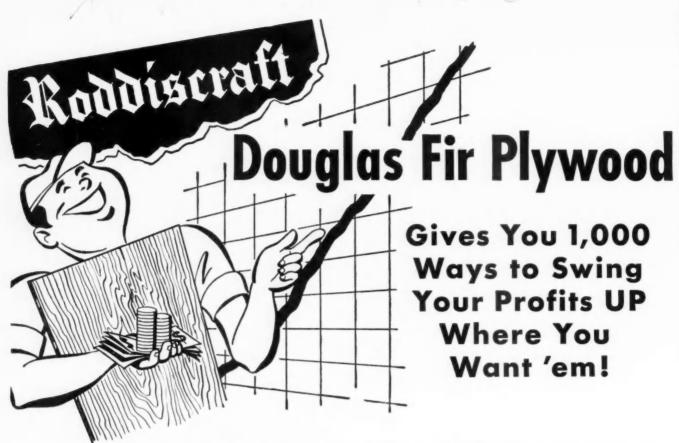
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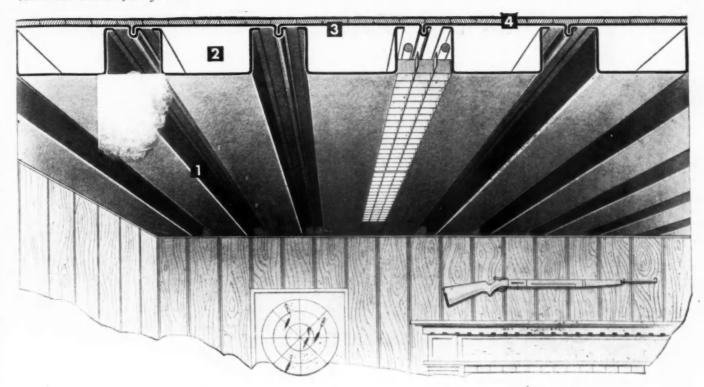
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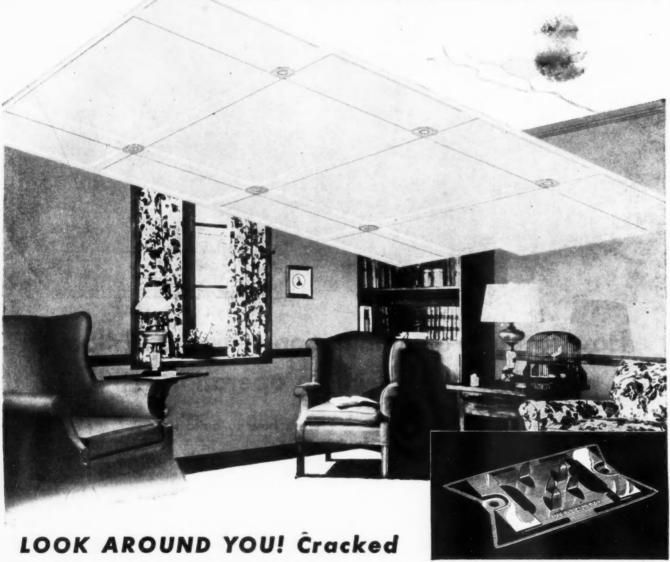
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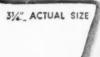


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Publisher's Page



The Changing American

VERYBODY is discussing whether the mild recession we have been having is going to develop into a real depression. If it does, this will be because the American people have asked for it. They -or most of them-deserve no credit for the prosperity we have had since the war ended. And they will deserve no credit for it if in the near future we escape a bad depression. For they have put into important offices-especially the presidency-men who have favored, and now favor, policies which if all were adopted would not only soon cause a ruinous depression but would make depression permanent by destroying the only kind of economy that ever in the history of the world created real and prolonged prosperity.

Whether depression comes or not, and especially if it actually has started, the \$64 question the American people should be asking themselves is: "What has caused such a great change in the American people in the last third of a century?" For that they have greatly changed there can be no serious question. How and how much they have changed can be realized only by those who are old enough to have lived a large part of their lives before World War I.

This nation entered World War I thirty-two years ago. The third of a century before that included the depression of the 90's and the recovery from it, all of which this writer remembers from having experienced them. Everybody suffered from the depression of the

90's, and with especial severity in the territory where this writer lived, and it did seem then that every quack means of restoring prosperity that could be invented by cracked minds was proposed. But whether the people realized it or not, in that period the political and economic philosophy of *individualism* pre-vailed and could not be shaken. Two laws of great importance that were passed—the Interstate Commerce Act in 1887 and the Anti-Trust in 1890-forcibly illustrate this. Both of them were aimed at assuring the people opportunity to practice individualism by protecting them from private monopoly—the former being intended to prevent abuse of the power of railroad monopoly and the latter to destroy and prevent monopoly in naturally competitive industries. They were in no sense paternalistic; and no paternalistic legislation was passed to alleviate or end the depression of the 90's. The most serious threat offered the economy was the promotion of "free silver" to inflate and depreciate the currency, and thereby rob creditors for the benefit of debtors, but it was defeated after the greatest political battle in American history. The briefly interrupted prosperity and progress during the three decades before World War I were due to the hard work and thrift of the people as a whole, to the enterprise shown and the "venture capital" invested by business men in large and small business and to a virtually complete avoidance of paternalism in government.

As the outstanding characteristics

of the American people for the three decades before we entered World War I were individualism, industry, thrift and venturesomeness in pioneering and making investments, so their outstanding economic characteristics since then have been and still are desires to do less work for more pay, and to have government provide them with subsidies and "security."

