch in your town for this program, sponsored nationally by the National Retail Lumber Dealers Aasociation, the United States Savings and Loan League. You'll see it spearheaded by press, radio and television publicity, proving to America's vast market of non-home owners, with actual dollars-and-cents figures, that "It's Easy To Own A Good American Home!"

LOOK WHAT BUILDERS SAY OF THE AMAZING RESULTS!



"Such provids were never dreamed of Dur sales far exciseded all estimations. And I'm vertainly proud to have Kolvingtor Kitabens in my homes." JOHN D. HARRISON



"The Kelvinator Kitchen was a big attraction, recrived such fine comment from persons visiting my demonstration home that I'm all set to feature your equipment in feature homes."





"The Kelvinator Kitchen gives my \$8,300 home that \$15,000 hook." RODNEY M. LOCKWOOD



thing to equal that Opening Day. The way on-thespot purchases mounted was absolutely unique and inspiring."



"Over 22,000 people visited our demonstration home in the first week – special interest was shown in the Kelvinator Kitchen. It has great appeal and is very impressive."

JOSEPH LAWRY

TIE IN WITH THIS PROGRAM WHEN IT COMES TO YOUR TOWN!





AMERICAN BUILDER

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D

Distribution Channels

A PANEL at a convention held recently was asked what retail lumber and building material dealers could do collectively to preserve their position as distributors. The question was preceded by the statement that in some sections of the country, both wholesalers and manufacturers were by-passing the retailer and selling directly to contractors and builders.

One of the panel members replied by saying that there was nothing that could be done collectively. Another panel member added that it was fortunate that nothing could be done, and just as certain that nothing should be done. What he meant, as he explained in considerable detail, was that no business group has a right to ask for free enterprise in one breath, and protection of its position in another. Retail lumber dealers, he added, are not accidents in the distribution picture, nor are they a factor tolerated on one side by manufacturers and wholesalers who paternally keep them in business, and on the other side by builders and contractors who buy from them because of sympathy with their need to stay in business. Some 25,000 retail lumber and building material dealers are in husiness today for one reason only--that is because their services in the distribution process have been proved over more than 150 years to be the most efficient and economical yet devised in an open competitive system.

Now, if there is by-passing, and there certainly is, it is due to one of two reasons. Either conditions have changed so that the retail lumber and building material dealer in some places can no longer perform the most economical and efficient service, or dealers, where by-passing them is becoming a practice, are not operating efficiently or do not know how to sell the services that put them in business. There is ample evidence to indicate that conditions have not changed and are not changing to eliminate the economic need for a retailer. Thus, the only conclusion that can be reached where retailers are being by-passed is that they have failed to keep pace with the development of greater efficiency, or do not know what they have to cell, and how to sell it to builders.

Great changes have taken place. Alert retail lumhermen have noted them, studied them, and tailored their operations in ways that still make them the most conomical sources of materials for home builders. In meeting change these dealers are proving the advantages of free enterprise by accepting the competitive threat of by-passing as a spur to evolve new economies that eventually are passed on to the home owner. That is the purpose of free enterprise, and the only reason for it. Free enterprise, however, and protection from economic changes are not bed fellows. The only danger to the retail segment of the building industry is the danger that some of its members may impose on themselves through complacency and lack of initiative.

PUBLISHING DIRECTOR Robert M. Marris BDITOR Edward G. Garla MARAGING EDITOR Let E. Aread SERIOR ASSOCIATE and EASTERN EDITOR B. M. Wambell ABCHITECTURAL BDITOR Arthur V. Hansen WEITERN EDITOR William C. Rodd FIELD BDITOR Robert Charles ASSISTANT (BDITORS Eithard Gavey Resmand Shin PEODUCTION EDITOR Margaret C. Carroll ART EDITOR George M. Clark CHIEF DRAFTSMAN J. T. Rob CONSULTING ARCHITECT

Editorial Office, 79 W. Mosroe St., Chicago 3, 58

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83

Sponsorship of 1950 National Home Week Will be Broadened

National Retail Lumber Dealers Association and National Association of Real Estate Boards will cooperate with National Association of Home Builders in staging 1950 event

EXTENSIVE plans, formulated on a national level, assure that the phenomenal acceptance and growth of National Home Week will strike a new high point in 1950. The event, conceived and inaugurated by the American Builder in 1948 and spearheaded by the National Association of Home Builders each year since it was started, has attracted the interest of all segments of the home building industry. As the result of a meeting sponsored by the American Builder in Washington in January, the National **Retail Lumber Dealers Association** and the National Association of Real Estate Boards are adopting National Home Week as an integral part of each association's annual public relations program. Members of these groups will now work with their associations and with members of the National Association of Home Builders in staging annual National Home Week observances in communities of all sizes, September 10 to 17 this year.

In previous years lumber dealers, real estate brokers, banks and savings and loan associations have cooperated with home builder groups and with individual home builders in staging National Home Week in their communities but none of the national association groups representing segments of the industry other than the home builders have ever officially cosponsored the event. The tremendous success of National Home Week promotions where they have been held in the last two years, plus an avalanche of inquiries and interest concerning the promotion following the 1949 observance led American Builder to the conclusion that this annual affair was growing to proportions which necessitated help from all segments of the industry if National Home Week is to continue to grow in importance as an annual outstanding feature of the home building and housing industry of the United States.

National Home Week is the type of annual event which can be observed in every village and hamlet in the nation. In fact, wherever there are homes and families living in them, it can be observed with propriety in one way or another. There is no community too small to observe National Home Week just as there is no community too small to observe National Clean-Up and Paint-Up Week, an annual spring event for many years throughout the United States. The limitations on National Home Week observance thus far have been its novelty, lack of an appreciation of its potentialities for good public relations by some segments of the industry, and the need for more educational material on all phases of the promotion.

The tremendous popularity of the Week in all major cities where it was staged in 1949, especially with home builders and newspapers which cooperated, assure that it will be an annual affair in those communities. In practically all cases where National Home Week has been observed thus far, there have been local chapters of the National Association of Home Builders which sponsored the event, sparked all the promotion and carried the responsibility. In a number of cases retail lumber dealers carried the major load on the promotion, but these cases have been exceptions.

Under the new setup as worked out in Washington in Jamaary, members and groups within the National Retail Lumber Dealers Association and the National Association of Real Estate Boards, as well as the members and local chapters of the National Association of Home Builders will be advised on National Home Week possibilities, plans and methods by their national offices. Heretofore where members of the former groups had participated in an observance of National Home Week, it was done at the instigation of the National Associ-



E. G. GAVIN. officer of American Builder, origination of Buttannel Bonne Weak

ation of Home Builders or some of the individual members of that organization, and then only in the larger cities and metropolitan areas of the nation.

With lumber dealers and real estate brokers in practically every hamlet of the nation, National Home Week will be brought to a much greater portion of our population. Ties between the lumber dealer, builder, real estate broker and banker are closer in the small communities. Now that there is co-ordination of National Home Week promotion among these groups at the national level, it should be simple for these segments of the industry to join hands in promotion at the local level with the help of ideas and material supplied by the various national groups.

Since National Home Week has reached the proportions of a major national observance for all segments of the home building industry, American Builder has assumed the role of co-ordinator at the national level. This publication saw the need for a meeting of minds of the national association groups directly concerned with National Home Week, and as a result invited representatives to the Washington meeting in January. In its role as co-ordinator, American Builder will devote its efforts solely to those tasks which no single association or group can logically undertake. Since National Home Week is still in its infancy it is difficult to foresee all the ramifications and possibilities this position entails. Thus far, however, the need for some sort of a National Home Week handbook, with suggestions on promotion of the week in various-sized communities, is realized. This handbook, containing detailed ideas for associations and groups sponsoring the week as well as suggestions for tie-in promotion by individual home builders, lumber dealers and realtors, is being prepared by American Builder. This publica-



LEFT: Bolney M. Lockwood, president of HAHB: right: Frank W. Cartright, encoutive vice president, HAHB

tion also sees the need for careful coordination of initial announcements of the week to the press on a national basis, as well as the need for a central agency to tabulate results of the promotion and assemble other data on the observance. Personnel to handle these phases of National Home Week have been assembled by American Builder.

All the developments outlined here should intensify as well as consolidate much of the promotional effort of the various segments of the home building industry. For the first time in history there is a central theme or event of national scope on which those interested in all the various phases of home building, home modernizing, home financing and home selling can concentrate. The National Association of Home Builders, which LEPT: C. R. Sweet, president of HELDA: right H. R. (Cotton) Morthup, emerative vice president of HELDA

has pioneered promotion of National Home Week, will continue to spearhead the event in cities where there are chapters because the event is primarily a showing of homes—the products of the industry—which home builders erect. Not many builders, however, can cumplete a home and make it livable without the help of their retail lumber dealers, other suppliers and subcostractors. The dealer has his part in the erection of most new homes and therefore is eager to promote more home building and modernization.

In a great many communities, it is the activity and aggressiveness of realtors and brokers which keep the population and opportunities on the increase to create more demand for the houses produced by the building LEPT: Robert P. Gechain. president of NARED: right Hathert U. Robers. esse-

industry. Realtors, therefore, are not only working with home builders in a great many cases, but are responsible for many opportunities created for the industry. Their part in the promotion of National Home Week as a stimulant to a continuing good market should be sincere and enthusiastic.

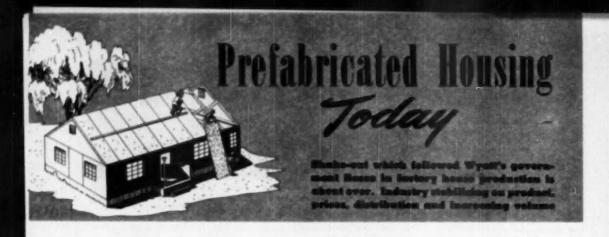
With humber dealers and realtors joining hands with home builders to sponsor National Home Week, the event and the excellent opportunities it affords for homa fide promotion of the industry will be brought to the doorstep of every business man intercated in perpetuating a healthy and stable market for the private homaing industry. This is a powerful, dignified and effective manner for all segments of the industry to parade accomplishments before the public annually.

REPRESENTATIVES of 11 Ohio HAHS chapters wimeen Gov. Frenk J. Lenarche sign National Home Wook Precimention for the State of Ohio



THUC descentrations of new bonnes equipped with modern conventioners trust thousands of interacted American families. Througs like the one pictured are common during National Huma Wesk

MARCH 1750



THERE are about 60 well-established firms in all parts of the United States producing prefabricated houses today. This is about the same number that were in continuous operation last year. Several firms discontinued production in 1949; these were, principally, firms which entered the field under the stimulus of the Wyatt program of governmentguaranteed markets and loans.

One of the lingering problems confronting the industry since the conclusion of World War II has been that of overcoming the unfavorable publicity which resulted from the unsuccessful efforts of the government to spur the production of factorymade houses under the Veterans Emergency Housing Program. Reports of an extremely high mortality rate in the ranks of prefabricators, and the fact that prefabrication could not fulfill the rash promises made for it, have caused critics of prefabrication to intone a dirge over the industry.

In 1946, priority assistance on materials, guaranteed market contracts and government loans were made available for the production of prefabricated homes, especially as an inducement to attract new companies into the field. The housing expediter declared that in a period of two years the industry would undergo the expansion which would require ten years under normal conditions.

Only in recent months has the industry neared the conclusion of the protracted postwar shake-out which ensued. Those companies remaining in business include primarily the oldline prefabricators of which a number got their start before or during the war, and a small group of newcomers. Except for three of the companies reported in business now, all produce houses of frame construction. Almost without exception they are firms which have started out on a modest basis. Their homes do not differ radically in appearance or design from conventional-type dwellings.

Despite the cries of the critics, the industry believes that the shake-out has been healthful. It has eliminated the unsound ventures and some flyby-night operators who made flimsily constructed houses which tended to turn the public and builders against all factory-made homes.

As to the glowing promises which prefabricators have not been able to fulfill, industry leaders point out that they were made by over-enthusiastic proponents of prefabrication who sought revolutionary results which could have been attained only by readjusting overnight the whole building industry to attain a Utopian setting for prefabrication. That this has not happened has tended to obscure the fact that steady progress is being made by the soundly organized firms which are gradually expanding their operations.

Prefabrication, which has been called a term that means many things to many different persons, is gradually becoming more sharply defined. According to Hart Anderson of Minneapolis, Minn., president of the Prefabricated Home Manufacturers' Institute, prefabrication is the "factory

The American Builder is indubted to the Prefabricated Ham Maxafacturers' institute for its cooperation is the proparation of this material about profabricated bosses and the present states of the industry. Obviously space would not permit publication of every perdatricated bosse now on the market. There are many others, not shown here, that are boing produced in volume for astional consumption. A survey of the industry disclosed that virtually all of the companies now in operation are producing panels of varying but standardized sizes for the walls, partitions and ceilings of their houses. Some of the firms also prefabricate floor and roof panels. Those who do not prefabricate floor and roof panels, precut materials for these parts of the dwelling. It is customary for the manufacturer to include in his package the correct amounts of items, such as shingles and roofing, required to complete the home on the building site. As a general rule, the prefabricator furnishes all materials necessary to erect and complete his houses except masonry, plumbing, electrical items and painting. One manufacturer, for example, advertises that his houses are shipped 83 per cent complete.

Thus far a limited distribution program has been one of the chief factors holding back a larger production of prefabricated homes. Manufacturers have tried various methods of marketing their homes such as direct sales to the consumer, through department stores, and by selling them to retail lumber dealers and local home builders. A few maintained their own crews and erected and sold the completed dwellings themselves. The trend since the war has been to sell the 'packaged" houses to local home builders, who are the principal outlet for the industry's product today.

Recently many of the companies have been expanding their distribution. According to a recent industry estimate, nearly 3,000 builders in the United States are now erecting prefabricated houses. This number is exfabricated houses. This number is ex-

year. One of the largest manufacturers of prefabricated houses reports that it has 150 active dealers in 12 different states. About 10 companies now have regional distribution. Most of the smaller companies generally sell their houses to builder-dealers set up within a 100 to 300 mile radius of their plants.

Builder-dealers handle the erection, completion and sale of the house to the home buyer. Some of the mannfacturers offer the dealer an exclusive franchise for a certain area while others do not limit their sales to any one dealer in a town. Some of the manufacturers require that their dealers sell the homes under the trade name of the producer. In these instances the builder's sales efforts may he supported by the prefabricator's advertising program. In many cases, however, the builder uses the factorymade housing in building his homes and then sells them under his own name. The builder nearly always determines the sales price of the homes.

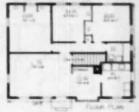
Shipments of prefabricated houses in 1949 followed the general home building pattern. As in the case of all new housing starts, shipments during the first four months of the year fell below those for the corresponding period of 1948. However, they rose sharply during the remaining months of the year and new records were established for these months. Estimates for 1949 indicate the industry sold 35,000 homes—an increase of 17 per cent over 1948.

Most of the established manufacturers expect to increase their production substantially in 1950 as the result of a continuing strong demand for their product. For the first time since the war, the plants of some of the companies reached capacity operation during the latter part of 1949, A sizable backlog of new orders for their homes is assurance that production will continue at a high level during the first part of this year. In fact, several firms have increased their business to the point where they no longer have sufficient plant capacity to handle it and plans are being made to open a second factory this spring. The Prefabricated Home Manufacturers' Institute, trade association of the industry, estimates that sales of prefabricated homes will reach the 50,000 mark this year provided the general market for residential construction remains favorable.

A big reason for optimism in the industry is the performance in recent months of builders who have turned to erecting factory-made housing as one means of meeting the demand for lower-priced dwellings. Virtually all

(Continued on page 148)

American Houses, Inc., New York, N.Y.



Plane area-804 square feet. Erected on beservent foundation Exterior wall-double course was obligated.

Interior wall-M2-inch gyprum board, topod joints, pointed or papered, both walls and floor, coramic tile. Insulation-1-inch blanket fiber glass in wall; 2-inch in cailing.

looring-oak.

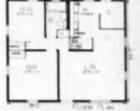
Equipment-planking Extures; hat water heater; all-fired forced cir-



culating had varier hast; alectric range, Litchen cubinets; ceptic tant. Beasmant cubing finished with Yy-inch gypsom beard and basement built head is furnished. Leven seeded.

in Ridgewood, N. J.-47,000.

W. G. Best Factory Built Homes, Inc., Peeria, Ill.



Place area-672 square feet. Evented on concrete slab. Exterior wall-Double-coursed red cedar shingles. Interior wall-Upson panels. Insulation-Linch cotton blackst in Insulation-Linch cotton blackst in

Insulation—I-inch cotton blanket in sidewalls; 2 inches cotton blanket in ceiling.

Flooring-asphalt tile with cove base

Equipment-Plumbing fistures; 20-



gallan gas-fired hat water heater; bitchen cabinets; all-fired furnanc; wardrobe closet; window screans; aluminum thresholds and weatherstripped dears and windows. alling price, exocted, without lot, in Paoris, III.—\$5,995.

Capital Prefabricators, Inc., Tyler, Texas



Floor area-922 square feet. Eracted an foundation with arawl space under floor.

Exterior wall-achestos shingles. Interior wall-1/2-inch gypsum board

tile on beth walls. Insulation—15-lb. felt in wells; 4 inches mineral wool in ceiling.

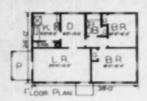
Flooring-oak. Linoleum in kitche Tile in hoth.



(pulpment-plumbing lintures, incloding shower: 30-pallos hat water bester; 50,000 B.T.U. Geor funceo; 10,000 B.T.U. beth wall hester; binches cabinat; wardrobe closete; landscaping, laws. Jolling price, areated, without lat, in Ardmare, Otia, -47,400.





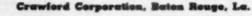


- Place area-664 square feet. Erected on foundation with crawl space under floor. Entroise vall-Wood ciding, chingles or arbestes shingles. Interior wall-My-inch gypeum beard. Interior wall-My-inch gypeum beard. Interior wall-My-inch spinoral wool in seiling.

Pleasing and

registrant-planking Esturas; Roar furnasa; 30-gellon electric water heater; kitchen cabizete. elling price, erosted, without lut, in Charlotte, N.C.-\$6,950.

Salli



BR A I-1 C1 (LA BR BR didica

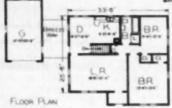
Floor area-784 squara feet. Erected an concrete slab. Exterior wall-wood siding or asbes-

- Exterior vall-wood siding or abbe-tax comment. Interior wall-gypsom board, paint-ed or papered. Insulation-aluminum-coated paper. Riscing-asphalt tile. Hardwood at additional cost. Equipment-plumbing fixtures; 20-galion gas-fixed bot water beater; hitchen cabinets; 50,000 B.T.U. in-nut are about; 50,000 B.T.U. in-

put gas-fired circulating furness. Solling price, erected, without lot, in Boton Rouge, La.—\$5,950

Iven R. Ford, Inc., McDenough, N.Y.

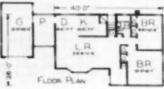
Floor area-. 848 square feat. Erected on foundation with basement.



GBH-Way Homes, Inc., Walnut, Ill.

Floor area-1,268 square fast. Erected on conventional foundation with full becoment. Exterior well-%-inch butt 18-inch

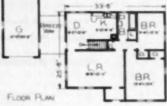
machine processed shakes. Interior well-%-inch gypsum board, recessed edge.



Insulation—Vy_inch insulating board sheathing and reflective insula-tion in sidewalls; cotton biastar with vapor barrier in colling. Flooring—25/32 EMYP. Equipment—All plumbing fistures; oil-fired forced warm air fureace; bitchen cabinets. Selling price, erected, without lot, in Pele, III.—97,850.

living quarters; garage and breazeway included in base price. Selling price, arected, without lat, in Nerwich, Cann.-\$9,608.

PLAN LOOR



86



General Industries, Inc., Fort Wayne, Ind.

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Ploor area-450 square feat. Eracted on concrete slab. Exterior wall-asbertus shingles.

Interior wall-wallpaper over ply-

Interior wall-wallpapar over ply-wood. Insulation-anvoiage type 1-inch ant-ton blanket with exphalt-backed vapor barrier one side, loaft paper ether side in wells; enclosed type reflective 1-inch catton blanket both sides with exphalt-backed vapor barrier one side in ceilings. Floreing-exphalt tile. Portien of etric floored for storage area. Pull-down stairway installed. Equipment bitchen tables; planbing flatures; water backer; warm air furnase.

furnace. Salling price, aracted, without lat,

The Green Lumber Co., Lourel, Miss.

Floor area-1,296 square fast. Breated an foundation with crawl space under floor. Exterior well-wood siding or as-

bestes coment shingles.

Interior wall-plywood or gypsum baard.

Insulation-1-inch Fibergles in wells; 2-inch Fibergles in cading.

BA

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BR

FLOOR FLAM

Flooring-cak. Equipment-plumbing Astures; fur-nece; bitchen cabinets. Selling price, erected, without let,



Gunnison Homes, Inc., New Albuny, Ind.

Floor area-672 square feet.

Hoor area-b72 square test. Erected on concrete tab. Exterior wall-exterior grade ply-wood with glastic-imprograted Ghrous whoot on weather tide. Interior wall-plywood, seeled and lacquered asters! wood finish. Insulation-minoral wool in wells; celluloss blankst in celling.

air furnaca.

Selling price, erected, without let, in New Albany, Ind.-\$5,400.

The Halliday Co., Ltd., Burlington, Out., Canada

BA

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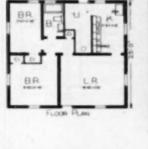
Floor area-720 square feat. Erected on foundation with base

- manl.
- Exterior wall-ashestes siding shin-

etterior vall-actories total and an glas. Instation-2 inches fiber glass in walk and 3 inches fiber glass in inthe and betteroom. Flooring-oak except asphalt file in litchen and betteroom.

Equipment-kitchen cabinets, fur-nace, hat water heater. out lat, in

Salling price, aracted, withe Burlington, Ont .- \$5.500.



BR

FLOOR PLAN















Harnischloger Corp., Pt. Weshington, Wis.



Floor area-768 square feet. Erected on foundation with base-

ment. Exterior well-cador sidewell chinglas.

Interior well-Upson penals. Insulation-aluminum foil in wells;

Insulation-aluminum foil in wells; 2-inch fiber glass in ceiling.

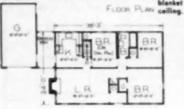
Pinering-asphalt tile. Equipment-kitchen cabinets: gravity furnace: hot water heater: plumbing fistures: landscaping and walks.

Selling price, erected, withdut lat, in Rochella, III.-\$8,500.

E. F. Hedgson Co., Inc., Beston, Mass.

Floor area-864 square fest. Erected on foundation with basemant. Estarlor well-basel coder siding.

Ygat inch.



Interior well-1/2-inch rigid insulation board.

tion board. Insulation—Vy-inch insulating board and aluminum foil in walls; Vy-inch insulating board and one inch blanket with reflective surface in V colline.

> Flooring-V. G Dauglas fir. Oak Pours at additional cost.

Equipment-bitchen cabinets furnece; plumbing fictures.

Solling price, erected, without lot, in Daver, Mess.—\$10,809.

Houston Ready-Cut House Co., Houston, Texas.



BR

TI

BR

FLORE PLAN

Floor area—1,104 square feet. Erected on concrete piers. Exterior well—asbeotos chingles. Interior well—fir phywood. Insulation—4 inches cotton in ceil-

ing. Flooring—profinished herdwood. Equipment—plumbing fixtures; 20gallon hot water heater; 42-inch attic fon.

Solling price, erected, without lot, in Liberty, Texes-\$8,483.

Johnson Quality Homes, Inc., Brooklyn, N.Y.



-

Floor prea—896 square feet. Erected on foundation with basement.

Enterior well-ceder shingles.

Interior well -- lath and plaster, papered.

Insulation-1/2-inch rigid insulation in walls: 2-inch cotton insulation in colling.

Flooring-ook.

- Equipteent-furnace, plumbing fatures; kitchen cabinate; fireplace; hut water heater.
- Salling price, erocted, without lot, in Feirfield, Conn.-\$13,000. This includes brazeway and 22:22-foot garage shown in photo.

Knox Corporation, Thomson, Ga.

- Floor eros-800 square fast. Erected on foundation with crewl
- epace. Exterior wall-wood siding. Also fur-nished with asbeetes siding, wood shingles or brick veneer.
- Interior wall-gypour board, papered. Insulation-2-inch ootton betts in
- calling.
- Flooring-ook. Equipment-plumbing Retures, oil-fired floor furnace: kitchen cabinais.
- Salling price, exected, without lot, in Themson, Ga.-\$5,450.

BR 3 LR BR 40 10000 CON PLAN

Midwest Housing Corp., Janesville, Wis.

- Floor area-768 square feet, plus garage. Erected on foundation with base-
- mani. Estorior well-10-inch bavel siding
- and codar shingles.
- Interior wall-dry wall. Insulation-aluminum foil in walls; minoral wool in ceiling.
- Flooring-ook, Enoleum. Equipment-plumbing fistures; kitch-
- an cabinots; water heater; fur-
- nace; water softaner. Selling price, erected, without lot, in Janeavilla, Wis.—\$7,990.

National Homes Corp., Lafayette, Ind.

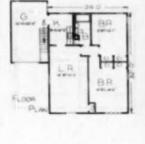
Floor area-720 square feet.

- Erected on concrete slab. May also be erected on foundation with crewl space.
- Exterior wall -- plastic-coated asterior type plywood. Wood siding or shingles also available. Interior well-Upson board. Insulation-1-inch cotton batts in
- walls; 2-inch cotton batts in cailing. ing-asphalt tile. Prefinished Hee
- aak used when not on slab. Equipment—plumbing fixtures; well furnece; kitchen cabinets.
- Selling price, erected, without lot, in Lefayette, Ind.—\$5.100.

Nichols & Cox Lumber Co., Grand Rapids, Mich.

0

- Floor area-884 square feat. Erected on foundation with basemani.
- Exterior well—l/set-inch bavel siding. Interior well—plastered. Insulation—1/2 inch coated insulating
- board sheathing in wells; mineral wool betts in ceiling.
- Flooring oak.
- Equipment-plumbing Astures; bitch-en cabinets; gas-fired forced
- warm air fürnace. Second floor, unfinished, suitable for additional rooms.
- Selling price, erected, without lat in Lansing, Mich .- \$10,500, including garage.





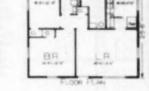
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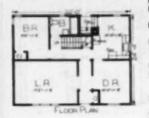
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LOOP PLAN





North American Buildings, Ltd., Winnipeg, Can.



Floor area-1,600 square feat. Eracted on foundation with base-

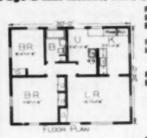
meet. Esterior well-Hattbinch bevel codar

eiding. Interior wall-seamless plywood. Insulation-Il-inch minaral wool botts in walls, and cailing.

in wate, and commy Flooring-oak. Equipment-plumbing fistures; bitchen cebinet; hat water han-er; gravity warm air furnes. Second floor, unfinished, mitable for additional rooms.

Salling prices, aracted, without let, in Winnipsg-\$8,606.

Page & Hill Homes, Inc., Shukepee, Minn.



Roar area-720 square feet. Erected on concrete slab. Exterior web-1/2 x &-inch bevel siding.

iding. Interior wall-Upson panels. Interior wall-Upson panels. Insulation-utumism fol in walk; 2-inch certon blashat in ceiling. with vapor barrier. Flooring-asphalt tile. Equipment-kitchen cabinets; plumb-ing fisteres; forcage wall clears with diding doors; atsem windows, screens, combination doors; stoops, welk, drivewy and finish grade. Selling price, exected, without lot, is Dos Meines, Low-16,900.

in Des Moines, laws-\$5,900.

Pease Woodwork Co., Cincinnati, Ohio



Floor area-1,084 square feet. Erected an foundation with basemani. Enterior well-//jaB-inch bavel sid-

ing. Interior well-gypour board. Insulation-reflective in wells; min-eral wool betts in ceiling.

Flooring-osk. Equipment-furnace, optional; hat water heater; plumbing flatures; titchon cabinats.

Selling price, erected, without lat in Hamilton, Ohio-\$8,800.

Precision-Panel Homes, Inc., Stockton, Calif.

Floor area-801 square feet.

Erected on concrete slab. Enterior wall—V-rustic redwood in front; estation plywood strips with radwood hattens on other walls; radwood on gable ands.

reduced as gable ands. Interior wall-gypeum board, dese-rated to purchaser's order. Insulation-2-inch minoral weel baths in walk; 4-inch baths in ceiling. Flooring-asphalt tile. Equipment-plumbing fintures; bitch-en cabinets; hot water haster; circulating wall-type warm air hoster, siding doors an all clearts. Selling price, created, without lot, in Stockton, Celli-48,737.

AMIRICAN BUILDER



E BR

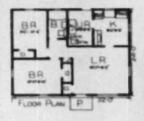


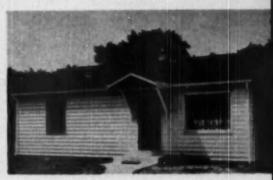
FLOOR PLAN

Quality Momes, Inc., Jellet, III.

- lear area—Jää square feet. rected an foundation with anywi
- spece. Iteriar wall-

- space. Barler wall- Krob-inch barel siding. terler wall- Upace based. mdation-i-loch callulas in walk; 2-inch fiber glass in Soor. Barling-cal. gaipmant-plenking firtures; cil-fied forced worm oir furtures; bitchen cabinet. alling price, arected, without lot, in Hinedale, IE-\$8,500.
- -5



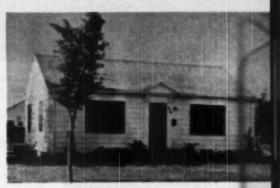


Southern Mill & Manufacturing Co., Tulse, Okle.

Roar area—788 square feet. Erected on foundation with crawl

- Exterior well-arbester shingles. Exterior well-arbester shingles. Interior well-arbester based. Insulation-J-inch minerel wool in cell-ing.
- Flooring oak. Lineloum in kitchen and both.
- and bath. Equipment-plumbing fistures; hot water heater; floor furnace; kitch-
- en cabinats.
- Salling price, aracted, without lot, in Brownfield, Tazas-\$5,800.





The Thyer Manufacturing Corp., Tolede, Ohio

- Floor area—703 square feat. Erected an foundation with base-
- mant. Exterior well-Red cader shingles. Interior well-gypeen based, paint-
- ed. Insulation-mineral wool in wells and

- Insulation—mineral wool in wells and ceiling. Flooring—cesk. Equipment—plumbing fixtures, kitch-en cehinesh, forced worm eir fun-ness; hot water heater, built-in chine cehinet; wordroke cleasts. Selling price, croated, without let, in Milwaubee, Wis.—\$7,400.

Unit Structures, Inc., Peshtigo, Wis.

- Roor area-672 uptare feet. Eracted on foundation with base-mant. Entorier well-coder shingles. Interior well-dry well, painted and
- papered. malation—2-inch cotton batts in walls; 4-inch cotton batts in coll-

- tering-tering-terch. gaipment-of-fired forced warm of furnace: planting fisture. Juling price, orected, without lot, in Green Bey, Win-64,850. 5



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FLOOR PLAN

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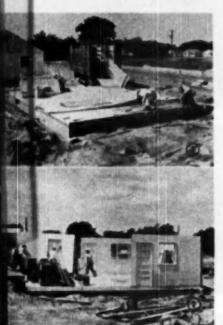






STREET of Notional Homes' proinbricated houses in Eassier Park subdivision. Indianapula

Homes for the Thrifty



92

Large volume of prefabricator's "Thrift Homes" is erected rapidly to meet need for low-cost housing

SINCE March, 1949, an Indianapolis builder has completed two large housing projects, consisting of 900 "Thrift Homes," the low-cost models manufactured by the National Homes Corp. of Lafayette, Ind. Selling prices were \$6,325 and \$6,700 for two and three bedrooms.

The builder is Robert E. Bartlett, president of Kessler Homes, Inc., Indianapolis, dealer for National Homes. The first development, the 400-home Kessler Park subdivision in the city, six miles from the downtown business district, was completed around the first of the year; 500 additional homes were recently finished in Speedway City, Ind.

The Kessler Park project, for which Bartlett used the recommendations of the FHA Land Planning Division, consists of 80 acres divided into 400 lots (averaging 50 by 100 feet), with two-and-one-half acres reserved for a park and a public school. Frontage facing a trunk highway is reserved for commercial use.

The development is well laid out, with double bituminous streets, roll curbs, gutters and public sidewalks. All utilities are installed. The builder furnishes for each house at least four shrubs, two trees and a minimum amount of grading.

For variation of appearance, buyers were offered a choice of 16 designs eight each in the two-bedroom and three-bedroom sizes. Four color choices were available and variety was further achieved by skillful adaptation of houses to lots.

All of the houses are basementless and of frame construction. The twobedroom models have over-all dimensions of 24-feet 7-inches by 28-feet 7-inches. Three-bedroom design is 32, 7 by 24, 7.

The National Homes Corp. sup-





B. E. BARTLETT

VIEW (right) shows well-pleased lend use in layout of streets



plies all wall, ceiling and roof sections. Exterior and bearing walls are of 2x3-inch studs spaced 16 inches O.C., faced with 34-inch waterproof plywood. The interior is 34-inch waterproof, crackproof, joint-free laminated wood fiber, in lacquer 6nish, which can be papered or left in the natural finish.

Between the two wall coverings is 1-inch Cellulite insulation in batt form, with vapor seal placed nearest the warm side.

The interior partitions (non-bearing) are of 2x3-inch studs, spaced 16 inches O.C. with the same type of laminated wood fiber. In the ceiling construction 2x4's are spaced 16 inches O.C. and covered with 34-inch pre-decorated gypsum board, glued and nailed to the ceiling joists. Over the ceiling joists, after erection, two inches of Cellulite insulation is installed. LEFT: Below Barriett started to develop sits in 1948, it was used an local stepart.

The roof sections are of 2x4-inch studs spaced 16 inches O.C. over which 5/16-inch Plyscord is glued and nailed. The sections are covered with 15-pound felt and 210-pound asphalt shingles.

All millwork, doors and windows are finished by the manufacturer, eliminating the need for decoration on the job site. Windows are doublehung. Screens, and weatherstripping are supplied for doors and windows and aluminum thresholds for doors.

The foundation is conventionally built. An 8x16-inch concrete footing is used, six inches below frost line, on which concrete blocks are laid. Piers of the same construction are provided to support the girders over which 2-8-inch joists 166 inches O.C. are applied. Finish floor is laid directly over the joists which are insulated on the underside. Pre-finished Bruce oak flooring is used in living room and bedrooms; asphalt tile in kitchen and bath.

Heating system used in the Kessler Park homes is a Winkler wall furnace, manufactured by the U.S. Machine Co., Lebanon, Ind. It is part of the equipment furnished by the prefabricator. Dealer supplies Rheem gas-fired, 20-gallon water heaters.

The base cabinet, sink, laundry tray, cabinets and shelves are manufactured by the Mullins Manufacturing Co. and furnished by the prefabricator. The dealer supplies all necessary plumbing, including tub, lavatory, and water closet. These are products of well-known manufacturers. Romex wiring is installed. In the Kessler Park operation an

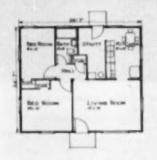
STEPS in eraction of "Thrity Home" by Eastler crow. (1) Floor panels are reasoved from truck and placed on foundation. (2) Wall panels, with windows and doors in stulled, as into place. (3) Three men set well panel in position. (4) After well are floors have been eracted, celling toins are put in place. (5) Assembling toins are put in place. (5) Assembling to panels. (9) Gable ends an into position. (7) Application of ampleh realing insulation. (8) Application of ampleh realing insulation. (8) Application of ampleh realing thinging-men al

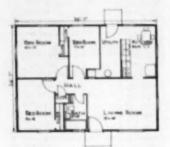


MARCH 1950



#ATIOHAL'S Camberland design (e8) has two hedrooms. Suiton model at right in three-bodroom home





DiffENSIONS of two-bedroom "Thrift Name" (upper face plan) are 28 feet 7 inches by 24 feet, 7 inches. Lower pess Shedroom model which is feet feet wider average of three houses was crected each working day. The "packaged" units were delivered daily—five days a week—at this rate. They reached the project each morning by truck from the factory 55 miles away.

Bartlett does most of the work with his own crews. He subcontracts for labor and materials in the construction of streets, sewers, sidewalks, curbs and gutters; for labor and materials in wiring; and for labor only for plumbing and block laying.

All of Bartlett's Kessler subdivision houses were sold as quickly as they were completed and the only sales promotion was an "open house." He uses brochures prepared by National Homes and also receives inquiries prompted by the manufacturer's advertisements in leading consumer magazines.

Financing of the homes was bandled by the National Homes Acceptance Corp. An application for FHA commitments on the entire project was submitted to the FHA. Indianapolis office where dual commitments were issued authorizing maximum loans of 85 per cent to builders and 95 per cent to owneroccupants.

A few loans were negotiated in the name of the builder but when advance sales mounted commitments were obtained in the name of the purchaser and loans closed in the latter's name. Construction advances were made to Kessler Homes in accordance with the National Homes Acceptance Corp. plan for National dealers.

There is an insured 25-year mortgage of \$6,000 on each house, with the two-bedroom unit requiring a downpayment of \$325 and the threebedroom home, \$700. Monthly payments, including insurance, taxes, interest and amortization, are \$40.58.

In order to turn out 15 houses a week, Bartlett kept 30 foundations and 15 floor platforms ahead of his erection crew. This was accomplished by careful planning, co-ordination and close supervision. Each of his crews is highly trained in a particular operation and only one crew works on and in a house at one time. Power tools are used for machine grading, trenching and other places where they expedite work.

Before becoming a dealer for prefabricated homes, Bartlett had had no building or real estate experience. He had been engaged in direct sales and sales management and had done some work in financing. In his first year as a National Homes dealer, 1946, he erected 50 houses and the following year, 100. In 1948 this rate was increased to 150. These were National Homes' larger models, priced from \$7,795 to \$10,450.



OTHER variations of design are shown in two-bedreen model, left, and three-bedreem et right



VETERAN'S lambly is typical of prachaness of Pope and Bill pretebricated hamen southed by Hanold J. Vola. Winner, S.D. Rouses sold for SA.000. with FBA comminance for SA.000. Puchaned ander 30 year leans. down payments were SBM. mastiky "parkaspe" payments. S30.74. Bipht Extedar of a "Padynt Extedar of a "Padynt Exte-



HABOLD J. VOLZ (left), president of Vols. Inc., and Leo A. Dohmon, firm contractor

THE ERECTION of houses from factory-fabricated panels solved for Builder Harold J. Volx of Winner, South Dakota, the problem of entering the small-town low-cost housing market in 1949.

Winner is a county seat of approximately 3,500 population located 90 miles south of the state capital, Pierre. Voir, in the real estate, building, and abstract business, completed seven houses by conventional methods after the war in the \$9,600 to \$11,500 price range. He then stopped building because the demand for homes in this range had been satisfied; and although there still remained a big need for lower-priced homes, he felt that his method of operation could not profitably provide good quality for this market.

In May, 1949, Volz obtained the local agency for homes manufactured by Page and Hill Homes, Inc., of Shakopee, Minn. The Volz organization completed 16 homes in the next four months and plans an expanded building program for the 1950 season.

Vola attributed the success of the operation to the fact that his organ-

ization was able to produce good homes for around \$6,000-a price that lower-income families could afford.

"Our customers are the clerk in the grocery store, the mechanic in the garage and the GI's who were paying high rents for unsatisfactory basement and attic apartments," Vola, proudly declares. "We feel that we are definitely rendering a service to our local community as we are making it possible for these people to have their own homes."

Of the 16 homes sold last summer, 13 were Page and Hill's "Budget Homes," designed to take advantage of the financing under which the FHA insures 95 percent of the loan where the amount does not exceed \$6,000. One-story dwellings with 720 square feet of floor area, these homes have two bedrooms, living room, kitchen with dining area, modern hath and utility room. They are built without basement. All rooms have two





Prefabricated Housing is Boon To Small Town Builder

exposures and the space is carefully utilized for maximum livability. Storage space is provided in the utility room and in the attic. The remaining three houses were larger dwellings for families who could pay more.