The 20's were marked less by productive investment than by a huge stock market speculation the purpose of which was to enable the participants to get rich quick by taking other people's money without painful effort. The depression that followed was marked by a rash of legislation, which has continued up to the present time, and has been intended ostensibly to use the power of government to tax everybody for the benefit of everybody while having the real intention of buying for the party in power the votes of everybody largely or mainly with their own money.

The most amazing fact about what has occurred is that so many of the middle class people who have been most injured by the paternalistic policies adopted and proposed have allowed themselves to be fooled, bought and corrupted by these policies. In contrast to the people of the generation who in 1896 rejected the offer of "free silver" to reduce their debts by inflating their currency, they have accepted most of the legislation which has been offered to spend and tax them ostensibly into affluence and security but actually into ruin.

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Same O. Drum,



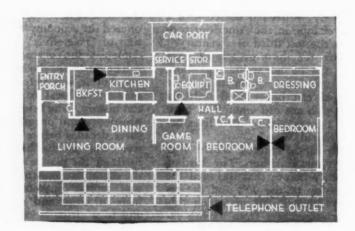
Samuel G. Wiener and William B. Wiener, Architects

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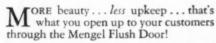


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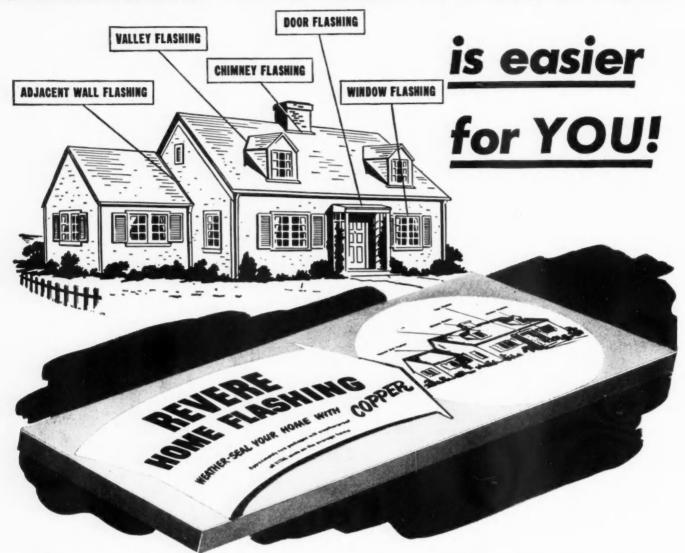
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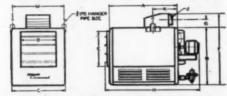
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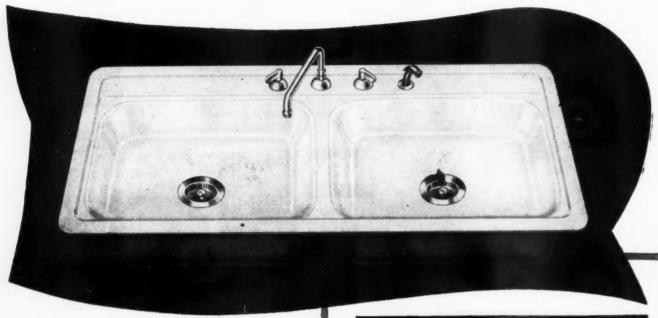
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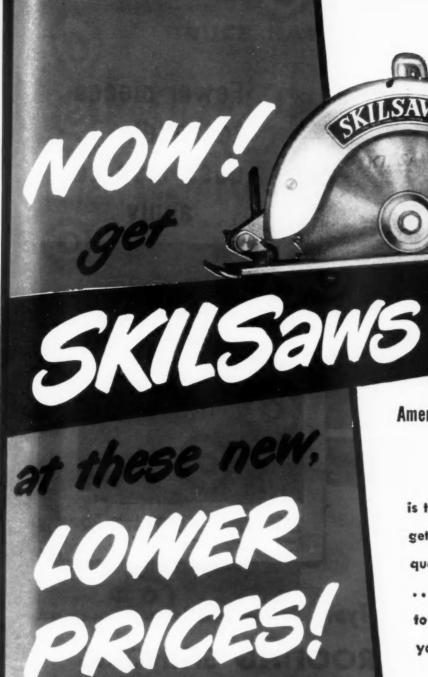
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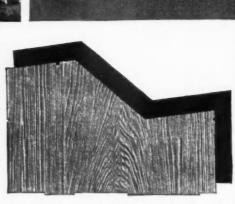
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Here's the perfect roofing shingle for builders who want to speed up work and cut their costs. Units are large . . . only 90 required per square . . . and only 2 nails per shingle. They're self-aligning . . . punched and notched for fast, even application. And the results: a good-looking, neatly-finished job plus important savings of time and money.

"Century" No. 5 Roofing Shingles are ideal for new and low cost housing. Can also be applied over old wood shingle or composition roofs. Made of asbestos and cement, they are fireproof, rotproof, time and weather resisting. Supplied in White, Spanish Red, Black and Surf Green colors . . . each with weathered cypress texture and random width thatched butt.

Get full information about "Century" No. 5 Roofing Shingles from

your K&M Dealer, or write direct to us. We'll attend to your inquiry promptly.

Original manufacturers of Asbestos-Cement Shingles in this country

KEASBEY & MATTISON COMPANY · AMBLER · PENNSYLVANIA



BRUCE HARDWOOD FLOORS

Used throughout more homes than any other floor!

Give your homes this popular floor

When you tell a prospect a home has Bruce Hardwood Floors, he knows immediately that means quality construction. For over 25 years Bruce has been the most popular and widely used of all floors for living and dining rooms, bedrooms and hallways. Today there are more Bruce Hardwood Floors than any other make of floor in homes and apartments all over the United States. And this preference is being solidly backed by a powerful consumer advertising campaign in leading magazines.

You actually save money

By using *prefinished* Bruze Hardwood Floors (completely finished at the factory) you can save from 3 to 5 days on every home you build. The factory-applied finish eliminates costly sanding and finishing on the job. You just lay the floor and it's ready for immediate use... with the finest finish ever given hardwood floors.

For free copy of "A Life Saver for Builders," write E. L. Bruce Co., Memphis (1), Tenn.



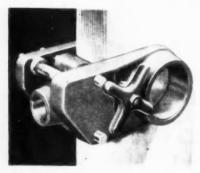
House-Beautifu

Bruce HARDWOOD FLOORS



"...and with Kwikset's unconditional guarantee, builders can't go wrong!"

-Says RAY HOMMES, president of Rayart Construction Company, developers of Norwalk Gardens and other Southern California housing projects.



KWIKSET JIG-Clamps on quickly, holds tight. Assures exact right-angle holes. Speeds installation!

Kwikset Locks are a credit to the home—and to the builder or contractor who puts them there. Cleanly designed, handsomely hand-finished in polished or satin brass, bronze or chrome, more than 4,000,000 of them now are in use in American residences!

Cost is low...engineered craftsmanship makes volume production practical ...and easy 2-hole installation cuts labor and time to a minimum on the job. Quality is high...Kwikset working parts are of brass stampings or pressurecast Zamak No. 5, the rugged, high-test alloy that stands up under years of heavy service.* Kwikset Locks are unconditionally guaranteed against defective materials or workmanship!

Authentic design for every traditional or modern residence. Available for all standard installations and in all popular U.S. finishes. Deadlatch optional. Write for file-size catalogue.

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

Manufactured by KWIKSET LOCKS, INC. Anaheim, California

Distributed by

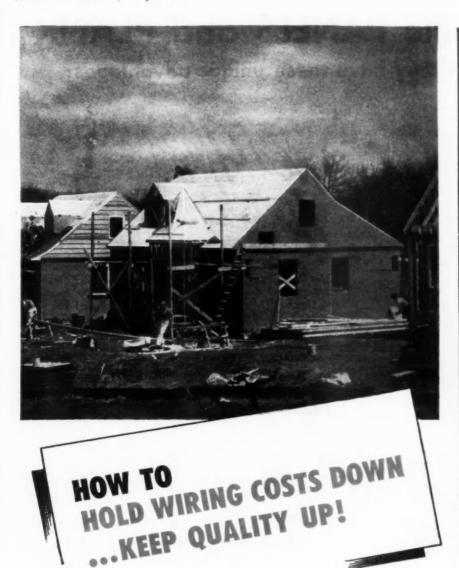
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Street & No. City State

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Now, when every second counts—now, when every construction dollar must produce full value—methods of cutting costs without sacrificing quality take on new importance. That's why General Electric PVX® nonmetallic sheathed cable has become such a favorite.

PVX goes in fast—goes in to last. The tough, smooth, moisture- and flame-retardant braid covering makes for easy pulling. Its light weight makes PVX easy to handle. Its small over-all diameter permits installation in tight spots. And PVX strips freely, quickly, leaving a clean conductor for fast connection.

To get the rest of the moneysaving facts on PVX and many other items in the General Electric wire and cable line, send for a free copy of the 42-page book Building Wires, Cables, and Cords for every purpose. Address Section W23-72, Construction Materials Department, General Electric Company, Bridgeport 2, Connecticut.





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CONSTRUCTION MATERIALS
DISTRIBUTOR



portable cords are available in types suitable for almost any portable tool. These G-E cords are built to take abuse—are just the kind of

tough, durable cords that hard-working tools need. Make sure that Flamenol cords are on the equipment you buy—make them the rule when you replace cords.

is one, feature of Type SE-Style U service entrance cable. It can be installed directly on the outside of a building without conduction if you want to. Another convenience of this high-quality product is that, on short spans, you can run it from the pole right through to the meter equipment.



TODAY'S biggest wiring news is General Electric remote control. This revolutionary, new lighting control method utilizes a lightweight, two- or three-conductor No. 18 Awg

Flamenol control wire, easy to handle and low in cost. Your General Electric distributor has up-to-the-minute facts on this exciting new system. Stop by and see him soon.

FOR INFORMATION

on any part of General Electric's line of wires and cables, contact your General Electric Construction Materials distributor. He is ready, willing, and able to help



straighten out your supply problems, or give you how-to-do-it wiring information.

Am

Johns-Manville PANELS and PLANK

are better because they have these unique advantages:



Pre-decorated in soft pastel colors...

Beautifully finished at the factory in a variety of soft pastel colors, the materials require no further decoration. They are ready-to-use when installed, but may be painted if desired, with either oil or water paint. The Glazecoat finish eliminates the need of a primer.

Lightning Joint Conceals all nails.

This J-M feature conceals all mails.

This J-M feature speeds alignment and offers the important advantage of concealed nailing. No exposed nailheads to mar the beauty of wall or ceiling. Beveled edges provide a neat "V" groove at the joints. Write for new brochure on J-M Decorative Insulating Board. Johns-Manville, Box 290, N. Y. 16, N.Y.

beautiful than ever. Accidental smudges easily removed

with an ordinary art gum eraser.