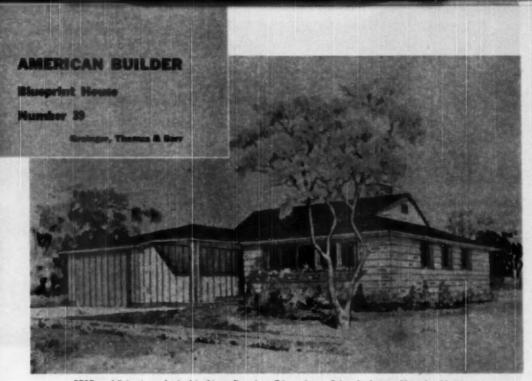
Volz believes that by using factorymade housing he "is offering his huyers the best value that money can buy."

"As soon as the first house was erected, we could see immediately that this type of construction was of the best," he asserted. "Home prospects were definitely satisfied, the reason being that top-grade materials were used and the floor plans were inviting. There is no waste space and every nook and corner is utilized."

In addition to providing better homes, Volz said that by erecting prefabricated houses he has fewer "headaches"; shat he can determine his costs more closely in advance of construction; and that he has been able to expand his operations with a minimum overhead because of the speedy erection of the houses. This increased volume of business yields a lower profit on each unit but a larger income for the year.

The Volz organization erects and makes the "Budget Homes" ready for occupancy in a period of only 10 days with a crew consisting of only a foreman and four laborers. The house is erected in one day. The Volz crew handles all other phases of construction, including plumbing and wiring.

(Continued on page 144)



REAR yard living is emphasized in this medium-size, all frame house. Spinyed raise at aphie ands adds interest

A HOUSE OF CONVENIENCE

By establishing the entrance as a hub, or focal point, all areas of the house become accessible with a minimum of effort

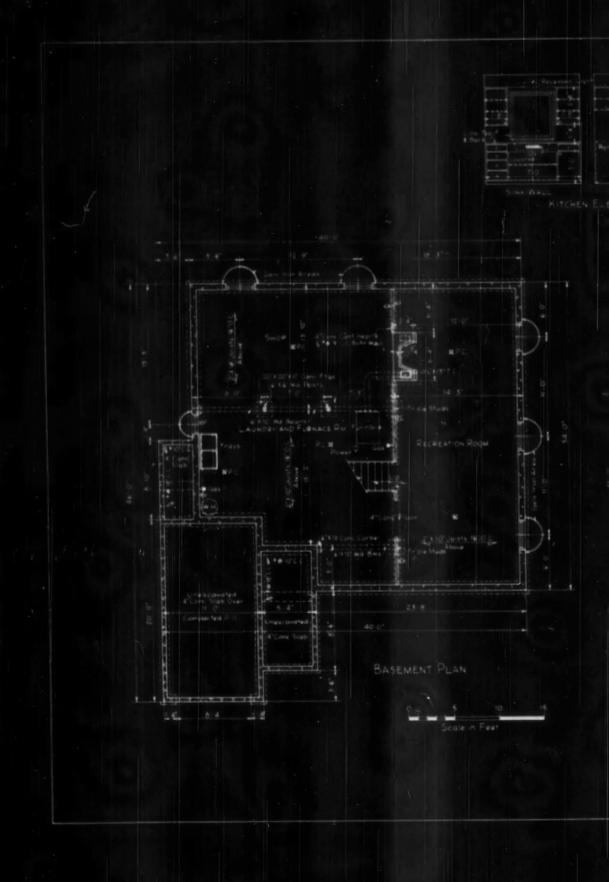
> AN ANALYSIS of this month's blueprint house designed by Grainger, Thomas & Barr, architects, Seattle, Wash., revolves around the question of circulation. This becomes a matter of prime importance, for basically, a house becomes easy or difficult to live in, depending upon the relationship of one area to another.

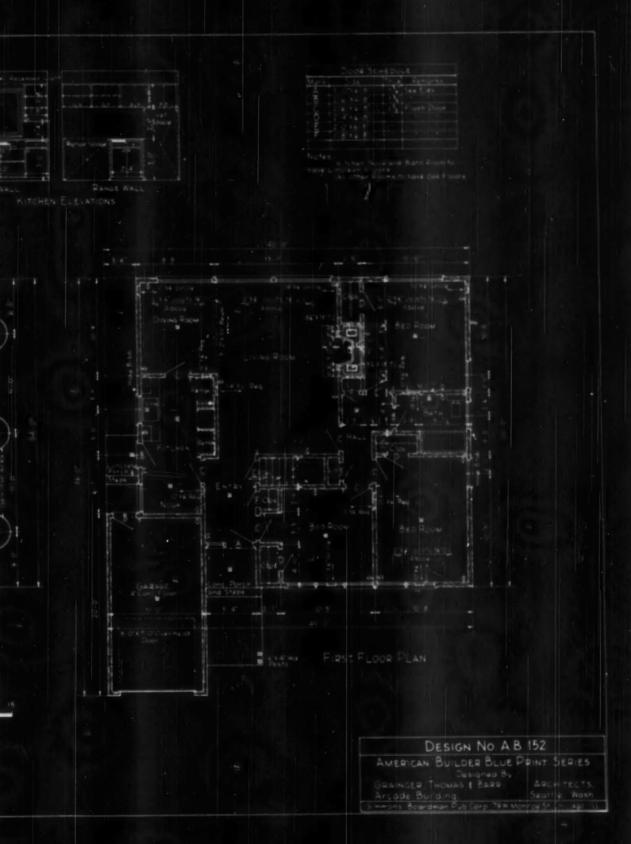
The smaller the house the more important circulation becomes, for then there is a tendency to arrange the plan so that a nuajor room may act as a traffic artery. This can be avoided by careful study of the plan, eliminating excessive halls, and establishing a central hub from which access to all rooms can be quickly obtained.

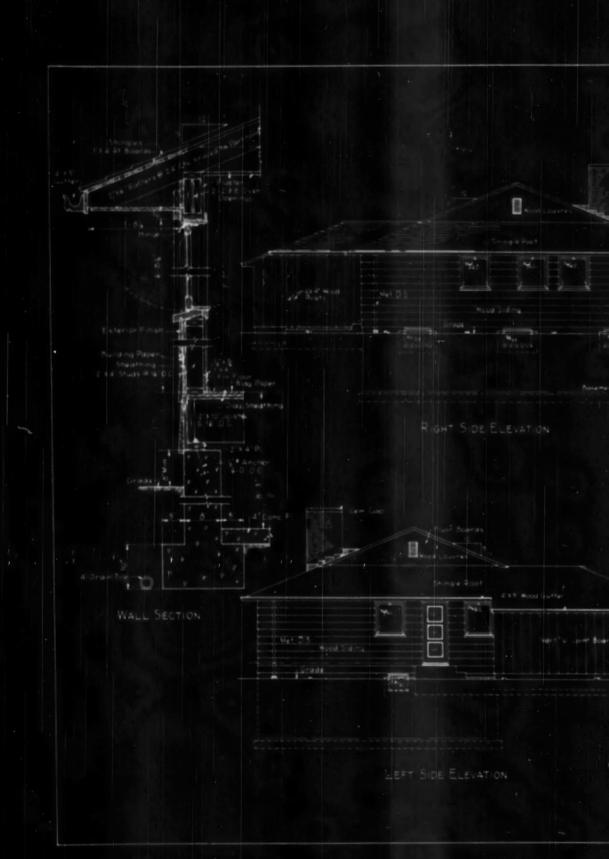
The plan of the current blueprint house is an example of good circulation. The central hub is the entry, and access to all rooms, including garage and basement, is easily obtained from this area.

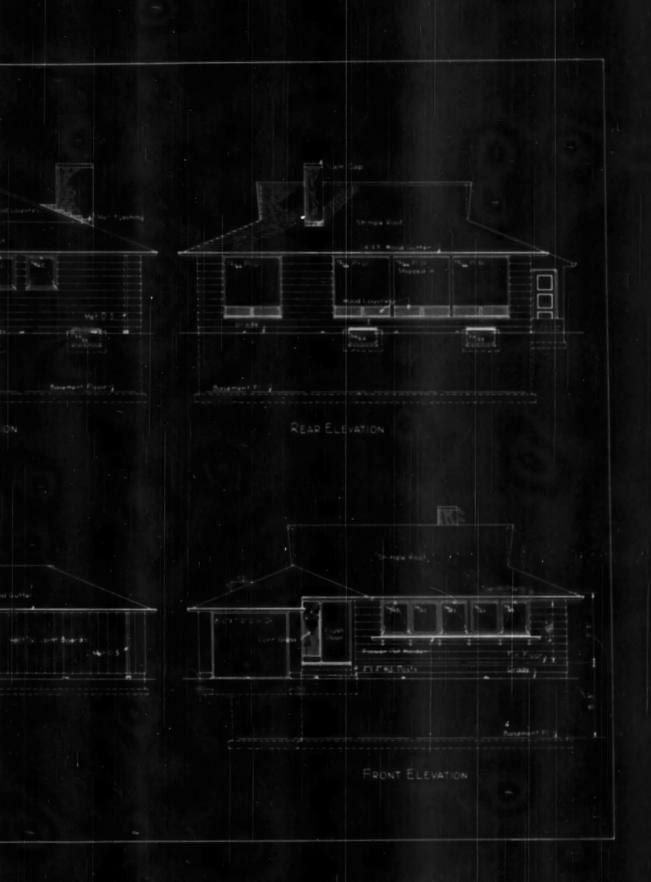
This all frame house contains approximately 1200 square feet of living area, exclusive of the attached garage. Three bedrooms are clustered together on one side and front to form the quiet area, with living and dining room arranged for rear yard living. Kitchen and garage follow in sequence along the opposite side and front. A full basement is provided. Ample space is available for heating, laundering and recreational facilities in this area.

The design is a simple and straight-forward expression of the plan. Grouping of the high, hinged sash on the front wall of bedrooms, and the fixed sash and loavers of the living-dining space, adds a modern note to a somewhat traditional exterior treatment. The attached blueprint sheets cover in detail the various types of materials used.





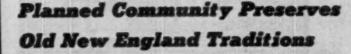




BUILDER Selected Nomes

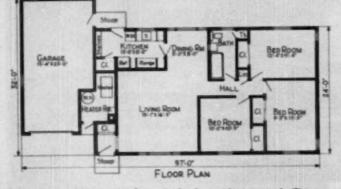
NCORE have a modified coincide design in Polipate development in priminer Research Holeson rands style haven vill also be hadeded in the project, which will be in the \$13.13.000 comp







ALL Genzeni Electric ittehen includes S-colie best restigenetics, pushbetten resupe, disburschn, Disposell, benadry ask, extensitie bennetaskenst im, combiothen clock and dass chiese



Room assurptions in compact and show is placed on ample storage and utility space

TWO model homes, the first of more than 224 to be built at Baldpate in the Oak Hill section of Newton, Mass., were recently opened to public impection. In the first 15 days, 53 units were sold and thousands of Greater Bostonians had been attracted to visit the model homes. Arnold Hartmann, builder of these

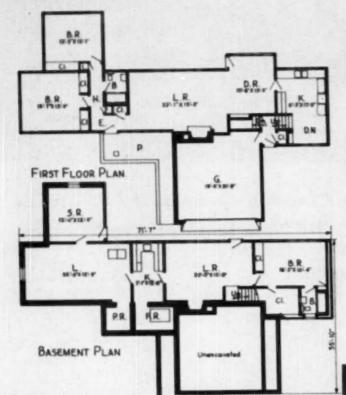
Arnold Hartmann, builder of these Baldpate homes, describes the new development as "a planned community preserving the old New England traditions." All homes will be motified Colonial or modern Ranch Style. They will occupy large seeded lots in the "Charles River Country Club section of the city." The development, located seven miles from downtown Boston in rural setting of natural scenic beauty, features the General Electric kinchen, fully equipped, over 65 electrical outlets with wiring certified adequate by the Electric Institute. G.E. air wall radiant heat and automatic water heater"are other comforts and economy features.

comforts and economy features. Three bedrooms, large living roomdining room, ample closet and storage space, separate utility room, and attached garage are all features of these homes, designed to sell in the \$12,000 to \$13,000 price range,

Model home decoration was by the nationally-known Ottilier Heuer Crowley in cooperation with R. H. Whites of Boston.



SITE DICTATES STYLE

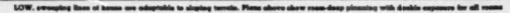


Close collaboration of architect and builder produces a group of custom built homes that most the needs of execting clients

GLENDALE addition, located on the outskirts of Minneapolis, Minn., is a rapidly growing community of fine bomes. Each one is custom built and designed to conform to the requirements of individual owners.

This particular group of three homes was designed by Gerald W. Brandhorst, architect, and built by Enaco, Inc., whose president is Paul K. Enghauser. Both men are from Minneapolis.

The Glendale area consists of a series of small hills and valleys, with streets arranged to conform to the terrain. Plotted lots are extreme in width but of minimum





ENTRANCE insultance of creationness for Mr. and Mon. C. A. Buther. Solit of extended real line of gurage and house provides challer for the approach to front door. Godge adding is in contrast to the points of wood and stone well of the boute

BECAUSE of the aloping terrain, the corr of the Sother house has two stories. The lower foor is on apartment for owner's paramin. Balaw, Braylane is it bring room



MARCH 1958

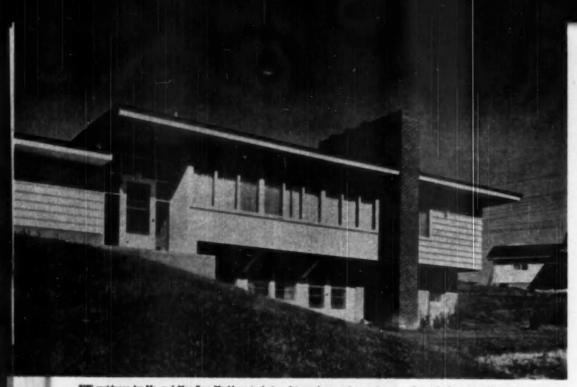
depth. This condition, along with the rolling topography, established the pattern of layout and design for

The plans of the houses are similar. Rooms are arranged successively, forming a long rectangle. The entrance unit in each case acts as a hub, with the service area on one side and the living and quiet area on the other. The Sather house (pictured) is an example of one-room depth planning, with double and sometimes triple exposure in

Construction costs range from \$22,000 for the Sather home to \$28,-000. (Thoen house, page 105). All of homes are basically of frame construction above grade line, with a veneer of stone and brick used for a portion of the wall areas to effect a change in the exterior treatment. The exposed concrete block foundation above grade is covered with a heavy coat of cement finish. In addition to good drainage, a rolling site permits a great deal of latitude in house design and layout. In the case of these three houses full length windows are provided

all the homes.

all rooms.



THE residence for Mr. and Mrs. Burr Markham is designed to conform to site requirements. Deep shadows are obtained by prejections



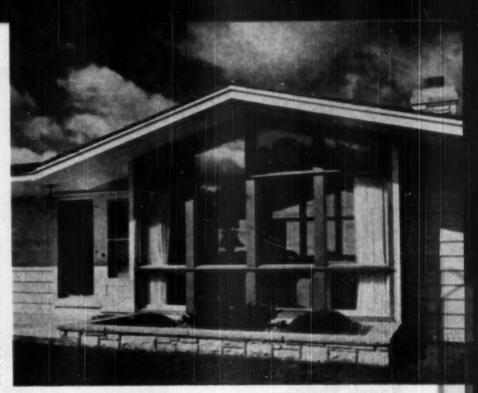
FLAMS of Mathham house, right, indicate a largest'al reems speed out ecrose the brant of property. Slepting ground provides good light for beammat recording room

on the exposed wall of basement, making a large portion of this area available for living.

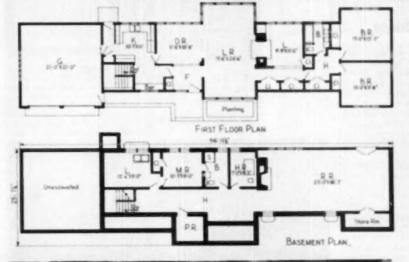
Because Glendale is one of the highest spots in the Minneapolis area, the architect held the designs to low one-story dwellings, with heavy roof overhangs and large glass areas through which the downtown area of the city can be observed.

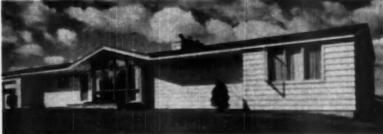
Materials used in these homes include Pella wood casement windows by Rolscreen Co., Twindow by Pittsburgh Plate Glass Co., Janitrol Furnaces by Surface Combustion Corp., Ventrola Kitchen fan by Carrick Products Co., Kitchen-Maid cabinets, Rheem hot water heater, Rezo slab doors by Paine Lumber Co., Crane fixtures, Cedar siding and shingles and plywood subfloors.





FEATURE of the resi-dence of Mr. and Mrs. a is the long Th and the . -em the or walls and ceiling ng room. All g h is fixed on wer such hinged at dom. A complete or to cuiling glass all in provided at ends





AT LEFT, pips of Thees house. A feature is the 16 acts. divide (in a avios fire-100 L Indi. arer. ali viow al h wing in by a . a lefe ani i

MARCH 1950

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LONG. low read at house and garage add appearence of greater length and grasshikness to this molified ranck style home

Ranch Style— A Popular Choice

THOUGH the over-all width of this modified ranch style home is 80 feet, the front roof overhang of the house, breezeway and garage, together with deep shadow lines of horizontal siding, add an appearance of even greater width. The exterior lines of the house reflect the popular ranch style of architecture but interior appointments reflect traditional planning.

Interior of the spacious kitchendining room combination is finished with pine wainscoting and red tile floor. Wood cabinet doors, in natural finish, have wrought iron hinges. Dado paneling and exterior walls are painted Lambert green. A fireplace is provided in both the living room and in a recreation room in the full basement.

The master bedroom has a walk-in type wardrobe closet, as well as a built-in ironing board.

Conventional framing is used throughout the home. The ceiling is insulated with \$\% inches of mineral wool; the sidewalls with blanket type insulation. Heat is supplied by a 120,000 B.T.U. oil-fired, forced warm air furnace. The home was built for Mr. and Mrs. C. T. McAndrew in Plainwell, Mich., by Economy Builders, a local firm.





CABINET work is kitchen, below, is left in natural faish with worseght toos kinges to bleed with Early Amerlom fursishings, Dede and pmalling are Lambert green. Layrout of Soor pices, left



A Small Home Fills Special Nee





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PLE, straightforward in

FLOOR plos shows matchess utilization of a small stres



BUILDER Selected Hemes

NTEREST is added to the front elevation of this small Kalamazoo, Mich. home by recessing the living room wall to provide a shehtered entrance. By placing a large picture window in the rear of the living room, proper advantage is taken of a view offered by a deep lawn. The dining room is a part of the living room, in an L-shape combination, yet enough space is allowed so the dining room appointments do not intrude upon the appearance of the living room. The kitchen is placed at the front of the house, and a partial parti-MARCH 1980 ETICHER, above, is separated from dising room by attractive equcrate designed katchkanth shelves. Largo Briog room picture window ovarioths room laws, right, Nois attractive maders. Sealars

tion between it and the dining rosm is achieved by an attractive counter and shelf arrangement.

Ventilation for the flat tar and gravel roof is through a continuous narrow screen strip placed around the eves. Joists are notched where necessary to permit the free circulation of air.

The home has a full basement, with walls constructed of 8x8x16-inch concrete blocks. Diagonal yellow pine subflooring is laid over 2x8 floor joists. Finished floors in bedrooms are of tongue and grooved prefinished oak, while floors in the remainder of the house are tongue and grooved yellow pine.

Exterior 10-inch cedar siding is placed over conventional 2x4 wall framing, and the walls are fully insulated. Insulation between ceiling joists is mineral wool batting. Heat is supplied by a \$0,000 B.T.U. capacity, oil-fired forced warm air furnace.

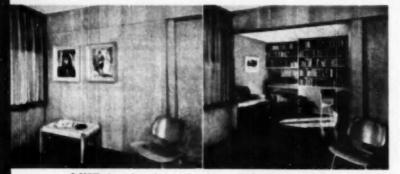
The home was designed by the owners, Mr. and Mrs. Maurice Norg, and built by F. T. Marple, a well known Kalamazoo builder.



VIEW from study. Storage cubinate are built in plywood finished walls above firepiane. Gime penel or right opens on balcony

Double Function Rooms

Bliding panels, low partitions create illusion of space in small functional house

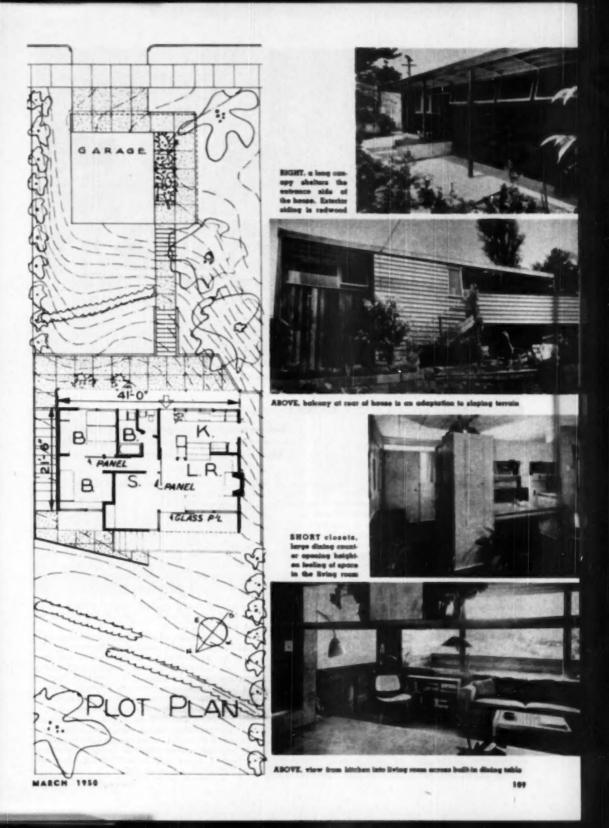


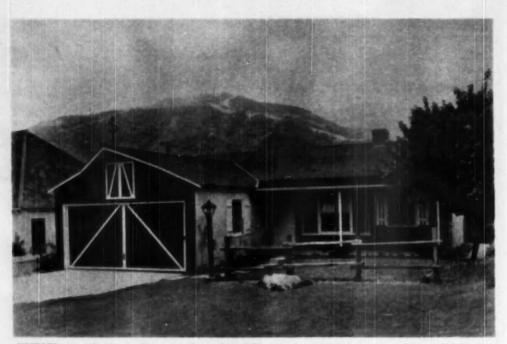
A BIGID plywood ponel incusted on sheaves divides the living and study areas. At lait, above, view with panel closed. At right, same view with panel open, showing study

TWO sliding wall panels, an unin-terrupted ceiling, and a built-in dining table that separates the kitchen and living room create an illusion of spaciousness in a house with only 908 square feet of area. A rigid panel which is mounted on sheaves closes off a study at one end of the living room which otherwise is part of this main room. A similar panel divides the bedroom space. When this panel is open, these rooms form one large child's play space. In this manner, areas in the house are utilized to the maximum since they are made to serve double functions. This principle is used in the bathroom which also serves as a laundry.

The closets and table partitions that separate the kitchen and living room do not extend to the ceiling. This uninterrupted ceiling plane is intended to increase the illusion of size. A counter-like construction, with doors that cover knee-hole space, serves as a dining table.

This house, designed by Gregory Ain, Joseph Johnson and Alfred Day, California architects, has exterior walls of redwood shiplap siding. The roof is a built-up composition.





HAYBACE olds authenticity to this farm-type house. Long. split rati fance, and worther vans are small items included in price

Cooperation Cuts Costs

TWELVE building trades contractors and suppliers have joined with A. C. Lane, Inc., Glendale, Calif. in a cooperative venture to produce custom-built homes at low cost. The central company was organized with A. C. Lawe as manager, Rex O. Ballentine as expediter, and Edwin A. Saville as building superintendent. These men comprise the parent company. The twelve other subcontractors and suppliers, not stockholders, are associated, with this A. C. Lane Company on a cooperative basis—to this extent:

The parent company, which seeks out and acquires the jobs, gives all of the subcontracting to these twelve firms without asking for other bids. The associated contractors forfest certain regular margins and give the A. C. Lane Company bids generally given for volume contracts. In this way the contracting company is assured of low bids, quick service, and uniform craftsmanship. Under this arrangement, the names of all twelve cooperators are listed in the firm's advertising; each cooperator pays a share of the advertising costs proportionate to the general percenage of his costs of the houses built. All twelve groups have old and established reputations in the community, from which all mutually benefit.

Since the cooperative venture has proved successful to date, the group plans to extend its activities to include the construction of an apartment building. Each contractor or supplier will have the option, in this venture, of leaving the amount of his contract in the project as an investment. The profits that accrue from renting or selling, managed

Subcontractors, suppliers, and builder find cooperation nots mutual dividends and high efficiency in custom-built home construction

by the A. C. Lane Company, will be divided proportionately among the participators.

The authentic farm house, shown in the photographs on these pages, is an example of the work done by Lane and associates. This home of 1040 square feet was sold for \$9750, including a two-car garage.

The walls of the living room are paneled with knotty pine treated to create an "antique" effect. This paneling is also used in the den and as wainscoting and ceiling in the dining room where other wall surfaces are papered. A unique snack bar with an egg crate shelf above divides the kitchen and dining areas. The top of this bar is covered with Consoweld, a plastic laminate. Glass blocks, used to illuminate the breakfast area, are also used in the outside walls of the closets.

The kitchen is equipped with a dishwasher, a garhage disposal unit, and an exhaust fan. The drainboard is tiled, as is the top of the Pullman lavatory in the bathroom. Drawers are built under this bath lavatory to provide an abundance of bathroom storage space. Tile is also used to form a six-foot high wainscot in the glass-door-enclosed shower above the tub. A chest of drawers has been built between the two wardrobes of the master bedroom.

Other features of the house are pegged and grooved oak floors, copper plumbing tubing, two cedar-lined closets, and the use of Permalite insulating aggregate in place of sand in plaster to reduce weight and minimize cracking.

The home is heated with a 50,000 B.T.U. dual wall furnace, thermostatically controlled.





A. C. LARE. Educin Serville. and Rex Ballentine. Iron left to right above. engating plans for another house being built by the frm

FLOOR PLAN

ABOVE. Sace plan of ferm-type house. Each closes with an outside well has a glass block window. A sliding door between den and kitchen preserves spare



PINE paneled dan with speakage on purch and kitchen has closet and can serve as bedroom or quest room





ABOVE, fireplace corner of living room with dising room beyond. Elithen is seen at right, over smath her

MATERIALS AND EQUIPMENT: Hardware, SCHLAGE LOCK CO.: Enclowm, ARMSTRONG CORK CO.; plembing Extures, AMERICAN RADIATOR and STANDARD SANITARY CORP., CRANE CO., KOHLER of KOHLER; gas floor furnace, COLEMAN CO., INC.; electric baster, THERMADOR ELECTRICAL MFG. CO., regulators, MINNEAROLIS-HONEYWELL REGU-LATOR CO.; water baster, HOYT MEATER CO. Other fersishings: Conserved, GENERAL VENEER MFG. CO.; eshavet fas, PRYNE CO.; doer chimat, NU TONE, INC.; garbage disposal unit, GIVEN MFG, CO.



TYPICAL application of Modern-Crete panels for outside wall construction. Note Build surface of material around entrance and an rounded surface of corsec, right

The development of an exterior wall panel that may be handled on the jeb by one man is announced by this firm. Easily cut and sawed, each panel will support an appreximate on-end load of 50,000 pounds

DECORATIVE effect over fireplace in corner of living room is achieved with new Hightweight approprie. Cost of material is comparable to trame construction

ht Aggregate w Versatility

SUCCESSFULLY used in more than 2,000 homes, a new type lightweight aggregate material for exterior walls and other construction uses is now available to the building industry. After a fouryear test period in laboratory as well as on-the-job use, the recently introduced product meets FHA requirements in the United States as well as requirements of the National Research Council in Canada. Called Modern-Crete (patents, trade - marks, copyrights applied for), the material is formed by a method of uniting a lightweight aggregate with Portland cement to gain structural strength, insulating qualities, weathering qualities, and workability in field use.

A significant product, formed with the lightweight aggregate material, is a panel for exterior walls to be used in constructing homes with or without basements. Each panel is 16 inches wide, 356 inches thick, and 8 feet long, and weighs approximately 140 pounds. According to the manufacturers, Modern Crete, Inc., Flint, Mich., a standard panel is capable of supporting approximately a 50,000-pound load, on end.

To construct an outside wall with the panels where conventional wood floor is used, a steel channel is bolted to the outer edge of the foundation (see detail drawing), and the panels are positioned vertically with ends held in the channel. Where the wall panels are used with concrete slab floors, the steel channels are bolted directly to the slab.

At the top of the panels, another steel channel is placed the length of the wall, and serves to hold the panels in perfect alignment. To this top channel, steel roof framing may be welded, and for wood framing, a 2x4 plate is nailed on top of the channel.

Three separate seals are made between the panels. A pre-shrunk mastic is used at the joint on the outside; plumbers cakum is packed in a recessed pocket on the inside where panels join, and over this, on the interior side of the joint, black mastic is applied with pressure. An advantage of this, the manufac-

turers say, is that the walls may be erected in any temperature since no mortar is used.

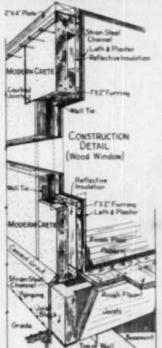
The panels are nailable, and may be easily sawed. Modern-Crete lintels are supplied for window and door openings, and to continue a wall under a window, the lightweight aggregate material may be cut to size.

The interior side of the panels may be finished in several different ways to suit the demands of the home buyer. In developing the material, considerable thought and research centered around the need for a material that would incorporate the necessary structural strength, insulation qualities and other desirable characteristics, and at the same time permit the use of conventional interior finishing. Since the panels are nailable (they are hollowed out on the inside surface to provide an air space), conventional lath and plaster may be used by furring out as in other masonry construction, or dry wall construction may be used. In numerous cases, the manufacturers say, the material can be used without any additional treatment on the inside other than painting.

Another thought carried out by the firm was to develop this material around products, such as Stran Steel channels, that are available throughtout the country. This material is highly adaptable from a standpoint of appearance to glass block; and since the panels may be easily sawed, openings for glass block may be made wherever desired.

Satisfied that they have a valuable product, the intention of the company now is to set up franchise manufacturers as licensee holders to make the material readily available to all builders.

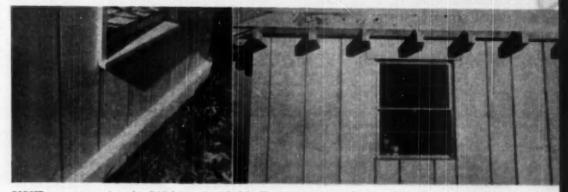




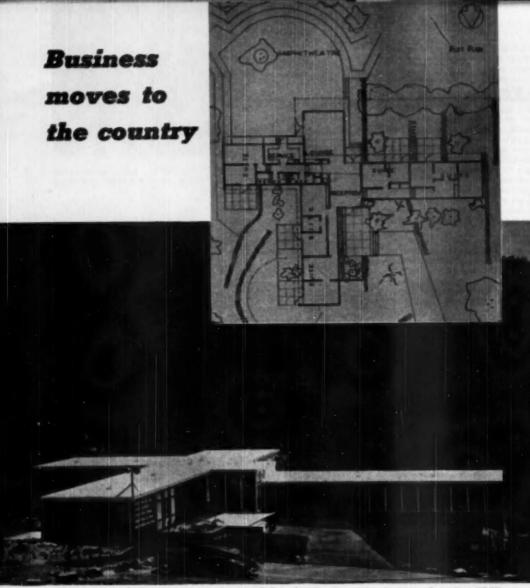
-18 Ma IN-CH Bottom in hold by steel cham







PARGET or connect growt is used to finish bottom of panels, left. Wood real feating members are used with panels, right, Li and different width panels for lower part of window are provided. Modern-Crote is autishie appropris and may be easily are ola, right, Lintel MARCH 1958 113



OFFICE building, loss than two miles from downtows Hollywood, Calil. offers many advantages. Cost about \$30,000

OW to avoid cramped downtown office quarters with accompanying parking and commuting problems is illustrated by an office building near Hollywood, Calif. The words "near Hollywood," instead of "in Hollywood" are the answer. The building, less than two miles from the dowotown area, is close enough for occupants to conduct necessary busingss in the city, yet far enough out to provide abundant parking space, an excellent countryside view, and construction on less costly land.

The owners, closely associated with movie production, employed Gregory

114

Ain, architect, with Joseph Johnson and Alfred Day, collaborating, to design a modern, low-cost building of a type for which their firm has achieved an outstanding reputation. The budget was limited and the requirements were considerably beyond what is usually considered necessary in an office building. Yet the building was completed early in 1948 at a cost of about \$30,000. It was built by the Aldon Construction Company of Los Angeles.

Of frame and stucco construction, the building is built on a concrete slah. Walls are plastered. Ceilings are fibre insulating boards in 4-foot squares. Built-up roofing, with crushed white rock over it for insulating, is used. Four-by-four-inch posts are placed four feet on centers in all glazed walls and joined to the lintels and foundation with exposed steel straps and carriage bolts. There are 3.840 square feet of area in the building. The stucco is painted gray and tan.

From the large parking area, this building has the appearance of an unusual residence. The landscaping, the attractive colors, large porch, wide glass areas—all contribute to this A 5-cuite office building on a site less than two miles from downtown Hollywood cest only \$30,000 to build. In addition, owners got a building of practical design with a countryside view

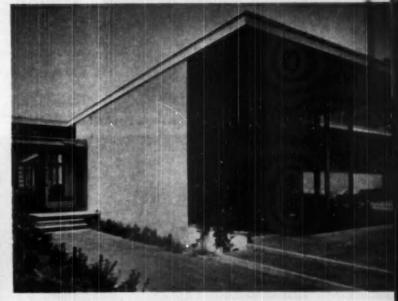
effect. The spacious reception room serves all five organizations using the building. Suites are reached by corridors leading from the reception room.

The lounge, which is frequently used as a meeting room, opens on to a wide paved area constituting an amphitheater since it is enclosed by the surrounding hills. It is planned to cut the banks into arcs of seats so that meetings can be held outdoors when the weather is favorable. Adjacent to the lounge is a service room from which refreshments are served to the lounge and amphitheater. A portion of the south wall of the lounge includes a truss, the triangular spaces of which are filled with glass. This truss is necessary because the entire south wall is glass, preventing any other type of bracing from being used. Glass is used liberally but oriented

to avoid the afternoon sun. Only one suite has windows facing west, and these are merely auxiliary windows since the suite also has windows on the east side. Each suite has its own concrete patio so occupants can take full advantage of the California weather if they so desire.



CORRECORD load from this spectrum reception room to each of the five suffer





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TRIANGULAR spaces of trans at and of re-

MAECH 1958

GLASS over adds on





ENTRANCE displays above oticast visites to Library of Rome



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Thousands of prospective home buyers visit display at Dime Savings Bank of Brooklyn, which offers information on the homes of 70 builders—prices, finensing, location, equipment, architestural style and construction details

UNUSUAL, striking and effective are the words which best describe an important sales medium used by home builders on Long Island.

It is called The Library of Homes and Home Buyers Exhibition. It is a permanent display jointly sponsored by the Long Island Home Builders Institute and The Dime Savings Bank of Brooklyn, N.Y., and is located just off the bank's main banking floor.

The exhibit has been in operation since May 21, 1948, and in those 20 months, approximately 65,000 potential home buyers have visited the display, and 10,000 mail and telephone inquiries have been answered.

Redesigned, refurbished and relocated a few weeks ago with 75 percent more space, the exhibit is now being visited by an average of 2,139 persons a week, or 428 daily. During its first year when located on the bank's second floor, average weekly attendance was 1,363.

The Library of Homes (a name copyright by Otto J. Hartwig, executive secretary of the Long Island Home Builders Institute) is regarded as such an important home sales medium by George C. Johnson, president of The Dime Savings Bank, that the bank has spent \$8,000 on redesigning, rebuilding and enlarging the display. The Institute has spent \$2,000 on display panels for its members. During the coming year, the bank plans to spend \$75,000 promoting the exhibit through newspaper, carcard and billhoard advertising.

Efforts have been stressed to completely divorce the exhibit from the home show idea. It is a central clearing home where home-seekers can examine at leisure all data available regarding the offerings of 79 builders who are participating.

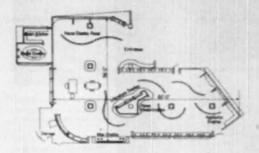
The central idea is to allot a 27x42-inch panel to each builder. This space costs him nothing. His only obligation is to supply material for the panel and keep up-to-date material in the hands of the staff, paid by the bank, in charge of the exhibit. As fast as new material is received

TWO views at 27x42-inch panels proposed by individual builders who keep up-to-date material in hands of bank staff

AMERICAN BUILDER

BANE dom

Promotes Home Sales



PLAN of Huma Buyers Exhibition, incuted just all main finer

it is placed on the panels by Oswald Chambers, Valley Stream, L.I., who designed and built the elaborate display.

Panel space is available free of charge to every member of the Institute, or any builder who places mortgage business through the bank. It is not necessary for Institute members to do business with the bank, however. Currently, only six non-members are participating.

The curved panels surmounting pedestals of modern design are hardboard covered with gray succe cloth and framed with narrow chromium strips. Tops are seven feet from the floor. Above each panel is the name of a specific builder's development. On the panel are thumb-tacked exterior and interior photographs of his house, floor plans, name of the builder and a list of specifications and features of the house. Colored paper strips and background pieces help set off the panels. Other information includes facts on plot size, price, financing arrangements, distance in commuting time from Manhattan, cost of weekly and monthly commutation and other transportation data, information on schools, shopping and churches, brand names of equipment, materials and all other details that will help answer questions on a specific home. A paper shield bearing the Institute's insignia identifies the builder as a member.

Each panel is a separate unit with two sides, space on each side being assigned to separate builders. The panels are movable and can be arranged any way desired. They are grouped in pleasing curves with four to 12 panels making up a section.

Chambers made full use of modern color, lighting and design. The 5,238 square foot room has walls of blue-green and gray in jewel tones, with occasional splashes of bright yellow. Fluorescent lights are recessed into the acountically treated ceiling and incandescent spotlights are focused on bays and displays along the walls. Within the bays are simple, quickly-read tables and other graphic information showing the cost of home ownership.

A particularly striking wall display is a 12 foot by 16 foot spotlighted map of Long Island, 13 feet 6 inches long cut out of 1-inch plywood, showing every community on the island. On it are green and white plastic numbered buttons corresponding to similar buttons placed on each builder's display panel. This permits quick orientation in locating specific developments.

For the builders, a master loose-leaf book is maintained by Mrs. Vera Maloney, who is in direct charge of the Library of Homes. This book in cross-indexed by localities, builders' names and price ranges. Each sheet earries complete information about an individual builder's listing.



DETAILED map of Long Island conveniently locates housing developments performed by building' panel displays

It is used principally for quick answers to mail and phone inquiries, but also is an aid to visitors who ask about developments in a certain community or within a specific price range.

In addition to the builders' displays, the bank maintains a large rack in the center of the room filled with literature from manufacturers of materials and equipment. A few manufacturers have displays along the walls and, two alcoves are used to show model room furnishing. These displays are changed from time to time, but the builders' panels are changed only as new data is received.

Visitors are encouraged to spend as much time as they wish browsing through the sleek exhibit. Comfortable chairs are provided together with many authoritative books on home construction, design and interior decoration. A house plan service is maintained, while story and picture books are provided to entertain children while their parents inspect the exhibit.

The Library of Homes is open during banking hours-9 to 3 daily and until 7 p.m. Thursdays,

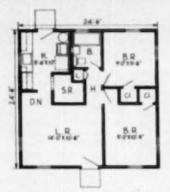
No effort is ever made to sell a visitor a home. Mr. Johnson, president of the bank, sums it up thus: "The exhibition is designed to save home-seekers money and time. It should not be construed in any way as an attempt by the bank to sell houses. We feel, however, that by making available the fullest possible information on the values offered by the several builders, together with details on financing and other information pertinent to home ownership, we are performing a distinct public service. A visitor is under no obligation whatever."