Another Housing Development Picks



Sewel

The GAS Refrigerate

Low maintenance costs benefit owners. Instead of moving parts, Servel uses a tiny gas flame to produce constant cold. There is no machinery to wear, need repair, or lose efficiency. Upkeep costs are held to a minimum, and operating costs remain low—another benefit to owner or tenant, depending on who pays the gas bill. See Sweet's for details, or write to Servel, Inc., Evansville 20, Ind.

spacious frozen food compartment, moist-cold and

dry-cold sections, and big flexible interior.



the <u>one</u> bookkeeping machine for modern builders designed to speed and save on every accounting record...

and here's why... The alert executive today is most conscious of reducing all costs, and this new Remington Rand machine has been geared to eliminate administrative waste-holes. It produces all the accounting records needed by builders and contractors more efficiently and more economically than ever before. Here is how:

Faster results...every feature of this bookkeeping machine has been electrified. Balances are computed and printed automatically, and improved tabulation and high speed timing eliminate operator-strain—increase operator worktime.

Simpler operation...two, three or more related records—sales journal with distribution, cash journal with distribution, or any others—are produced simultaneously—records for every breakdown, for every necessary department. New "snap-on" registers give extra flexibility... they're easily repositioned for any new application.

New functional design...many new, special features guarantee operator-owner appeal. This streamlined beauty has new organ type, finger-grooved keys—and uniform printing impressions are assured. The writing line is completely visible, and register totals are magnified for even easier reading. Yes, in every way it's designed to speed and save in your accounting administration.

But see for yourself. Call your nearby Remington Rand representative, or write for free booklet, "Fashioned for Business Administration." Remington Rand Inc., Dept. AU-7, 315 Fourth Ave., New York 10, N. Y.

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BOOKKEEPING MACHINE

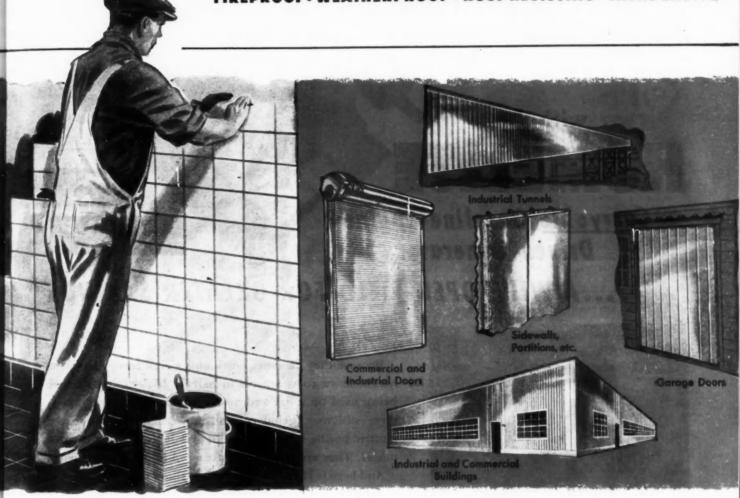
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Walls of Steel

FIREPROOF . WEATHERPROOF . RUST RESISTING . INEXPENSIVE



for faster, easier, lower cost, better construction

inside or out!

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

One of the big reasons for this trend

is *GALVANITE, a rust and corrosion resisting, high quality, zinc coated steel.

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

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

*GALVANITE—inexpensive, rust resistant, zinc coated steel manufactured by the SHARON STEEL CORPORATION.



Send for the latest

SHARON STEEL CORPORATION . SHARON, PENNSYLVANIA

PRODUCTS OF SHARON STEEL CORPORATION AND SUBSIDIARIES: THE NILES ROLLING MILL COMPANY, NILES, ONIO; DETROIT TUBE AND STEEL DIVISION, DETROIT, MICHIGAN; BRAINARD STEEL COMPANY, WARREN, OHIO; SHARON-STEEL PRODUCTS COMPANY, DETROIT, MICHIGAN, AND FARRELL, PERNSYLVANIA; FARRENTEROWN COAL & COKE COMPANY, MT. PLEASANT, PENNSYLVANIA; FARRENTERO COAL & COKE WORKS, FAIRMONT COKE WORKS, MORGANTOWN, WEST VIRGINIA; JOANNE COAL COMPANY, RACHEL, W. VA.

HOT AND COLD ROLLED STAINLESS STRIP STEEL —ALLOY STRIP STEEL—HIGH CARBON STRIP STEEL — GALVANITE SPECIAL COATED PRODUCTS—COOPERAGE HOOD—ELECTRICAL STEEL SHEETS—HOT ROLLED ANNEALED AND DEOXIDIZED SHEETS— CALVANIZED SHEETS—ENAMELING GRADE STEEL—WELDED TUBING—SALIVANIZED SHEETS—BOT STRIP

DISTRICT SALES OFFICES: Chicago, Illineis, Cincinnetti, Ohio, Cleveland, Ohio, Deyton, Ohio, Detroit, Michigan, Indianapali tedians, Milweukee, Wicconsin, New York, M.Y., Philadelphia, Pennsylvania, Rochester, New York, Los Angeles, California, St. Louis, Milwearti, Machreal, Quebe, Tenaste, Ontarrio.

STANDARD 110 VOLT

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... A WIDE-OPEN FIELD FOR GREATER SAVINGS



Driven Generator

HOMELITE PAVING BREAKER



HOMELITE CHAIN SAW

Because they do more work and weigh less...because maintenance costs are cut in half...high-cycle tools are being used on more and more construction jobs...concrete vibrators, grinders, impact wrenches, chain saws, electric paving breakers and an ever-increasing number of others. They are indeed the last word in greater efficiency.

And here is Homelite's answer to those who want to cash in on the advantages of high cycle tool operation. It's a compact gasoline-engine-driven dual-purpose generator... the first and only one of its kind... a complete power unit you can pick up and carry to operate your high cycle tools any place you want.

NO LOSS ON PAST INVESTMENTS

Even though you have made substantial investments in standard 110 volt tools, you have nothing to lose. For this Homelite Generator operates both high cycle and standard universal tools with equal efficiency.

Look into this new Homelite Dual Purpose Generator...the Carryable Power Plant of the Future. Send for bulletin...or, better...let us give you a free on-the-job demonstration. Write, today.

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CECO covers the construction field

With metal products for every building purpose, Ceco indeed covers the field . . . providing you with the finest in engineered steel products for monumental buildings, for institutional buildings, for commercial buildings. Ceco metal products also fit economically into the small home-cut fire hazards-increase building strength-reduce installation costs. For Ceco builds small with the same engineering precision they build big. Years of pioneering ... years of on-the-job experience in the construction field have given Ceco engineers a sure grasp of all building problems. Ceco's plants, too, are strategically located to give fast coast to coast service.



Ceco literature is full of installation tips and product data. It is FREE to all building men. Fill out coupon and mail today.

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CECO

In construction products CECO ENGINEERING makes the big difference

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LOW COST

—competitively priced . . . meets all requirements for low cost housing.

BURNS CHEAPER SIZES OF ANTHRACITE

—pays for itself in fuel savings. Built-in tankless coil supplies low cost hot water.





—coal feeds direct from bin . . . ashes discharge by gravity into container within unit.



Model C-1, Steam 325 sq. ft.
Hot Water 515 sq. ft.
Model C-2, Steam 550 sq. ft.,
Hot Water 880 sq. ft.



—jacket finished gleaming white and red enamel on steel.

NEW PRINCIPLE

of feeding and burning anthracite across a single, stationary, perforated plate. Burner and mechanism is attached by two bolts and all working parts are outside boiler.

Dealerships Available — Write to Anthracite Institute for complete information about the "ANTHRA-FLO" and the names of the manufacturers who now have units available. Get details of the attractive dealer franchise plan for this exclusive type, low priced automatic heating unit.



ANTHRACITE INSTITUTE

101 Park Avenue New York 17, New York



Built by BLACK & DECKER world's largest electric tool makers

Hundreds of Other Uses: Sawing lumber to construction length. Fitting interior trim and moulding. Cutting out plywood and wallboard panels. Preparing concrete forms, etc.

Unmatched Quality: Powerful new Home-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. Typical product of Black & Decker's 38 years of outstanding electric tool building!

See Your Hardware, Electrical or Building Supply Dealer for FREE DEMONSTRATION!



Products of The BLACK & DECKER Mfg. Co., Dept. 666, Towson 4, Md.



Makes pocket cuts in walls for built-in cabinets.

Easy to handle: Perfectly balanced, compact, light weight (only 9½ lbs.), eliminates fatigue. Comfortable handle close to blade for easy one-hand control.



Saws stair stringers in fraction of hand sawing time.

Safe to use: Telescoping guard automatically covers blade except when sawing. Instantrelease trigger switch. Ground wire prevents shock if tool shorts.



Trims stock size windows, doors, screens to fit.

Easy to follow: Cutting guide line is always visible. Sawdust blown clear of cutting action.



Cuts transite, tile, slate, etc., with abrasive discs.

Completely portable: Operates from any standard power line (A.C. or D.C.) or portable generator.

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All the facts of value favor CHEVROLET ADVANCE-DESIGN TRUCKS



America's truck operators are wise buyers. They know the value of prime power with economy... of massive load capacity... of outstanding quality, durability and handling ease. They know the advantages of the latest and finest features and of greater driver comfort

and convenience. And they know that all the facts of value favor Chevrolet trucks to an overwhelming degree . . . that they cost less to operate, less to maintain, and have the lowest list prices in the entire truck field. That's why they use Chevrolet trucks more than any other make!

CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT 2, MICHIGAN

TOP-VOLUME PRODUCTION BRINGS YOU TOP-VALUE FEATURES!

Chevrolet's new 4-SPEED SYNCHRO-MESH TRANSMISSION offers quicker, quieter and easier operation. Double clutching is eliminated because the gears are always in mesh. Faster shifting maintains speed and momentum on grades. Available in series 3800 and heavier duty models.

Chevrolet's power-packed VALVE-IN-HEAD ENGINES provide improved durability and efficiency as well as the world's greatest economy for their size!

Chevrolet trucks have the famous CAB THAT "BREATHES"*! Outside air is drawn in and used air forced out! Heated in cold weather.

Chevrolet Advance-Design brings you the FLEXI-MOUNTED CAB, cushioned on rubber against road shocks, torsion and vibration.

Chevrolet's exclusive SPLINED REAR AXLE HUB CONNECTION adds greater strength and durability to heavy-duty models.

Uniweld, All-Steel Cab Construction • Large, Durable, Fully-Adjustable Seat • All-Round Visibility with Rear-Corner Windows* • Heavier Springs • Super-Strength Frames • Full-Floating Hypoid Rear Axles in the 3600 Series and Heavier Duty Models • Double-Articulated Brake Shoe Linkage • Hydrovac Power Brakes in Series 5000 and 6000 Models • Multiple Color Options.

*Heating and ventilating system and rear-corner windows with de luxe equipment optional at extra cost.

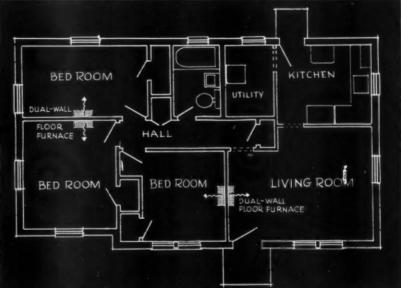
CHOOSE CHEVROLET TRUCKS FOR TRANSPORTATION UNLIMITED!



949.