The Library of Homes opens back from the bank's elevators which are used by hundreds of people every day. While waiting for elevators, hank customers obtain a wide view of the colorful, brightly lightled displays and if they are at all interested in home ownership they pay it a visit.

"Prospective home buyers like the atmosphere," says Clinton L. Miller, vice president of the bank in charge of promotion and advertising. "They like to sit down and talk over their problems secure in the knowledge they are not going to be high-pressured. The staff never attempts to sell a home, nor recommend one offering above another. The Library of Homes and Home Buyers Exposition is simply a place under one roof where the public can shop builders' offerings the same as they shop a department store."



PRAN-MINI house of D. C. Burns Reality and Treat Co. contains 501 square fast of floor space. Two wall-type floor furnaces with 17.000 K.T.G. commeity each provide heat. Bidlan. autoesta schooles



FLOOR plan shows large controlly located storage room of Fran-Mini house. Concern for apare economy characterizes design

Price Cuts Follow Construction Economies

OW can quality housing be provided for veterans at costs of only \$400 down and monthly payments not in excess of \$53? This was the problem posed and solved by the D. C. Burns Realty and Trust Company of Denver, Colo.

This company has succeeded in marketing a four-room house, containing 500 square feet, located on a lot 50 by 175 feet. The price is \$7450, including refrigerator, gas store, automatic laundry, concrete walks, and grading.



PLASTIC the were used for wainacoling in both of Fram-Brant house. Note shower installed over tak and investory with tray



THIS From-Mini kitchen in equipped with automatic womher, refrigerator, gan slove, and 30-pallon automatic hat water hester

The goal of the company is to reduce the cost of this house to \$6500 following further construction economies. However, this will probably also mean omitting the refrigerator and gas stove, but the house will then be priced low enough to enable non-veterans to purchase it with minimum payments.

The original price of these units has already been reduced \$500 following a reduction in the cost of materials and production during the summer of 1949.

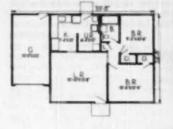
Economy of operation is achieved by using a square house design in which linear feet encompass the maximum amount of interior space. The one standard plan used is adapted to modular construction in which framing and openings are adjusted to standard material sizes.

The company prefers to organize its projects around groups of 25 houses in scattered areas. A slightly staggered system is used, i.e., the first house of the second project is started when the first house of the first project is completed. This method insures a continuous work schedule and sales program.

An unique feature of the Burns' AMERICAN BUILDER



LARGER Burns house of appending functional design salis for \$9300, including on attached gamops with upward acting deer

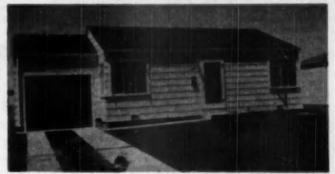


method is the bundling of materials. Four major packages of precut supplies in quantities based on accurate estimates are delivered to each job. The bundles are: floor joists and subfloor, partitions, roof framing, and finished materials. Delivered in reverse order, the material is stacked in order of use.

Two factors are essential to economy construction according to Franklin L. Burns, president of the company. These are : accurate material lists and accurate and complete cost estimates. Recognition of these factors have contributed to the success of the Burns company's operations.



THE house with its unique causer window som National Association of Hame Builders first place regional award. Black consuments at side of attributory units familels, ventileting



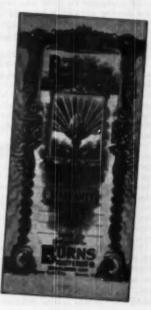
ASBESTOS shingles were also used as siding as Burns' Fran-Brent house. He chimney protradas fram real as house is hosted with ges. Convenent windows used throughout.

EVERY purchaser of a Bures bottes-built busqulow is given a written construction warranty. Provisions are: adjustments to be made without charge during first six months, periodic inspections for three years, planned service asrungement on machemical reports, construction charges



MARCH 1980

PRANKLIN L BURNE, president of D. C. Jurns Backy and Trust Conpany, is shown of loft receiving award from Advertising Club of Deaver gives is recognition of building achievecostin and excellent services



The Best is Yet to Come

By R. E. Saberson

OOKING for something to sell ... something that will enable you to compete favorably for a share of the consumers' dollar?

The race is fast and furious. Industry after industry is moving in. New automobiles . . . new television sets . . . new electrical equipment . . . new everything !

Never were the advertising pages more attractive. Or the

display rooms more inviting. Or the TV screens more crowded. On every side Mr. and Mrs. Ultimate Consumer are deluged with invitations to consider this or that intended to provide greater comfort, faster transportation, more enjoyment, greater huxury, substantial economies.

It is all very interesting ... a complete verification of the statement we read near the close of the war in which it was predicted that the "last gun of the present war will be the opening gun of the greatest industrial battle the world has ever seen," or worlds to that effect.

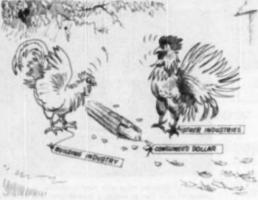
Of a certainty the hattle lines now are forming although it no doubt is true that the intensity of the struggle is nothing as compared with what it will be later on.

All of which means that, in most cases, the long-awaited postwar goods are now here. Such being the case, it behooves the bome building industry to stop, look and listen in an effort to determine how its products measure up in comparison with the many new things that have come onto the market.

Can the home of today compete successfully with the newest models in automobiles, for example? It may sound a bit farfetched to assume that they really are competitors, but the fact remains that the family which has extended itself to buy a car a bit larger than they intended doesn't turn right around and buy a new home the next month or possibly the next year.

The fact that the family splurged a bit in the purchase of the car was no doubt due to the all around newness of the automobile. It was more luxurious, roomier, classier, faster and a lot of other things. True, it cost considerably more than had been expected, but this was rather easily overcome by the efficient salesman who has now forgotten there was such a thing as a seller's market.

Two factors stand out in this transaction . . . (1) the car itself and (2) the salesman who got the order. Both are far different in every respect than they were not so very long ago



BATTLE lines are forming now

when demand exceeded supply and shortages reared their well-known heads to annoy the ultimate consumer no end.

Nor is it necessary to stop with automobiles. The same thing is true of practically everything else. Products have come a mighty long way since the end of the war. Unfortunately, the same thing cannot be said, at least to the same degree, of the salesmanship behind them.

How about houses?

It's a good question for the simple reason that a great many prospective home buyers still remember the four walls and a roof that were being sold as "homes" during the peak of the great housing shortage. It has been a bit difficult to get them back in the notion of buying a home ... especially with so many new things claiming their attention ... things that can be featured as a single unit in the advertising pages or put on display in Main Street store windows.

With all this tumult and shouting going on it was only natural that countless home prospects should transfer their attention, for the time being, from the aforesaid four walls and a roof to something that could shed its prewar garb with less trouble and in much shorter time.

In the meastime, something was happening to houses too, although at a bit slower pace. Perhaps the pace actually wasn't slower after all, but somewhat more piecemeal. Houses, naturally, are made up of a large

number of component parts. They are constructed to perform a variety of functions. While it was more difficult to appreciate the wast progress that was being made in the improvement of each and every one of the parts themselves, it nevertheless is true that the struggle for improvement was just as great as was taking place in every other industry.

If there should be any question concerning the accuracy of such a statement it merely is necessary to pick up the current issue of any magazine dealing with the subject of homes and thumb through the pages. Here

will be found the answer to "are homes keeping up with the procession?" It might not be out of place at this point to make the unqualified claim that they are not only keeping up, but in many cases are actually leading it.

Naturally, this appraisal does not apply in all cases. Homes vary in quality just the same as everything else. But this much is true. It now is possible to build into a home as much "newness" as is available in anything else that is produced.

As we leaf through the pages of the magazine that lies before us we find it difficult to pass from one page to the next. Each is a new adventure ... a new thrill that adds to the joy of home planning.

No part of the home has been neglected. We read about new methods for heating and cooling, important window developments that change completely the whole concept of fenestration. Doors, too, have come in for their full share of attention. Even hasement windows have not been overlooked. Kitchens are overwhelm-

(Continued on page 146)



BROAD front lowns berdened at the street with large trees helped sell customers at the Reyntone development of F. L. Palmer and Son

Developer uses brick veneer, aluminum windows, in entire project, but for insured sales he depends on . . .

Diversification

NO MONOTONY of duplicated facades can be found in the Keystone development of F. L. Palmer and Son. Both Mr. Palmer and his son and partner, Richard Palmer, are aware of the problem all developers face-the problem of producing the maximum amount of home for a minimum price with enough variation in the units to sait individual family tastes. This company has perhaps the only workable solution.

In this Keystone Avenue development in Indianapolis, no two houseshave the same exterior. In addition, every house has an individual floor plan derived from one of the seven basic plans used in the 18-unit project. Further, a variety of brick types and roof treatments were used to insure that this would appear as a diversified home development.

Another exceptional selling feature of these houses was the size of the lots. 50 by 212 feet. This unusual lot depth made it possible to locate the houses well back from the street line, giving the project an air of spaciousness without infringing on the long rear lawns and children's play areas. Palmer, who has been an Indianapolis builder and realtor for 44 years, recognizes the need for "extras" as prerequisites to a successful sale of project homes. "Extras" include Magic Mirror door knockers, showers, automatic gas water heaters, and clothes chutes.

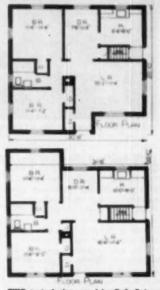
These houses are equipped with aluminum double hung windows and storm sash and screens. All sills are of marble. Casements have been climinated by the use of an aluminum molding. Interior doors are birch or gum flush type.

Although white oak is used for flooring in the main living areas, the kitchen and bath floors are of linoleum laid over 3/16-inch Masonite, preferred by the builder for its amouthness and handling case.

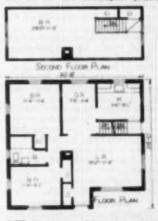
The purchase price of the homes included a concrete block garage with an upward-acting door. The houses, ranging from 750 to 1100 square feet in area, were sold at prices from \$10,750 to \$12,800 with FHA and VA loan insurance programs.



MARCH 1958



TWO typical plans used by F. L. Palmer and Son in their Indianapolis project



LEPT, this is a typical 115-story unit. Sour plus above, of these built by F. L. Paimer



Double-Glazed Window Details



Elsis and drawl gh murteur of Pintshe orgh Plate Glass Co., Pittsburgh, Pa GENERAL TWINDOW FACTS

FOR maximum thermal insulation of all large double-glazed windows, an air space of one-half inch is recommended. Standard sizes established by manufacturers of these units apply only to a construction of two pieces of onefourth inch polished plate glass with a one-half inch air space.

The use of sash especially designed to accept double-glazed window units insures that the window will float in the opening free from glazing stress. Sash should allow adequate glazing clearance and provide protection against excessive glazing stop pressure on the glass.

The exclusive use is recommended of elastic glazing compound which permanently retains its resilience. Two lead or treated wood setting blocks should be placed onefourth of the width in from each end of the unit.

The success of an installation is dependent on protection of the hermetical edge seal during han-dling, followed by satisfactory glazing. Even though seal and glass edges are well-protected by a stainless steel channel, reasonable care should be exercised during handling and installation.

Glazing Instructions

Openings must be square, free of twists and glazing obstructions. Units should not he set in flimsily 122

Insulating value of Twindow compared to single glass

Time	题	111		
SINGLE	56". 56		1.14 1.12	
DOUBLE (2 Pieces Glass) (1 Air space)	56" 54"	14" 14"	.63 .61	41% 46%
	16 ¹⁴	6 "	.57	50%
	54"	16"	.35	5156
TRIPLE 5 Pieces Glass) (2 Air spaces)	14" 14"	4" 16"	45	62% 63%
	5"	16"	.38	\$796
	15"	·**	.37	67%

VALUE IS S of loss 0.1491 F. . gree F. 15 MPH

constructed frames, inadequate to bear their weight, nor in frames of green wood which will warp later in drying out, thus causing a strain in the window setting.

To avoid glass breakage, the units, especially the large ones, must literally float in the opening.

Only a small amount of glazing compound should be placed at the back of the glazing rabbet. This will allow the unit to be positioned more easily than if glazing rabbet



TYPICAL section



TYPICAL as window inspe 24 wide such, to be used as ver unit in coni .

is full. The next step is to fill the void behind the edges of the unit and to apply face glazing compound before the stop is set.

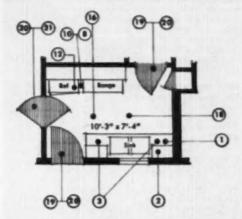
The window's insulative qualities reduce the tendency for condensation to form and, under normal conditions, virtually eliminate frost formation on room side glass surfaces.

Standards for Kitchen Planning

A RECENT analysis of kitchens in small mass-produced houses by the University of Illimois Small Homes. Council shows that in general they are inadequate and poorly arranged. Kitchens of 103 plans were studied, the standards of judgment being those of a previous Council storage space study, other research, and architectural design handbooks.

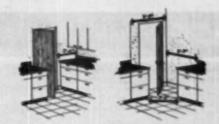
Specific facts pointed out by the survey were that storage space, particularly in base cabinets, was insufficient; too little counter was provided; the assembly of equipment in most cases was poorly planned; and the rooms themselves were not well planned.

In some cases, an acceptable kitchen could have been made in the same room by simple rearrangement of equipment. However, in a majority of plans, the errors were due to faulty architectural planning, such as the size and shape of the room and its location in the house plan. To correct these, major structural changes would be required.



ABOVE: Foults found in kitchen of one of 153 house plans studied in University of Illinois Small Homes Council analysis. These correspond to numbers (below) in list of faults found in all plans

Horege	No. of Pie
1. Insufficient base cabinet storage 2. Insufficient wall cabinet storage	
L. Interfficiant wall cabinel starage	
and the second se	
). Too small amount of counter (total)	43
6. No counter to right of siek	
8. Too little counter to right of sink	
6. He counter to left of sink	18
7 Tax little counter to laft of sick	47
8. No cousier beside range	41
8. No counter beside range 9. Too little counter beside range	12
8. No counter basido refrigerator	84
1. Tao little counter beside refrigerator 2. Refrigerator door swing furang direct	
 Refrigerator dear swing (wrang direct) Distance between refrigerator and sink 	iam) 50
3. Distance between refrigerator and sink	too graat or small 37
4. Distance between sink and range for q 5. Distance between range and refrigerator	reat or shall 10
. Insufficient space in front of cabinets of	the grade or prise of
a. commenter aparte in train et unbringen e	and addressed of
irchilocharal Space	
7. Insufficiant window area	87
R. Yeallic through work area	67
 Corner doors that waste wall space w for cableats 	hich could be used
for cableats	
8. Too many doors 1. Doors which interfers with uso of cabi	
1. Doors which interfare with use of cab	inels, or with
each other	
E. No room to add cabinets and counters meet requirements.	maded to



SOGBL left. II properly orange, do not initialize with the use of equipment. Decen in connex, right, take up well space which rough he more advectorproperly utilized for exhibit time.

Planning Space

In planning the architectural space, the following factors are essential to maximum convenience and efficiency:

The kitchen should connect directly with the dining and service areas.

There should be easy access to the front entrance.

If there are children in the family, the kitchen should be located so that play areas are in view.

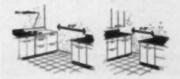
Arrangements should be avoided whereby the kitchen becomes the main thoroughfare to the vest of house.

Doors and Windows

Most kitchens require two doors—one leading to the dining area and one to the outdoors (either directly or through a utility room or service entrance). A third door is seldom required: unnecessary doors break up the assembly of equipment, waste space and interfere with traffic.

There should be as many windows as possible without reducing the required amount of wall cabinet space. Whenever possible, window area should equal 15 or 20 per cent of the kitchen floor area.

The minimum amount of wall, exclusive of doors, re-



RECOMMENDED clearances for enhinets and applicances

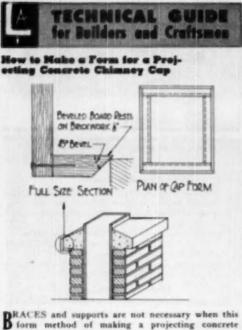
quired for base cabinets and appliances in a kitchen having "fiberal" storage facilities is 20 linear feet; for "medium" kitchens 17 feet, six inches; and for a "limited" kitchen, 15 feet.

Location of Cabinets and Appliances

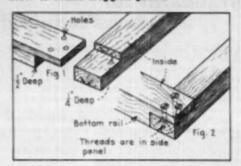
Distribution of cabinets and appliances hinges largely on location of work centers; normal sequence of work centers is from left to right. The mix center is at the right, followed by sink, range and serve. Centers may be isolated if they are complete.

For clearance between cabinets or appliances opposite each other a distance of four feet is recommended. The clearance between cabinets at right angles to each other but separated by a door or work area should be at least three feet (standard door width plus minimum casing); clearance for appliances in this position should be four feet.

The above material is esprinted by permission of the University of Illi units Small Homes Council from its circular (3.13, "Kathen Planma Standards," Other circulate available for 18 contes out, Write Small Homes Council, Mumford Mouse, University of Ullimia, Urbana, IB.



BRACES and supports are not necessary when this form method of making a projecting concrete chimney cap on top of chimney is used. The bottom board is beveled to about a 45 degree angle and rests on the top course of brickwork for a distance of $\frac{1}{2}$ inch of its surface. This is sufficient to hold the weight of the poured concrete. It eliminates the need of nailing supports in the joints of the fresh brickwork and the sub-equent patching that follows. It permits the mason to finish the chimney without waiting for the carpenter to set and brace the form. The form can be made by the carpenter and taken to the job before the chimney is completed.—Submitted by James E. Hancock, Mt. Dora, Fla. How to Make Lupped Joints



APPED joints in window screens and panel doors can be made stronger by cutting them in the manner shown in sketch. This method suggests the use of odd thicknesses for laps in place of the usual arrangement.

As noted in Fig. 1 the short piece is routed out at hpped end with only ½ inch thickness of wood remaining, while the side rails are shaped with ½ inch of material left on end after routing. Drill three small holes through the short tails to prevent splitting. In this manner the threaded portion of the wood screws are tightly imbedded in the thick portion of the lap.— Submitted by Herbert E. Fey, New Braunfels, Texas.



HOW TO DO IT . HOW TO DO IT

No. G-5 . . . Exterior Display Unit

THE PROBLEM: To remodel the lower portion of an out-moded building to house a modern women's ready-to-wear specialty shop. Two floors are required for major selling and display purposes, with the display areas of both made integral with each other. The front wall of the second floor is to set back from front property line, permitting the second floor display to be in the line of vision of potential shoppers without encroaching upon the normal pedestrian traffic of sidewalk. Free standing display case to be installed in open area of front.

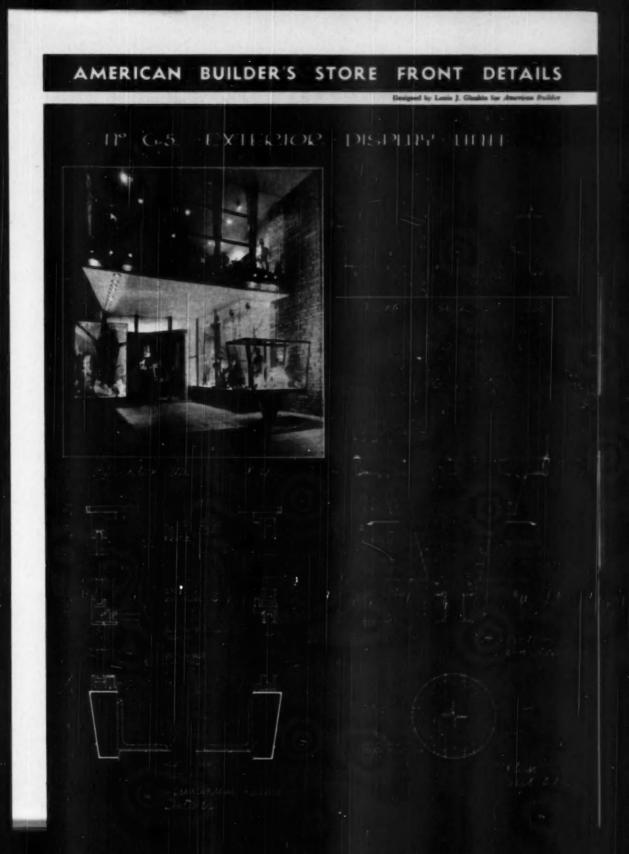
THE SOLUTION: Steel girders and a portion of second floor construction were removed and new steel beams installed. A two-story all glass front established which is separated only by the ceiling and floor construction. Stairs to second floor sales area are placed conveniently at one side of the entrance doors.

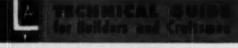
The free standing display case, shown in Detail, proved to be one of the outstanding features.

MATERIALS AND COLORS: Herculite glass entrance doors are placed between solid oak door frame members finished natural. The angled white pine wood mullions between second floor windows. are painted a chartreuse shade. The Crab Orchard stone finish placed on side of structural piers extends into store beyond the glass line. Stone is slotted to receive stone and then caulked. Terrazzo floor and bulkheads are finished in red verona with white Portland cement and red color pigment added. Show case pedestal is white terrazzo. The frame for glass case is Alumilited aluminum with steel reinforcing. Structural steel channels are imbedded in the concrete floor slab directly under pedestal with supporting angle irons extending up through the pedestal. (See detail drawing.) First floor vestibule ceiling is of Keenes cement painted eggshell white; second floor ceiling is painted chartreuse. The built-in flower hox extending across front conceals spotlights.

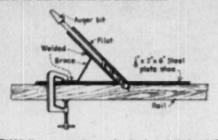
AMERICAN BUILDER

124





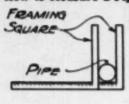
How to Bare Holes in Stair Rail



THIS jig assures the mechanic that all holes drilled for vertical halasters in the top face of bottom angular rail are placed at the same angle. The jig consists of a steel plate shoe, a metal brace, and a 36-inch inside diameter metal pilot. A hole is drilled through steel plate shoe at proper angle, in which metal pilot can fit. Brace is welded to plate and pilot to maintain the proper angle to conform to the run and rise of stairs.

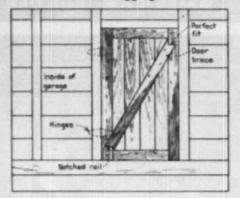
To operate, insert a drill in the pilot of the same diameter, and drill holes in rail as required to proper depth. Steel plate is held in position on the rail by "C" clamp. This jig is moved along the rail and clamped into position for drilling hole for each baluster.—Submitted by Chas. Klein, Albion, Pa.

How to Measure a Pipe



To measure a pipe quickly and accurately use two steel framing squares placed one on each side of pipe, to be measured as shown in sketch. The size of pipe can be determined from reading on square.— Submitted by C. A. Markley, Lehighton, Pa.





1

DOORS that are constructed of shiplap or center match boards have a tendency to sag at the front end, even when a diagonal brace is used. This difficulty can be overcome by employing the method suggested in the above sketch.

The ends of the diagonal brace are cut as shown, and then laid on the two side rails and marked off. The rails, which have been temporarily placed in position, are removed and the marked notches cut out with a saw. If the diagonal brace fits perfectly in the notch on rails, the door will not sag.—Submitted by Herbert E. Fey, New Braunfels, Texas.

> Two new features of interest to our How-To-De-It readers are included elsewhere in this issue. One, "IDEAS FOR APPRENTICE CRAFTSMEN," deals with elementary construction methods. The other, "READERS DISAGREE," is a controversial feature where the pro and can of our How-To-De-It ideas are discussed by the readers.

HOW TO DO IT . HOW TO DO IT

No. D-63... Distinctive Details, Closets and Drawers

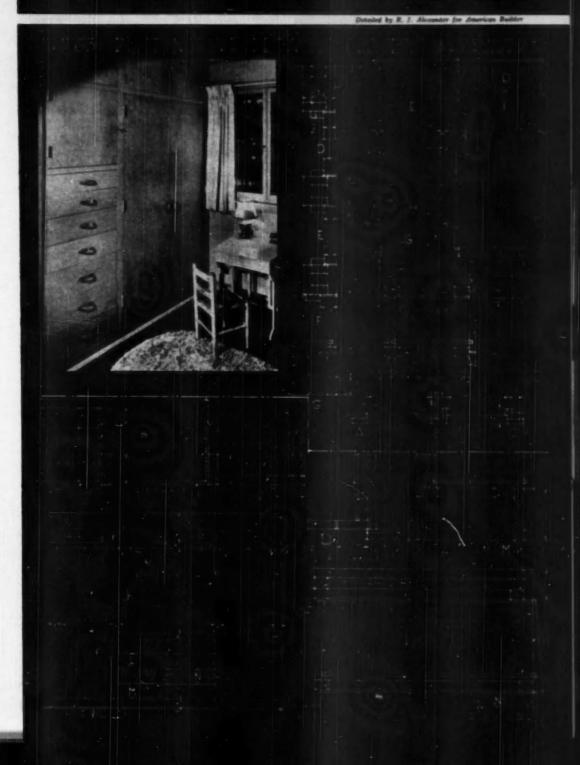
WITH the increased popularity of the basementless house, planned storage space, storage walls, builtin cahinets, wardrobes, drawer cases and closets, either all or in part, are a distinct "must" in the planning of a new home. Most experts agree that two thirds more dead storage space can be provided in a basement than on the first floor for an equal expenditure of money. These same experts are also agreed that the smaller amount of storage space on the first floor is preferred to the larger amount in the basement because of its convenience and accessibility to the occupant. This all sums up to the fact that planned storage space is here to stay.

The photograph and details shown on the upper half of the detail plate on opposite page cover the cabinetwork in a child's nursery. These cabinets would be equally adaptable to a recreation room, a bedroom, or a sewing room. In fact, a combination study and guest room would be more livable with a wall composed of built-in units.

The lower half of the detail plate shows an alternate arrangement for a complete installation with drawers in the lower section of the center unit, and open space above for use as a dressing table. Two complete storage units flank the dressing table on each side. A mirror can be placed on rear wall of open space if desired. While 34-inch-thick plywood doors are shown in detail, this could be changed to a core door. Birch trim, doors, and finish are used throughout. All wood is left in a natural finish.

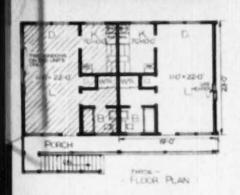
Standard built-in units or storage wall cabinets can be obtained in a large variety of sizes and types.

AMERICAN BUILDER'S BETTER DETAIL PLATE











Builder Invests in Apartment Units

> d for protective investment in case of ilding slow-up prompts California co to construct own apartment units

E. CLARK, a builder, is pre-. pared for the day when the volume of building in California declines. He has constructed 64 rental units as a personal investment. Formerly located in Nebraska, since 1945 Mr. Clark has been building tracts of 20 to 25 houses in the \$10,000 class in California. He is prone to believe that the market for this particular type of home may soon be surfeited, and therefore, he felt the need for a protective investment. These Greenbriar apartments are his "cushion." They are located near Hollywood.

Five two-story buildings were erected on a plot measuring 188 feet by 120 feet. A swimming pool, used by the USO during the war, had already been built in the southwest corner of the area. This, of course, does much to enhance the apartment project. The southeast corner is payed for use as a 64-car parking lot, serving the units.

Before undertaking the project, Mr. Clark made a survey to ascertain what type of dwelling unit was in demand. His inquiry revealed the need for small furnished apartments. Only ten of the Greenbriar apartments are not furnished. The buildings are of colonial design. Porches stretching along the fronts at both the first and second floor levels provide access to the apartments. Ornamental woodwork, similar to the balustrades of the porches, is used at the roof line. The roof itself is of red cedar shingles. The woodwork and exterior stucco are painted white. Foundations for the buildings are solid concrete walls. Interior walls are plastered over Gyplap manufactured by the United States Gypsum Company. A 1-inch 26 gauge wire is employed on the ceiling.

Mr. Clark gave special thought to sound-deadening. All partition walls are packed solidly with six inches of rock wool. A 4-inch blanket serves between the floors. Flooring consists of 1/2-inch plywood laid over 1 inch by 6 inch subflooring. A 40-ounce walle rug pad and carpeting provide an attractive floor covering for the dining and living areas. To compensate in height for the lack of padding and carpeting in the kitchen, an additional 36-inch utility board was laid over the subflooring before the plywood and linoleum was applied.

The kitchens, designed-in partby the Southern California Gas Company, are equipped with gas refrigerators, gas ranges, and gas water heaters. Waste King disposal units (manufactured by the Given Manufacturing Company) are installed in the sinks. Ceramic tile decorates the sinks and backsplashes.

Glass shower doors over the tubs are part of the bathroom equipment that also includes electrical heaters and tile floors. A single gas wall heater installed in each living area provides 20,000 B. T. U.

The project is evaluated at \$480 .-000. Rents range from \$100 to \$135.

AT LEFT, top. 60 foot a 30 foot swimming pool encs used by USO now enhances walk of new sportment units in Colifornia. Bottom, wast side view of Greenheise aparts with floor plans of typical compact sait immediately shows



ALUMINUM STORM SASH A835001 Eagle-Ficher storm tash, which fastees per-manastiy to outside of morable hinged catement, mores with window when care-ment is opened for warblation. Sash is morable from inside, leaks like part of win-



dow itself, and rumains in place all year. Installed on extraine, such cannot damage interior woodwork. May be used on either metal or wood aak. Does not hamper ve-ration blind controls, nor interfere with locks and vestilating control handles. Esgis-Ficher Co., Ciscianati I, Ohio.

LIGHTWEIGHT PAINT A835004

Lightweight peint coller applies emosth cost of oil point to flat surfaces. Designed far home use, "Flo-matic" roller, Model



He-I, is especially withed for cellings because in eliminates dripping and paint running down into band. Mede of eluminum, unit weighs 25 owness and holds more than a half piet of paint under pressure in He bandle. Paint feeds through 4-inch reliev into seamless wool pile ower. Measures Vijal 2 inches. The Rubberset Co., 56 Ferry \$1, Newark S, N.J.

RESILIENT ENAMEL FLOOR A835004 COVERING

AB35004 Because of increased domand for a wider base floor covering, the Stoan-Blabon Corp. In sow producing their resiliant anamel floor covering has a fait base. Sloan-Blabon Corp. 295 Fifth Are., New York 16, M. Y.

MARCH 1958

NEW COLOR PLASTIC TILE AB39003 NEW COLOR PLASTIC THE ABSING! New inidesent caloring in Pitteburgh In-terload plastic tile, identified by the some "Mat Grey," has been added to the 60-teen existing colors included in Sen's line of both solid and marbellind effects. The new poli-tens marballing in result of form's research to Bed practical color to both bland and contrast acceptably. Jones & Brown, Inc., Pitteburgh 19, Pa.

UTILITY FURHACE A835005 Majortic Model UF-26 furnace regulars floor space of 26 inches square for installa-tion, and has beened rating of 100,000 B.T.U.'s. Downer type hurner azambity permits easy installation of either oil or gas



burner, er alleve for inter change of fuel by changing the assembly. Designed for either conventional up-flow type ad air cir-culating heating system or in never perim-ater type hooting which cells for down flow air circulation. The Majestic Co., Hunting-ten, Ind.

WATERPROOF FINISH AB36057 "Asphait-Seal," a waterproof finish for painting and wortherproofing asphalt side world and read shingles in new being marketed for use to restore and beautify dirty, washterbasten insulated beich siding. The new product stops blasding and crum-bling by sealing the pares of the series. In any product stops blasding and crum-bling by sealing the pares of the series. Will withstand atmospheric and woether conditions. Available in one and the pallen containers, the finish is ready-mixed for immediate application, and comes in three light and four dark color. Devalues Manufacturing Corp., West 42nd St. and Dyor Area, New York 18, N. Y. A835657 WATERPROOF FINISH

PACKAGED JET WATER A835007 SYSTEM

AB30007 "Rechat" packaged jot water system, de-signed for challes well installation, has one-piece housing with single-piece, cell bronze mergie and venturi built into housing to assure perfact alignment of parts. Equipped with noise dampeners and rubber mounted, unit is designed to opporte quietly. Arail-able is 1/3 and 1/2-147. sins, delivering up to 840 gallem per how. Barnes Manu-factoring Co., Mansflaid, Ohie.

HOME FREEZER

Model LFL-6, 6-foot freeser, will store up to 210 pounds of packaged forms fands in cabinet compactly built for smaller families with Emited floor space. Recommend top, at counter height, may be used as esten



bitchen work surface. It stands 36 inches high 39 inches wide and 20% inches doop. Estariors are of rest-proofed visel, finished in baked-on white enamel. Food compari-ment lines are of eleminum, with square carsers to provide direct freezing contest with battom and sides of perkeyed freeze foods. One of fuer new models in Lennard freezer line. Kabrinster, Div. of Nash-Kal-vinster Corp., Detroit, Mich.

COMBINATION MAIL BOX AB35666 "Aristocrat" combination mail bas and magazine receiver has two specieus com-pertments for both mail and magazines or



newspapers. Watertight, built of heavy gauge rustproof aluminum, fishhad in en antique bronze. Hand wrought croftense-ship appearance. Designed for the aco-omy base. Air Costrol Products, Inc., Coopersville, Mich.

CLOSET PIXTURES DISPLAY ABISEIS "H" door display available to daslers far K-Veniance clothes closet flaturen is de-R. Tentance clothes clease flatures is de-signed for use in windows, on counters or on the Boor. Foolisened to demonstrate actual installation of fintures on the closef door. R. Veniance line includes forty mod-ors, space-saving Estares for cleasts of overy shape and ulse and ell major articles of clothing. Kappe B Vogt Manufacturing Co., Grand Rapids, Minh.

eyewell Spray-Pol, easy-to-carry sp 1, weight ious than 17 pounds in an. Spray-gun is cell contained, wi TTT. russer, motor and gun in one unit. Spea a quart of paint or any sprayable figs



in four minutes at more than 50 pounds air pressure. Plugs into any 110 vult AC or DC outlet. Salico Corp., 801 Andrus Bidg., Minecapullo 2, Mine. ar Du M

A835812

CLEAN-OUT DOGE

CLEAR-OUT BOOK ARISEIZ Over-ell dimensions of this efficient ches-out doer are 10%/x1% inches; rough inside dimensions are 10x8% inches; hade of heavy 16-paops dis-present others!, doer is nabraekable. The 1%-inch 90 degree angle Range, top, bettem and sides ach as a lintel to hald door sourcely in place. Deer is easily apsend and tightly cleared and



locked by turning knob on door. Height of door allows for three courses of brick. Suporter Fireplace Co., 1708-C East 15th St., Los Angoles 21, Calif.

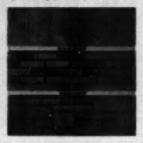
ROUTER MOTOR UNIT A825013

ROUTER MOTOR UNIT A835013 No. 8 cas-hall H.P. Staniay-Carter router motor unit factures versatility and power cambinad. Vantilating system provides powerful air blast to cool motor and beep work urfaces clean. Sealed for life ever-ties ball bearings. No oiling required. Heavy duty motor wound and insulated to withstand severe mechanical shock and vibration. Accentally ground callet type chuck will not tilp. Motor designed to fit large line of Stanley-Carter tech. Stanley Electric Taols. New Britain, Coon.

INSULATED ASPHALT SIDING A835014

Sibino Available insulated asphalt dding is available in a choice of shingle, brick or stana designs which closely match the size and appearance of the original ma-terials. Method of soluration with pena-trating exphalt under high temperatures assures complete sealing of core stech on

or natural sists grands anist capitali for durabi

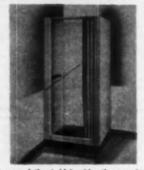


Hy, cales stability and fire resistance. Ap-plicable over wood siding, clapheard, shin-gles or ever sheathing. Pitteen by 66-insh panch provide for aufling through to studie on either 16 or 24-inch centers, requiring an even count of 20 panels to lay-op a square. Weatherpanel Sidings, Inc., 285 Chandler St., Buffalo 7, H.Y.

PORTABLE SHOWER

Shipper chowar is adaptable to summer cottages, hateh, bearief courts, and perticularly suitable for small homes. Unit new offers rounded front stiles and slightly rounded existing consers and a feasion-type top frame which bilminates screws.

A835615



Improved threshold is wider than previous model. New type valves have been speci-fically designed for shower cabinet use, and a new decorative shower cam breaker is incorporated. Walls of cabinet are of bonderized, galvaniand steel, finished with whith, bakedon synthetic anamel inside and out. Receptor is pre-cast Stenetes, and bas cash-in drain with new type strainer plate. Rist Metal Manufacturing Co., Chi-case, III. cage, Ill.

ILLUMINATED LEVEL

"Lume-Loval" has a sall-contained light for use on dark interior jobs. Finger-tip light control gives instant and accurate readings with a flick of the thumb. May be carried

A835014



in a pocket or tool kit. Unit has a lifetime guarantee. International Manufacturing varantee. International Manufacturi e. 2360 South Delewere, Denver, Cole

A838017 BINATION WINDOW

Russe combination window combines storm cosh, coven and weatherstripping in one only. Special penel provides Othered across vestilotion. Pased also has cotematic lock-ing mechanism which functions for all ves-tiloting and closed positions. Screening is



of Lamite. Matal-to-matal contact is alim-noted by use of weatherpreef felt. Wie-dow is made of Armes bot-dipped legot loss Painto-grip and Rainhed with ensmel. F. G. Russell Co., Cleveland 1, Ohie.

PORTABLE ELECTRIC SAW AB35018 Postivation inductive SAW Addisore Bradford "Infortalmaster" Model 160 port-able electric taw will cut to maximum va-tical depth of two inches and minimum vertical depth of $\frac{2}{24}$ inches. At angle of 45 degrees, maximum depth di cut is 116 inches and minimum depth is $\frac{2}{26}$ inches.



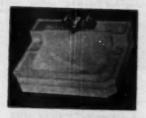
Sin-inch saw is designed with adjustable hase permitting depth of cut adjustments and havel cutting at any angle from 0 to 45 degrees. Purversed with aniversal 110 valt AC/DC mater which drives blads at 4000 RPM on load speed. Fan keeps saw-dust clear of cutting line. Length, 9 inches; height, 5% inches, width, 8 inches, weight, 10 pounds 4 owners. The Bradford Ma-chine Teel Co., Cincinnati, Ohia.

LIGHT REFLECTOR ASSEMBLY

A835019

ASSEMBLY AB35019 Jackailo feature of Guthilite reflectur as-sambly is available in Receased Troffers that feature ladderless maintenence. Trof-fer opens and swings down easily for changing lange and charters from the floor. Enfore reflector ensambly can be simply lifted down for thermugh channels are easily mounted. No wiring or essessaries to get in the way so that floes can be quickly pulled through and connected. After chan-nals are installed in ceiling, reflector ar-omabiles can be added right from the floor. The Joint Can St. Louis 3, Mo.

WALL HUNG LAVATORY A835828 Richledge well hang vitroous chine lave-fory, in sizes IBal5 inches and 1917 inches, is designed for compact, moders home and for powder room instellation. Incor-



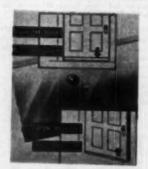
porates integral front overflow, anti-opiech rim, two reconned mag dishes, raised shall back and high-gloss finish. Also penshed for canter and fittings. Chrome plate loga and tevel hars are evailable if desired. Richmond Radiator Co., 19 E. 47th St., New York 17, H. Y.

ELECTRIC WALL MEATERS AB39821 New 250 series of factod alt alectric wall beaters incorporate optional thermostells metred, increased beating efficiency, auto-matic re-sol sofery witches, and saiootif-icelly designed alt includes. Built-in thermo-rate an models 250 KT end 250 KTW can-tred the operation of both the beating ele-mentatic an operative at all times the matter switch is in the "ON" position and may be sof to maintain any ream tempora-tive between 56 and 56 degrees. Operation of heating element and fan is automatically halted when ream temporature exceeds de-sired temporature by one degrees and is resumed when temporature faft are degrees balow that desired. Market Electric, Prod-ucts, Inc., and LaSelle Lighting Products, Inc., Buffalo, N. Y. BLECTEIC WALL HEATERS AB35021

DRAFT SEAL

A\$35822

"Stop-ADreft," a davice that operates extensically with opening and classing of dears to which it is attached, seeks out all drafts, dirt and noises. In operation, a projecting pin pressed into the unit when



the dear is closed course the fait divid to drop to the floor and soul the opening. When the deer is open, this pin springs free and lith; fell out of the way to clear the floor or floor covering. Made of beary gauge steel and math-proof fait. Two springs control the operation. Usit is two inches high. Heinch wide. Installation is simple, and may be made on doors opening in either direction. Only a screw driver is necessary. Weterloo Sales Co., Cleveland 19. Ohio. 19. Ohio.

MARCH 1950

HOME INCINERATOR

"Little-Closester" res all and wate, garbage, and rub acts as its own faal. Be bottom, dats of air enter and cal. am lag

A8398821



sees of unit to food flamms. Unit is con-nected to furnace anote pipe. May be located as cleas as four inches to con-combustible well and out clear then 12 inches from combustible wall. Motel parts are beery cast iron. Asbesto-heard outer inches. Selection of peopler colors. The Clear Mfg. Co., 4525 M. 124th St., Briter, Win.

PORSED IRON CABINET

A839924 New, (8-itam line of forgad iran cabinot hardware includes latches; 14 and 16, hinges for both that doors and H-inch



offset doors; knobs; door and drawer pulls; butterfly kinges; thumb latchas. Hardwara is designed in "heart" pattern and has black finish. McKineary Manufacturing Co., Pittsburgh 12, Pa.

PLEXIBLE GLAZING STRIP FARTER CLARING STRIP AB36025 Resible glasing strip made of Karassal may be used on both fixed and attern type windows. Strips are estraded to customer's specifications. Strip in made in blaz-arage of from zero to 180 degrees R. If fasing is required, or to any degrees R at fasing is required, or to any degrees for a trip be hold in place by mochanical means embodied either in the design of the window or strip. The B. F. Geodrech Co., Akren, Obie. A835625

SINE-LAUNDRY TRAY

A838824

mb-Loundry tray combine b-inch aint top with one spaler bitchen use, and ry purper S



is part of the will, and is removable when desired. Dalans percestein will not chip or wave off, and is resistant to esside. therehing underside cohiest has a culterly drewer, insulated dears and drewers, con-ceeded verification, and stainless cited has-dise. Streamlined feasest with spray at-techman. Trary Manufecturing Co., Pitta-burgh 12, Pa.

PREPARRICATED CHIMNEY AS35827

PREPARRICATED CNIMMET AB35827 New Eightweight chimney is chipped com-plete and installed is fear man hours or ion. Lieted by Vederweiters' Lebezotaries for all residential construction with any foul, il mests FHA minimum requirements and is ecceptable to the National Building Code. Premanant refractory chimney tile Uning is serveunded eith Eightweight, chimney insulating wall. Heat transfer is less than one-hall the heat transfer is less than one-hall the heat transfer Corp. 135 5. LaSelle St., Chinage 3, II.

RADIANT-CIECULATOR GAS MEATER A825628

Model 218 Confertner, A.G.A. approved redicat-siculater heater, has 18,000 &7.U. capacity. Given off radiant rays by four double-sizy radiants, and at the same time.



supplies circulated back. Heutral brown "Hi-Bake" ansmal finish does not discolar. Double assmad for strength and rigidity. Rind artifice cap in brass valve automat-ically regulates proper flow of fuel. Cas he ared with any of the common types of gat. Island Steel Cantainer Co., 125 N. Cortuz Sit., New Orleans 19, Le.

STAPLE HAMMER

A\$35629

STAPLE HAMMUE ABJ8629 Bostitch kassy-daty automatic stapling hammar, Modal H4, drives staplass with half-inch crown and K-inch lags. Staples are so engineered that lags divergo inside the work, putting them under tension and in-oreasing their helding power. One-hand machine operates at arm's longth. Uses in-clude application of metal lash or corro-gated paper to studding, laying shinglas, or facking fait covering for built-up tar and graval roofs. Bostitch, 1101 Machanis St., Westerly, R.J.

PLAMELESS TORCH A835629

Gun" projects up to 1286 depress f. of radiant heat from its orifice, and can be used for prectically all of the usual applica-tions of a gescilles blow torch except for direct flame breeing or solidaring. Current

concemption is less than that of a small domestic electric iron. Weight is appreci-mately two pounds. Operates as 115 only A.C., and uses 400 weith. Can also be used as direct surrent by using proper clyle D.C., play. Kinetic Laboratories, 1720 Sansam St., Philadelphia, Pa.

A835635 SLIDING CLOSET DOOR The Spacemaker steal diding closet door is a campletely packaged unit consisting of two flush type steal doors operated on



hall bearing rollers within a steel door frama. Unit is shipped ready for immediate installation. Pinished is prime cost of baked on paint. The Steelerst Manufacturing Co., Resemayor, Ohio.

AGITATOR-TYPE WASHER AB35837

dia Dialamatic Scenamat II o under del of the Bendix Economet, ny of the latter's features, such ple-action Wondartub with a arantee. New features include Un with a S-year helada Undarte



washing ostina, Finataway-Flushaway drain-ing and Squozz-Drying. New model em-ploys a plastic explorter; does not spin, and respires on flaor factoring. It is operated by a single dial that controls the auto-matic washing, rinsing and squeeze-drying operations. Machine is mounted on conten-Bandis Home Appliances, Inc., South Band 34 Ind 24, Ind.

BELT SANDER A831630 Ther Silver Line electric bolt sanders, crollable in two styles, offer power at the bolt with direct spur gase transmission from armature spindle to driving roll. Efficient heat disaption system atillans conductive properties of ten's aluminum



boosting plus air currents sat up by the maving belt. Life time accuracy of align-ment of moving parts is essured through use of a one-piece aluminum beaving, with oversize grease-scaled bell beavings la-cated for maximum support of beth driver and idlar rolls. Independent Pneumatic Teel Co., Aurore, III.

Ameri	ican Builde	r. 79 W. M	onroe Stree	et, Chicago	3. Illinois
NAME		********		ADDRESS	*******
CITT				STATE	
A835001	ABSSOCE	A835017	A\$35025	A835034	A835843
AB35002	AB35010	AB35018	AB35026	AB35635	AB30044
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A 855664	AB35018	AB35038	A835622	AB35837	AB35048
AB35003	A835013	AB35021	AB35629	A835038	AB35647
A833006	AB35014	A835022	AB35839	AB35038	AB35048
AB35007	AB35013	AB35623	A835031	AB35848	AB35049
AB35008	A\$35016	AB35624	AB35832	AB33041	AB35850
			AB15033	AB38842	AB35051

CONDER REAMER

UNDER-REASON New R. & R. Under-Reamer reams pior balos to FVA specifications (for concrete grade-beem foundations) in fraction of time required by old-festioned, but still widely need "specing" method. Leaves class amouth, uniform-stand hole for me-



tarial conservation. Entry-operating crash on handle activation worm gear, to open and close cutting collers. Reamed dirt is housed within reamer and knowlit to sur-face. Standard & & R. tool lits 5 foot 10 inch hole to make 17 inch footing. Heavy plaw-steel blades for years of hard service. Extensions entre per foat. Reamers for larger holes evailable on order at entre cost. B. & R. Company, Bas 93, Plane, Texas.

HEAT CIRCULATING FORM AB35634

HEAT CIRCULATING FORM AB35036 The Price Fireplace bast circulating form is now equipped with a number of devices to that the mason can save fine in con-structing ducts, and obtain a neat and trim appearance around the front of the fire-place. Larger warm air outlets and simpli-fied construction of air passages are de-uigned to increase valume of warm air responsion chennals at the fireplace opening aliminate uply joint between face brick and fireplace form, and new flasible metal stap on apren prevents insulation from disping down and thewing in frast. Price Fireplace Meeter and Tank Corp., 83 Austin St., Buffalo 7, N. Y.

PORTABLE POWER SAW A825831 "Whip-Saw," portable power taw, cuts wood, plastic, bane, pressed wood and many other composition materials up to 1-

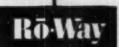


inch in thickness. Will make inside cuts without need of first boring a starting hole. Saw makes starting hole itself and from there on the blade will cut any inside these desired. Weight, 3½ pounds. Per-barg Manufacturing Co., Bridgepart, Conn.

A835638

Built with the Care You Build a Fine Home







Nationwide sales and installation service. See your closelled tolephone directary for names and addresses of Ro-Way Distributore.



There's a Rollay for every Doorway!

MARCH 1958

Ro-Way Overhead Type Doors keep their "good looks." They are designed and built to stand up in service that is rougher and tougher than any other part of the house.

First, Ro-Way Doors are Overhead Type. That means they won't freeze shut ... snow drifts can't keep them from opening easily ... frost-raised floors can't jam them ... winds can't blow them off or bang them shut. They operate smoothly and casily, even if jambs become moisture-swollen. They roll up—in and overhead—out of the way.

The inner surface is never exposed to weather. The outer surface is protected from rust streaks, bycause all Ro-Way hardware is Packerined after fabrication. All panels are of fine quality three-ply Douglas Fir Plywood. All door sections are glued-then doweled with steel-not wood.

Ro-Way tracks are made in our own plant. So, too, are the Ro-Way ball bearing track rollers with "double-thick tread." Springs are made by Ro-Way, too-each one power-metered to the weight of the door it will operate.

That's how we build Ro-Way Doors with the care you build a fine home. That's why Ro-Way Overhead Type Doors look better longer—yet cust no more.

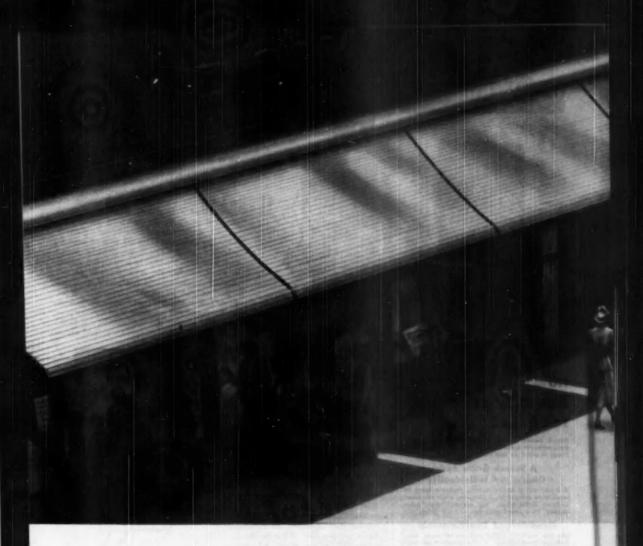
> For residential, commercial and industrial doors, specify Ro-Way Overhead Type Doors.

ROWE MANUFACTURING COMPANY 765 Holton Street Galesburg, Illinois, U. S. A.

UNEQUALED IN

APPEARANCE

PERFORMANCE... REDUCED YEARLY COSTS...



By every standard, here is the ideal all-metal awning for commercial, institutional, and industrial buildings. Hundreds of installations have conclusively proved its durability, dependability, and economy.

Engineered for long life — precision-made for trouble-free performance—it operates smoothly year after year. By minimizing annual costs and fire hazards, the Kawneer Awning is an important investment in long-range economy and reduced replacement expenses.

Light weight is combined with the structural strength to withstand hard usage and severe climate. Hard surfaced aluminum slats are carefully formed, and positive locking prevents leakage. Easy extension is provided by lateral-hinged arms of sturdy pipe with heavy cast-iron elbows.

This handsome awning meets the highest standards of modern design. Its striking, rich appearance will add distinction to any facade, and its sating lustrous finish reduces glare.

Furnished as completely assembled package units, Kawneer Awnings are ready for immediate erection. They can be obtained with concealed boxes or with hoods for surface application.

Widths up to 18 feet and roofs up to 8 feet are provided as individual units. When widths of more than 18 feet are required, multiple units are used. For detailed information, write 209 North Front St., Niles, Mich.; or 2569 8th St., Berkeley, Cal.





HOW TO **Beautify a Doorway** for \$15.13

Skeven above is one of the boastiful Coffman hand-wrought armometral iron screen grilles which range in price on low as \$15.13, F.O.B. factory.

A Screen Grille Adds **Charm and Individuality**

A levely entry levilles friends, makes a kenne so much more attractive. A glocaming white exampled Coffman Grille gives "one appeal" and "solve appeal" to a new house, too.

Hand-Forged Craftsmanship

Like the work of deliked artisom of years ago, Collinge hasd-wrought croftsmanship from iron bar stock gives each grifie its forge draws scroll tips, graacht lines, and becartful givets, bring-ing Old World beesty and individuality to the materia here.

Stock Designs at Law Cost

Standardized for economy, Coffinas Grilles 8 modern building noods. Installation is acry with servers and a grille will lost a lifetime. They give the groatest screan protection and strengthen the door frame.

Stock Sizes for All Doors

Grilles are available for all clock single panel, two panel scream and combination storm doors.

EASY TO ORDER

Just check dimensions of your door and dimen-oloss of inside estress aponing. Your lumber or building supply dealer will show you Collman de-signs, or place an order for yos.

Write Department A8, P.O. Box 1113, fer tree catalog of designs, sizes and prices.

Manufacturers of the Original "Complete Builders Line" of Hand-Wrought Ornamental Iron





How to Scribe a Board te a Stene Well

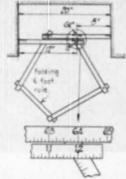
WHEN scribing a baard to a stone wall it is essential that a close, tight fit be obtained. This can best be done by using a scriber made from [4-inch-thick plywood. This scriber is shaped as shown in sketch to conform easily to the hand. A small hole is made in the plywood close to the top and a convenient distance from the pointed edge to receive a pencil. This hole should be placed on a level with the edge of scriber and should be approximately the same diameter as the pencil in order to hold it securely in place.

Scriber can be reversed to scribe from either left or right, top or bottom, by taking out the pencil and inserting from the opposite side .- Submitted by Arthur N. Nelson, Kansas City, Mo.

HOW TO DO IT . HOW TO DO IT HOW TO DO IT

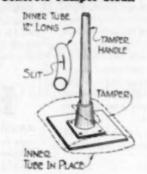
How to Take Inside Measure ments with Folding Rule

BY USING an ordinary six foot folding rule, inside measurements can be easily taken such as cabinets. windows. To use, fold the rule in the manner shown in the sketch, being sure that the larger figures on rule are on the top horizontal member. Place the ends of rule against the sides to be measured. Using the reading on the lower scale as a reference mark, add this dimension to the difference between the above number and 72 inches the maximum figure on the rule. Thus in the example, 72 inches minus 64 inches equal 8 inches. Eight inches added to 12, which is the reading on the lower scale, totals 20 inches, the dif-



ference between the ends of the rule. -Submitted by John E. Benter Hampton, Iowa.

HOW TO DO IT " HOW TO DO IT ". HOW TO DO IT How to Keep Face of Concrete Tamper Clean



.

WHEN using a concrete tamper for and dirt will adhere to the tamper face. To avoid this difficulty cut off a piece of rubber inner tube length of tamper face. Cut slit in side of tube for tamper handle. Pull tube down and stretch over tamper face .-- W. A. Woodard, Volga, So, Dakota.

American Builder will pay \$3.00 for each short cat or job pointer that is accepted for publication. Send all motorial in Architectural Editor, American Bolider, 79 W. Monroe St., Chicago 1, III.

Give Home Buyers What They Want Most

with

STANLEY Residential SLIDING DOOR HARDWARE



Nothing adds so much SEL to a house as space. You can provide extra space, even in small homes — and make your selling job easier — by installing Stanley Sliding Doar Hardware.

Doors that slide open and shut, easily, appeal instantly to today's home buyers. For here is a new living idea ... a style note as well as a space-saver, to make the homes you build more spacious, more desirable.

Home buyers right in your community will read about Stanley Residential Sliding Door Hardware in The Saturday Evening Post. Take advantage of the prestige of the Post and the Stanley name in hardware — include this wanted feature in your building plans and turn prospects into customers. The Stanley Works, New Britain, Connecticut.







iend for fuider which illustrates and describes the complete line of Snanicy Silding Deer Mardware, with door plans, header construction and isobalistion details.



HARDWARE . TOOLS . ELECTRIC TOOLS . STEEL STRAPPING . STEEL



because harmonious proportions, ancient as Greek culture, fearure U.R. designs. Quality manufacturing and refined designs are as acceptable now as they will be ten years bence.



Rigid case-iron tubs with multicost, vitreous enamel finishes have that inviting-to-use and easy-to-clean look. Corner and wide seat recess models are available.

Functionally designed and free from dist-trapping corners, U-R china water closets match the line with acceptable features.

PLUS VALUES IN HOMES WITH U-R KITCHENS

You can point with pride to the utility features and eye-appeal of Universal-Rundle kitchens. Unit adappability and range of sizes of cabinet sinks, counters and wall cabinets permit custom-like fittings to kitchens of many tizes and shapes.

Be sure! Make Universal-Rundle your feature line. Its high quality is obvious. Its price is competitive. For information about Universal-Rundle products return the attached coupon today.

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PLANTS IN New Cestle, Pa; Conden, N. J.; Milvackee, Wio.; Redlands, Calif.

UNIVERSAL-RUNDLE CORPORATION NEW CASTLE, PENNEYLVANIA Please send information regarding the U-R line to:

Name. Address City_ Firm

Catalogs and HOW-TO-DO-IT INFORMATION

706-SELF-PROPELLED AGGREGATE SPREAD-ER-Bulletin S.P.S. 9, describing the new Jaeger Selfpropelled aggregate spreader, is available from The Jaeger Machine Co., Columbus 16, Ohio, Bulletin describes how spreader accurately lays base and surface aggregates, free-flowing bituninous mixtures and plant-mixed stabilized soil-up to 12 feet 6 inches.

707—SWING-LOADER, CRANE, BACKHOE—IIlustrated bulletin describes latest type hydraulic powered loader that handles from §j-yard standard material bucket up to 2-yard snow bucket with 180 degree swing. Attachments provide quick conversion to mobile yard or factory crane operating 14 to 23-foot booms, or to ½-yard backhoe excavator. Mandt Manufacturing Co., 400 W. Goodale St., Columbus 8, Ohio.

708-STEEL DOORS AND FRAMES - Architect's specifications, construction details, dimensions, and other pertinent information concerning the new Anweld steel doors, frames, and sliding closet units are featured in an illustrated 8-page folder issued by the Building Products Division of The American Welding and Manufacturing Co., Warren, Ohio. A separate bulletin is available on packaged sliding closet door units.

709—CAST IRON BOILERS—Catalog No. 561 illustrates and describes the "100" Series boilers in Type A for automatic firing with gas or oil and in Type H for hand firing, for use with either steam or hot water systems, Catalog No. 562 is devoted to the "200" Series boilers in Types A and H. Both catalogs cover a wile range of National Heat Extractor cast iron boilers, and are issued by the National Radiator Co., Johnstown, Pa.

710—PORTABLE PIPE TOOLS—Bulletin released by Beaver Pipe Tools, Inc., Dana Ave., Warren, Ohio, is filled with information contributed by users of Beaver tools, and highlights concerning the new Model-C portable power units. Also described is the Beaver "77" power threader designed for use with electric power drives.

711-METAL TILE PRODUCTS-Metal Tile Products, Inc., Hastings, Mich., has released a 16-page 4-color booklet describing their products. Illustrations effectively show installations of Alumtile, a wall tile fabricated from aircraft aluminum and finished in Instrons enamel. Hastings Alumi-Shield awnings are also shown.

712—ADJUSTABLE DISCHARGE CONCRETE MIXER—Bulletin 49-13 published by Chain Belt Co., 1600 W. Bruce St. Milwaukee 4, Wis., describes the new Rex Adjustable discharge Moto-Mixer, Mounting dimensions, drawings, and specifications are included, as well as illustrations showing how the adjustable discharge feature works on the job.

713-BATHTUB HANGERS.-The Lucke hangers, which are adaptable to every bathtub make and dimension, are illustrated and described in a new brochure issued by William B. Lucke, Inc. P.O. Box 177, Wilmette, IR. How a tub may be built firmly into the wall construction, behind the wall finish, with protection from cracks or leaks at the plaster line, is explained.

Most Powerful Chevrolet Trucks Ever Built!

Plenty of power-and dependable power-to handle heavy loads at lowest cost? Two great engines bring you new power, new stamina, new and spectacular performance with economy. These 1950 Chevrolet P-L trucks are the most powerful trucks Chevrolet has ever built.

In performance, popularity, payload and price, Chevrolet is the outstanding leader! Chevrolet is the nation's choice for every trucking job... and on each job, these P-L trucks have established their right to leadership by years of outstanding service.

> CHEVROLET MOTOR DIVISION, General Marses Corporation DETROIT 2, MICHIGAN

Far ahead with all these PLus Features:

 TWO GREAT VALVE-B4-HEAD ENGINES: the New 105-h.p. Lond-Manter and the Improved 93-h.p. Thrift-Master—to give you greater power per getten, lower cett per load • THE NEW POWER-JET CARBURETOR: smeather, quicker acceleration response • DIAPHEAGM SPHING CLUTCH for cere witten engement • STNCHEO-MESH TRANSMISSION for fast, smeath shifting • HYPOID REAR AXLES—3 times made durable than spiral bevel type • DOUBLE-ARTICULATED BRAKES—for complete driver central • WIDE-BASH WHEELS for increased tire mileage • ADVANCE-DEISION STYLING with the "Cab that Breather" • BALL-TYPE STEREING for centre landing • UNIT-DESIGN BODIES—precision boils.

P*L* ADVANCE-DESIGN TRUCKS

CHEVROLET

Popularity Leaders The public's overwheiming preference for Onevrolet is proof of owner subifaction earned through the years. Beyond question, Onevrolet P-L trucks are the notion's leading choice in the eartier bruck field.

Performance Leaders

pulling power over a wide range of unable road speeds—and on the straightaway, high acceleration to cut down total trip time.

Payload Leaders The rugged construction and all-around economy of Chevrolet Pri, trucks out operating and repair costs-let you deliver the goods with read-reductions in cost per ton per mile.

Price Leaders from low selling price to high resole volve, you're money absend with Chevralet trucks, Chevrolet's rack-bottom initial cast-outstandingly low cost of operation and spikeopand high trade-in volve-all odd up to the lowest price for you.







Catalogs

714—PLUMBER'S BRASS GOODS—The Eljer Co., Ford City, Pa., offers a new 16-page catalog presenting the firm's complete line of brass goods, Products shown include the Eljer renewable faucet units, pop-up wastes, compression faucets, self-closing faucets, bath and shower fittings, curtain rods, sink faucets, angle and straight stops, traps, wastes, crumb cups, P.O. plugs, closet and lavatory upply pipes, towel bars, and lavatory legs.

715—PONDEROSA PINE WOODWORK FOR TO-DAY'S HOMES—is title of an impressive and colorful Q-page hooklet published by the Ponderosa Pine Woodwork Association, 38 S. Dearborn St., Chicago J. III. Booklet is designed to stimulate consumer demand for Ponderosa Pine woodwork products, and to offer application ideas to builders and architects.

716—ALUMINUM AND BRASS MOULDINGS— The Wooster Products Inc., Wooster, Ohio, announces a new catalog and haudbook describing the various styles and types of metal mouldings. Additions to the Wooster lines of aluminum and brass mouldings and redesigned types of standard mouldings are shown in this new catalog and handbook No. 150.

717-WOOD PRESERVATIVES-A 6-page bulletin issued by the Chapman Chemical Co., 770 Dermon Bldg., Memphis 3, Tenn., describes termite habits, signs of termite infestation in wood, and directions on how to stop attack and how to save wood already infested. The Bulletin, No. T-49, is titled "Guarding Your Property Against Dumage Like This."

(Continued from page 138)

718-WIRING SERVICES-Four-page folder illustrates and describes new cost-cutting specification grade wiring devices for the electrical contractor. Designed to speed work and cut costs, plastic devices are manufactured to meet requirements in residential, commercial, and industrial wiring jobs. Monowatt Incorporated, 66 Bissell St., Providence, R. I.

719-NEW WAY TO INSTALL COUNTER FLASHING-Literature offered by Fry Reglet Co., Div. of Watts Electric and Manutacturing Co., Birmingham, Mich., describes and illustrates Fry Flashing Reglet, rolled metal form.

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Readers Service Department American Builder, 79 W. Monroe St., Chicogo J, III, [March, 1950]

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A FULLY GROUNDED STEEL CONDUIT SYSTEM

AT MINIMUM COST

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This rounded channel-lron shape adds strength Makes fishing easy over the roller-bearing surface. The spring action of the cold-rolled steel holds a true circular cross section under any bend.

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FLEXSTEEL is an approved

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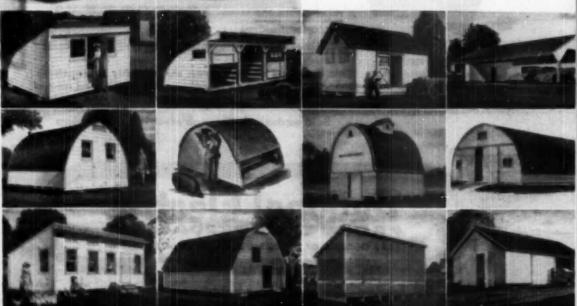






Build for EXTRA VALUE with the 4-SQUARE BUILDING

SERVICES







There is much in these Building Services for you ... more today than ever before, because today owners are searching for greater value. These 4-Square Building Services were developed to make available to builders plans for homes and farm buildings ... plans that are professionally designed and Weyerhaeuser engineered... that are complete with blueprints, material lists and easy estimating forms.

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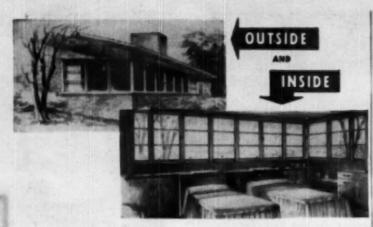
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Pelle Casement Units can be combined into more than 300 different sizes of varying width and height. Installation cost is cut to a minimum because all Pella Casement Windows are completely assembled and pre-fitted at the factory. Pella Casements, in modular dimensions, fit right into specified rough openings.

CHECK THESE CONVENIENT, LOW-COST Pella FEATURES

EASY TO OPERATE - Polia's patented hinge design and construction assure easy operation.

FITS ALL TYPES ARCHITECTURE -Palla Casements fit snugly into wood. frame, brick, brick veneer, stone, etc. They convey dignity and stateliness to Colonial architecture . . . enhance Cape Cod "cosiness" . . . land breadth to Modern or Spanish styles and sturdiness to half-timbarad English.

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-	FILLA CASEMENTS - ROLICESENS - VENETIAN BLINDS	1

Preish Been to Builder

(Continued from page 95)

Some of the Volz houses are placed on concrete slats and crawl space is provided in others. When slahs are used, asphalt tile is used throughout as floor covering. The houses built over crawl space are on joists and have finished hardwood floors.

Closets in living room and hedrooms are the compartment wall type with sliding doors. Standard Page and Hill kitchen cabinets, with sliding doors, are installed.

For heating, Volz has used space heaters, Coleman floor furnaces, Lennox highboys and Coleman highboy forced warm air plants.

Volz states that the only limitation to his sales has been the absence of construction loans in the community. He estimates that if temporary financing had been available to cover costs during the construction period. his house sales in 1949 would have been doubled.

L. F. Whittemore New **Brown Co. President**

F. G. Coburn has announced his resignation from the post of president of the Brown Co. and Brown Corp., effective Dec. 31. His successor is Laurence F. Whittemore, who recently resigned from the presidency of the New Haven Railroad.

Cohurn, who assumed the Brown presidency in 1943 at the request of the directors to lead a program of rehabilitation of the company's business and properties, will remain as a member of the board of directors.

Whittemore has been actively asso ciated with Brown Co. since 1935, when he became a member of a stockholders committee during the company's reorganization. He became a director of the reorganized firm in 1941

The board of directors of the company announced that it had voted unanimously to transfer the office of the president from Boston to New York, where the sales office is located.



AMERICAN BUILDER

venient Rolscreens that roll up and down like window shades. Rolscreans aliminate putting up, taking down,

BOLSCREENS - Polla

casements are equipped

with inconspicuous, con-



painting, repairing and 1010 storage space.

DUAL GLAZING AND WEATHERSTRIP. PING - All Pulla Casements are dual glazed to insulate against winter cold and summer heat . . . weather-stripped to eliminate drafts



"Freedom from Painting DICTATED OUR CHOICE OF ALUMINUM WINDOWS"

"We selected aluminum windows because of freedom from painting costs, larger glass area per window opening and lower installation costs," says Mr. M. P. Halperin of Braverman and Halperin, architects for Cleveland's distinguished Marchmont Courts. Now, after three years of service, owners, contractor and architects report complete satisfaction with their choice; have specified aluminum windows for a companion apartment now under construction.

Each year, as proof of economy and long life piles up, more builders and owners are demanding windows of Alcos Aluminum. Aluminum windows are available now in all standard types and sizes. For the names of manufacturers, write ALUMINUM COMPANY OF AMERICA, 1485C Guilf Building, Pittsburgh 19, Pennsylvania.







The Best Is Yet to Come

(Continued from page 120)

ing . . "workless, dirtless, automatic." Bathrooms, too. There are new screens to command attention with a long list of spectacular advantanges. Exterior sidings and shingles are available in a wide variety of materials and colors.

As we turn page after page we read about new types of plywood, prefinished hardwood floors, telephone raceways, sliding doors, steel doors, attic fans, sewer pipe, radiant heating, folding stairways, awnings, fireplaces, insulation, utility room equipment, dry wall construction, glass blocks, wood preservatives, garbage disposal units, water systems and garage doors. The list seems almost endless and, of course, the all-important point is that it includes each and every part of the home. Nothing is missed, not even the nails. Lumber, too, is available which has been pressure-treated to prevent rot when used in dark, damp areas-lumber that no selfrespecting termite will touch.

Now, it naturally is true that even with all these new and improved products it still is possible to get a poor hause if the many component parts are not put together properly. Craftsmanship plays a major role in determining quality. But it likewise is true that home parts gradually have become larger. Work formerly done under unfavorable conditions on the building site now is frequently done in factories and plants by skilled workmen. Construction methods are changing like everything else and the end result is more work for everyboly.

It may be a long time before every new, satisfactory material and all possible construction changes are incorporated in the majority of houses. There are so many products and so many different ways of doing things that personal preferences of architects, home builders and owners can be given full sway. No matter how much tastes and needs may differ, all can be satisfied. The rich, the poor and the in-between can all have the homes they like and can afford.

Just as is the case with the 1950 automobile, the 1950 home must be hacked up with more and better salesmanship. Selling techniques will improve as the gap closes between supply and demand. More and more sales points will be built into the houses themselves. New materials and equipment—better construction methods will continue to gain in importance,

It's all going to be great fun . . . an interesting adventure. Don't sell the home building industry short. The best is yet to come.

AMERICAN BUILDER

IDEAS...

IDEAS

As advertised in the Saturday Evening

POST...

to bring you more jobs!

MONTH after month, full color page illustrations like these are giving remodeling ideas to millions of POST readers—many right in your own community. They feature the new Gold Bond Insulation Board, Tile and Plank. They tell about harmonizing color blends and the big variety of modern, low-cost, remodeling possibilities. They are seeds, planted to make extra business and profits easier for you to harvest.

Be sure to recommend Gold Bond Insulation Board Products for any remodeling job—home or commercial. These colorful products for walls and ceilings are now available at your local Gold Bond Lumber & Building Material Dealer.

NATIONAL GYPSUM COMPANY, BUFFALO 2, NEW YORK MARCH 1950 You'll build or remodel better with Gold Bond

Decorative Insulation Boards, fireproof Wallboards, Lath, Plaster, Lime, Sheathing, Wall Paint, Rock Wool Insulation, Metal Lath and Sound Control Products.

6 to 1 in your favor hanging doors with a Stanley-Carter HB8 Hinge Butt Router

You can cut out for butts on 6 doors with this precision power router in the time it would take you to mark and cut recesses by hand for just one door. You get a perfect fit every time . . . each butt set solidly on a perfectly flat surface. Cuts for square or round cornered butts. Easily adjusted for any thickness of hinge by turning motor housing 1/16" for each turn, 1/32" for a half turn, 1/64" for a quarter turn. Self-sharpens its bit. Aluminum alloy housing and base. Full sealed ball bearing construction. Universal motor, 1/2 h.p., 18,000 r.p.m., direct drive.

This trade mark on electric tools tells you the most important thing you need to know about tools

STANLEY

When you buy an electric tool you have to take somebody's word about gears, motor, bearings, shaft, switches, power, etc. Whose word about tools could be more reliable than the word of "Stanley" ... tool makers for over 100 years. On electric tools the name, Stanley, means the tools are quality built, thoroughly tested and honestly rated. Covered by a generous guarantee and serviced by a network of Stanley Service Stations. See your dealer or write for complete catalog. Stanley Electric Tools, 492 Myrtle St., New Britain, Connecticut.





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. hevel

13 Baser and Jamb To Far une with Singe but space. With this to deare the second second second the second particle leads down. Adjusted for my size dear

Pretab Housing Today

(Continued from page 85)

prefabricators are devoting the major portion of their output to the production of these homes, typical models of which are illustrated here.

An increased acceptance of prefabricated housing was demonstrated last year in a number of cities where this method of building became a derisive factor and the outstanding projects of lower-priced homes were prefabricated.

One example was in Indiana. According to FHA, the two largest projects of low-cost houses built in 1949 in the entire state were the Kessler Park subdivision and Brookville Village, both in Indianapolis, Prefabricated houses were built exclusively in both of these developments. The Kessler Park subdivision of 400 houses, larger of the two, is described in this issue, starting on page 92. Brookville Village, the second project, is a \$1,000,000 subdivision of 152 single-family houses which was completed in December. Here, two-bedroom houses of the Thyer Manufacturing Corporation were erected at the rate of one to two each working day. Selling price for the complete dwelling, with lot, was \$6,400. All of these dwellings were sold before construction, from one model house advertised in the local newspaper on one week end. Financing terms were: \$400 down. total monthly payments \$40, on a \$6,000, 25-year mortgage insured by FHA.

Syracuse, N. Y., provides another example of cities where prefabricated houses are coming into prominence. The Pizio brothers, Alfred and Mario, were among the first conventional hulders in that area to switch to factory-made housing. This was late in 1947 when they were finally persuaded to try three houses manufactured by Ivon R. Ford, Inc., of Mc-Donough, N. Y.

The Pizio boys have made a big success of their prefab operation. When they were building houses by conventional methods, they averaged five to ten dwellings a year. Last year, they crected and sold almost 100 Ford homes. They have two sizable projects under way. Pine Ridge Manor consists of 80 larger Ford homes selling for \$8,424 to \$9,800. In August, they began the erection of low-cost houses in Maple Manor, By November, they had completed 31 of these smaller houses which sell for \$7,395. The house has a full basement, and an expansible secund floor with stairway and gable

(Continued on page 150)





... Because the Way to a Woman's Heart is Through the Kitchen-

Equip with NORGE You sell her on the house with imaginative kitchen planning. You soften him up by including the price of major kitchen appliances in the deal. You'll find it easiest to get them both agreeing tou il tina il easiest lo get them both agreeing that you provide maximum value if you make the

oppliances NORGE.

LOTS OF reasons why **NORGE-equipped** houses SELL

Norge is one of America's best known, most heavily advertised appliance lines. More -- it has an outstanding reputation for advance design, exclusive features of the most wanted kind.

Perhaps most important, Norge is known for superior quality-enjoys an outstanding reputation for solid engineering and construction to outlast a mortgage.

Norge appliances are beautifully designed - by the W. B. Ford organization. And, from where you sit, they're beautifully priced ... finest all 'round values to be had.

From every angle, there's high wisdom in outfitting the kitchen - with Norge.

SEE

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City......

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THE FEATURES OF AMERICA'S FINEST HOME APPLIANCES



Preich Housing Today

(Continued from page 148)

windows so that the buyer can complete additional bedrooms later.

These examples illustrate the increasing use of factory-prefabricated dwellings by builders constructing homes in the lower-price range. Prefabricators believe that as time passes more and more builders will use their product to erect homes for this market, while continuing to use conventional methods for providing higherpriced, custom made houses. The wide range of prefabricated homes on the market today, however, is not limited to low-cost houses. Prices of prefabricated houses sold last year ran from \$5,100 up to \$30,000. Many companies discovered their low-cost houses stimulated interest in more expensive models. Visitors to low-cost housing projects who could afford to pay more, often became interested in prefabricated homes and ordered larger models.

Another development has been the activity of prefabricators in producing housing for the rental market. This work has not received much attention because most of the companies have been making only single-family houses. However, one prefabricating concern which specializes in gardentype apartment buildings has received a contract for a 1.000-unit military rental housing project to be built at Fort Bragg, N. C., under the Wherry Act. This project is to consist of 600 agartment units in 100 separate buildings and 400 singlefamily honies. All units will be frame construction with brick veneer. A few companies are making duplexes. for the rental market. Some observets see in prefabrication the means of more quickly constructing modestpriced rental units in communities where public housing advocates are saying that private enterprise cannot do the job.

Home Building Record in '49

An all-time record of 1,019,000 new non-farm dwelling unit starts was set in 1949, the U.S. Labor Department's Burcau of Labor Statistics reported in releasing preliminary totals for the year. This total is nearly nine per cent above the previous high mark of 937,000 units established in 1925.

> Don't Miss American Builder's Prize Winning Romes April Issue

Why Silentite Windows ...make happy home owners!



WEATHER STAYS OUTSIDE Patented "floating" weather-stripsexclusive Curtis-designed weatherstripping at head, meeting rail, and sill-plus the insulating value of a used window. That's why Silentite windows are weather-tight-dusttight. Wind infiltration is reduced to

a minimum-comfort stays in while

the weather stays out.



EASY YEAR-ROUND OPERATION

MODERN BEAUTY IN 12 STYLES

Slender multions-wide glass areas -beautiful Mitertite trim-these qualities pat Silentite windows at the bead of the beauty parade. Silentite windows are available in 12 sash styles-all economical because they are quickly installed. Silentite is a popular choice with women.

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SILENTITE The Desident window	Address

BUILD PRESTIGE . . . SATISFY CUSTOMERS This Easy, Economical Way

BILL, YOU'LL BE GLAD I SPECIFIED NICHOLS NEVER-STAIN ALUMINUM NAILS FOR YOUR HOME. THEY WON'T RUST LIKE ORDINARY NAILS. THEY WON'T STREAK OR STAIN PAINTED SIDING OR CAUSE SIDING TO LOOSEN THROUGH NAIL RUST. YET THEY COST LESS THAN \$3.50 MORE THAN ORD-INARY NAILS FOR YOUR FIVE-ROOM HOUSE



THANK YOU FOR USING ALUMINUM NAILS ON MY HOME. ONE OF MY NEIGHBORS HAD TO REPAINT HIS HOME LAST WEEK BECAUSE OF RUSTED SIDING. COST HIM #300. MY PLACE LOOKS GOOD AS NEW- THANKS TO YOU AND NEVER-STAIN ALUMINUM NAILS!

Yes! THERE'S A BIG DIFFERENCE IN NAILSI

Nichols Nevier-Stain Aluminum Nichi, ero etched from head to Nip for greater holding preser ... drive easy ... Upter to torry ... and cost less to apply because on construction ing or puttying is necessary?

NOW PACKAGED FOR THE JOB

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Expansible plan a feature of low-cost home project

Provisions for future bodroom or don are part of units designed for Whittier's young families

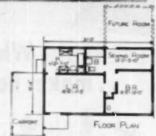
A in the development of Greenleid Village. That—and a desire to produce a low-cost house. Vista, Inc., of Los Angeles, constructed 145 small houses with these ideas in their new project located in Whittier, Calif.

All units are designed to accommodate a future expansion by the owner in the sleeping area of the house, although the added space might also be used as a den.