"Mansion Heating" Comfort For Low-Cost Houses! - - With eman DUAL-WALL Floor Furnaces





This Fine Floor Plan Shows How Franklin Burns Uses These Coleman Installations To Uphold Quality

He uses Coleman's dual-wall models which set under the walls to heat separated rooms. Each provides powerful automatic heating for from two to five large rooms. They hold down building costs and bring real comfort—even in Colorado's rigorous mountain winter climate. As Franklin Burns says: "Coleman Dual-Wall Floor Furnaces fit in with our plans—they are a definite part of better building!"

Find Out How They Help You Uphold Quality, Hold Down Price, And Make A Profit

Now, contractors everywhere are using Coleman Floor Furnaces, to help give better homes for the money. You, too, can get either dual-wall or flat-register models in sizes from 25,000 to 70,000 BTU; you can have gas, oil, or LP gas burners. Meet building code and FHA requirements; give finest automatic heating with any floor plan. And you'll have no duct cost, low installation time charges. See your Coleman dealer now for the right Coleman Floor Furnaces for you.

Available For Gas, Oil or LP Gas, Full Depth or Shalloflow

Yes, we have floor furnaces, flat-register or dual-wall, to meet every requirement of local fuel situations and building codes! Ask your Coleman dealer, or mail us the coupon.

THE COLEMAN COMPANY, INC. Wichita 1, Kansas

Coleman DUAL-WAL FLOOR Saves Cost Fits In Floor FURNACE of Ducts Under Wall: Heats Both Sides and Basement

> Gas, Oil or LP-Gas DUAL-WALL Coleman



| i | The Coleman Company, Inc., Builders Contract Dept. AB-6671, Wichita 1, Kans. |
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| À | Please send me free information about your special cooperation for builders and contractors, and Floor Furnace Catalog for Builders. I am specially interested in: Gas Oil LP-Gas postar Name Address |
| 1 | Gas Oil LP-Gas more |
| ŀ | Name PULIC L |
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HOW TO SELL

with the General Electric

 General Electric's Home-Builder Advertising Plan gets you . . .



ATTENTION!

Quick as a flash, hard-hitting ads like these tell a story every home hunter is deeply interested in-a story that builds desire for an all-electric kitchen!

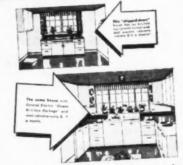


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GENERAL (ELECTRIC

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WHICH HOUSE IS THE BETTER BUY FOR YOU?



\$0.00 a month makes the amazing difference between these two houses!

GENERAL @ ELECTRIC



Look what wonderful

GENERAL @ ELECTRIC

YOUR HOMES FASTER-

"Complete Kitchen Package"!



For better living—all-electric living in a G-E equipped home. Thousands of new homeowners are enjoying this leisurely, modern way of living now—and millions more are learning about it through General Electric advertising, insisting on it when they build or buy new homes!

Of course, your prospect wants a complete General Electric Kitchen—but can be afford it? That's where the G-E Home-Builder Advertising Plan completes the selling job by adding the conviction of the "packaged mortgage."



CONVICTION!

Under this easy-paying mortgage plan, the price of the G-E "Complete Kitchen Package" is part of the price of the house

—adding only a few extra dollars (usually averaging \$4.80) each month to the regular mortgage payments.*

"Packaged mortgages" make it so much easier for the prospect to buy—so much easier for you to sell your homes! Look at these sales-clinching arguments—

Small payments over the years instead of big short-term installment payments! No installation costs! A complete kitchen right from the start—ready to live in!

And best of all—the homeowner often saves enough on his economical G-E appliances to make up the slight extra monthly cost of his G-E "Complete Kitchen Package"!

So put this merchandising program to work—quick! Get together with your G-E distributor in planning and merchandising G-E equipped homes. He has complete information on the Home-Builder Advertising Plan for you that will do a lot to help sell homes faster.



ACTION!

Call your distributor today. If not listed in local telephone directory, write to Home Bureau, Appliance and Merchandise Department, General Electric Company, Bridgeport 2, Conn.

GENERAL ELECTRIC HOME BUREAU SUCCESS STORY OF THE MONTH

Better living comes first in homes by W. C. and A. N. Miller Development Company of Washington, D. C. Their latest single-family home development, "Sumner," won first prize in a nationwide contest.

"We have incorporated General Electric Kitchens—including Refrigerator, Range, Dishwasher and Disposall.** We firmly believe these items are necessities—and also help sell our homes!"

Make your next project a fast-selling, prestige-building success! Let your G-E distributor help you in planning and merchandising G-E equipped homes.



*When equipment is included in a long-term mortgage.

**General Electric's registered trade-mark for its food-waste disposal appliance.

You can put your confidence in-

GENERAL ELECTRIC

Ame

Builder of 150 Homes Reports:

"25% Labor Savings with Plyscord Sheathing"



"Plywood Sheathing and Subflooring is Stronger," says Fred P. Tosch,

Buffalo, New York

Above: Workmen placing PlyScord sheathing into place on one of the Tosch houses built in Buffalo. Below: A group of the completed homes-stronger, more rigid, more durable because of PlyScord sheathing and subflooring.



PLYSCORD—the sheathing grade of Douglas fir plywood—is easily identified by this "gradetrademark" stamped on the back of every panel. For a handy pocket folder, "PlyScord for Better Construction," write the Douglas Fir Plywood Association office nearest you: Tacoma Bldg., Tacoma 2, Wash.; 848 Daily News Bldg., Chicago 6; 1232 Shoreham Bldg., Washington 5, D.C.; The 500 Fifth Avenue Bldg., New York City 18.

BUILDERS:

Cut costs and speed construction with PlyScord sheathing and subflooring.

ARCHITECTS:

Specify PlyScord for stronger, more rigid construction.

DEALERS:

Be sure you have adequate stocks of PlyScord—the sheathing grade of Douglas fir plywood.