The houses, priced at \$6500 to \$6750, contain 598 square feet of area. They are located on lots measuring 62 by 100 feet. The price includes a carport and driveway. A \$1500 down payment was required with a monthly payment of \$47, including taxes. The Whittier Building and Loan



COMPLETELY furmished model house above helped sell customers at Greenleat Village. Typical floor plan used, with probable expansion outlised, right



Company handled the financing. Special arrangements were made for a second trust deed so that only a \$750 down payment was required of some buyers.

The units were built on concrete slabs with conventional framing, stucco exteriors, and plastered interiors. The lowpitched roofs, including an extensive overhang, were builtup, covered with an aggregate. Asphalt tile cover the floors. Heat for the houses is supplied by Dual Panelrays, heating units that depend largely on direct infra-red radiation. These heating units are manufactured by the Day and Night Division, Affiliated Gas Equipment, Inc.

A shower is provided over all bathtubs. A 20-gallon heater supplies hot water. A combination sink and laundry tray with tile drain and backsplash has been installed in every house. Screens for the houses are aluminum. Another feature of the houses is the use of Multibreaker switches or control panels.

More than six exteriors were used to give variety to the project, also promoted by differing colors and porch arrangements,

Since an adube soil condition prevailed, it was necessary to equip each house with a seepage pit in addition to a regular septic tank. Further, surface water is found here at 20 feet, making it mandatory to place the seepage pit at a 30 foot depth. The tract is in an unincorporated area.

AMERICAN BUILDER



Big Space Refrigerator for Small Kitchens Keeps Frozen Foods Perfectly

That's what prospects for new homes and apartments want. And that's what they get, if you install this Model SA-7 Westinghouse Refrigerator. It's a full 7 cubic footer yet takes no more space than former 5 cubic foot models. Powered by the exclusive Westinghouse Economizer Mechanism which has record of 20 years of economical, trouble-free performance. Extra capacity makes possible COLDER COLD in the Freezing Compactment for safe storage of frozen food and ice *plus* safe, steady cold in the general storage areas, with low percentage of running time.

Put the power of the Westinghouse name to work for you in selling new homes or renting apartments. Write for particulars.

WESTINGHOUSE ELECTRIC CORPORATION Appliance Division Mansfield, Ohio

Appliance Division • Mansfield, O Plants in 25 Cities—Offices Everywhere TUNE IN TED MALONE... Every Day, Monday through Friday ABC Network



and stores 21 lies, of foods and ice.



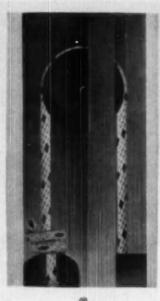
HUMIDRAWER. Holds nearly 1/2 busing of fruits and vegetables.



MEAT STORAGE. Gines tray stores 15 lbs. of most in proper cold.







SPOT SASH CORD

Simplicity — no other device is as simple or as permanently efficient for balancing double-hung windows as the time-tested combination of Spot Cord, pulleys and weights. Perfect and permanent balance and noiseless operation are assured. There is nothing to get out of order.

The part that takes the wear is the cord — and Spot Sash Cord will last almost indefinitely. It is made of extra quality fine cotton yarn, firmly and smoothly braided, and guaranteed free from imperfections.

Identified by our trade-mark, the Colored Spots (Reg. U.S. Pat. Off.) Send for sample card with table showing right sizes for different weights,



SAMSON CORDAGE WORKS BOSTON 10, MASS.

NEW PRODUCTS

(Continued from page 132)

CELLAR DOORS AB35012 Convolutions and safety are previded with use of Blos Celladoors, which are made of copported or aluminum. Trim, permonent



doors fit avany type of construction. Style and size available for every home. They install quickly, and are stocked by leading supply dealers. The outside basement ontrances are weatherproof, sag-proof, termits-proof and temper-proof. The Bilco Cu., 164 Hallock Ave., New Heren & Cons.

PAPER DISPENSERS

A825033

New complete line of paper towel and tailet paper dispensers is announced by this firm. Tailet paper dispensers are designed to dispense either single or doublefaild toilet paper. A two-tone appearance is provided by the steinless steal tops with white anamel bodies. Steinless steal tops withstand discolaring caused by burning cigarettes. The full-length and width front door with rounded corners is held securely is place by a lock at the top. The slot in lawer front of door provides the amount of paper supply at a glance. Width, S-19 inches. Depth, 2-19 inches, and height, 7-19 inches. The Bennett Manufacturing Co., Aideo, N. Y.

LADDER PLATFORM AB35034 Rungq-Stop, "a little platform on a ladder," provides working comfart for carpenters or pointors, in two sizes, 72111/4 and 7214



inches, platform affers planty of standing room. Eliminates sore arches or aching lag-muscles. Always level with ground at any ladder-clant. Requires only seconds to change to another rung. Fits single or ontension rung ladders. Insulation & Refractories Co., Williamson, Wayne County, N.Y.

(Continued on page 158)

AMERICAN BUILDER

again RUBEROID brings you the crowning achievement in the field of asbestos siding

5 BACK!

TRAM

Yes... that deluxe asbestos siding ... Ruberoid Vitramic ... is again in production. A wartime casualty because of shortages of scarce materials and manpower, Vitramic needs no introduction to the thousands of builders who used this finer siding in prewar years ... and created a silent salesman with every home built?

Every homeowner who is willing to pay a little more for the best becames an enthusiastic Vitramic booster when you demonstrate the outstanding advantages of the hard, amooth, vitreous-ceramic surface that stays brighter and cleaner through years of weather-defying service. Yes . . . you can do a real job of *selling* the qualities of Vitramic over any other siding because your customer can see the difference in the very convincing demonstrations you are able to make right before his eyes. You can show him why and how it resists dirt, grime and soot . . , and what Vitramic gives him that no other siding can match.

The new Vitramic is better than ever . . . the result of more than ten years of Ruberoid research and development. With competition getting keener . . . this finer asbestos siding provides the extra value your customers are seeking. Whether on new homes or old, Vitramic truly represents the last word in performance . . . the crowning achievement in asbestos siding.

For easier sales . . . for bigger profits . . . for the utmost in customer satisfaction, play up Vitramic in your sales and advertising programs . . . and watch how quickly your business will benefit from this better-than-ever Ruberoid exclusive-feature product.



BOOK REVIEW



BACK a few years ago book publishers discovered that there was some special sales magic in the two-word phrase "how to" when applied to basic instruction books. Fortunately, since then these same publishers have taken pains to develop the "how to" teaching technique to a point where today there are many books that really live up to the "how to" claims made for them. The two books on stair building that we discuss this month are both excellent "how to" volumes and we will tell you why.

STAIR BUILDING

By Gilbert Townsond, Second Edition, 200 pages, illustrated, 514 inches by 614 inches. American Technical Society, §2.50. No. 12 in adjoining colours.

First, a good "how to" book should be written in simple language because it is used not only by the experienced craftsman but also by the young apprentice. Secondly, a "how to" book must be well illustrated with clear-cut pictures, diagrams, plans, and drawings keyed directly with the text for easy reference. Finally, the book should be written by an author thoroughly familiar with his subject. STAIR BULLING by Gilbert Townsend is a book that goes a long way toward fulfilling these three "how to" requirements.

Stair huilding, as many American Builder readers know, can be a pretty fascinating part of a carpenter's work because of the interesting layout problems involved. Or it can be an awful headache for the inexperienced builder tackling his first few jobs. The important thing is that there are definite layout and construction rules for stair building that have come to be accepted as standard and once these rules have been learned by the builder, the rest is comparatively easy.

Mr. Townsend in his book gives the reader a full description of all types of stairs and their location. He explains the fundamentals and details of laying out strings, traming, balusters, winders, headroom, dimensions and other essential factors. The second half of the book is devoted to building the stairs, stair finish, curved handrails, bevels, laying out handrails and face molds, how to lay out stairs, and arrangement of stairs in the house plan. All of which is good meaty information that just about every general contractor and carpenter should know.

SIMPLIFIED STAIR LAYOUT

By J. Douglas Wilson and S. O. Weener, First Edition, 58 pages, dlastrained, 734 moless by 10 meters. Delmar Publishers Inc, 81:25. No. 11 in edizionage zolows.

While this 60-page paper-bound book does not pretend to be as all-inclusive as the Townsend volume we nevertheless like it a lot since it has reduced the "how to" of stair building to its basic essentials and then by word and picture have presented those essentials in such an effective manner that misunderstanding them is out of the question. Part A is devoted to stairway types, stairway construction, stairway mathematical and layout terms, and stairway parts. Part B deals with mathematical calculations (nothing very hard about them), and layout procedures. The book ends with a handy index of stair building terms, All in all, a very next job.

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

ESTIMATING

- THE BUILDING COST CALCULATOR. By John R. Smith. A system for arriving at building construction cost by use of schedules giving cost of standard units of construction at verying costs of labor and meterials. \$10.50.
- SIMPLIFIED CARPENTRY ESTIMATING. By J. W. Wilson and Cioli M. Ropera. Everything needed to "lake-off" a bill of matacials from set of plans and specifications for a frame house-with monty heipful quick-selence tubias and abart-cut methods that simplify the work. \$3,80.
- THE SUILDING TRADES HANDBOOK. Boody reference on building subjects-mathematics, architectural drawing, structural design, materials and methods, \$1.75.
- CONTRACTOR'S MATERIAL LIST. A 10-column toke-off form for complete listing of motorinia and labor costs. \$1.00.
- SPECIFICATIONS. Full ast of detailed house specifications (and item index), with spaces for inserting the pertinent descriptive date. 5.50.

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- STEEL SQUARE POCKET BOOK. By Dwight L. Sieddard. Illustrated and wacked-out problems of laying out common rafters, hipped, ectagon, hexagonal and circular reads, roots of uneven pitch, and curved roots, 51.35.
- SIMPLIFIED BOOF FRAMING. By J. Douglas Wilson and S. O. Werner. Tolls how to frame gable. hip and unsecual pitch intersecting roofs. Contains short-cut methods, cloar and practical explanations. \$2.00.
- SIMPLIFIED STAIR LAYOUT. By J. Douglas Wilson and S. O. Worner. Basic work back presenting easily understood fundamentals of stair building.
- STAIR BUILDING. By Gilbert Townsend, S.B. Fully illustrated explanation of every problem in design and construction of stairs. \$2.50.

PLAN BOOKS

 AMERICA'S BEST SMALL HOUSES. Exterior and interior views. floor plan ekstches, moterial specifications and descriptions of 40 new low-cast homes. 83.85.

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- HOUSES FOR GOOD LIVING. By Boyal Barry Wills, A.I.A. Fhotographs and floar plans of 34 fine bosons by a leading architect. \$4.00.
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- MODERN METHODS OF HOME REATING. Standard heating systems illustrated with 17 floor plans showing heating outlets. 40 photos of equipment and instaliations. 25 heller and piping connection disgrams, and 11 heat less calculating tables. 5.00.
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- BADIANT HEATING. By T. N. Adlum. A practical quide to design and installation of radiant heating, snow melting, and radiant cooling systems together with step-by-step procedures. SLO.
- HOW TO DESIGN AND INSTALL PLUMBING. By A. J. Matthias. It. Every step in the design and installation of the plumbing system. to fulfill requirements indicated in blueprints and specifications. axplained and illustrated, \$3.56.

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- PRICE GUIDE FOR PAINTERS AND DECORATORS. Tables covering practically every type of work done by the painter and decorator, with suggested prices based on various wage scales. \$1.35.

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- BANDBOOK OF BRICK MASONRY CONSTRUCTION. By John A. Mulligan. For measure contractory, estimators and construction anginesis. 35.56.
- MARCHIRY SIMPLIFIED, Vol. 1. By J. Bolph Dubsell and Gilbert Townsend. Complete explanation of the tasks. meterials and practices of messary--including biosprint reading, use of concrete block, ckey tile and brick, building messary sideworks, divergency, Basen, and steps. 54.56.
- 87. MASCOUNT SIMPLIFIED, Vol. I. Practical measury precedures in the vertices phones of construction, from building forms for concrete to constructing firsplaces and asptic tank systems, includes discussion of hamiltan area producta such on plane blacks, wasspronting mistares and inrealisting blacks. 53-06.

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- INTERIOR ELECTRIC WIRING AND ESTIMATING. By Albert Uhl. A. L. Nolson and C. H. Dunlap. How-to-do-it book on interior wiring and cost estimating. 82.75.
- WESTINGHOUSE HOME WIRING HANDBOOE. By A. Carl Bredehl. A guide for planning the wiring of modecompriced homes, with emphasis on safety. effectiveness and efficiency. 81.06.

MISCELLANEOUS

PLANS

- NOME BUILDERS MANUAL FOR CONTRACTORS. Provides convenient data and check lists to follow all operations connected with construction of a home. Losselent binder parmits additions of special material pertuining to project being constructed, 55.00.
- PRACTICAL ACCOUNTING AND COST REEPING FOR CONTRACTORS. Complete instructions and examples showing proper methods of keeping time and compliang casts on all classes of construction work, \$3.00.
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33 BLUSPBINT PLANS. Comprints of moders mail homos designed by leading erchitects. Also descriptions and Soor plans of 9 other houses. 7 garages, thetches of built-is septement. 51.80.

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MARCH 1958



AFS and F

Space economy, installation economy and overall lower cost -the prime requirements of today's building-are the three big reasons you should use USF Sliding Closet Doors. Steel panel construction of a new, improved vertically-welded type, assures you of dependable dimensional accuracy, squareness and plumb. Nothing to sag, nothing to warp, and a lifetime of service. Unique track and roller arrangement assure easy sliding. Installation is fast, sure and low cost. Overall cost is less than you think. Let us send you the facts.

Write for complete data



NEW PRODUCTS

(Continued from page 154)

FLOOR HINGE FOR DOORS AB35847 Improved Pilvico Checking floor kings, for us with all-glass doors, incorporates gradu-ated pressure areas in the normal 90 do-grees opening are. The initial 15 degrees

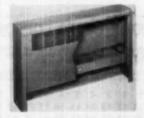


has the greatest spring load to prevent oponing from wind pressure. The next 60 dugree area, the arc of greatest use, has a drogree area, the arc of greatest use, has a reduced spring load to facilitate easu of opening. In the final 15 degrees the spring load builds up gredually to give snubbing action against violent opening. At 90 degrees there is a hold-open position. Pirtsburgh Plate Glacs Co., 632 Deguesne Way, Pittsburgh 22, Pa.

TRANSLUCENT PLASTIC PANELING A835042

Alsynite translucent plastic penaling weighs approximately eight ounces per equare foot, is easily handled and erected, and may be sowed with hand or power saws and secured with ordinary sheat motal screws or bolts. In six different colors, roso, green, yollow, maize, equamerine, and opelescent. Three different Three different corrugation patterns are available, in standard size shoets arranging from 8 to 12 feet in langth and from 26 to 40 inches in width. Used for interior partiens, shower dears, windbreaks, patio and porch roofs, garage doors, and as coloriul decerative panels in dens, bers, and playrooms. Allied Syn-thotics Co., San Diego, Celif.

CABINET CONVECTORS AB35038 Rittling cabinet convectors are available in 4, 6, 8 and 10-inch depths (other than semi-recessed style which is produced in 6. 8. and 10-inch dapths), and produced in



lengths of 4-inch increments from 16 to 64 inches. Complete line includes recessed, semi-recessed, free stending or wall hung types. Designed for use with steem or forced hat water systems, heating elements having seamless copper tubes expanded into aluminum fins under a Rittling patent. Made of heavy gauge stuel. The Rittling Corp., 1298 Niagare St., Buffalo 13, N. Y. (Continued on page 160)

AMERICAN BUILDER

Right out of college ... A SALES LESSON by K&M "Century" APAC



Ar Burgers University, The State University of New Jensey, New Brakewick, K&M "Century" APAC is used in the Solversity Comman. Mare APAC is seen on the faculty diving room walk. APAC is also used in the centeries Architect Inserver: York & Sonrow:

When you're quoting on a wall paneling job that has to be good, at minimum installation and maintenance costs, there is sales leverage for you in the lesson of K&M "Century" APAC at Rutgers University. Both the new cafeteria and the faculty dining room, in the University Commons building, required trim and restful interior walls—plus initial and long-term economy. APAC was used. You can cite its ability to fit the building budget as meatly as it fits the walls!

On any project-interior or exterior-this K&M Asbestos-Cement Board produces all the savings that go with handy, swift erection and elimination of fussy finishing. Not even paint is necessary.

As to low maintenance, the K&M combination of asbestos and cement in APAC is the foe of fire and weather, rust and rot, rodents and termites. Therefore APAC excels when you install it for siding—for ceilings, panels and partitions—for sheathing and casing—for flat sections in general. That's volume business. You can make out a strong case for it with APAC.

Get full information about "Century" APAC from your K&M Dealer, or write us direct. We'll attend to your inquiry promptly.



Original manufacturers of Ashestos-Cement Roofing Shingles in this country.

KEASBEY & MATTISON COMPANY - AMBLER - PENNSYLVANIA



NEW PRODUCTS

(Continued from page 158)

UPWARD ACTING GARAGE DOOR

No. 200 "Over-the-Top" upward acting sectional type garage dear combines eaclusive two-point spring adjustment for perfect door balance with other features.



Adjustablo brakes prevent doar slamming. Track supported assembly property spaces tracks to prevent doar binding. Offset, rabbated joints seal out weather. Tapered vertical track, in closing, forces door against jum for weathertight real. Hardware, including chrome handle and brass cylinder lock, ball-bearing rollers and sheaves. Zinc or galvenited finish on all hardware escopt springs and angles. Available for openings 8 feet wide by 7 feet high, and 9 feet wide by 7 feet high, Eand 9 feet wide by 7 feet high, and 9 feet wide by 7 feet high, seal 9 feet wide by 7 feet high, feet per 9 feet high 9 feet wide by 7 feet high 9 feet by 9 feet high 9 feet wide by 7 feet high 9 feet by 9 feet high 9 feet by 9 feet high 9 feet by 9 feet by 9 feet high 9 feet by 9

WINTER AIR CONDITIONER AB35041 Rotary fired winter sir conditioning unit is 57 inches high, occupies a floer space of 72/5x20/5 inches, and delivers a full 90,000 B.T.U.'s of filtered warm air. A "Flame-Flas" stainaless steel hoarth ring forces the flame to wipe the inner wall of the new drum type heat exchanger. Furnace is aftractively finished in beige and red infra-red baked on enamel as in the majority of the Fluid Heat line. Anchor Post Products, Inc., Baltimore 24, Md.

PLASTIC METAL COVERING AB35847 Kreme-Kote, a new liquid plastic, provides o protective covering for all kinds uf metal, used inside or out. Applied by brush or cloth, it quickly dries, leaving a transporent cover. Brightly shined objects remain shined for soveral months. Krome-Kote Co., Hyde Park Bank Bldg., Chicago 15, III.

MAGNETIC LATCH FOR CUPBOARD DOORS AB35046

Loco-Latch for cupboard doors consists of a small, powerful permanent magnet, a



small plate made of special steel, and necessary screws. There are no moving parts, no springs. Doors apon assily, without noise. Laboratory Equipment Corp., St. Joseph. Mich.

(Continued on page 162)

AMERICAN BUILDER





Put into your houses what home "shoppers" want ... and they'll buy!

Two out of three women prefer gas for cooking. Beyond the mains, this means PYROFAX Gas not only for cooking, but for refrigeration and water heating as well. It's the cleaner, faster, more economical, more dependable fuel..., gives instant, even heat.

No matter where you build, you can install PYROFAX GAS ... the

low cost fuel for modern kitchens. Installation is quick and easy . . . no expensive wiring, no construction changes. PYROFAX Gas is piped in direct to range, refrigerator or water heater from twin cylinders outside the house.

Let us show you how PYROFAX GAS saves on building costs ... makes sales easier for you!



Nationally Advertised Appliances

Magic Chef and Caloric ranges, Servel refrigerators, Ruud and Bryant water heaters, and other gas appliances are available for use with PYBOPAX Gas—from distributors in 30 states east of the Rockies.

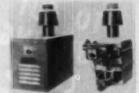


For full information see SWEET'S CATALOG, or address Dept. Al. PYROFAX GAS DIVISION Union. Carbide and Carbon Corporation 30 East 62nd St. Eds. New York 17, N. Y. "Pyrotes" is a registered tride-mark of Union Carbide and Carbon Corporation.

NEW PRODUCTS

(Continued from page 160)

MIDGET HOT WATER PLANT AE35040 Model 2HW2, midget gas-fired hat water heating plant, is especially suffed for heating individual opartments. Cast iron construction. Unit is 13 inches wide by 26



inches deep and is 17 Inches high, and due to its small size it can be unpanded from the colling or arranged on a well shell. Comes completely assembled, and has AGA input rating of 45,000 B.T.U.'s. Mork & Acherman, Inc., 18 E. 41st St., New York 17, N.Y.

INSULATING PLASTER BASE A835043

Souled Lok-Joint lath is now evailable in 36 and 1-inch thicknesses. Over-all upe is 18468 inches. Both new sizes are manufactured from Greylite insulation board that has integral exphalt treatment for positive meistere resistance. The lath has shiplopped joints, beavy-gauge galvanized wire "Loks" attached to lower edges for support between framing members, and asphalt vapar barrier. Insults, 500 Baher Arcade Bidg, Minneappelis 2, Minn.

GAS FLOOR FURNACES AB3637 Four new models of gas burning floor furnaces have been announced by this firm. Rated at 35,000; 40,000; 50,000 and 60,000 B.T.U. input, they are approved by AGA. Two models, the "Ninsteen Series," are 23½ inches high and may be used in basementias homes with two-block feendations. Two models of the "Twenty-Fire Series" are 30 inches deep and are water-proved to within 25½ inches of the floor. Duo-Therm Div., Motor Wheel Corp., Larsing, Mich.

FLOOR SANDER AB35050

Improved model of the Reid-Way "8" floor sender has a widened frame to provide greater space between edge of sendpaper



and frame Interior. This eliminates possibility of sandpaper rubbing on side of the plate. Model is available for 110 or 220 volts A.C., 50 or 60 cycle. Only one maving part. Sands directly to basebeard on both vides. Surface cutting speed, 3,375 feet per minute. Sand paper area, 140 square inches. Separate vocuum motor, fused to prevent damage. Reid-way, Inc., Codar Repús, Iowa.

(Continued on page 164)

Another Major Housing Project Selects Hotpoint Appliances

Windsor Village is one of the nation's outstanding rental housing projects. To help produce more desirable homes at no increase in cost-homes that would more than meet today's exacting standards of living-the L & L Building Corporation equipped each of the 540 units with a Hotpoint Range and a Hotpoint Refrigerator.

Similar preference for Hotpoint products is being expressed in scores of communities and building projects throughout the country. Whether you are a large or small operator -whether you plan to build or remodelapartments or homes—the wide acceptance of the Hotpoint name - the exclusive features and proven quality of Hotpoint products will serve as a plus value from the viewpoint of either buyers or renters.

Moreover, Hotpoint is equipped to give you much helpful information in home appliance arrangement and economy. Write today for free-of-charge literature and full specifications on the entire Hotpoint line-every major unit for the complete electric kitchen and home laundry.

RANGES . REFRIGERATORS . DISHWASHERS . DISPOSALLS® WATER HEATERS . FOOD FREEZERS . AUTOMATIC WASHERS . CLOTHES DRYERS . ROTARY IRONERS . CARIMETS MARCH 1954

or Village

Indianapolis, Ind.

"Prior to the construction of these projects we had used Hotpoint appliances in oth projects and were well pleased with their performance. Our past experience together with the increased ease of renting our units to a public which has come to accept Halpaint appliances as the highest standard of quality led us to use these appliances again in our rental housing projects."

Very truly yours, LAND L BUILDING CORPORATION

Geo. V. Ginger, Secretory

Hotpoint INC. 14 Gun wall English A 5600 West Taylor Street, Chicage 44, Illineis

COMPARE! SEE FOR YOURSELF WHY GLIDE-AWAY

IS THE OUTSTANDING OVERHEAD-TYPE DOOR



• LIFETIME PROTECTED AGAINST RUST AND CORRO-SION because Glide-Away Doors are made of paint-lock steel which is Bonderized and zinc coasted . . . and for EXTRA protection they are covered with a prime coat of infra-red-baked paint at the factory.

• EASIER TO INSTALL because the one-piece jamb strip and weather seal is pre-assembled.

 CABLE-CONTROLLED DOUBLE DOOR LOCK permits ingertip operation from the garage interior without disturbing outside lock.

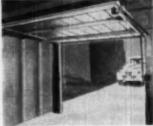
• ONLY 1/2" OF HEADROOM is required.

 GREATER RIGIDITY because of the heavier gauge inside structure and double hat channel section construction.

STEEL DOOR DIVISION

STAMPING PRODUCTS

AND MEG. CO.



Glide-Away space-saver, jamb-type hardware does not savifice interior space. Arms are welded steel construction. Again we say: "COMPARE BEFORE YOU BUY".

Stanging Pro	statts and Milly. Co.
Steel Dear D 14001 (nterve	iducts and Milly. Co. Eviation dia, Detroit 27, Milab.
Plane und	datalied information on "Gible-Away
Gartege Door	
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I am a 🖂 W	
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NEW PRODUCTS

(Continued from page 162)

FLOOR-TYPE REGISTER AB35045 A new Boar-type register for use with the G-E Air-Wall heating system requires a floor opening 1(8 wide. Since no cutting



or observation of walls is required, installation is vimplified for conversion jobs in existing homes, frame or masonry walls, and in new construction having mesonry or frame walls of less than conventional thickness. Register is installed vartically. Complete assembly includes die-cast-shuminum register, and a sheet-matal stackhoad and boot. General Electric Co., Bridgeport 2, Conn.

GAS-PIRED DUCY MEATERS ARIS644 Automatic concealed ges-fired Resnor duct heaters, supponded or hose-supported, ere now available. They can be applied to any type duct system, and can be used uingly or in multiples. Adaptable for use with air conditioning units, they are designed for concealed installation along hot air routes. Direction of heat flaw through the exchanger section is reversible, permitting alternate operations on different linos. AGA and Underwriters' Laboratories approved. Resnor Manufacturing Co., Mercer, Pa.

STEEL CELLULAR PANELS AB35051 A strong subfloor and a heat distribution system may be installed simultaneously through the use of Fenestra steel cellular



panals. Colls of the panels serve as ducts for host air distribution and cold air roturn. Heat passing into the panel colls is radiated through the floor and also flows out of registers at the baseboards. Panels provide flot, continuous surface for basement colling. May be laid from beam to beam, aliminating joists, and a special interlocking feature joins the panels as they are laid. Pipes and wire can be enclosed in the panel colls. Detroit Steel Products Co., 2550 E. Grand Bird. Detroit Steel Products Co., 2550 E. Grand Bird. Detroit Steel Products Co.,



AMERICAN BUILDER

Insulite Bildrite Sheathing Offers 222% More Insulating Value than Wood Sheathing.

ONE LAYER OF INSULITE SHEATHING EQUALS TWO LAYERS OF WOOD SHEATHING

> T'S 10° below zero in that laboratory "cold room." On the other side of the test panel it's 70° above zero-average room temperature. This was a test to re-create actual living conditions in an average home. We wanted to compare the insulating value of INSULITE Sheathing and wood sheathing.

> HERE'S WHAT THE LABORATORY REPORTED Delicate instruments measured the heat flow through the materials from the "warm room" side to the "cold room" side. INSULITE performed an amazing insulating job! Here are the facts:

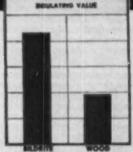
aINSULITE resisted heat loss better than twice as well as wood,

3.56

- . Engineers call this the "k" factor, and the "k" factor of INSULITE was 222% better than that of wood.
- •One layer of INSULITE (%" Bildrite Sheathing) provided more insulating value than 2 layers of wood sheathing.
- Besides double the insulating value, Bildrite also gives you double the bracing strength of wood sheathing horizontally applied. It's water-proofed throughoutevery fiber protected.

THAT'S WHY INSULITE builds better-gives more for the money. Warmer homes in winter, cooler homes in summer. Build with Double-Duty INSULITE.

See Sweet's File for Builders-Ja/S.



COMPARATIV





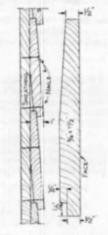
WILSON AVE. AND GREEN LANE __BRISTOL PA.



Reader Objects to Substitution of Shiplap for Siding

A studgestion for substituting hiplap for siding was submitted by Herbert E. Fey, New Braunfels, Texas, and published in the HOW-TO-DO-IT section of the December, 1949 American Builder. A letter has recently been received from H. A. Owaley, president of Owsley Lumber Co., Pensacola, Fla., objecting to the niethod employed, and offering his company-designed siding as an alternate. His letter is as follows:

"On page 1.24 of your December issue you show siding made from ordinary shiplap sheathing, etc. This siding has a meager ½-inch shadow line, it also provides only two points of bearing against the sheathing in its width; in addition, it provides just one place to properly nail siding allowing siding 4 good chance to warp in or out in the center of the board.



"I am enclosing a sketch showing a shiplap bevelel siding that we designed a number of years ago. We have sold a lot of this material in Pensacola. This material is cut from 1x8- or 1x10-inch boards. The siding has a 35-inch shiplap with 35inch top and bottom edges which gives a 35-inch shadow line. The back face of the siding has a 35-inch bevel from center of board to top. This permits the back face of siding to lie right against face of siding to lie right against face of siding providing (Continued on page 168)

BENNETT "DEEP-SEAT" ASH DUMP

100% Heavier for Permanent, trouble-free service -9x 4¹/₂ inches. Cat. No. C-203.



CAST-IRON CLEANOUT DOOR

Air-tight closure...convenient hinge-type door. Crimped masonry wires. Sizes 8x8, 12x8 inches. Cat. No. C-213.



BENNETT GRATES & LOG DOGS



Cat. No. A-501 Heavy Duty. Extra Deep, Removable Ends. Ash dumping trap. For Coal



Cat. No. A-905 Cradle Grate. Sturdy Coal or Wood Basket.



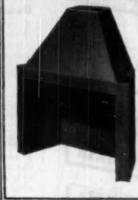
Cat. No. A-515 Wood Grate. Use with or without andirons. Good outdoor fireplace grate.



Cat. No. A-1451 Log Dogs for feavy Logs. Protect valuable adirons. Ideal for camp or outdoor feeplace.

ETT - IRELAND

THE BENNETT Simplified and Standardized FIREPLACE



THE **BENNETT** LINE *of* SALES *PROVEN* FIREPLACE SUPPLIES

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

SIMPLIFIED and STANDARDIZED

This simplified Benaest 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.



BENNETT Expanslip THROAT DAMPERS

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



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

leescreen

SAFETY FIREPLACE CURTAINS

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

Write new to 350 Market St. for Cotolog and full Information on the COMPLETE POST-WAR BENNETT LINE



Scartlingly different --- an entirely new conception — Fleetlite is the window you have been demanding for years. Engineered and built as a complete ed window, Fleetlite provides mah, morm sash and screen as aged

an integral unit, easily installed at one time. Home owners like the self-storing consortence of FLEETLITE --its economy, its beauty, its permanence. Already installed in thousands of homes throughout U.S. and Canada.

What people are looking for," says Builder.



Barlance is an order for Fivetlite windows for an additional group of one which I am starting in the early spring. After taking your windows in all of my building during 1949, I can shally any chost the fact that I was fostering your windows accounted a ready market for my homes and advance orders extending into 1950. Is any ready market for my normal and advance ecoust extension, meet 5700. Is may assessed you to hnow that recently I had one of these houses open for inspection for one day, and at that cime, mak orders for evolve additional houses, all or be equipped with your windows. As a result I am convinced that the new dosign features of Floriton Windows are what people are making for even in low-case homes, and I am therefore planning on using your product exclusively during the coming year.

Many chanks for your good coopers tion and prompt service

Weise ander for fall details or see your distributer.

de by FLEET OF AMERICA, INC.

112 PEARL STREET BUFFALO, N.Y.

Roaders Disagree

(Continued from page 166)

good nailing on any area of the exposed siding surface and holding material tight against the sheathing or framing. The total projection of siding from face of sheathing is one inch. A 5/4 mising and corner board can be used with case."

Strength of Wood **Beam not Changed**

SUBSCRIBER in the Chicago area calls attention to a suggestion in our Technical Guide department on how to make a built-up wood beam, submitted by Edward Grabowski, Toledo, Ohio. This is shown on page 120 of the August, 1949 issue of the American Builder. His letter follows

"Mr. Grabowski's conclusions are not founded upon good reasoning. The two 2x4 inch timbers are placed rafter-wise, presumably with the idea. of establishing an action similar to that of an arch, or to add strength by triangulation, as in a frame composed of two rafters and a joist, but no strength has been added to the lower or tension side of the beam. To achieve the desired effect, the ends of the braces might be connected by a tie-rod, or they might be firmly sented against immovable abutments. As the beam is illustrated, it is simply a beam, nothing more.

"The strength of beams is a measurable characteristic, a function of their peculiar cross sectional shape and size. This measurement is called the "section modulus." With the proper consideration given length of span and allowable fiber-stress, section modulus may be used to determine allowable loads.

"For the two main members in the illustrated beam, two 2x12's, the section modulus is nearly 71.7 inches". For three such members placed side by side it is 107.5 inches', 34 higher. There is no difference in the combined strength of the individual members and that of a solid timber with the same dimensions, if the individual members are placed side by side.

"The bears illustrated is not of constant strength. Its strength varies from a maximum at the center span, and at its ends, to but little more than that of two 2x12's at the quarter points. At the center and at the ends, (Continued on page 170)





WEARS LIKE IRON ... CLEANS LIKE GLASS

An ideal surfacing material, combining beauty with durability --- that's General Electric's Textolite, now distributed by Roddiscraft.



TEXTOLITE is scratch-resistant, beautiful but tough. It resists scratching better than low-carbon seed!

TEXTOLITE is heat-resistant, not easily charged, blistered or discolored by heat. A special cigasette-proof grade is also available.



TEXTOLITE is staingrooffood acids, alcohol and household chemicals won't discolor it.

And besides that, G.E. Textolite is easy on the eye. Easy to clean, too, with its smooth, lustrous finish.

Now's the time to sell Textolite. You'll find dozens of applications where durable Textolite will fit your customers' needs -- kitchens, dinettes, hotels, soda fountains, restaurants, cocktail lounges. Available in a wide variety of standard colors and patterns.

Textolite sales go hand-in-hand with plywood sales. Here's a real team to boost your profits, backed by two great names, General Electric and Roddiscraft.

Ask your Roddiscraft salesman for color card and samples.





NATIONWIDE Reddiscraft WAREHOUSE SERVICE

 on Angerias 11, Golil. 2000 E. 54th B. noticella 10, Kr. (2011 E. 15th B. thilosofted, W. M., 113 F. Printeria D. thilosofted, W. W., 113 F. Printeria D. thilosofted E. W. (2010) C. 16th B. there York K. W. (2010) C. 16th B. there York K. W. (2010) C. 16th B. Mark C. 1000 C. 10000 C. 1000 C. 1000 C. 1000 C. 1000 C. 100



Your big-profit building contracts are right at your finger-tips when you use **DODGE REPORTS**. You are told WHERE to go... WHO to see... WHAT to talk about to get these jobs! And you can have this information for any area you specify, any type of construction, or any stage of the construction work.

You get profit-making facts that abow you the active prospects for building contracts such as --

> new apartment buildings, banks, hospitals, schools, churches, theatres, homes, factories

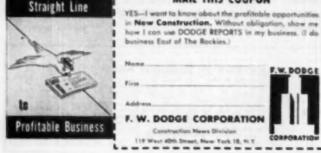
-In fact, every type of new construction offering you profitable job opportunities. Thus, with DODGE REPORTS, you can be first in the right placeat the right time; you know what type of materials will be neededwho is involved in each project (name of owner, architett, engineer, contractor) - when the plans will be ready for figuring and when bids must be submitted.

DODGE REPORTS save you time, save you "leg work." They enable you to base your estimates upon known facts . . . time your bidding . . . close deals at the proper moment for effective results.

Let us show you, without obligation, how DODGE REPORTS can help you put your finger on profitable building contracts.

A8-3-50

MAIL THIS COUPON



Readers Disagree

(Continued from page 168)

the section modulus of this beam is approximately 97.5 inches, but at the quarter points it is but 75.3. A beam with equivalent strength is illustrated in the accompanying drawing. Its thickness is supposed to be the same as that of 2 inch standard dressed scantings, 354.

"A better way to reinforce the beam is to place the reinforcing 2x4 inch member flush with the top edge for the whole length, or the lower edge, if it is preferred. The beam will then be a constant cross-section, with constant section modulus of about 97.5 inches." This procedure has the effect of moving the neutral axis of the beam from the vertical center to a point about 6.35 from the lower surface.

"In all of the foregoing calculations, the actual and not the nominal sizes of timbers were used, and shearing stresses were not considered. All jointing was presumed to be perfect, and this is hardly possible without careful glueing of all joints. The spiking usually given such built beams can hardly be expected to develop the full calculated strength.

"A word of caution may be put in here. Efforts to reinforce wood beams by simply changing their cross-sectional shapes are very rarely, entirely successful. I.T. and box sections of wood, especially if short, deep, and beavily loaded, are nearly always subject to dangerous horizontal shearing stresses. These stresses characteristically concentrate at points where the cross section changes shape suddenly, i.e., where flanges join the webs. It is for this reason that fillets are placed at these points on all rolled steel I's and T's. Such fillets are not possible on built beams of wood. The well known rectangular cross-section is generally necessary on account of these not easily recognizable forces.

TV Used To Sell Building Product

Hachmeister-Incorporated is conducting a 13-week television test campaign in the Pittsburgh area to determine if a building product can be introduced and then properly merchandised through television.

With the development of Bloxolite, the new plastic decorative partition blocks. Hachmeister decided to try television as the medium for introducing it to home owners, architects and builders. Station WDTV in Pittsburgh was selected for the campaign, which is being conducted by Walker & Downing, Hachmeister's advertising agency.

AMERICAN BUILDER

170

Important Points ONLY NUTONE CAN CLAIM ALL THESE FEATURES

- MORE AIR DELIVERY More C.F.M. than other models in the same price bracket.
- S-YEAR GUARANTEE Motor unconditionally guaranteed for full 5 years.
- EASIEST TO INSTALL A screw driver is the only tool required.
- PERFECT ALIGNMENT—Only three screws lock telescoping sleeves in correct position.

ONE

Kitchen Ventilating Fans Luminaus

Pushbuttons

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inc tes

Low Voltage Transformers

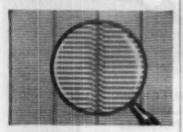
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Electric Door Chimes Electric

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4312-

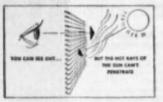
This cooling device was <u>hot</u> at the home show!



It's KAISE ALUMINUM SHADE SCREENING. And if you were at the NAHB Show in Chicago you saw how it can sell homes faster!

Keeps hottest rooms as much as 15" cooler - by means of thin louvers which block the sun but not the view!

Does the work of Venetian blinds plus awnings plus insect screeningfor as little as one-tenth the cost of all three!



Kaiser Aluminum Shade Screening is available in regular or tension frames from sash and screen manufacturers, and in 50-foot rolls from jobbers. (Are you a jobber? Some profitable territories are open. Get in touch with us fast!)

Set yourself up for a summer of profits - with the hottest hot weather item you ever had. Write today for free ALA file and name of nearest manufacturer or jobber for low-cost, fast-selling Kaiser Aluminum 5hade Screening.

Produced by Kaiser Aluminum & Chemical Corporation.



Sold by

Kalser Aluminum & Chemical Sales, Inc. Kaiser Building, Oakland 12, California

INDUSTRY BRIEFS

Roy V. Winters was recently elected president of National Plan Service, Inc. As vice president he

has been increasingly active in the management of the company for the past several years. Winters succeeds J. M. Wright, with



whom he has worked very closely. Wright will continue to serve National Plan in an advisory capacity. Frank Z. Smith has retired as treasurer and head of the architectural department and has been succeeded by Howard J. Uebelhack.

* * * *

Hotpoint, Inc., will erect a new refrigerator factory on a 21-acre site in Chicago, the firm's president, James J. Nance, has announced. Completion is expected in approximately 15 months. Nance also said that tooling and machine installations to complete the conversion of the company's former range plant for the manufacture of home laundry equipment would be completed during the year.