"WE HAVE USED Douglas fir plywood PlyScord for wall and roof sheathing and for subflooring in about 150 houses built during the past two years," says Fred P. Tosch, housing developer of Buffalo, New York. "Cost records show that we have effected a 25% saving in labor. Construction has been speeded too, making it possible to eliminate many of the problems arising from a partially completed building being open to the weather.

"Plywood is stronger, it eliminates the need for corner bracing, further cutting costs. Our crews like plywood because it is real wood, easily worked.

"I am firmly convinced that the use of Douglas fir plywood results in a superior structure. When I built my own home, I used plywood for sheathing, roof decking and subfloors. It is one of the outstanding new homes in Buffalo."

LARGE, LIGHT, **Douglas Fir** STRONG



You can't beat 100%!



10,000 roofs in Levittown... and every one is ASPHALT!

There's simple logic in the fact that Levitt and Sons chose asphalt shingles, 100%, for their homes in Levittown, Long Island. "If asphalt shingles are the best buy for one house, why not for a thousand?"

The advantages of asphalt shingles are basic, one house or a thousand. Asphalt shingles are economical—low in first cost, low in cost per year. They're easy to apply, easy to maintain. They're colorful—available in a variety of tasteful colors that complement the colors of each individual house and contrast pleasingly with

its neighbors. Asphalt shingles are attractive—with clean lines and patterns, at home with any style, any size home. They're weather resistant—built to take the punishment of sun, wind, rain, and sleet. They're fire-resistant—coated with mineral granules that will resist sparks and flying embers.

Make a chart of the qualities you want in a roof. You'll find that asphalt shingles score high on all counts. That's why developers like Levitt and Sons prefer asphalt shingles—100%!

ASPHALT ROOFING INDUSTRY BUREAU • 2 West 45th Street, New York 19, New York

SPONSORED BY 28 LEADING MANUFACTURERS OF ASPHALT SHINGLES-SIDINGS-ROLL AND BUILT-UP ROOFINGS



Combine the genius of Alfred S. Levitt, and the dreams of 10,000 home owners—and you have Levittown, a Long Island dream city that's no longer a dream—it's a reality, Mr. Levitt believes in 'dream homes'... but they've got to be practical. That's one reason why every home in Levittown is roofed with asphalt shingles, "You can't beat 100%!"

WRITE FOR THIS NEW FREE BOOKLET

"Good Application Makes a Good Roof Better" contains 24 pages of step-by-step information on good application proctices—with diagrams. Get free copies from a member company, or write direct.



ASPHALT SHINGLES
Construction's Biggest Dollar's Worth

Public Acceptance



American-Standard

First in heating . . . first in plumbing

that's second to none!

Another reason why it pays to specify or buy American-Standard Heating Equipment and

Plumbing Fixtures

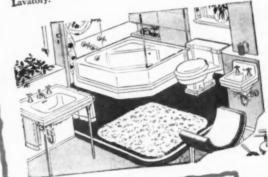
■ More American homes have heating and plumbing by American-Standard than by any other single company. And our big advertising program in leading national magazines is creating a still greater demand.

When you recommend American-Standard products for the homes you're designing . . . or install them in the homes you are building or modernizing, you can be sure of client approval and lasting customer satisfaction. For no heating equipment and plumbing fixtures are better made . . . none are more favorably known.

And, remember, the American-Standard line covers products for every type of installation . . . for any size budget. Your Heating and Plumbing Contractor will be glad to give you details. American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.

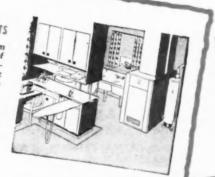
BEAUTY TREATMENT FOR THE BATHROOM

For that luxurious look . . . and a lifetime of satisfaction, you can't beat American-Standard Plumbing Fixures. Here you see the corner model NEO-ANGLE Bath, the graceful ROXBURY Lavatory, the quiet MASTER ON PIECE Water Closet, and the unique MADENTA Dental Lavatory. Lavatory.



GOOD-LOOKING

A basement utility room A basement utility room adds to the livability of any home. This downstairs laundry is built around the oil fired SAR-ATOGA Winter Air Conditioner and has the convenience of a modern venience of a modern
ALDEN Laundry Tray and
a gas fired BUDGET Water
Heater—all by American
Standard.





ROOM SUGGESTIONS

There's planning help for you in Room of the Month Ideas—colorful folders showing interesting ways to create rooms around American-Standard Heating Equipment and Plumbing Fixtures.



Look for this Mark of Merit



The American-Standard "Installed Here" sign on your job tells everyone who passes that only the best is good enough for the homes you build or remodel. Be sure your Contractor puts up this sign when he begins the installation. installation.

ng home and industry

AERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILER • ROSS HEATER • TONAWANDA IRON



in Philadelphia

WE MADE A HIT!

The Home Show in Philadelphia's large Commercial Museum drew home towners by the tens of thousands. We were elated by the Oh's and Ah's of the admiring folks at the Universal-Rundle booth. And, Philadelphians have good taste in home appointments. It proved to us that the extra effort we make to achieve good design is a feature that appeals to modern public taste.

You, too, can win prospect approval when you show Universal-Rundle ware. Let folks see the beauty of the Vitreous China and Enameled Cast Iron fixtures in exclusive U-R patterns. You can easily sell the U-R line that wraps up quality, beauty and economy in one profitable package.



U-R Stewardess cabinet sinks and The Milady combination cabinet sink and laundry tray, bedecked with the Distributor's display crescent and door banner, created approving interest.



Universal-Rundle

UNIVERSAL-RUNDLE CORPORATION

NEW CASTLE, PENNSYLVANIA

PLANTS IN New Castle, Pa.; Camden, N. J.; Milwaukee, Wis.; Redlands, Calif.