* * * *

The St Louis branch of Minneapolis-Honeywell Regulator Co. and its Brown Instruments Division hus been moved into a new office building. The new building, the first to be built and owned by the company, contains about 6,600 square feet of floor space. It is located at 4354 Olive St.

* * * *

Robert B. Taylor of Newark,

Ohio, was recently appointed research director for the Structural Clay Products Research Foundation. He has begun the planning for an industrywide, long-range re-

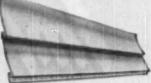


search program in the brick and tile industry from his beadquarters at 1520 18th St., N.W., in Washington, D.C.

* * * *

The Nichols Wire and Aluminum Co., Davenport, Iowa, has announced the separation of Warehouse and Mill Divisions. C. L. Johnson, affiliated with the company since 1939, has been appointed manager of sales of the Warehouse Division, and G. J. Brenneman, a firm member since 1947, assistant sales manager of the Mill Division.

New aluminum siding <u>floored</u> 'em at the home show!



Maybe you were there!

Scores of pop-eyed visitors at Chicago's NAHB Show proved by their enthusiasm that beautiful new Kaiser Aluminum Siding is a fast-moving money-maker -- with advantages no other material can offer.

Used on re-siding jobs or new construction, Kaiser Aluminum Siding offers home owners permanent beauty, low first-cost, no upkeep-costs. That means quick sales, high profits and clean, no-complaint deals for you!



GOES ON FAST AND EASY. Nails applied to one edge only. Exclusive curved surface gives extra strength, assures watertight joints. Has permanent baked-on paint finish!

Made of tough, high grade aluminum. Has flawless beauty and quality, with no buckles, wrinkles or "oil cans." Can't rust or warp, can't be damaged by termites, resists fire.

Hurry! Sew up a deal for Keiser Aluminum Siding! Write today for free AIA file and name of nearest jobber. (Are you a jobber? Some territories are open. Get in touch with us fact)

Kaiser Aluminum Siding is produced by Kaiser Aluminum & Chemical Corporation.



Sold by Kniser Aluminum & Chemical Sales, Inc. Kniser Building, Bakland 12, California



TER CUTS WITH SMALLER BLADS --- Only radial saw that aits 315" deep with 9" blade --- more than most other machines with a 14" blade.

Profit Bui

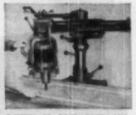


ALL CUTS MADE IN CONVENIENT TABLE AREA - Rp and cross-of through center of table-with "CENTE-PIVOT" offset yoks and simplified





MINATE POWER WASTE and w drap with analysive off-carder drive motor of big blades and



THRIFTY IN FIRST COST AND PERATION, light enough to move am jub to job. Eavy clearance through serways — anly 24" wide with wood OPERATION. table rame al.

Now-cut labor costs, make more profit on your job, and do a better job, with the new Walker-Turner "900" Series Radial Saw. Walker-Turner machine design brings to the building industry the streamlined techniques of modern production for wood and plastic cutting.

A complete machine as shown, the "900" Radial Saw does all the radial saw jobs. Yet with its big, durable work surface, full-work visibility, and Walker-Turner erra protection, even unskilled labor can operate it easily and safely.

Use this radial saw right on the building job-for easy, profitable cutting. You'll find it's a goodwill builder among home buyers. Be the first in you'r area to protit from Walker-Turner design in a builder's power tool. Mail coupon for bulletin describing in detail the many features and applications of the new "900" Radial Saw.



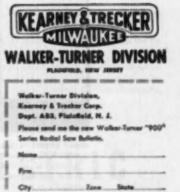
SOLD ONLY THROUGH AUTHORIZED DEALERS

new

radial

saw

'9[



Let General Electric help

WHY NOT CAPITALIZE ON SUCCESSES SUCH AS THESE?

A builder in Massachusetts reports: "Sold 125 G-E equipped houses in 10 days."

From Maryland: "Sold 44 G-E equipped homes from 1 sample in 1 day!"

From Colorado: "Sold 54 G-E equipped homes the first week end?"

Why not follow the success pattern of these builders?

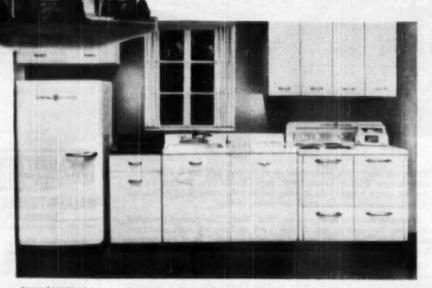
When you equip your houses with the General Electric Kitchen-Laundry you pre-sell your houses. You give customers what they want—homes designed for better living . . . scientifically designed kitchens that take much of the drudgery out of homework.

And, you know General Electric's reputation for fine products. General Electric appliances are the preferred brand of so many, many people.

As little as \$4.80 extra

You can include General Electric living in your houses for as little as \$4.80 a month extra when the G-E "Kitchen Package" is included in the long-term realty mortgage!

Furthermore, the economical operation, low maintenance and long life of General Electric appliances may offset the slight increase in monthly payments,



ONLY \$99901 "A low-cost luxury home with fully equipped General Electric Kitchen worthy of a \$30,000 home!" That's how Messen. Brinker and Campitelli described their Kensington Estates houses. Included in the kitchen in a G-E family-size refrigerator . . . G-E electric range for automatic cooking G-E sink and electric dishwasher . . . and G-E Disposall® food-waste Unit and storage cabinets. No isometer 250 of these General Electric equipped bauses were odd in just 10 days!

sell your houses faste

From all over the country come enthusiastic builder success stories such as this one ...

"SOLD 250 G-E EQUIPPED HOUSES IN 10 DAYS!"

Here's what Mr. NATHAN BRISKER, President, and A. CAMPITELLI, Secretary of Kensington Estates, Inc., Brentwood, Md., say:

- "We consider our 'Kensington Estates' housing project a huge success. The sale of approximately two hundred and fifty houses in ten days was an attainment far beyond our fondest hopes.
- ⁴⁴It is our opinion that the phenomenal success of this project was due to a soundly built house well planned, good financing and the better

living built into the homes in the form of the complete General Electric Kitchen.

- "We think the public deserves better living in the lower price home as much or probably more than in the more expensive home.
- "We want to extend our appreciation to you and the men from the Potomac Electric Power Company for your help and co-operation in mamning the houses and demonstrating the G-E Kitchen to the thousands of people who visited these houses."

A COMPLETE MERCHANDISING PROGRAM FOR YOU!

General Electric---the world's largest electrical manufacturer ---offers you all these advantages:

 Tested merchandising programs that have helped so many other builders enjoy phenomenal sales results.

 General Electric is the brand of electrical appliances that people prefer to all others.

 Assistance in designing and improving kitchens and layouts for your houses.

GENERAI

 One source of supply for matched equipment—everything but the linelena and point.

 Fewer headaches. G-E equipment is world-famous for its dependability.

GET COMPLETE FACTS about the General Electric "Kitchen Package" through your local General Electric distributor, or write to the Home Bureau, General Electric Company, Bridgeport 2, Connecticut,

ELECTRIC

You can put your confidence in-



NDUSTRY BRIEFS

Northern Hardwood flooring manufacturers were told to expect a 25 per cent decrease in the use of wood floors for industrial building during the year at the recent meeting of the Maple Flooring Manufacturers Association in Chicago. W. C. Abendroth, Reed City, Mich., who was re-elected president of the group, said that the trend definitely pointed to the school field in 1950.

* * * *

Establishment of a new sales division of the Upson Co. and the appointment of William W. Suttle

as its sales manager were announced recently by Harry R. Shedd, vice president and director of sales for the company. Memphis, Tenn., will be headquarters for the



new Central Division, which will include Louisiana and parts of Tennessee, Alabama, Florida, Missouri, Illinois, Arkansas and Mississippi.

Suttle joined Upson in 1941 and had been manager of the South Atlantic Division since May, 1949.

* * * *

Louis Herscovitz of Chicago has been named sales consultant for the Ruberoid Co., the firm's president, Herbert Abraham, announced recently. Herscovitz was vice president and general sales manager for Ruberoid from 1945 to March, 1949, when he resigned to join a brother in another type of business which occupies only part of his time.

** * * *

Three appointments to the 1950 board of directors of the Plumbing and Heating Industries Bureau have been announced by George O. Toepfer, president of the Bureau. John M. Dunser has been reappointed to represent the Copper and Brass Research Foundation; C. E. Lewis represents the Oil-Heat Institute of America; and G. C. Bulkeley the Tubular Plumbing Goods Institute.

L. E. Venard, president of Western Mineral Products Co., Minneapolis, recently announced that the company has expanded operations by purchasing the facilities of Western Vermiculite Co., Denver, Colo, Western Vermiculite, one of the pioneer plants in the vermiculite industry, has operated in the Denver area for more than 10 years.

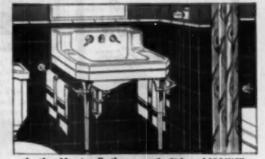
Richmond's at Home all through the House !



In the Powder Room, she Richmond RICHLIDGE, Plate #G-152. All the big lavatory features and beauty at a budget price. A compact wall-bung china unit to fit the smallest bathrooms. Chrome-plated legs and towel bars optional. In 2 sizes: 18" x 15", and 19" x 17".



In the Kitchen, she Richmond SIRBIN, Plate #1888. A handrome indgeback acid-remisting enameled cast-iron sink with double drainboard and double compartment. Ideal for haso cabinat installations in the most modern kitchena. Drilled for dack-type supply fittings with hose and agray.



In the Master Bathroom, the Ridmond BROMLEY, Plate (G-132. Smart and modern-will glamorize any bethroom. A shelf-back, square boost vitreous china lavatory with front overflow and anti-splash rim. Chrome-plated legs and towel have optimum. In 2 dams 22" x 18".



In the Smaller Kitchen-Dinette, the Ridmond STRAITON, Plate #2110. A beautiful enamed acid-mulating cast-iron flat-rim aink for built-in counter top installationsone of the fine Richmond line of quality mike. Drilled for supply fitting with hose and spray.

Insure Satisfied Customers With Smart, Sturdy Richmond Sinks and Lavatories

When you specify or install Richmond you're guaranteed customer satisfaction. For Richmond's top-quality products make a lasting impression all through any house. Whatever the situation, there's a Richmond rugged enameled cast-iron sink (or sink and tray combination) of versatile design with acid-resisting enamel to serve the finest kitchens. Whatever the location, there's either a Richmond vitreous china or enameled cast-iron lavatory of superior construction, design and finish to grace the finest bathrooms. And with each Richmond unit, there's a choice of four tasteful pastel colors—Asure Blue, Bermuda Coral, Fern Green and Oriental Ivory—plus the famous Richmond "whiterwhite" ahade.



MARCH 1958



A Big-Time "Salesman" for Rural Home Builders !

It's easier to sell your out-of-city dwellings, with Myers Water Systems in your "Sales Story." For instance, this new "HN" Ejecto has profitable advantages for both builder and buyer. Quick, sasy installation means important savings for you. Quiet operation, simplified convertibility-postive action at the turn of a tap-are typical features of the new "HN" Ejecto that help to sell homes. And its continuous problem-free performance is a real good-will builder-an important asset for every builder. Full range of Myers Ejecto and Reciprocating Type Water Systems matches every water service need. And a new Myers line of Water Softeners that are today's top values. Write for catalog and name of distributor nearest you.



Dept. 2.94, Ashiand, Ohio



THE steel square is superior to any other device in laving out 14 100 bridging with speed and accuracy, Important Street So point to remember is that figures for rise and run are placed on opposite sides of piece to be marked. The sketch is 16 based on 2x10-inch joist 16 inches O.C .- C. M Olson, Lewisburg, Pa. HOW TO DO IT . HOW TO DO IT . HOW TO DO IT

How to Prevent Window Sash from Binding

SILL

SASH

ORIGINAL SHADE

New CUT-

VINDOW, STOCK

APPON.

N the case where wood sash are inclined to bind due to expansion the following suggestion is offered. Plane the edge of window stool that adjoins sash leaving a sharp edge at the top of stool as indicated in drawing. --- Batsell Moore, Waco, Texas.

HOW TO DO IT . HOW TO DO IT . HOW TO DO IT How to Draw Form Wires Tight IN PLACING forms for concrete walls, areas are encountered Wepge where it is difficult to twist form wires holding horizontal boards to vertical struts. In these cases wood wedges can be used to draw form wires tight .- W. A. Woodard, Volga, So, Dakota

How to Use Square for

Marking Gauge

HOW TO DO IT . HOW TO DO IT . HOW TO DO IT

NOTCH-

LARGE number of A LARGE number of carpenters use a combination square for a marking gauge, but they find it rather difficult and awkward holding a pencil at the end of the riske blacks

To overcome this condition, tile a notch at the center of the end of blade and the pencil will stay in place .- Submitted by Arthur F. Taggart, Monrovia, Calif.

AMERICAN BUILDER

only 155 man-hours to erect this better house Think of it! Days—not months—to put up as sound a house as you have over constructed. And this faster P&H way of building simplifies your problems of erection, financing and selling.

P&H PREFERRED HOMES GO UP FASTER ... EARN BIGGER PROFITS

The time element is only one item in your P&H profit picture. Consider the cost factor. P&H Preferred Homes give more ac-

curate control of building costs than you have ever known!

Most important of all, here is a profit opportunity not equalled in any other type of building. You can meet the price demands of the market... and earn greater profits on four to five times as many homes as you can build by conventional methods. And you'll self them, for here is sales appeal that has proved itself wherever P&H Preferred Homes have been shown.

These important reasons, with the economies of mass production, explain why so many profit-wise builders are turning to P&H Preferred Homes in '50. Start now, for a really profitable building year.

Send today for all the facts about P&H Preferred Homes.



3 Full sizes: 24' wide by 28' long. 24' wide by 33' long. 24' wide by 36' long.

@ Large living room --- 11' 7" s 17' 4".

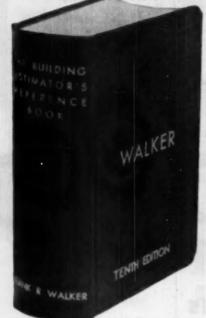
- Saint-free, crack-proof wells.
- Choice of two at three bodrasm
- · Flush doors throughout.
- . Built with ar without housement.
- Choice of heating equipment.
- · Highly rated for FHA financing.

PRE-ASSEMBLED HOMES

th Saul



Tenth Edition ... The Building Estimator's Reference Book



1700 pages, 1000 illus., 1000 tables, 25-page index, 41/2 x 61/2, flexible

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Excavating, Foundation Work, Reinforced Concrees, Framing, Millwork, Lathing and Plastering, Painting and Decorating, Glass and Glazing, Structural Steel, Masonry, Sheet Metal, Marble and Tile, Heating and Air Conditioning—and many other building subjects.

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Enclosed find \$10 remittance for which send ms a copy of the New Tenth Edusion of THE BUILDING ESTIMATOR'S REFERENCE BOOK and a Free copy of THE VEST POCKET ESTIMATOR. If J do not find the books emirely asterfactory I will present them within five days of receipt and you will refund mp \$10.

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By Frank R. Walker

The new Tenth Edicion contains latest estimating and cost data on everything that goes into house construction, from foundation to finish. It can be used in any locality, regardless of local prices or wage scales. It covers all types of small and large building construction.

For 30 years Walker's handbook has furnished contractors and estimators the most complete compilation of estimating and cost data available. The new edition has been revised and improved in the light of postwar conditions. Thousands of items that enter into construction estimates are logically arranged and tabulated for ready reference. A complete cross-index enables the user to quickly locate any subject.

HELPS PREPARE BETTER ESTIMATES

A copy of this new edition will help any builder, contractor or estimator in figuring and performing work at minimum costs. It will reduce the chance of overlooking an important item in an estimate. New methods of doing various kinds of work are explained and new building materials that have come on the market since wartime restrictions were lifted are fully described.

SEND FOR A COPY TODAY

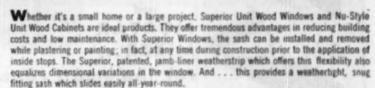
Send for a copy of the new Tenth Edition of THE BUILDING ESTIMATOR'S REFERENCE BOOK today. Take advantage of the many opportunities it offers for increasing your profits through better estimates. Money back if not entirely satisfactory.

FREE

With The Building Estimator's Reference Book The Vest Pocket Estimator

This is one of the most popular little estimating books ever used by contractors. It contains 220 pages, $2l/2 \ge 5$ inches, and is flexibly bound to fit the vest pocket. Estimating and cost data most frequently referred to is presented in condensed tabular form. It can be instantly referred to on the job or in the office.

180



The features of Nu-Style Cabinets are also many! They provide utmost convenience ... maximum utility ... absolute economy and greater flexibility. They can be scribed or sawn, and they can be enameled any color or finished natural.

Bilt-Well Products are distributed by leading woodwork jobbers throughout the 37 Eastern States.

CARR, ADAMS & COLLIER CO., Dubuque, Iowa

Manufacturers of The Bilt-Well Line: Superior Unit Wood Windows - Exterior & Interior Doors - Entrances & Shotters - Clos-tile Casements - Carr-dor Garage Doors Basement Unit Windows - Louvers & Gable Sash - Breakfait Nooks - Combination Doors Screens & Storm Sesh - Corner (China) Cabinets - Gli-der Cabinets - Ironing Board Cabinets - Mantels & Telephone Cabinets - Multiple-Use & Linen Cabinets - Stair Parts



Another



STANLEY PLANES Make the most of your skill

The choice of 9 out of 10 woodworkers, Stanley Planes feel right ... work right. These planes—and many other types of planes—are part of the complete line of Stanley Tools. When you buy tools, look for this famous trade-mark. Stanley Tools, New Britain, Conn.



THE TOOL BOX OF THE WORLD



HARDWARE - TOOLS ELECTRIC TOOLS - STEEL STRAPPING - STEEL

American Builder Publishers Announce Staff Promotions



J. S. CRANE, laft, vice president and socretery of the Simmons-Boardman Publishing Corp. and contern advertising manager of the American Builder since 1938, whose appeniment as general sales manager of all the corporation's transportation publications was recently canounced by James G. Lyne, Simmons-Boardman president; and Cherles A. Simonaen, who succeeds Crame as contern advertising manager. Also an neurosci is the appointment of Robert A. Will, itermerity with McGraw-Hill Publishing Co., as American Builder promotion manager. Crame is widely known is all learnches al the light construction industry and has been atiliated with Simmons-Boardman since 1932. In his new past, he will serve an promotion director for all of the corporation?



for the small contractor, or for decentralized mixing on large jobs

With B. & S. engine drive \$320 . . . Electric motor drive \$300

Here's a unit that will place your mixing on an efficient memory-saving basis. Just wheel it to the apot nearest the work ..., goes through Silvich doors. Charging height Silviches ..., heavy-duty blacks give end-to-end action for therough mixing ...bug splitter saves time. Ringed housing for quick access to engine and drive ..., hinged safety grating for easy charming. Limpible construction ... heavy rolling chain and machine-cut gear drive ..., treubis-proof staffing bax.

Literature on request

Also 6 and 10 ca. ft. plastor and mortor mixors, tilting and sam-tilting cancrote mixors, concrete carts, mortar bases

MULLER MACHINERY CO., Inc.

Metuchen 4, New Jersey



WHY IS BEAUTY-an important factor in home building -neglected below grade? All too frequently basements, representing 20% or more of the home area, are left unfinished. These basements are highly valued by home owners for laundries, workshops, recreation and play rooms. Why, then, should they be neglected . . . particularly when it costs so little to decorate with Medusa Paints!

With colorful Medusa Paints, you transform dull unfinished basements into bright, livable areas. But this is only half the story of Medusa Paints. On walls, Medusa Portland Cement Paint actually protects the construction . . . sealing out mild dampness, while Medusa Rubber Base Coating gives concrete floors a super-tough finish that has remarkable wearing qualities. Use these long lasting paints for basements, utility rooms, garages, breezeways, stucco and concrete block homes-in fact, all concrete and masonry surfaces! To help you select harmonizing color schemes, we have prepared color charts. Write for them.

MEDUSA PRODUCTS DIVISION •1 MEDUSA PORTLAND CEMENT COMPANY 1002-2 MIDLAND BUILDING + CLEVELAND 15, OHIO

BEST for Masoury Surfaces

MEDUSA S PAINTS



MARCH 1758



HOUSES are flexible!

Engineered Houses fit any climate, any style, whatever you want-your way! They're rugged individualists designed for speed -fast because we take your plans or ours and pre-cut and panelize the materials into massproduction. Not pre-fab! Not mode to straight-jacket formulaz. Versatile-on entirely new conception! \$4,000 house or \$40,-000 house; one unit or a complete project. Our engineers have a billion hours of know-how proved on projects across the nation and around the world! Save on material costs. Save on erection costs.

FOR COMMUNITY, INDUSTRIAL **OR SPECIALIZED NEEDS**

Phone, wire or write for FREE booking ENGINEERED HOUSING and get full details on this revolutionary technique in housing construction!



NRLDA Highway Signs To 'Sell' Home Ownership

Highway signs selling home own ership will be installed throughout the country in 1950 by humber dealers in a NRLDA-sponsored publicity program to be carried out by state and regional associations



Feature of the sign is a full-color drawing of the Certigrade National Home, the model home publicized in 1949 by the Red Cedar Shingle Bureau

The signs are built, installed and maintained by a midwest outdoor advertising agency. The dealer-user pays a modest monthly rental fee to the regional or state association.

The signs are double-faced and all printed matter is treated for visibility at night. Installation is in a concrete hase; signs are 10 feet high; seven feed wide at top panel and two feet high, four feet wide at bottom panel on which dealer's name appears.

20 Million Acres in Tree Farms at End of 1949

At the end of the year, the nation had a record 20,010,102 acres of privately-owned timber land devoted to the production of wood for commercial use. This acreage, representing 2242 different ownerships in 27 states, is certified in the American Tree Farm system.

Nearly 3,000,000 acres were added in 1949, according to James McClellan, chief forester for the American Forest Products Industries, Inc., which sponsors the program in cooperation with state agencies,

For the fifth consecutive year the South led all other regions in tree farm growth, with a total of 1,151,759 acres. The Western Pine area was second and the Lake State region whiel.

Minnesota will dedicate its first tree farms in the spring of 1950.



SAVES TIME

shows how Su a Seat n. Balt ping fo gh 2 a 4 sheds des secure

AVES LABOR

G. Deteing, Foreman, Taylor Brothers, South Band, fates: "Seven men set up the forms for a 28' x 27'

AVES COST

Time and Lobor out eaders, waters and bracing ... Plus for suce of forms ... Costs drop to a new low.

RENTED WITH PURCHASE OFTION WRITE TODAY FOR FREE CATALOS



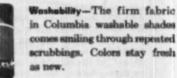
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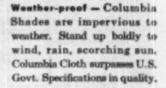
Even the queerest window shade requirements don't baffe Columbia! You may want extra long, skinny shades for some mysterious purpose—or jumbo shades that sound impossibly large. Just see your Columbia Authorized Dealer and he'll follow your specifications to the dot. But versatility is only one of the big benefits you get when you install Columbia Window Shades. Some others are:



Long Life—Columbia Shades are built for hard wear . . . woven to resist pinholes and cracks. Maintenance costs are kept way down because Columbia Shades are really tough.

Perfect Service—Quiet and dependable operation is assured. Columbia Shades and rollers pass rigid tests before they leave the factory.





Calumbia Shadey and Venetian Blinds are sold only through Calumbia Authorized Doulors in loading department stores, furniture stores and shade shape.

We will gladly submit specifications for shades that can become a part of the General Contractors bid. This includes a recommendation for correct type of fabric, mechanism and color; method of manufacture and proper installation. Let us call on you and discuss your particular problems.





In Hall-Mack's complete selection of bathroom accessories you'll find unique special accessories like these—made to add the final touch of convenience and appearance to any bathroom...



THIS BEAUTIFUL Concealed Lavatory Unit is a perfect companion for all other Hall-Mack Accessories. Soap, tumbler and toothbrush are ready at the touch of a

finger-yet smartly concealed when not in use. These bathroom necessities are mounted on a revolving panel, and only a polished chrome surface flush with the bathroom wall is visible when the unit is closed...

Axo near is a three-bar Adjustable Towel Rack - a real spacesover it's instantly adjusted to any of three positions (horizonral, 45°, or down) and is ideal for drying hosicry, for diaplaying guest towels, and for bath towel storage. Drops down out of the way when not in use, yet provides so much extra convenience when needed.

> LOOK FOR All of the extra qualities in bathroom secessorties-and you'll choose Hall-Mack! Rememberthere is a complete line to give you the right accessories for every bathroom need. Hall-Mack also makes a full selection of fine Medicine Cabinets and other recessed specialies. Write for details. Hall-Mack Company, 1144 W. Washington Blvd, Los Angeles 7, California.

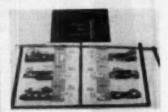




50

Book for Merchandising Homes Published by National Plan Service

A complete henne building book, designed as a merchandising aid for retail lumber dealers, and others in the building industry is being published by National Plan Service, Inc., R. V. Winters, vice president, has asinounced. Called "Planning Your Individual Home." the book contains 96 pages of 15x20-inch dimension, Fifty-six pages portray home designs in full color and give home planning guidance, while 40 are devoted to building materials from which to choose in planning a home.



PHOTOGRAPH shows partian of cover and full color spread of six home designs of National Plan Service's sales aid book

All of the merchandising information in the book, which contains no advertising, is presented in a factual manner. Complete coverage is made of all phases in planning and building a home; for example, there are four pages of kitchens.

A preview of the book was held at the NRLDA fall meeting in San Francisco, where it was shown to atate and regional association secretaries and received very favorable comment as a constructive selling service. The book is being shown currently at state and regional dealer conventions and by National Plan Service representatives. Orders are being accepted for late March delivery.

Wiscensin Professor Named HHFA Housing Research Head

Appointment of Dr. Richard U. Ratchiff of the University of Wisconsin as Director of the new HHFA Division of Housing Research, authorized under the Housing Act of 1949, was announced recently by Administrator Raymond M. Foley of the Housing and Home Finance Agency.

Dr. Ratcliff has had about 20 years of varied experience in the housing field, including business, teaching, governnoent, consulting, writing and research in the economic and social phases of housing, planning and real estate. He formerly was with the (*Continued on page* 188)



Abore: Associated Plywood Mill, Willamina, Origin Right: Associated Plywood Mill, Eugene, Oregen

... from Oregon's finest Douglas fir

Plywood is known as the "miracle" wood. How it gets that way at Associated Plywood plants is no miracle at all, but rather a combination of outstanding natural and man-made circumstances.

The rich, rain forests of Oregon yield the fine Douglas fir that comes to Associated mills. These mills are among the largest and most modern in the plywood industry, with a number of manufacturing "firsts" to their credit.

And in these mills work more than 900 skilled craftsmen-men who have had years of training and experience.

The plywood they produce (both exterior and interior panels) is grademarked and trademarked a double guarantee of product quality and user satisfaction.

APMI trademarked plywood is available in the nation's major building and distribution areas, in stock sizes for most efficient use. Your inquiries are welcomed at Associated mills, or at any of the listed warehouses.

> APMI Stack Panel Sizes Longibs: 60" 72" 84" 96" 108" 120" 144" Widths: 24" 30" 36" 42" 48"

2 MILLS WITH BUT A SINGLE PURPOSE... quality plywood

APMI SALES WAREHOUSES

Eugene and Willamine, Oregan San Francisco, 925 Taland Bt., 24 Dallas, 4814 Bengal St., 9 St. Laula, 4268 Urah St., 16

OTHER SALES WAREHOUSES DESSONETTE & ECKSTROM LOS ANGELES II, CALIPORNIA

PACIFIC MUTUAL BOOR CO. TACOMA 2, WASHINGTON BALTINOSE 31, MARTLAND OHICADO 5, HILINOTOS GARNOOD, NEW JENEY EANSAS CITY 3, KANSAS 51, FAUL 4, MINNESOTA

ASSOCIATED

APM

How to make provision for attic fans in your homes

made comfortable throughout steps described below will save of cooling an entire house.

It is a simple matter to plan money for owners by providing new homes so that they can be for inexpensive installation of package attic fans, the most hot summer months. The two economical and practical means



Installation of Hunter Package Fan can then easily be made when home is built, or later



This new fan is a compact unit, with built-in fan, motor and suction hox. Fits low-clearance attics. Certified air delivery ratings for any size home or climate.



Automatic or pull chain shutters are quict, tight-closing. Fit narrow hallways. Soft ivory finish (baked enamel) harmonizes with the color scheme of any room.

MAIL FOR COMPLETE CONSTRUCTION DETAILS

Hunter Fan and Ventilating Company, 381 S. Front St., Memphis 2, Tenn. Send copy of "How to Cool for Comfort" to:

Name Firm Address City & State **Hunter Package Attic Fans** 188

New Johns-Munville Product Used in Interior Decerating

Johns-Manville has entered the interior decorating field in its Flexboard line of asbestos and cement utility sheet materials with the 1950 introduction of De Luxe Flexboard.

Manufactured in sheets one-eighthinch thick, four feet wide and up to eight feet long, the new material features a fabric pattern and is available in six colors. It has the appearance of a textured material and a hard, smooth finish.

The finish is fused into the base sheet through the use of heat and pressure. The manufacturers said that accelerated tests over a period of more than a year have shown that De Luxe Flexboard is alcohol-proof, grease-proof and highly resistant to acids, alkalines and household chemicals; that it is not marred by burning cigarettes ; is remarkably shock-resistant; and that it withstands high humidity, hot water, steam, sun and hours.

Domestic applications of the material include bathrooms, kitchens, nurseries and game rooms; among commercial applications are walls and ceilings in shops and showrooms; window backgrounds and interior displays; and interiors of office buildings, hospitals, theatres and schools, For any of these uses the board may be applied either by adhesives or mechanical fastenings.

Wisconsin Professor

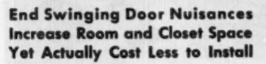
(Continued from page 186) National Housing Agency, predecessor to the HHFA and, since 1944, he has been Professor of Land Economics, School of Commerce, at the University of Wisconsin.

Title IV of the Housing Act of 1949 authorizes for the first time a comprehensive and coordinated housing research program. It directs the HHFA Administrator to carry out a program of research and studies concerned with housing economics and other housing market data and with development, demonstration, and promotion of the acceptance and application of new and improved building materials, methods, and techniques, directed toward increased and sustained production and lower costs.

This activity is to be carried out in cooperation with government and non-profit organizations and private inclustry.

Since administrative funds for the new program became available late in October, specific research projects set forth in appropriation requests to Congress have been going forward-Foley said.

SPACEMAKER SLIDING STEEL CLOSET DOORS



Doors and Frame Comprise a Packaged Unit Ready for Installation. Doors May Be Purchased Separately.

No wonder housewives everywhere choose Steelcraft's new SPACEMAKER Steel Doors in preference to the old swinging, space-hogging kind. Just look at the diagramssee how you have to claw and fumble to get at any-

thing stored in the dead ends of old-style closets. Spacemakers open right up to whatever you want. Besides, Spacemakers permit full use of the room space in front of closets which must be kept free for ordinary doors to swing in.

Nevertheiess, Spacemakers actually sell for less than comparable wood doors and hardware. They save on construction costs, too-eliminate extra studs, lath and plaster-cut building time, too because they're so quickly and easily installed. Once installed, they assure smooth, quiet operation-and trouble free service for years to come. Send now for complete details. Just mail the coupon below.

....

COM

STEELCRAFT ONE-PIECE STEEL DOOR FRAMES Cut Building Costs Still Mare. Perfect team mates for Strektraft SPACEMAKERS, these sturdy steel frames are also ideal for conventional swinging doors of wood or metal. Use this up-to- date, improved product at a sub- stantial reduction in installation costs. One-piece welded construc- tion won't creak, sheink, swell or warp. Reinforced, mitsed corners won't open. Hinges are spotwelded to frame. Completely enclosed dust bon welded to frame, adjusable brass strike plate furnished. Mail coupen at right for full information.	Ĩ	HACTICAL Bay to operatoSeve spece. LASY TO INSTALL No field coting for hinges of hardwore. MOUNTAINS MOUN	-
STEELC	RAFT	Company Address City	Bross

My Penii



Yeu can now use a Whiteman Power Buggy for pouring con-crete all the way up to your tep floors.

- DUMP CONTROL ... A genred control enables operator to make partial dump and return balance of load to position, a very desirable feature not available in
- BIGGER BUCKET ... How 13 co. H. or 2,000 lbs. per load.
- MORE POWER... Now 7% horsepower, 4 cycle, air caeled mater. Pawor to skim aver the ground, or climb sleep grades (30*) fully londed.
- MORE SPEED Now up to 16 miles per hr. -forward or raverse.
- STRONGER FRAME ... GREATER STABILITY ... Lower load center of gravity-wider wheel tread with dual tires. Sharter wheelbace-only 42"-permitting use on slanderd 5' runways.



OTHER SPECIFICATIONS

Overall length \$2". Overall width single wheels 36"; duals 44". Wheels, pressed steel, split rim (all interchangeable). Tires, 400-8 (wheelborrow size). Drive, automatic clutch and variable speed changer. Steering, full 360" ratel-ing drive mount. Ball bearing support. (forms in its own radius.) Brakes, conleacting on load wheels.



ix Cities Approved for Sinm Clearance I Under 1949 Hous e Fund ng Ant

The first reservations of funds under slam clearance and urban redevelopment program authorized by the Housing Act of 1949 were made recently when Raymond M. Foley, HHFA Administrator, approved preliminary allocations totaling more than \$5,000.000 in Federal grant funds for the first six cities to file applications.

The reservations were signed by Foley and Nathaniel S. Keith, director of the Division of Slum Clearance and Urban Redevelopment, at a ceremony at the administrator's office attended by members of Congress representing the applicant cities.

The six cities ranged in population (1940) from 20,000 to 294,000. The cities, amount of grant funds reserved for them and populations are : Jackson, Tenn., \$300,000, 24,000; Albany, Ga., \$200,830, 20,000; Perth Amboy, N. J., \$177.170, 41.000; St. Paul, Minn., \$1,276,870, 288,000; Nashville, Tenn., \$1.861,000, 167,000; Dallas, Texas, \$1,758,400, 294,000.

The grant reservations were made to communities on the basis of applications approved by local governing bodies. They are intended to assure these communities that such reservations will remain available during the period necessary to develop plans for specific slum clearance projects, prior to the execution of firm loan and grant contracts. Keith pointed out that they do not constitute binding commitments, since firm contracts for slum clearance aid can only be entered into with localities on the basis of fully developed proposals. In order to maintain the grant reservations, the localities must take definite steps toward the accomplishment of specific projects within six months,

Under Title I of the Housing Act of 1949, a total of \$1,000,000,000 in huns and \$500,000,000 in grants is made available to assist local communities in slum clearance and urban redevelopment programs. Reservation of grant funds at the present. time is limited to projects to be started by July 1, 1951 and are to be made from the initial \$200,000,000 of the grant authorization.

The Federal grants are to be used to pay up to two-thirds of the net write-down cost representing the difference between the cost of acquiring, clearing, and preparing the land for redevelopment and the value of the cleared land for its approved new uses. The locality will contribute at least the remaining one-third.



Here is

THIS new Bradford 6" Portable Electric Saw is ruggedly constructed and fully powered to take on the toughest sawing jobs! Use of highest quality materials throughout assures carpenters, contractors, and maintenance men YEARS of costsaving service. Powerful 110 volt AC/DC motor. All ball bearing construction. Helical-cut hardened gears. Compact, streamlined, BAL-ANCED design gives greatest accuracy with least effort.

Ask your Bradford distributor to demonstrate this precision-made tool- it's today's outstanding power saw buy! Write for bulletin giving complete specifications.



"Heatilator Fireplaces cost no more and make houses easier to sell!"

SAY LEADING OPERATIVE BUILDERS



HERE'S a big extra selling feature that makes houses move faster - and costs you little or nothing! Build your houses around the cheery glow of a modern Heatilator* Fireplace-the Fireplace that circulates heat instead of wasting it up the chimney. Savings in labor and materials usually more than make up for the small cost of the Hessilator unit.

1. Assures corroct operation. The Heati-lator unit is a scientifically designed. lifetime-built steel form around which you can build any style fireplace. It assures correct construction even by inexperienced masons and eliminates common faults that cause smoking.

2. Saves you time and money. The Heati-lator unit adds little or nothing to the cost of the finished freplace because it's complete from hearth to flue and ready to install. It saves on expensive firebrick. It saves mason time and labor because all designing is done. You save valuable

HEATILATOR FIREPLACE **Closes Sales FASTER!**

time because the Heatilator unit permits anapereited construction.

3. Creatures heat, saves feet. The Heati-lator unit takes heat that is ordinarily wasted, and circulates it to every corner of the room ... and to adjoining rooms as well. On cool Spring and Fall days, furnace operation is unnecessary. In mild climates, it's the only beating source needed.

4. Makes any house easter to soft. It's the kind of quality com-

fort feature today's bousehunters are looking for! And they know the Heatilator name through over twenty years of autional magazine advertising.

Write today for complete specifications and illustrations showing a variety of attractive freplace designs employing Heatilator units.

Heatilator Fireplaces are sold by all leading building material dealers. Ac-cept no substitute. Look for the Heati-lator name on the dome and on the damper handle. Heatilator, Inc., 635 E. Brighton Ave., Syracuse 5, N. Y.

op of alcone and invites Nam was d Bench of Kin

"Hostilator is the roy trade-



Clay Tile Exhibit Offers Outstanding Design Ideas

FLOORS of real clay tile are featured in four rooms recently designed by T. 'H. Rohsjohn-Gibbings, designer for the Widdlacomb Furniture Company's new contemporary furniture. The rooms were visited by bundreds of buyers, newspaper-women and magazine



FIREPLACE in living room is attractive through its simplicity

editors during the Grand Rapids, Mich., furniture show, and drew a lion's share of attention.

A glazed tile in a handsome ash gray shade was used throughout the display, which will remain on exhibit all year. The display comprises a dining room, living room, library and bedroom. Clay tile was selected by the designer to match the style of the new contemporary pieces. And in this case it also enhances the general design of the rooms. The contemporary living room has a long, low fireplace with simple and effective lines. Ash gray color of the tile floar blends well with the brown color of the fireface manifel.

White brick wall and floor of ash gray clay tile are



WOOD panel above this fireplace carries design motif to ceiling

compelling features of the library. The fireplace in this room is again a simple design. A wood panel over the fireplace, the same width as the fireplace opening, carries the design motif up to the ceiling. Colors of the painting selected to go over the fireplace are dark hued to match the dark effect of the fireplace opening.

Highlight of the dining room is an ash gray clay tile floor that blends well with exposed white brick of the wall.

The bedroom is made pleasant and restful by harmonizing colors and materials. Here again the designer (Continued on page 194)





ONE OF THE OUTSTANDING NEW ITEMS OFFERED IN THE LEIGH 1950 LINE IS OUE NEW LINE OF METAL AWNINGS AND CANOPIES These units are made of DOUBLE-PROTECTED Steel - Steel that is casted with sinc and benderized

for double weather protection. Finished in two costs of baked cannel * one piece construction -- no assembly problems * Rigid steel construction will withstand wind, fulling iniches, etc. * Beautiful styling enhances any bases.



WINDOW AWNINGS

An attractive permanent metal swning that gives end shads without cotting off ventilation and light. Finished in 3 attractive calars --Green, Blue and Tile Red baked ensmel. White ensmel inside gives lighter cosms. Flashing nails are perves to house -- heavy steed ornamental brackets screw to awning and house -- a sturdy permanent installation that can be made in a matter of minutes, Projects 20". Made in widthn 10", 36", and 42", Packed in individual shipping containers, complete with brackets, etc.

DOOR CANOPIES

Builders! These door canopies out your cost 50% to 75%. Compare their cost with your "on the job" fabrication cost. Finished in 3 attractive colors — Green, Blue and Tile Rod. Flashing nails or screws to house — heavy steel ornamental brachets screw to canopy and house — a rigid permanent installation that can be made in a matter of minutes. Drip drain channel at front roof edge. Projects 30" — 4" deep, 44" and 54" widths. Pached in individual shipping containers, complete with brachets, etc.



(Continued from page 192)

has ackieved an outstanding effect by using simple lines, and a straightforward design motif. A broad, sturdy wood mantel over the low fireplace provides a setting for display items; a satural wood wall above the fireplace blends with the wood mantel, and adds softness to the colors in the room. The design motif of the fireplace is carried out by the use of wood



DROP celling of room adjacout to this dising room heightens the effect of strongth added by the use of the and brick

panels on the wall across the room.

The theme of all the rooms is tied together by the use of the same color clay tile, a technique which the designer uses to achieve "interflowing" rooms.

"Clay tile has long been used for floors throughout Spain, Argentina and other lands, but in the United States it has been too often restricted to bathrooms, kitchens and patios," said Drew Schroeder, chairman of the Tile Council of America, which cooperated with



USE of wood mantal and wall pessels above fireplace add appearance of resthelness to this pleosant bedroom.

Widdloomb on the Grand Rapids display. "These rooms prove that clay has the beauty and design qualities needed to fit it for floors throughout the finest and most modern homes."

Resew your subscription to American Builder

The PARKS PLANING MILL SPECIAL

MANUFACTURERS OF QUALITY WOODWORKING MACHINES Since 1887

8 MACHINES IN ONE

The Parks Model R Planing Mill Special is a low priced, multi-purpose, money-saving machine that is ideal for almost every shop. It offers a Cant from Double Table Rip and Crosscut, 22-Inch Band Saw, Swing Cut-Off Saw, 12-Inch Jointer, Tenoner, Upright Hollow-Chinel Mortises and Borse, Reversible Spindle Shaper, and 13-Inch Sanding Dig.

Write for free descriptive Literature.

PAADD Woodworking Machine Company Dept. 30-MM, 1546 Knowitce St., Cincinneti 23, Ohio

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ist on his seal

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Make this your "safety rule" when you buy aluminum windows-insist on the "Quality-Approved" seal.

It's your assurance of complete satisfaction, for you and your customers.

It's your protection against windows of inferior materials and construction.

Today, with so many makes to choose from, this protection is particularly important.

It tells you which manufacturers make windows that have been tested against rigid standards, and approved.

When you see this bright red seal you'll know you're getting all the ad-vantages of aluminum windows at their best-quick, easy installatioù, good looks, freedom from painting and costly upkeep, trouble-free operation and long, long life.

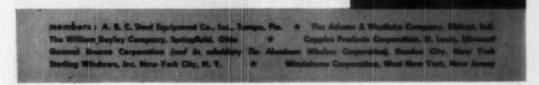
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OUALIT APPROVED

You can get "Quality-Approved" aluminum windows from any manu-facturer listed below.

For complete information consult any Association member, see Sweet's Builders File (Section 3c/1a) or write to Dept. AB-3.

Aluminum Window Manufacturers Association 209 Codar Aveaue . Takama Park . Washington 12, D. C.



MARCH 1950

Chicken House Apartment Style

Monsuring 30 x 140 foot, the buildings have modern insulated walls. Each unit houses 7,500 birds

A. A. Urness, owner of the Rochester, Minn., hatchery, recently completed two of these laying houses.

Framed of lumber, the laying houses have a concrete block foundation. Floor framing consists of a laminated 8x10-foot girder extending lengthwise of the building along the center line. Framing into this includes 4x10-inch beams, spaced 7½ feet apart for the pen areas and 5 feet apart for the feed room. A two inch D & M floor is laid over the beams.

The wall selected by Urness begins with an exterior asbestos composition board in 5g-inch thickness, horizontally applied in 4x8-foot sheets. Insulating sheathing was tightly installed around the windows and doors.



Ventileting louvers in laying houses prevent moisture huild-up

Within the walls, a 2-inch blanket of glass fiber provides further insulation to keep chickens warm during the cold winter months prevalent in Minnesota. The blankets were installed by nailing wood lath strips over the fold of the paper that encloses the insulation.

On inside walls of the laying bouses, §j-inch Insulte Graylite insulation board was nailed directly over the 2x6-inch studs. To resist the moisture produced by chickens, a barrier of special kraft paper with an asphalt core was placed over the §j-inch insulation board on the interior walls. Asbestos board nailed over the vapor barrier complete: the wall and provides a durable surface that resists pecking by chickens.

Standarized Panels Speed House Erections

Texas Housing Company of Dalhas and New Mexico Housing company of Santa Fe have developed a new technique in home construction. These firms are manufacturing and marketing "engineered" houses embodying a medium between prefabricated buildings and conventional methods of construction. The plant at Dallas is handling better than one million hoard feet of lumber a week. In this plant, lumber is precut to size and built into wall panels, roof trusses, and other component parts of a house. About 50 per cent of the rough carpentry work is done at the factory,

The company has developed about 200 models and designs for homes from one to four or more bedroms, ranging in price from \$5000 to \$40,-000, including lot. In addition to its own models, the company is able to adapt specifically designed plans to its production methods. Houses are sold packaged, for erection by contractors, with all lumber needed for completion precut to size, including doors, windows, trim, interior wall finish, hardware, and appliances. The panels are sheathed, exterior only, with 34 to 35-inch plywood.

extra white

TRINITY WHITE Portland Cement

Your customers will appreciate Trinity, the whitest white cement. Gives uniformly excellent results. Widely advertised to architects and users for years. Used in volume in architectural concrete units, terrazzo, stucco, paint, etc. Other uses include light reflecting floors, ornamental work, tile setting, etc. Trinity is a true portland cement and meets Federal and ASTM specifications. Carry it in stock. Trinity Division, General Portland Cement Co., 111 W. Monroe St., Chicago, Republic Bank Bidg., Dallas, 816 W. 5th St., Los Angeles.

as white the as snow

TRINITY WHITE 18 a True Portland Cement!



COST LESS to build - yield MORE PROFIT to Builders!

• That's why National Homes Corporation is not only the nation's *largest* producer of prefabricated homes, but also the *fastest growing*. Output at Lafayette is already scheduled for a 50% increase over 1949, when we broke all records month after month. Our new plant at Horseheads, New York (near Elmira), serving the Eastern seaboard, means a still greater increase.

Inquire NOW — your city may be open for dealership!



NATIONAL HOMES CORPORATION LAFAYETTE, INDIANA, U.S.A.

Double Glazing Lowers Air Conditioning Costs, Lab Experiments Reveal

Preliminary results of 3-year tests at the Cleveland laboratories of the American Society of Heating and Ventilating Engineers indicate important advantages for double glazing.

Summer heat is transferred through glass by three means, states a progress report just issued by Libbey-Owens-Ford Glass Co. These are: 1) direct solar radiation, where the window is exposed to direct sunlight; 2) sky or diffuse radiation caused by the air's indirect reflection and absorption of solar radiation, which would cause some heat transmission through a window that is not exposed to direct sunlight; 3) conduction and convection of heat through glass, caused by the temperature differential within and without the building.

Direct and diffuse radiation of solar evergy are the most important of these from an air conditioning standpoint, and double glazing does a remarkable job in reducing transmission of heat from these sources. For example, during a normal day 82 per cent of the sun's energy passes through regular quarter-inch plate glass. This transmission is lowered to 71.5 per cent when double glazing is used, consisting of two quarterinch lights and a quarter-inch air space. A substantial reduction is effected when Heat Absorbing plate glass is used as one light of a double glazed window unit. Transmission of solar energy is then reduced to 44.5 per cent.

Air conditioning savings in dollars and cents may be calculated from the experiments with heat transmission by conduction and convection. Using a day when the outdoor temperature is 95 degrees and the indoor temperature is 80 degrees Fahrenheit with an exterior wind velocity of 15 m.p.h. (these are the conditions upon which air conditioning engineers usually base their cooling calculations) the time rate of flow of heat through a window by conduction and convection was measured for single quarter-inch plate and for double glazing consisting of two quarter-inch lights and a quarter-inch air space. This time rate of flow is designated U. For single plate the U value equalled 1.06 BTUs/ (sq. ft.) (deg. F) (hr.). When the above double glazed combination is used the value 1.06 becomes 0.61. Thus if the cost of power to cool the air warmed by heat flow through single glass is \$1.06 for a given area, the cost of power for the same area when double glazing is

used would be 61 cents. Heat Absorbing plate does not affect reduction of surface-to-surface beat conduction, its value lying in the reduction of direct and diffuse solar radiation.

These figures can be readily transferred not only into greater warm weither confort for occupants of private homes but mean a substantial reduction in the size and cost of basic air conditioning comfort for large buildings also.

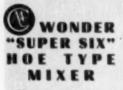
Further calculations, using basic data in the 1949 Heating, Ventilating, Air Conditioning Guide, show that a five ton reduction in the cooling load for a building, in latitude 40 degrees with 1,500 square feet of unshaded western windows, can be effected with the use of Heat Absorbing Thermopane. The records of architects and air conditioning engineers in a number of Thermopane-glazed buildings support these laboratory results.

The air cooling load requirements for small and medium sized commercial establishments are often met with factory built air conditioning units. When double glazing is installed in such buildings it is often possible to take care of cooling requirements with an air conditioning plant that is a size smaller than would have been mecessary for a building with single glazing.

Here are two mixers every builder should own. They speed up work, savo many man hours a year and are known everywhere for their quality and rugged construction. See your CMC distributor or write for catalogs.

Great MONE

S For BUILD



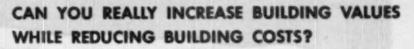
Mises coment, mortur, patout planter with hair or filtre. Hen receivable long leading drawn lunca-der antra years of services. Triple mining hoses. Sealed Timhan bearings on hoth hos and junk sharks.





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ERIAL NOW 2

Q. WHAT IS A MODULAR PLAN?

A modular plan is one drawn on a 3-dimensional, 4-inch grid, to which the building layout details are referenced. This provides a simple, convenient and outform way of dimensioning and referencing drawings and of relating details to the dimensions of the building.

Q. DOES MODULAR DESIGN REQUIRE ANY CHANGE IN BUILDING METHODS?

No. Modular-size woodwork merely reduces wasteful cutting and fitting on the job. Any type of modular-size window, for example, fits see standard 2-light opening.

Q. DOES MODULAR DESIGN LIMIT CREATIVE PLANNING?



No. Mudular design does not limit or restrict the free architectural expression of syle and individuality. Modular design, too, fits any type of structure-no matter how small or how large.

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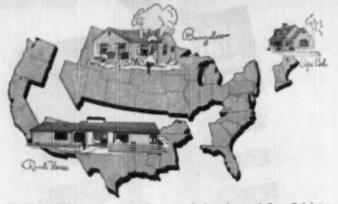


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Architectural potpourri feature of 'All-American house of 1950'



HOUSE designs fallow regional traditions, ranch, bungalow, and Cape Cod being preferred choices

HE All-American House of 1950 -the most popular type of dwelling new being sold-will be a bungalow of no definite architectural type ranging in price from \$8,000 to \$10,000, with no dining room or basement and with smaller kitchens but greater closet space than prewar, T. H. Maenner, Omaha, Neb., president of the National Association of Real Estate Boards, said recently.

His description of the 1950 house was based on a survey in 513 cities just completed with the aid of local real estate boards.

The All-American House can best

NAREB survey of 513 cities discloses that dising rooms, kitchens, closets, and prices are focal points in planning home of your

be described as eclectic-picking up ideas from everywhere-in half of the reporting cities, Maenner explained. In one city of every three, however, the 1950 dwelling will be a "ranch" type house, and in one city of every five, it will be the Cape Cod or colonial type.

The ranch type is tops as the 1950 house on the Pacific Coast, in the East, south Central states, and in the West South Central region, where it originated. The Cape Cod house dominates its own home region, New England, but it is not the most popular house in a majority of cities in any other region. Even in New England the eclectic bungalow is the most popular design style in one city of every four, and in one-third of the larger cities.

The All-American House of 1950 is emphatically a low-cost dwelling, Maenner said. The price range begins as low as \$5,000 in 16 per cent of the cities, and it runs no higher than \$10,000 in every region of the



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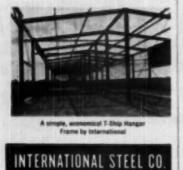
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(Continued from page 204) country and for both large and small cities (78 per cent of all cities).

In the smaller cities, he added, only one city of every six shows a predominance of higher-cost homes in the new construction. But one of every three of the larger cities reports that top cost. if a new house is to be popular, runs up to \$15,000.

The lot on which the House of 1950 is built is larger than for prewar structures. This is the trend in 76 per cent of the reporting cities, and in 83 per cent of the larger cities.

The dining room in the House of 1950 is vanishing, Maemer said. It is likely to be a mere indicated corner of the living room in 66 per cent of the reporting cities. Small cities are now the leaders in eliminating the dining room. The separate dining room is vanishing in seven of ten of the smaller cities.

The House of 1950 is likely to have no basement. Basements, however, are more popular than they were in the prewar days in New England, the Middle Atlantic states, and the East North Central states.

Its porch is still most often found in the front, where it will shelter the entrance and "dress up the looks of the house," Maenner asserted. But in large cities it is now preferred at the side where the entrance is now often placed. While 38 per cent of reporting cities say front porches are preferred, the remaining 62 per cent are evenly split between a preference for the back porch, serving as an outdoor living room, and the side porch.

Plaster is still the typical interior finish of the House of 1950. Dry wall construction has become typical of the new house construction in only 28 per cent of the reporting cities.

Notwithstanding the considerable movement for larger kitchens, the typical new House of 1950 has a smaller kitchen than the prewar house, Maenner pointed out. However, while 58 per cent of reporting cities indicate that costs are keeping kitchen size down, 42 per cent report that new kitchens are now larger than in the prewar house. The large cities show this trend slightly more frequently than do the small cities.

Closet space is definitely greater in the 1950 house than it was in prewar houses. Added closet space is a feature of the 1950 new house in 77 per cent of reporting cities and in 81 per cent of the smaller cities reporting. This last fact is an indication of how fast the smaller cities are pick-

(Continued on page 208)



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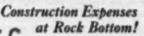


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ing up the most modern home building ideas.

The volume of sales on new houses is holding steady in well over half of the cities of the country, and is still advancing in 20 per cent of the cities, according to the survey.

The large cities have the strongest market, Maemoer added. In approximately two-thirds of these larger cities, there has been no let-down, and more than one-fourth show a definite up trend.

Regional Subtypes

There are some interesting regional variations in a house of today, as would be inevitable because of variations in climate and tradition, Maenuer commented.

New England's House of 1950 has a irreplace and a basement. A hot water beating system is here the most desired. New England prefers a side porch rather than one to the front or back. It is less interested than other sections of the country in increasing closet space.

In the Middle Atlantic states (N.Y., Pa., N.J.) the House of 1950 is likely to be somewhat more expensive than the national average. The most popular price ranges no higher than \$10,000, but in one city of four the most popular range includes houses priced up to \$15,000. The preferred Middle Atlantic house is a bungalow, with the Cape Cod design a close runner-up. It has a fireplace, side porch and basement. Preference in heating systems in this region is almost equally divided hetween hot water and oil farmaces.

In the South Atlantic states (Md., Del., W.Va., N.C., S.C., Ga., Fla.) the House of 1950 takes this regional slant—the lot aize is definitely larger than in prewar houses, especially in the large cities, and larger closet space is almost universal. The popular house here has a hot air furnace and a fireplace.

The East North Central states (Ohio, Ind., Ill., Mich., Wis.) follow fairly closely the national type in the House of 1950, except that basements here are popular, and kitchens are larger than was the prewar style.

In West North Central states (Minn., Ia., Mo., N.D., S.D., Neb., Kan.) the House of 1950 is exactly that described as a national favorite. In this region not a single city reports hot water heating systems as most popular.

The East South Central states (Ky., Tenn., Ala., Miss.) like best the ranch or rambler house. Cape Cod is (Continued on page 210)

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(Continued from page 208) the popular design type in only eight per cent of the cities. Climatic influence shows in absence of a basement and in use of lighter types of central heating. Side porches are definitely dominant over the front or back porch. Kitchens are definitely smaller than prewar. Lot sizes are larger, but the trend is not so general as in other regions. Closet space is definitely larger. Not a single reported city in this area is building extensively in a price over \$15,000. This also is true of the West South Central, the Mountain, and the West-North Central States.

In the West South Central region (Ark., La., Okla., Tex.) the House of 1950 is of dry-wall construction. ranch design. The bungalow, however, is most popular type in 47 per cent of the cities. Cape Cod is the typical design in only 2 per cent of smaller cities and none in larger. The West South Central region is the only region where dry-wall construction is dominant. It is the typical finish used in five of six cities reporting in the region. A big closet is a great drawing card and is found in 96 per cent of the large cities. Basements have lost popularity in 95 to 97 per cent of the smaller cities. Hot air heat is popular in cities in the area.

In the Mountain states (Most., Ida; Wyo., Colo., Utah. N.M., Ariz.) in the House of 1950 dry-wall and plaster construction are running 50-50. The vanishing dining room is typical of the new huase in 86 per cent of large cities. The heating system preferred is hot air.

In the Pacific states (Wash., Ore., Calif.) with the ranch type dominant in 61 per cent of the cities and 66 per cent of the smaller cities, not a single small city shows: Cape Cod as popular. Fireplaces are usual in 71 per cent of cities and 77 per cent of large cities. Basements are not found in 61 per cent of reported cities. Hot air is the preferred beating system.

Heads New Appliance Division

T. W. Hardy has been appointed vice president in charge of the Home Appliance Division of the Murray Corporation of America, it has been announced by B. C. Gould, president,

Hardy joined the Murray corporation in 1943 and served in executive positions in Detroit and Scranton, Pa. His headquarters will be in Scranton, where the firm's new Home Appliance Division will shortly begin production.

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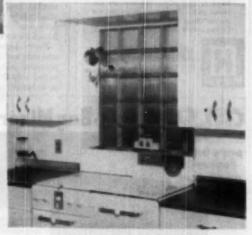
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MARCH 1958

ACOUSTICAL TILE NAILS ... designed for the job



When installing acoustical tile chaose a inh-designed nail that combines ease of ion with these special features, a opplice hand and which allows the noil to be driven home without damaging the files ... a collar which holds the tiles firmly in place ... minuter threading which gives supariar holding power. The noils are furnished with a plated finish to prevent rust streaks where moisture is present. Send for free samples and descriptive literature.





GILSON BROTHERS CO. majurlecters of Constartors Component

NO other one-bag mixer on the market goes your way to speed work like the time-proved Gilson 48. This is true because the ed vanced design of the simple hydroshe mechanism eliminates traublesame elutches and cables, sets up new standards of efficient operation. Many other Imprivance

an automatic skip shoker and siphontype water tank help make this procision miner pay out best for you. That's why contractors from coust to const use Gilson misers - 39 moduls from which to choose. Write for the 65 bullatin and the name of your Gilson distributor.

New Firepresting Meth Incorporated In Mospit

A new method of fire protection with lightweight materials is demonstrated in the Senile Ward building of Eastern State hospital at Medical Lake, Wash,



CEILING in her ical pi

Lightness of the structure was made possible by the use of welded steel frame and steel joists and the first use in the area of the "Saxe" system of connecting structural steel members in lieu of conventional molds. This method results in approximately 25 per cent reduction in dead load over conventional reinforced concrete.

Every factor conducive to safety, adequate and modern sanitation, and generous living space has been embodied into the building, which is to be a home for more than 500 aged

* mail, 7.34

and infirm wards of the State of Washington.

Construction of the building was accomplished with lightweight steel framing, Vermiculite lightweight concrete floor slabs and roof construction and Vermiculite plaster. The latter was used on metal lath for suspended ceilings, fireproofing of beams and columns and two-inch solid. plaster partitions.

American Machine and Foundry Purchases DeWalt Inc.

Purchase by the American Machine and Foundry Co., New York City, of all properties and assets of DeWalt, Inc., manufacturer of radial saws, Lancaster, Pa., has been announced by Morehead Patterson, chairman of the board of the purchasing firm.

The transaction involved the transfer of 115,000 shares of American Machine and Foundry Co. stock, plus \$665,000 in cash to DeWalt, Inc. DeWalt's assets as of Sept. 30, 1949, amounted to \$1,751,447, including more than \$1,000,000 in cash, as against current liabilities of \$198,531.

Patterson said that American Machine and Foundry would continue operation of the DeWalt plant with the present personnel as a whollyowned subsidiary.



You don't have to sell the beauty of a sparkling weedfree Scotts lown . . . most folks just naturally want laws perfection for their new home. Assure your client this extra satisfaction by always using Scatts SEED, TURF BUILDER and other Laws Care Products. Of course, you'll want to use Scotts on your own lown too, since the cost is so modest. To help you build better lowns, write today for a FREE 2 year subscription to Lown Core."

LAWN CARE Products

Make Better Lawns!

Out torf research department and soil technicians are also of your disposel. No obligation, of course a . Soll & sons co

77 Spring St, Marysvilla, Ohia also Pala Alta, California

FREE



Here's a brand new heating idea ... a winter air conditioner, for gas or oil, designed by J&C engineers, that requires the addition of only a component package to make it either an 85,000 ... a 100,000 ... a 112,000 ... or a 120,000 Bity output furnace.

FOUR FURNACES IN ONE! It can actually grow with the home. Start with a four room home, and as the family and income increases . . . enlarge the home without changing furnaces. Simply change a small, low-cost package and increase the output of the J&C "Four-In-One" to meet increased heating needs.

The "Four-In-One" is a quality unit . . . with 12 gauge heat exchanger, top quality cabinet and burner, and fully automatic controls.

An original design . . . engineered, warranted and built by Jackson & Church Company.

AMERICA'S LARGEST AND MOST COMPLETE WARM AIR HEATING LINE ...

JACKSON & CHURCH CO. SAGINAW, MICHIGAN "Work well done since "81"

New Minnesola Firm Enters Rubber Tile Fleer Market

A new rubber tile flooring is being tranufactured and sold by a new corporation, the Beauty Wear Rubber Co., Inc., Minneapolis, Minn. Froduction was begun after two years of laboratory testing, the firm's preselent, A. B. Warner, said.

Warner pointed out that all colors have been developed from the recommendations of 22 leading Northwest architects, as expressed in a survey conducted by a research organization.

The outlook for future development is excellent, Warner added. He said he believed the flooring would have immediate consumer acceptance because of quality of product and a more than competitive retail price. Another factor cited was the low scale of freight rates now in effect west of Chicago to the West Coast market.

Distribution plans are being made to take care of production capacity, through dealers throughout the Northwest.

All of the new company's executives are native Minnesotans and the firm has been capitalized through local and private capital. Other officers are H. A. Campbell, vice president; D. A. Sokonan, treasurer; and J. D. Warner, secretary.

Glass Insulation Used To Cover Real Drain Pipes

A new method of wrapping roof drain pipes with Fiberglas Aerocor insulation is being used at the \$4,000,-000 St. Vincent's Hospital addition in Toledo, Ohio, now approximately 50 per cent completed.



NEW METHOD of covering roal drain pipes with Fibergias Aerocor involution. being used at St. Vencent's Neopital. Tolede. Ohio

The insulation prevents water from condensing on the pipes and entering the walls in which the pipes are enclosed, thus avoiding damage. Four layers of Aerocor for a thickness of two inches are wrapped around the pipe and hound with Fiberglas tape. John G. Saalfield, president of Service Products, Inc., the firm installing the insulating material as subcontractors of Robert Carter Co., mechanical contractors, said that the insulation and the tape are used because they are impervious to moisture, will not rot and are incombustible.

A. Bentley & Sona Co., general contractor, estimates the addition will be completed by late 1950;

Annual British Home Show Has Wide Popularity

The Ideal Home Exhibition, organized by the London, England, Daily Mail, will be held for the 27th time this year at Olympia, London, Mar. 7 to April I. The home show, the British Empire's greatest, will occupy 12 acres of floor space and will have around 600 exhibitors. Growing steadily in the postwar period, it attracted more than 1,250,000 admission-paying visitors in 1949.

One of the exhibition features is a full-sized and fully-furnished village which this year will include a typical New Zealand house transported by the New Zealand government. Landscape and formal gardens occupy an acre and a half.



MONOCORD TIMBER TRUSSES



FOR CLEAR-SPAN, POST-FREE BUILDINGS

FAST ERECTION WITH LOCAL CREWS AND EQUIPMENT

Monocord Timber Trusses are designed, engineered and factory-fabricated to meet all job and load requirements. They are delivered knock-down, ready for accurate assembly and easy erection by local crews and equipment. Monocord Trusses enable you to economically meet the growing demand for one-mory, post-free buildings.

In addition to Monocord Trusses, Weyerhaeuser furnishes other typical fabricated lumber items to general contractors, builders and industrial builders.

TRUSSED RAFTERS + BRIDGE TRUSSES + HATCH COVERS + PALLETS + NIGHWAY BRIDGE BARRICADES + FLOATS + REPRICERATION SHIP PARTS + STRUCTURAL FRAMEWORE + STEAM MAMMER PARTS - CHURCH TRUSSES + LOADING RAMPS + PILE DRIVER CRAWLER MATS + BUMPER BLOCKS + FOUNDATION TOWERS - GAS CYLINDER RACKS (treated) + FLUME CRADLES (treated) + COOLING TOWERS (treated) + MARINE FIER TIMBERS (treated) + WATER GATES (treated).

Write for complete details.

NEWARK, N.J. . ST. PAUL MINN. . TACOMA, WASH.



ANNOUNCING Longfiber SUPER-FELT

... the new Johns-Manville Rock Wool Batt

Much lighter and stronger

A revolutionary new process, developed by Johns-Manville, produces a rock wool of long fibres. Scientifically felted, these long fibres result in a much stronger and lighter-weight batt, with greater uniformity and rigidity throughout. Longfibre Saper-Felt sets a new high standard in home insulation.

Easier and quicker to install

Super-Felt is so firmly felted it will not break down, even with rough handling. Improved handle-ability reduces cost of installation. Batts fit snugly between framing members with less time and labor.



The same size package now contains 10 batts instead of 8! This means 25% fewer packages to handle ... 25% more material per trackload.

Get the full story of this new development. Write for brochure HI-153A. Johns-Manville, Box 290, New York 16, New York.

All Johns-Manville factories from coast to coast are rapidly converting to the manufacture of the new Longfibre Super-Felt Rock Wool Batts.



MARCH 1950



The results of grueling floor tests made by an independent engineering laboratory show that shellac retains its original color, outwears all other finishes.

YOU KNOW IT-

- · is easy to apply-dries faster
- · will not darken with age

shellac

- outwears every other finish
- easier to maintain simple to retouch
- Isss bother to keep beautiful

SPECIFY IT

for the floors of the homes you build!



TR. Thereas

Specifications on

the Use and Appli-

cation of Shallor

	CINFORMATION	
	Benched Skellar Manufartu 48 STREET, NEW YORK S. I	
	without obligation, full schuling "Standard Spr	
	and a second a state	
FIRM NAME	CITE & 8088	BIATS
FIRM NAME		-

Fills Military Housing Needs

A N example of what the private home builder is doing to meet the need for good military housing is the Tiller Construction Co. development at Offutt Field near Bellevue, Neb., where more than 60 homes have already been completed for occupancy by Air Force personnel. Built by Wallace W. Tiller, inventor of a number of

aircraft and motor tools during the war and prior to that



STREET of Tiller project at Offult Field, near Bellevue, Nebr

time a large-scale home builder in Minnesota and Wisconsin, the homes are a combination of prefabrication and conventional construction. A single floor plan is used, but exteriors vary widely-in roofs, driveways, location of doors and windows, and color of the stucco finishes. Cost



FULL-WALL Upson panels form interior walls and callings

of the 24x30-foot houses is approximately \$8,000. Additional homes to be built in the project, which is scheduled for completion in August 1950, will be 24x32 feet.

Each house has a 11x171/2-foot living room, two goodsized bedrooms, bath, kitchen and a utility room. Some of the homes have basements and others are built on poured cement foundations,

In the last 37 of the completed homes, all of the interior walls and ceilings were constructed of Upson fibre fullwall panels. Kitchen and bathroom walls are finished in Upson laminated fibre-tile, which has 4-inch-square indentations.

The houses are located on lots which average 51x.37-feet. Grass is planted in every yard, sidewalks and driveways are taid and each entrance is provided with a modern porch-light fixture.

A HOMELITE CARRYABLE PUMP IS THE _____ PUMP TO HAVE ON THE JOB

BIG REASONS



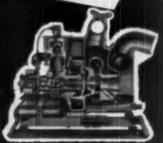
J. PERFORMANCE. Just add it all sp. ...lightweight for easy handling, 15,000 guillens per hour, me fastear self-prining possible, a guaranteed 28 h suction tilt, automatic seapper control, as trabile with clagging even effer handling mud and salids... that's winat you always get fram a Hometine iarryable gosaline-anginedriven pump that can be set up for operation daily and quickly expenden.

3. DEPENDABILITY ... continueus trouble-free performance... Is the result of all the special features that Momelite engineers build into their pumps... replaceable obrainiveresistant wear plates, a simple five-port seching device and impatient that require no grease, packing or otherhien sind a tran-clogging pump body directly attached with Ho bearings necessary, to the famous Homelite Glassine Engine, the result of building over 275,000 gesolineingine driven white his pair quarter cambry.



FOR

3. SERVICE. To keep Homelike pumps operating continuously, just as the day hay were first delivered, a chain of exclusive Homelite service shops estend across the radion. These service stations are campletely stocked and staffed by trained Homelike me who are ready to keep your Momelite pumps in top notch condition at all times.



SERVICE

STICE TO THE BULE OF THEEE 1. Performance 2. Dependebility DEPENDABIC. Sorvice, and you'll always stick to a Humadian.

nelite Corporation

808 RIVERDALE AVENUE, PORT CHESTER, NEW YORK



DEVELOP NEW FRAME FOR SLIDING DOORS

Individual Douglas Fir Door plants, in the Pacific Northwest, have developed a new frame for sliding door installation. The frame, tested and approved by the laboratories of the Fir Door Institute, is designed to carry the Har-Vey sliding door hardware, which has also been tested in the laboratories of the Institute.

Any 116-inch thick Douglas Fir door may be specified for use with the sliding door frame. The header can he cut back on both ends and spacers shortened for use with 2-loot wide Douglas Fir house doors.

How the frame is set up is shown in the accompanying illustrations. Simple detail instructions showing how the hardware is installed may be obtained from the Fir Door Institute, Tacoma 2, Wash.

To place the assembled frame in the wall, 2x6's, 2x8's or 2x10's would be inserted directly above the header, depending on ceiling height. Cripple studs might also be cut in as an alternate.

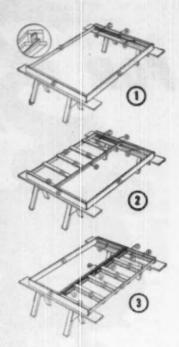
Install the frame on the subfloor between the study, making sure that it is set level and plumb. Then nail and toe nail frame securely to studs. The bottom brace (K) in Figure 1 is put out in the door opening to allow for the finish flooring.

In preparing the door, check to be sure it is square, then attach metal plates which are in hardware package, to top of door according to instructions. The door should be painted before it is hung.

FIGURE 1. shows the first step in cott up frame. Hender comes from factory as a single unit, consisting of A. B. and C. Nailing assembly should procoed as tollows: Honder A is laid on horses, and inside or year jamb G is natied to header. Nati exposed or front jamb E to header. Bettam braze E is natied to two jambs. G.

FIGURE 2. Insert one of the split jumbs. LF. in place, fitting into mortise in bonder. Put one H piece at K to give LF quick alignment. Then natl split jumb to bottom plate K and header to A. Now natl spreaders N to G and LF. Gluing apread ers to split jumb but not to back jumb is heat practice. Temperarily nail plaster stop D to pieces B and C. placing between split jumh LF and front jumb R

FIGURE. 3. Turn over frame tacking jamh spronders J in position on split jumb LF as shown for final assembly. Do not not jumb aproaders on sproader. Sproader is needed so corpenter will not drive jumbs too close together when toe-nailing frame into place. Position RF following the procoduce described in Figure 2





ALL-ALUMINUM SCREENS TOR EASY SALES AND GREATER PROFITS



No ladder meeded-Reinforced by cross brace, screens can be bang or removed from inside the bouse. Very light weight, Easily handled by Mrs. Housewife.



Because they are light in weight, they are easy to Handle Demonstrate-Deliver. (Many customers will take them home in their own cars.)

Made of rust-free aluminum and packaged in a handy carton. Do not deteriorate while in the warehouse. Take up minimum stockroom space, because carton of 10 screens is under 5" thick.

Manufactured by modern methods-assembled on a production line-by people with a decade of experience in aluminum



PINDOWS:

WING CLIPS 6.41 no extra cost). Afsee installation, au screwdeiver meaded to change or remove screen for window washing. Flips off instantly. No loose percus to get last.

screens: Your Guarantes for aniform top quality and freedom from consumer complaints.

All standard sizes for wood and metal windows available from stock-shortest delivery time on special orders. You can take all your screen problems to Fabrico.

DISTRIBUTORS INVITED

For samples, prices and information on available trancheses, write to

Screens & Fabricated Metals Corp.

-IN ANY OUANTITY - IN ONE OUALITY - THE BEST !-Light Weight. Screens are easily handled Corner Locks give wedge-fit without corrosive effect or discoloration. quickly installed. Rolled Tubular Section, 18 x 14 mesh Alclad aluminum screening combines cor-Wby consumers rosion resistance with maximum strength. Held at maximum tautness by speciallygo for No Stains, no discoloration of walls, designed aluminum spline. Precision engiwoodwork, draperies or blinds. neered for maximum strength and rigidity. FABRICO Hardware Included - complete with mstresisting hanging or attaching devices. ALL-ALUMINUM Can be used also to hang storm windows. WING SCREENS CLIP for casement windows. Protective A glowing cig-Rugged Strength, arette or windswept burning Will Not Red-Rust. leaves will not harm the Need No Painting. No upkeep. screen. * REGISTER APPLIED FOR MARCH 1950

NORTH BERGEN . NEW JERSEY



information on Bostwick's entire line of easier handling metal lath and motal lath accessories.

THE BOSTWICK STEEL LATH COMPANY 109 HEATON AVENUE - NILES, OHIO

Quick Sales of Tract Houses

Low initial charges, minimum menthly payments, garbage disposal units, paid-up insurance, help sell Culifornia's Piencer Plaza homes in one week end

All 96 new houses of the Pioneer Plaza development were sold in one week end. This tract, located in Norwalk, Calif., was constructed by the Alden Construction Company. Announcement of this 100 per cent sales record was made by the officers of the company. These men are: Albert Leighton, president; Willard Woodrow, vice president; Donald Metz, secretary-treasurer.



A GARAGE, atinched — as seen above and in floor plan at right, is part of every new house in tract. Note also popular corner window



The houses of this tract have two bedrooms. Special features contributed to their quick sale. For example, a tile stall shower with a glass door was installed in each house in addition to the conventional tub. Furthermore, kitchen equipment in each house includes a Waste-King Pulverator (an electric garbage disposal unit manufactured by the Given Manufacturing Company) and plastic kitchen drainboards. Wood paneled dinettes add to the interior decor of these units.

A particular appeal, however, was found in the financial arrangements made for purchasers of the houses. Customary escrow and impound costs were reduced to \$99. No down payment was required. These houses were approved for VA and FHA financing. Although the prices ranged from \$7750 to \$8050, monthly payments as low as \$45.47 were arranged for the purchasers. A tax exemption for veterans reduced this to approximately \$41.47 monthly. The minimum weekly income of the buyers was expected to be \$50. The developers also paid for a threeyear five insurance policy for each home. These financial arrangements were especially attractive for that segment of the public eager to buy but not equipped for heavier undertakings.

(Continued on page 222)

ORRISO

Opens the Door to OVERHEAD DOOR Satisfaction !



* Petent Pending

it costs less to buy! it costs less to ship and store! it costs less to install? and it's Four-Sectional!

BUILDERS!

The MORRISON Roly-Door needs Minimum Field Assembly!

Everything that can be predetermined in lised to the door at the factory? All brackets and hinging are pertuanently welded or riveted? Lanet to install—in lent time?

ARCHITECTS!

DISTRIBUTORS:

Franchines fut a few choice territories nor will available. Write in datail

The New MORRISON Roly-Door Four-Sectional All-Steel Overhead Residential Garage Door is the first and the only Residential OVERHEAD DOOR in the world with every wanted feature! It has everything and it's the only overhead residential garage door that has everything!

The Sensational New

The Four-Sectional, MI-Steel, Overhead Residential Garage Door

A New Low Price for a Quality Door!

(Please Read this Twice - it's the most sensational price news in the home-building industry in years!)

Because of its exclusive method of manufacture, the MORRISON Four-Sectional, All-Steel Residential Garage DOOR can be sold and installed for as low as \$60, depending on geographical location and installation conditions!





Quality concrete is essential to waterlight basement walls. The first step in making quality concrete is measuring the water. If your mixer has no measuring device, merk off gallon quantities in a pail. Use no more than 5 gal, water per sack of coment with tand in average main condition.

> A good concrete mix will look like the photo at the left. Note

that the mix is quite stiff; yet be-

cause of proper proportioning and

mixing there is planty of cament-

sand mortor to fill all spaces be-

tween coarse aggregates. Such a

mix will produce dense, watertight concrete for basement walk.

2 Aggregates should be does, well-graded and carefully macsured. On large or small jobs the best way to measure aggregates is on a small scale such as shown at the right. Use of a scale like this makes for quick, accurate measurisg and for more uniform concrete from botch to batch.



4 Concrete should be placed terecen the form in layers, ordinarily not nore than 6 is. deep, to insure even, dense waterlight concrete, tamp, spade or mechanically vibrate the nikture just enough to settle it and to wark it must to the forms along both sides.



5 Cure the concrete adequately. This is a vital step in producing watertight wells. Adequate caring means keeping the concrete moist for at least 5 to 7 days under favorable caring conditions at temperatures well above freesing —langer during cold weather.

Send for free, helpful, illustrated book "Concrete Facts for Concrete Contractors." Distributed only in U. S. and Canada.

PORTLAND CEMENT ASSOCIATION

Dept. 3-3, 33 W. Grand Ave., Chicago 10, III. A satisasi argonization to improve and extend the uses of pertiand cancell and concrete...through scientific research and engineering field work Quick Sele of Truct Houses

(Continued from page 220)

Twelve exterior designs and different floor plans give variety to the tract houses. Each interior was decorated in at least three colors. The homes have bardwood floors, concrete driveways and walks. Garages are a part of cach house. Certain floor plans include attached garages. Schlage hardware—product of the Schlage Lock Company—was used in all houses. The property is fully improved with sewers, water facilities, paved streets, and other conventional services.



LARGE closets. shower, separate garage prove value of this Piencer Plaza inw-cost Caltiornia home



Three different homes were completely furnished for the week end exhibition. Two garages at the project were set up as temporary offices to handle the purchases. One advertisement only drew hundreds of spectators, including the 96 families that purchased houses on this week end.

On the prior week end, the Alden Construction Company, developers of this tract, sold 93 homes valued at \$850,000 in its nearby Excelsior Gardens property. The company is widely known in southern California for its construction activities which include many homes and apartments in the Los Angeles area.

Officials of the company have announced that a new project is now underway—a large-scale single home development in southeast Los Angeles County.

Foundation Begins Research Program

Robert B. Taylor, of Newark, Ohio, has taken over his new duties as Research Director for the Structural Clay Products Research Foundation, and will immediately begin planning for an industry-wide, long-range research program in the brick and the industry. His headquarters will be at 1520 18th St., N. W., in Washington, D.C.

The million-and-a-quarter-dollar research program will attempt to find methods of reducing the cost and improving the qualities of structures made with clay products. Taylor will plan his program from a list of recommendations for research in the industry prepared by the industrial research firm of Arthur D. Little, Inc., Cambridge, Mass.



- * Cuts Installation Cost
- * Saves Floor Space
- For Nashville **Home Builder**



verantile Marr on institutes basis of ad east **beati** na uni the versame marked sourcement machaness everyone control become setting were (1) fits in any small asso — still, under floer or bosomsat, in stilly rear-or stoart; (2) requires for dust work; (3) requires no floor upone; (4) takes how time and labor to install; (5) affers dependiate beating curther; (6) time-tested in theseands of installations in old and new home; in this source room home in the Machaille Dagger 64-Rome Project pictured here, Harman Saytherner FUE 40's were installed with proven basebaard warm of esturns and two floor cold air returns.

Find out how the Norman Sautherner he low cast installation is new single and a new folder "Cuts Cast of Automotic Go lps builders boat competition through sulti-anit home construction. Send for

4 Pepular Sizes 40,000 to 100,000 STU Handles natural, mixed manufactured and LP gas.





Faster more ACCURATE sawing is made easy with the

Made to fold compactly for car trunk; can be carried easily

Doubles Portable Power Sew Production-SPECIFICATIONS: Table weighs only 752; 84' long x 30' wide x 34' high; cross cuts up to 2'x12'; 45' miter cross cut up to 2'x8'; adjostable lengths to 12'.

Sales Service Machine Tool Co.

2363 UNIVERSITY AVENUE

UNIBOY Saw Table designed to fit portable power hand saws. Takes 5 minutes to set it up for any type of saw work. Makes your power saw safer to use. More than pays for itself in tawing time saved on the job; in cutting difficult cuts like jack rafters and cripple jacks with precision; in making a better fit and saving DESIGNED to fit PORTABLE POWER SAWS Folds compactly . . . Fits into CAR TRUNK

You can PRE-FAB material on the job with a portable UNIBOY SAW TABLE!

CROSS CUT

The saw track guide fits the st of particular power drives save Set the track guide 90° to the table set the gauge for langth and por the save forward in the guide.



The sam track guide can be tel for ann anglo and the power saw shee for the other angle, thus com-perent cuts can be made for hip orders, jush reflexs and origide (activ, usually time consuming cuts.



er sow is effected unde the table, adjust the faces or ga-and the UNIBOY is ready for ping a pixel with the faces of the table can be adjusted for a strain or bened rip.

SEE YOUR DEALER ar write far new da-scriptive bulletin taday.







re-

ning and cutting.

from job to job.



.. for my Bilco

Yes, thousands of satisfied home owners are saying just that to their builders. Why? Because only with a Bilco Celladoor can they get complete convenience, pleasure and full use of their basement.

Bilco CELLADOORS

 THEY SAVE TOU MOMEY. By giving your workmen direct access to basement area during construction, Celladoor installation saves countiess steps, and pay for themselves in costly man hours saved. Hung in 10 minutes or less, Bilco Celladoors cost no more than old fashioned wooden hatchways.

2. THET SHA ROUSES. You're miles ahead of convpetition with Bilco Celladours on your houses. No other feature is so quickly recognized as a plus value by a prospective home owner. Your customvrs appreciate the fact that copper-steel Celladoors mean no future replacement expense.

a. THEFT & CHICH TO HESTALL. Just one easy operation when you're ready to pour capping or sidewalls and steps. Doors come complete with installation bolts, knocked down and compactly packaged for ease of storage and handling.

Leading building supply dealers carry Bilco Celladoors in stock. If yours doesn't, write us directly for complete details, specifications and installation data. And do your dealer a favor. Send us his name so that we can tell him how dealers, builders and home owners all profit through Bilco Celladoors.





ABTIST'S conception of "Hoppiness Home" given by John Benferte

Builder Donates Home To Cancer Society

A \$12,000 HOME to be built in Pueblo, Colo., has been donated to the Colorado Division of the American Cancer Society by John Bonforte, president of the Bonforte Construction Co., Colorada Springs, Society Division officials have announced.

Called "Happiness Home," the three-bedroom home of frame and stucio construction will be located in the new 90-home Bonnyville addition to Pueblo. It will be used in



JOHN BONFORTE

connection with the Colorado Division's fund-raising campaign in April.

Participants in the recent ceremonies at which Bonforte broke ground for the house included Evarts C. Fox, state chairman of the fund-raising drive: George H. Pittman, executive director of the Colorado Division; Mrs. Fred A. Braun, commander of the Colorado field army of the Society; Eugene Duffy, Colorado FHA head; and Edward Spangler, state head of VA.

In addition to the bedrooms, the house will have a fiving room, kitchen, utility room and tile bath with tub and shower. Also included in the gift are garage, curb and gutter, concrete driveway, basic shrubs and a three-year fire insurance policy.

Bonforte, who first came to Colorado Springs in 1943 with the Second Air Force, started building homes there in 1945 and has completed 371 in the city. There are 291 in one development, also called Bonnyville.



FLOOR plan of three-bedroom gift home



NOW....See How the Keystone System Helps You KEEP YOUR BUILDING PROFITS UP

These days the builder who "goes one better" than the next contractor has an edge when it comes to turning his time and money into profits.

That's where this 44-page Keystone System Book helps you. It suggests how you can build attractive bouses at lower cost ... and still add the extra features that appeal to home buyers. It gives you the reasons why building with modern reinforced concrete stucco makes good sense. It tells you how you can build stucco houses that are strong and durable . . . by using the Keystone System and Keymesh Reinforcing.

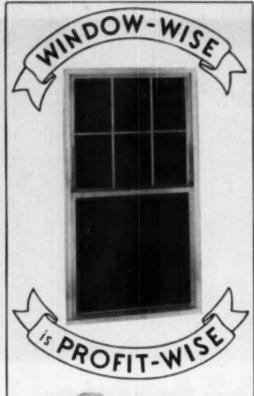
Contractors and trade authorities say that the Keystone System of Stucco Application is the most helpful guide to better stucco application they have ever seen. It's certain to be of value to you-whether you are building stucco homes now or may build them in the future.

Write for your free copy of the Keystone System Book today.

Keystone Steel & Wire Company PEORIA 7, ILLINOIS Manufacturers of Keymenb Reinforcing · Welded Fabric · Tie Wire · Nails

Modern, Durable Stucco Calls for KEYMESH





Motalan

ALUMINUM BUILDING PRODUCTS

The ALL NEW METALART heavy entruded Aluminum Bouble Rung Window for residential construction combines beauty, strength and low cost. Your choice of optral balances or tape balances, factory glazing with Neopreno Bead Giazing or job site compound glazing, full-framed Screens or economical Tension Screens, plus all stainless steel weatherstripping and hardware.

All 40 sizes donigned to use standard size glazz and to 84 masonry openings without special cutting of glazz or masonry.



Also Commercial Aluminum Double Hung Windows, Storm Windows, Screens, Attic Louvers, Oragmental Shutters,

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NAME			
ST. & NO.			
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Remodeling Keeps Pace With Growing Trade Territory



WIDE, attractive front for display and sales rooms was achieved by connecting original store building to adjacent wavehouse

WHEN a thorough remodeling and enlarging job was recently completed by the Bailey Lumber Co., Bluefield, W. Va., it marked for the company, in its 37th year of business, another step in a steady expansion which has constantly paralleled the healthy growth of the city and surrounding trade territory.

In remodeling the Bluefield plant, the old office was connected with the large adjacent warehouse building to provide one large sales and display room across the front. Also added were a new fireproof vault, a supply and advertising room, kitchen, drafting room and a conference room which seats 50 persons. Practically no new outside walls were required.

The new building's front is black and white vitrolite. An interesting interior feature is the use of a number of different flooring materials. These include rubber tile for the sales office and lobby, linoleum for the accounting section, asphalt tile for the vault and advertising room and Appalachian oak block flooring in the president's office.

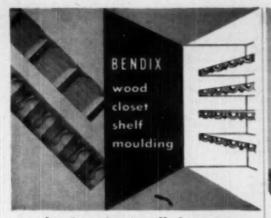
Similarly, the ceiling materials are varied; one part of the building is plaster, and two kinds of acoustical tile are used in other parts.

The entire plant is heated by one coal-fired boiler which supplies steam for the shop and hot water for the office. Heating outlets include standard radiators, baseboard radiation, radiant heat and other unit heaters.

At the time of the company's organization in 1912 a twostory warehouse served all needs. Now, in addition to the modern facilities in Bluefield, five other well-equipped plants are in operation at Mullens, Matoaka, and War, W. Va.; and Wytheville and Grundy, Va. Originally, the firm's business was confined almost entirely to lumber, but other lines were steadily added and the company is now one of the section's largest distributors of paints, plumbing, beating and electrical equipment, hardware, stokers, cement, brick, plaster and building materials of all kinds.

In its home building operations, the company supplies materials and cooperates with contractors. While it does not do architectural work, buyers are assisted in making plans and in obtaining contractors.

C. I. Cheyney, the Bailey president, has served in that capacity since 1930, after becoming general manager in 1922. Other officers are George Dunglinson, Jr., chairman of the board; J. E. McMullin, vice president; W. S. Owen, secretary; G. A. Browder, treasurer; H. L. Godschalk, assistant secretary; E. S. Mann, assistant treasurer; and J. S. Hall and F. S. Armistead, directors,



makes it easier to sell the woman

It is indisputable logic that you must influence the woman before you can sell a new home. She looks for the little extra touches that transform a bare home into a rich-looking home.

Bendix Decorative Wood Mouldings on closet shelves are strong selling-points to the bome-seeking woman. And these extra touches add extra value to the bows at small cost to the builder. A wide variety of Wood Mouldings in Modern and Traditional patterns is available for immediate delivery. 6 sparkling colors or unpainted. Isn't now the time to examine the Bendix line ? Write for illustrated catalog.



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Such an important purchase as power saws calls for plenty of consideration. This type of equipment is acquired to develop a more profitable operation. The new improved Comet Radial Power Saws get most attention in their field today simply because they offer so many superior features at lower cost. There is a full line of Comets from which to choose. All Comets make ALL the cuts. Practically no replacement costs after years of tough service.

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Letters to the **Editor**

Dual Use

Sir

Mrs. Ruth G. Sumner, Oakland 10, Calif.

Tax Heavy

Sir

I have been receiving the American Builder for about 15 years and I find it to be about the best all 'round magazine on small housework. It contains much useful information for architects, builders and clients. I also enjoy Frank Cortright's article and keep many of them on file and often refer to them. Enclosed is an impressive illustration on the local, state and federal tax situation which I would suggest you publish along with your articles fighting further federal housing. Private builders can build hetter houses for less money than the government can, so keep up the fight.

Carl E. Segerberg & Associates Carl E. Segerberg & Associates Architect & Engineers Middletown, Conn.

A Close Look

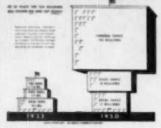
Sir:

I suggest you read your own magazine, particularly concerning new ideas. Reference is made to page 190, January 1950 issue, to the story "How to Apply Shoe Mould of Base." This islea is incorrect, according to Part V (Engineered House Construction Series) "Nailing" of the April, 1949, issue.

R. M. Brown Davton, Ohio

Dear Mr. Brown: Your criticism is understandable, and we are very happy to note your keen observation, Ideas offered by American





Builder, for the most part, are those of builders working actively in the field. Each idea usually represents a way of doing a job that some builder has found to be most practical for his purposes; or a method that he has found to be the best to his knowledge. We heartily welcome any new ideas that may represent improvement of those previously published in any issue, as well as an idea that may do a job equally as well by a different method. Publishing these ideas is one of our chief objectives .- THE EDITOR.

Isn't this what YOU want in a door?

DIMENSIONAL STABILITY is assured by the solid hardwood lumber core of this Weldwood Flush Veneer Door. The strong, staved construction makes the door highly resistant to warping, swelling or shrinking.

DURABILITY -- The entire door ... core pieces, cross-bands and face veneers... is bonded into a solid, durable, waterproof block by the use of waterproof thermal-setting glues. It is perfect for either interior or exterior use.

BEAUTY-You can choose from a wide variety of beautiful face veneers – birch, walnut, prima vera and other imported and domestic weeds.



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SOUND ABSORPTION-This Weldwood solid core door gives a high degree of sound reduction -un important advantage in many installations.

 You will also want full details on the Weldwood Standard Mineral Core Door and the Weldwood Fire Door, the only wood-faced fire door approved by the Fire Underwriters for Class B openings. Write for full information.

UNITED STATES PLYWOOD CORI 55 Wast 46th Street, New York 18, N. Y (613) Please send details on the following dones: Weldwood Lamber Core Door Weldwood Standard Minetal Core Door Weldwood Fire Door Norm	
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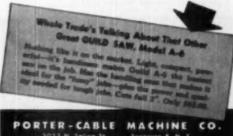
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229



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Electric Space-Heating Methods

By Stuart L. Forsyth

SINCE practical considerations influence the selection of any heating system, the use of electricity for home heating is growing. It offers convenience and flexibility which cannot be obtained in any other way. No lahor is required, as with shoveling coal or removing ashes. No storage space is needed for fuel, and there is no danger from open flames or explosive substances. No oxygen is taken from the air, and no obnoxious gases are produced.

In the Tennessee Valley the number of electrically heated homes has increased from 6,000 in 1947 to 17,000 in 1949. On the Parific Coast, public acceptance is well established, and as more power becomes available, it is expected that the growth of electric heating for homes will be as great as, if not greater than, in the Tennessee Valley area.

During these past few years of rapid growth, all the various methods in which electricity has been used to provide home constort have been studied by this writer. Those methods are of seven basic types: Central warm air systems, central wet systems, off-peak systems, heat pump systems, panel heating systems, floor furnaces, and unit heater systems.

"Central warm air systems" employ a central furnace and deliver warm air through ducts to the various areas where the heat is needed. "Central wet systems" are those which employ pipes and some form of radiator filled with either steam or hot water for delivering the heat from an electric boiler to the location where it is used.

"Off-peak heaters" include all storage type heaters which require no electrical input during certain times of the day. They are, of necessity, a variation of the first two methods because they require either ducts or pipes to deliver the heat from the place where it is generated or stored to the place where it is warted; however, the characteristics of off-peak heaters warrant a separate classification for them.

The "heat pump" is interesting because both heating and cooling can be provided by the same equipment. However, as with the off-peak heaters, the heat pump needs air ducts or pipes to distribute the heat. Therefore, it must be considered as just another type of furnace when it is used for heating.

"Panel heating" systems include all those methods which heat the floor, the ceiling and walls. These systems have been greatly misnamed "radiant heating systems." Their temperature has to be so low for comfort that only a small portion of the heat is dissipated by radiation. In fact, the panels become merely large convectors.

In the design of such systems, careful consideration must be given to the location of the panel from the standpoint of comfort. With low ceilings such as those encountered in homes, heated panels may produce an excessive directional heating effect.

"Floor furnaces" include those devices which recess beneath the floor and discharge warm air level with the floor or through registers in a wall.

"Unit heater systems" include all types of heaters which are a unit in themselves, designed to heat one (Continued on page 232)

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WOLMANIZED Pressure-Treated Lumber stops costly damage due to wood decay and termites. It gives your

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TRIATIO LUMBER

For SURE protection build with.

Electric Space-Heating

(Continued from page 230)

room independent of all other rooms. Many kinds are available. Some employ fans and others depend upon natural thermal currents to keep the air circulating throughout the room.

The study of these various methods, reported here, showed that there were numerous points on which they could be compared. Some points are of particular interest to home owners alone, some to the contractor or builders, some to the manufacturer of the equipment, and others to the power utility.

Of all those various points of comparison, ten can be said to summarize the main characteristics to be considered in choosing a practical method. These are first cost, kilowatt-hour cost, maintenance cost, reliability, flexibility of use, controlability, power demand, satisfaction to home owner, responsibility for results, and sales channels.

The seven classifications of electric heating methods are compared on the above ten basic points in figure one.

Arhitrary numbers have been used therein to indicate which electric heating method was found to be the most popular. Number I indicates that it ranks highest; number 7 that it ranks lowest.

COMPARISON OF TYPICAL ELECTRIC HEATING METHODS

		Ventral Warm Air Systems	Control Wet Systems	Off-Peak	Heal Pump Systems	Parel Pleating Systems	Floor	Unit Heater Setema
٤.	First Cost	4	5	6	7	3	1(1	7] 2
2.	KWH Cost	6	7	21	11 11	71 4	5	3
3.	Maintenance Cest	4	5		7	3	2	1
4.	Reliability	1	4	5	7		2	1
8.	Flasibility	3	4	7		5	2	1
6.	Controllability	3	4	5	7		2	1
7.	Power Demand	3	4	7	2	5		1
8.	Satisfaction to Home Owner	2	5	7	4	3		1
9.	Responsibility for resu	Its 3	4		5	7	2	
10.	Sales Channels	3	5		7	4	2	. 8
	TOTAL	34	47	\$7	53	46	30	13

On first cost, the floor inrvace may lead because a form of simple heating can be obtained at low first cost. However, they tend to heat the area locally just as oldfashioned stoves did. This is particularly true where low temperatures are encountered. If systems furnishing equal comfort are compared, the floor furnace soon loses its first place on this point.

The heat pump is by far the most expensive. The average installation usually costs over \$3,000. This means that the market for such equipment is limited to high cost homes. Mass production might reduce the cost of such equipment, but basically it is expensive because it requires a compressor, a motor and complicated controls as well as hot air ducts or pipes.

Theoretically, the heat pump needs less than half the electric energy required by resistance heaters, and, therefore, it has been ranked first in kilowatt hour cost. However, this is questionable because the savings in energy cost do not offset the increased cost of fixed charges and maintenance.

"Off-peak systems" are rated second in kilowatt hour (Continued on page 234)





What the building industry has been seeking! International furnaces are giving builders and heating contractors these terrific advantages—at an actual saving in cost! Heat delivered at floors provides warm floors with a blanket of heat at outside walls . . . minimum ducting and installation expense. . . closest floor-toceiling uniformity . . absolute quietness of operation

with exclusive patented spring-suspended blower . . . space saving (requires less than 2' x 2' floor space). Here's what Builders are saying about the NEW

INTERNATIONAL WAY OF HEATING



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"Low cost handling installation with avan distribution of hand-pins unbelievely low operating costs --interactional AF forecase holes or self havans PLACE & CO., South Bend, Indiana (featured in August, 1944 edition of "Architectural forecas".



heating plants in an profibulisated becamanities becam, and have had better results with international? B.9 thas with any others. The B.9 formace is more commission to accente existing the formace is more an almost perfect without leaders to the bounds. Costoners provide it active ST MOUSHIES COS-POBATION, Janasrillo, Wissonic (developer of the reflaxs perimeter method of besting.

SEND IN THIS COUPON for complete brochure on Now these and other builders have selved their low cost heating problems with internationals'

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can be archimet-designed to harmonize ... a real advantage for the homes with attached garages. On remodelling jobs old swinging type doors can easily be converted at modeat cast.



SECTIONAL TYPE

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PATENTED REVERSING ACTION alternates direction of shredding with each operation. This automatic "reversing action" doubles life of shredding elements, adds a unique self-sharpening feature, and assures long traublefree operation.

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7 GLEAMING WHITE FINISH neatly trimmed in block adds to the beauty of any kitchen, while compact streamlined smoothness (with no projections to catch dirt and grime) means less cleaning. Simplicity of design permits easy, economical installation.



Electric Space-Heating

(Continued from page 232)

cost on the very questionable assumption that the offpeak energy charge will be lower. Electric heating is a relatively large load, and it doesn't take very many installations to make the off-peak the on-peak. This means that rates would have to be increased accordingly, thus eliminating power cost advantages. Also, as in the case of the heat punip, the lower off-peak energy charge does not always offset the increased fixed charges and maintenance costs.

Unit heaters are ranked third because most tests show that they usually consume less kilowatt hours for the same comfort.

Maintenance costs are always high where moving parts are involved; therefore, the heat pump has been rated seventh in this classification. Unit heaters have been rated first because this study showed that unit heaters without moving parts required little or no maintenance.

The heat pump has been rated seventh in reliability because it is so complicated, and nearly every installation investigated was found to have given trouble. Unit heaters have been rated first because they have denionstrated the most over-all reliability. Some have been in use for over 20 years and are still giving reliable service.

For flexibility of use, unit heaters are away out in front. They can be used anywhere, anytime to provide auxiliary heat or all the heat needed. A different temperature can be maintained in each room, or one room at a time can be heated. With all the other methods, it is difficult or impossible to provide heating which will fit individual requirements.

The heat pump is rated the most difficult to control because it is so complicated. Panel heaters are sixth because changing the temperature of a large mass, such as a floor, wall or ceiling, always takes time. One national supplier of such equipment definitely states that a lag of four hours takes place from the time a change in temperature is required until results are produced. Unit heaters are the easiest to control because they do not have large thermal storage and each one can have a built-in thermostat which responds quickly to small changes in room temperature. With this unit control, only the electric current required to provide comfort where it is needed, is actually used.

Individual control is also important because it gives a diversity of power demand which cannot be achieved with any other system so far known. Tests have proved that the unit heater system will create a power demand approximately two-thirds of that created by other electric heating methods.

The power demand is primarily of interest to the power company because it means that less distribution capacity needs to be provided, but it is important to the home owner. Power rates are always based on the cost to serve. If power companies can serve an installation at a lower cost, they charge the home owner lower rates. If excess distribution capacity is required, the home owner must pay for it. In various areas where power is sold on a demand basis, it can be readily understood why the home owner will want the electric heating method that will give the lowest power demand

"Off-peak heaters" will create the greatest power demand because all the heat needed for all day has to be supplied during a relatively short period of time. On most power distribution systems, only a few homes would have to be added before the off-peak would (Continued on page 238)

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When you estimate a job, do you laboriously cover sheets of paper with figures—figures that have to be checked . . . rechecked before you can be sure you're right?

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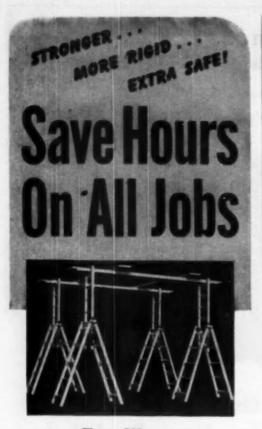
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Electric Space-Heating

(Continued from page 234)

become on-peak. History would repeat and the problems created by off-peak water heating would probably be simple by comparison.

No true measure of satisfaction exists, because each person has his own ideas of what he wants. Many like the central warm air system, but there are many others who object to the noise and drafts created. A floor furnace may cost less, but it may not heat every room or the distant corners of large rooms. Unit heaters have been rated first because most of the people interviewed like their care-free, cheery warmth. In one housing project we studied, central heating systems were replaced by unit heaters because the average housewife there wanted to feel the heat and see the glow.

Under responsibility for results, unit heaters are rated first. A complete package requiring only simple electrical connections can be supplied by the manufacturer. Installation can be made by electrical contractors without the assistance of other tradesmen. Therefore, responsibility for results can be centralized.

With all the other heating methods, at least two trades are involved. Responsibility for results is divided.

This point is very important to home owners and power utilities. If a unit beater should give trouble, only part of the house will be without heat and the home owner has only to call his electrical contractor or dealer for service. Generally, the power utility is the first thought of the home owner when his electric beating system gives trouble. With the centralized responsibility afforded by unit heaters, the problem is easy. With all other systems, the utility often has to act as a referee to determine who is responsible.

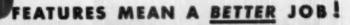
This responsibility for results carries back through the sales channels necessary to get the equipment from the manufacturer to the user. Electric supply companies now distribute wire, switches, etc., to electrical contractors, dealers, power utilities, and builders. Unit heaters can be handled through these same sales channels in the normal course of business. They are all members of the electrical industry, hence stand back of their own work.

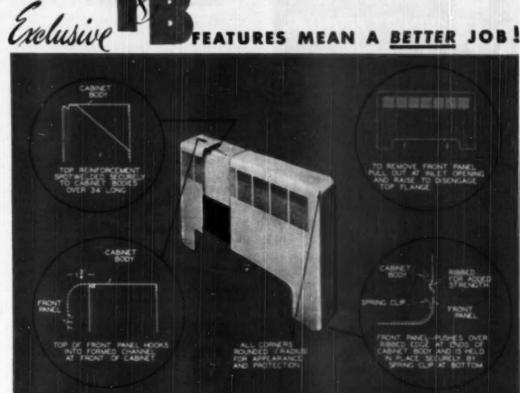
The other electric heating systems find their way to users through various distribution channels. Floor furnaces and central warm-air systems are often sold by the local tinsmith, and central wet systems by the local plumber. Off-peak heaters and heat pumps have found such little use that their distribution channels are not well defined. Panel heating systems sometimes are sold by building material dealers, and have in some cases encountered jurisdictional labor disputes between carpenters, plasterers, and electrical contractors.

Summarizing all these factors, it can be seen readily why the unit heater system was found to be the most popular.

Proof of the popularity of the unit heater system is demonstrated by statistics from Chattanooga, Tenn. Out of 4,390 electrically heated homes in that area 63.5 per cent now have unit heater systems. Floor furnaces whose popularity is based primarily on their low cost are next with 32.2 per cent. The other heating methods are not very popular.

This is a condensation of a paper delivered by Mr. Forsyth. Menager of Home Heating Sales, Westinghouse Electric Corp., bufore the 1949 Pecific General Moeting of the American Institute of Electrical Engineers.





TUTTLE & BAILEY Type FP Convectors - carefully engineered in every detail - combine outstanding features of design and construction that insure a faster, easier installation ... a nest, trim finished job you can be proud of. Ideal for semi-recessed or free standing installation, units consist of a front panel, cabinet body and an

efficient all-copper heating element ... furnished completely assembled in one lightweight carton to facilitate handling.

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Hold Thin Layer of Asbestos Paper Unnecessary for Warm Air Furnace Leader Pipes

Heat loss from a bright tin pipe covered with one thickness of L2-poind asbestos paper is 62 per cent greater than when the same pipe is left uncovered, according to research conducted by the National Warm Air Heating and Air Conditioning Association. The test applied to bright tin warm air leader pipes through which air is flowing at relatively low velocity under a gravity system.

In order to demonstituate the inefficiency of a layer of asbestos paper as a heat insulator, tests were run in which the number of thicknesses of paper was increased until the heat loss became less than the loss through a bare bright tin specimen. Eight thicknesses of 12-pound paper were applied before the desired result was achieved. The conclusion drawn was that a thin layer of asbestos paper glued around warm air furnaces leader pipes was unnecessary.

For the average, up-to-date, gravity warm air furnace, Association engineers said, a practical method is to merely seal the joints of all pipes with two-inch asbestos strips in order to make the system "closed" and therefore dusttight. The return air side, including joist panning, if used, should be stripped in a like manner. It was pointed out, however, that leader pipes which might be exposed to the chilling effect of basement windows, or which are extremely long, or run through cold spaces, should be adequately insulated—a minimum of three layers of corrugated abestos being recommended in such cases.

The electrical appliance industry will sell a total of 41,390,000 units in 1950, officials of the General Electric Co. predicted.





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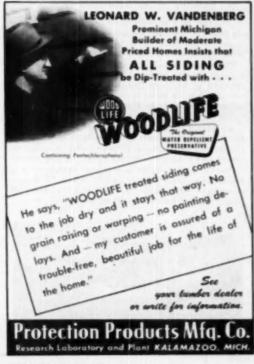
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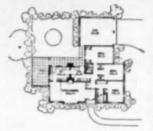
WESTERN PINE ASSOCIATION **310 Yean Building** Portland 4, Oregan

"SUGAR PINE



Magazine's January 'Five-Star' **Home Most Popular in 18 Years**





BETTER Homes and Gardens' pepular Tive Star home for January, 1949. Plan shows ingenious arrangement of rooms around hall space. Over-all area of house is \$5x51 feet

THREE-BEDROOM, one-story house featured in A the January issue of Better Homes and Gardens has proved the most popular published by the magazine in 18 years, John Normile, the magazine's building editor, said recently.

Although plan sales were not disclosed, he said that the house is "10 times as popular" as the average successful home featured in the publication, many of which appeared in postwar years.

The house was built as a model home in Inverness, a Chicago suburb, by Arthur T. McIntosh, Inc. It was designed by Architect Bertram Weber in cooperation with Normile. A blend of traditional and modern, the home was described by Normile as neither radical nor conservative.

Designated by the magazine as its "Five Star" home for January, plans were made available to the public through the magazine and through home planning centers as part of the publication's home planning service.

One "Five Star" home is published in each issue of Better Homes and Gardens and more than 100 designs covering a wide range of small and medium-sized homes are now included in the program.



TERRACE affords privacy: is easily reached from kitchen, parch, bedrooms. Overhang protects passage from house to garage



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ig Market for Remodeling Ipened by High Farm

Until the post-war period, at which time farmers' incomes rose to the highest levels in history, most farm homes had been repaired only to the extent necessary to keep them habitable. Now, for the first time in recent years, farmers have nomey to spend for capital improvements on a large scale and there is a great open



1. NEGLECTED for yours. old foreshouse was potentially livable but required extensive remodeling before becoming a desirable house.

market for building and remodeling. Much of the farm spending is being directed to building, with service structures such as barns and chicken houses usually being the first to be built or reconditioned. Enough of this



2. CHIEF improvements included retained roat of wing; applying leash white siding and a new real of green asphalt shingles. and trimming overhang at the rakes and -

work has been performed, however, to permit added emphasis on the alteration of existing dwellings. Many farmers prefer to remodel old houses which, although structurally sound, are badly in need of modernization.

The remodeling job illustrated was accomplished mainly by raising the roof of the wing and by trimming unnecessary roof overhang at the rake and eave lines. Depending on color to accent the overlaid white shingle exterior walls, the builder selected green, fire-resistant asphalt shingles for the new roof and painted the shutters a matching green.

By raising the wing roof, outside proportions were improved; and space was provided for an 18x24-foot

20.00

14 MARKET STREET

Electric Association Will Premote Ranges

The Electric Association, representing 600 manufacturers, distributors, dealers and electric companies in the Chicago area, February 14 will launch an all-out electric range promotion to boost Chicago up the range sales ladder, according to an announcement by Axel Kahn, association president.

Timed to immediately precede the peak selling season, the campaign will run for 13 weeks with advertisements in all major media plugging seven benefits of electric ranges. "When the campaign is over, everyone ought to know something about electric ranges which he does not know now," Kahn said,

room on the second floor of the wing. Ornate porch-pillar gingerbread was eliminated, one step toward giving the house a fresh, modern smartness,

Originally, there were seven small, cramped rooms on the first floor. Now there is a 23x24-foot living room, a spacious kitchen, a bathroom and two large bedrooms-one of which may be used as a dining room, if desired. There are two more bedrooms on the second floor of the main section of the house.



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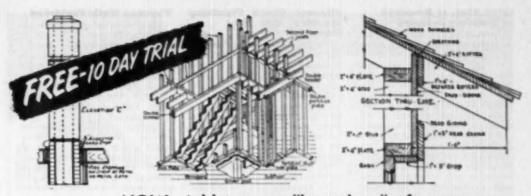
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Cites Aims of Research In Building Industry

The opportunities that exist today for providing shelter at both lower initial and maintenance costs offer a tremensious challenge to organized experimental work in the building industry. Dr. C. F. Rassweiler, vice president for research and development of Johns-Marville Corp., New York, N.Y., told members of the American Society of Civil Engineers at the society's meeting at the Hotel Statler, Washington, D.C.

In his talk on "Technical Research in the Construction Industry," Dr. Rassweiler said that research could make an important contribution to the progress of the building industry by producing a type of housing which would stimulate construction—housing which would influence people to abandon their present homes in order to get something better.

Rassweiler also advocated a campaign to increase pride of home ownership, stating that if this feeling were strongly enough inculcated in persons who had purchased homes in flush times they would not abandon their investments at the first sign of financial difficulty.

Describing "certain impractical ideas about radical innovations in the

Vitreeus China Plumbing Industry Has New Standard

The fifth edition of the Commercial Standard for Vitreous China Plumbing Fixtures has recently been published. The new Standard, CS20-49 supersedes CS20-47 and became effective Dec. 15, 1949.

The standard establishes uniform nomenclature, definitions and grades of vitreous china plumbing fixtures and includes requirements for material, construction, testing, marking and labeling.

The revision was developed and recommended by the Vitreous China Plumbing Fixtures Association in cooperation with the Commodity Standards Division of the National Bureau of Standards. Copies of the Standard are available from the Superintendent of Documents, U.S. Government PrintingOffice, Washington, D.C., at fifteen cents per copy.

building industry." the research director said they had led a great many people to feel that research will have failed if it does not produce a house "that can be transported to a new site and opened as one opens an umbrella."

Papered Walls Preferred

Homeowners and prospective homeowners prefer pastel wallpaper for the walls, with painted or enameled doors in white or cream, according to a nation-wide survey of decorative preferences recently made by Ponderosa Pine Woodwork. Paint or enamel in white or cream is also preferred for dining room trim, the survey revealed.

Although paint leads in preference as a finish for dining room doors, waxed or natural wood finishes run a close second. The survey showed that 42.1 per cent of those responding preferred paint or enamel, while 30.6 per cent preferred waxed or natural wood. In woodwork trim, however, 48.8 per cent preferred paint or enamel, while 25.6 per cent preferred waxed or natural wood. The preference for the "natural wood look" was especially strong in the north central and western regions, the survey showed, while the northeastern and southern regions tend to prefer painted interior doors.

November Lumber Under '48

Total retail lumber stocks at the end of November, 1949 were estimated to be 4.423 million board feet, a decrease of 2.5 per cent from Nov. 30, 1948.





Announce FHA Acceptance **Of New G-E Heating System**

FHA acceptance of the General Electric Co.'s Air-Wall heating system for use in properties otherwise eligible for mortgage insurance under the minimum property requirements and risk rating procedure of the agency has been announced by H. M. Brundage, manager of the automatic heating division of the company's Air Conditioning Department in Bloomfield, N.J.



AIR WALL use fernace installation



LIVING room register installution

The Air-Wall system is a lowcost, "packaged" forced warm-air heating plant for small homes. The complete package, delivered as a unit, includes a General Electric oil- or gas-fired warm-air furnace, smalldiameter ducts and elbows, plenum chamber and registers. The use of the small prefabricated round ducts and elbows effects a savings in installation costs and space.

The registers are installed in the outside room walls. Forced warm air is directed upward in a wide, fanlike pattern, forming a warm-air, blanket in front of the cold walls or windows.

The system is designed for use in small one- and two-story homes with basements, but may be adapted to basementless homes. It is limited to houses where the farthest supply or return duct will not be more than 60 feet from the furnace bonnet, measured along the duct work.

New Lucquer Finish **For Deer Hardware**

A new lucquer finish, which now comes on all Fenestra door hardware. is said to be impervious to all known cleaning fluids, as well as to the salts. and acids of human perspiration. It is also resistant to bumps, scratches and abrasion.

Formula for the lacquer came about after a two-year search and was the 119th tested in the laboratories of Sargent & Co., of New Haven, Conn., who manufacture Fenestra door hardware to Detroit Steel Products Co. specifications. Baked onto a bright lustre, the lacquer defies chemical analysis, cannot be dissolved by any standard paint remover or lacquer thinner-not even its own thinner.





Second Edition HOME BUILDERS MANUA FOR CONTRACTORS



This collection of material in its three-ring binder is designed as a celling hit. Any section may be removed and shown or given to the prospect. In the latter case a new section, punched for insertion, san be obtained. The user can add his own material, such as the local building code, to make it as complete as desired. The Manual contains ...

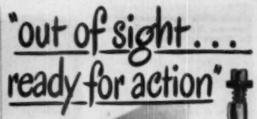
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Mark 40th Anniversary of George Hughes' Invention Of Electric Range

Forty years ago the first electric range was made in a basement on South Deathorn street in Chicago. The inventor was George A. Hughes, founder and first president of Hotpoint, Inc., Chicago, and the primitive model he developed was the forerunner to the line of push-button ranges introduced by the firm in 1949.

Hughes first became interested in the possibilities of electric cooking while working with electric utility companies in Minnesota, Montana and the Dakotas. In 1909 he moved to Chicago and continued to develop his idea while working as a manufacturers' representative for electrical equipment. One day he bought a sheet iron oven from a department store and took it to an electric shop in the basement of his building where he had it wired for electric baking, Although he had no idea what wattages were needed or what the temperature of the oven should be, Hughes mixed a kind of batter and successfully baked a loaf of bread.

Renting a third-story room on another street, the inventor employed six men to make the first ranges. from frames of gasoline and oil stoves



ELECTRIC stove, invented by George A. Hughes in Chicago basement in 1909 and exhibited for first time at electrical assoclution convention at St. Louis in 1910.

were used, with electric heating coils in clay molds being inserted in place of the old burners.

Hughes then loaded five of the new ranges in his car and drove to St. Louis to display them at a 1910 electric association convention-the first public exhibition of a practical electric range. Because of their topheaviness, the stoves had to be braced against a wall while Hughes demonstrated them. The same year he received a carload order from an electric. utility company and was able to raise enough capital to organize the Hughes Electric Heating Co., the first company to manufacture and sell electric ranges.

Up to the present date, approximately 150 improvements have been made in the Hughes range. The original models were of black with high backsplashers. With the adoption of vitreous enamel for finishes, white door panels were introduced; and allwhite ranges came out in 1924.

Automatic temperature and time control were incorporated into models manufactured after World War I. This improvement made practical the use of higher oven temperatures and provided faster baking and broiling.

Deep-well cookers in 1915 supplied extra low wattage for simmering foods very slowly. Drawer storage space became a permanent feature in 1923, and one-switch control for oven heating a few years later.

The original open heating coils were replaced by Calrod heating units incased in tubes. Other improvements were inclusion of clocks and an adjustable deep-well cooking unit.





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New Ceal Conveyor Fills Need For Small Dealers

A new one-man-operated coal conveyer now offered by Howry-Berg Steel & Iron Works, Inc., Denver, Colu., is proving to be a handy prodmet for the small coal dealer. By using a four H.P. Gladden engine, it quickly moves coal from ground to truck, truck to basement, or from cars.

Easily handled by one man, the conveyer trails easily because of its low center of gravity. It has an undershing axle low enough to get easily into cellar windows. Ruggedly constructed in double hox sections, the conveyer is available in any standard foot length, and can easily be lengthened or shortened.

A ratchet winch with dog and strong steel cables is provided for safe lifting and lowering of loader body. The loader can be adjusted for any angle. Standard No. 55 steel chain is used, with 12-gauge ribbed flights. Flights are bolted so that they may be tightened or changed.

The loader will handle approximately 18 to 20 tons of coal per hour, Carrier wheels are 16-inch drop center for 6.00x16 tires. The carrier is constructed of 2-inch, O.D., heavy



THE now Howry-Burg coal conveyer

tubing and wheel bearings are Timken Roller Bearings.

The 19-foot elevator will deliver at a height of 11 feet, from the ground at an angle of 40 degrees; the 27-foot loader at 18 feet, and the 43-foot model at 27 feet from the ground at 40 degrees.

Underfeed Stoker Is Popular with Homeowners

Since anthracite coal is smokeless, dustless, and nootless, it is an appropriate fuel for domestic use that already serves over five million American homes. Of these, over 125,-000 houses have stoker equipment installed. The addition of the ash removal worm to the stoker has made this unit nearly completely automatic. This worm carries the ashes from the grate to a receptacle.

Although two types of units are available—underfeed and overfeed the underfeed unit is more commonly used in homes. This type is available in sizes up to 100 pounds per hour consumption for domestic use. These units are adaptable, of course, to all three basic heating systems : air, water, and steam,

The initial cost for installation of an anthracite stoker ranges from \$350 to \$500. This price usually includes one year's servicing. Many manually operated units can be converted to anthracite stokers in about three or four hours. A survey of the particular heating needs for a house should be made, however, before the installation or conversion to insure the use of a unit of proper size. The average B.T.U. content of one pound of anthracite coal is 12,000 for the smaller sizes, 13,000 for the larger sizes.

The hard steel worms and a minimum of slow-moving parts contribute to low upkeep costs of these anthracite stoker units.

> Don't Miss APRIL American Builder



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Here's '50 to '60 profit per day!

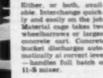
A Hoist Tower that pays for itself fast-then pays you big dividends. One contractor says his Jaeger Self-Raising Tower saved \$59 a day!--- the tower, an operator and two wheelers, against 10 to 12 hodders. You take



this tower to your jobs on truck or transporter. Two men assemble it on the ground in two hours. Then its 17-hp hoist raises it. Standard height is 37; with extra sections 47', 57' or 67'. (31%', 41%', 51%' and 61%' lifting heights). Saves scaffold erecting time, saves constant loss and cost of replacing wooden tower materials. Places materials faster, safer. Handles 1-ton loads with complete safety. And, you can use it two ways-



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