Long life, rich beauty, ease of application ... and economy without sacrifice of quality: they are all important in determining roofing value.

When you specify Bird Master-Bilt® Shingles, you can be sure of a roof which contains all these elements. Master-Bilt's are an investment . . . an investment your customers can make at an economical price . . . and that is becoming more and more important as time goes on.

Master-Bilt Shingles offer more than economy. Thick-butt construction, heavy shadowlines, narrow cut-outs all reflect Bird experience since 1795. Every material is processed by Bird, another reason for the balanced composition and quality of Bird Master-Bilt Shingles. A roof of Master-Bilts adds inimitable beauty and texture, as well as protection, for they are available in a wide range of colors and blendes, in more variety than is found in any other roofing material. Write us today for information about Master-Bilt and Master-Bilt Weather-Tex designs. Bird & Son, inc., 16 High Street, East Walpole, Mass.

BIRD Master-Bilt SHINGLES

East Walpole, Mass. New York



Chicago Shreveport, La.



You can clinch a sale quickly by giving home buyers what they want...more and bigger windows. This desire for larger glass areas is only natural. More windows add cheer and sunshine to any home...bring outdoor beauty inside...help make a house a home.

Naturally you want your prospects to know that you use only quality materials. We needn't tell you what a quality story the Libbey Owens Ford label gives your

customers. It's the recognized symbol of top-quality window glass...a silent salesman for all the other material in your construction.

Now's the time to capitalize on the trend to larger window areas... with L·O·F Quality Window Glass and the L·O·F label to tell your quality story to the buyer. Libbey Owens · Ford Glass Company, 4379 Nicholas Building, Toledo 3, Ohio.

L·O·F also makes polished plate glass, safety glass, colorful *Vitrolite** glass facing, *Tuf-flex** tempered plate glass and other flat glasses. Only Libbey Owens · Ford makes *Thermopane**—the first mass-produced insulating windowpane.



a Great Name in GLASS

Am

SOMETHING TO TALK ABOUT TO THE HARD-TO-SELL PROSPECT!



has more selling points than any other type of insulation

When it's hard to make the sale — Insl-Cotton may tip the sale your way! It gives homes double the sales appeal, double the comfort value. To the homeowner it means greater comfort winter and summer..it means less upkeep and lower fuel bills. To the builder and contractor it means quicker sales and more satisfied customers.

HERE ARE SOME OF INSL-COTTON'S TALKING POINTS THAT CAN HELP YOU MAKE THE SALES . .

- Ease of Installation Inst-Cotton is quickly and simply installed. Packaged in blankets that unroll like a rug, it goes up fast — is extremely lightweight and easy to handle.
- Lower Installation Costs requires no special tools, no expensive blowers or spreaders. New labor can easily do the job at a cost of approximately ½c per sq. foot in open attics.
- Harmless.to Handle contains no shot, silica or fine glass-like particles to injure skin, lungs or eyes.
- Permanently flame-proofed
 — lasts indefinitely under
 normal conditions.
- Most Efficient Type Insulation — Tests by U. S. Dept. of Agriculture and leading laboratories prove Insl-Cotton to be from 4% to 36% more efficient than any other type of available insulation when made to 7d specifications. K factor 0.24.
- Won't Sag or Settle heat, agitation and vibration cause it to expand and grow better with age. Lasts a lifetime. An excellent sound deadener.
- Uniform Thickness Mechanically laminated to avoid error—no high or low spots.

SPECIFY INSL-COTTON WITH CONFIDENCE—It exceeds Government requirements for 7d, FHA, FPHA, and HH-1-528 specifications. Readily available in open face type with heavy vapor barrier, in fully enclosed type and in the reflective aluminum type.

Certified — Inst-Cotton contains no second-hand material. Every lot is tested and certified to the U. S. Government. No other insulation except flame-proof, fire-retarding cotton insulation made under Federal supervision can-make this claim.

All Cotton Insulation Is Not Insl-Cotton . . Insist on the Original and Genuine Insl-Cotton

INSL-COTTON DIVISION

TAYLOR BEDDING MFG. CO., TAYLOR, TEXAS • BELTON, TEXAS Originators of Flame-Proof, Fire-Retarding Cotton Insulation

MAIL THIS COUPON TODAY!

TAYLOR BEDDING MFG. CO., Taylor, Texas

Gentlemen Please send specifications and will information on Inst-Cotton

Name_______

Address

City and State

Check Here:

Distributor

Dealer

Architect

Building Contractor



APM Branches and Sales Warehouses Cover the Country

Warehouse stocks of APM plywood are located in major population and building areas from coast to coast. These regional depots are also headquarters for experienced plywood men whose services are always available, and who are as close as your telephone.

—ASSOCIATED—Plywood Mills, Inc.

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BRANCH WAREHOUSES: Eugene and Willamina, Oregon; 925 Toland St., San Francisco 24, Calif.; 4814 Bengal St., Dallas 9, Tex.; 4268 Utah St., St. Louis 16, Mo.

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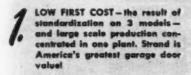
1949.

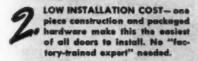
STRONGER, MORE DURABLE GARAGE DOORS AT LOW COST

... Installed by Thousands of **Builders Every** Month



Save Money 3 ways!





LOW MAINTENANCE COST- as the result of rugged all-steel con-struction, galvannealing, and Strand dependability. Your cus-tomers will be happy with their Strand Doors!



Your customers are quick to appreciate the advantages of this "best seller" among garage doors:

The strength and durability of steel-that can't sag, warp, rot or shrink. Uniform steel sheets are milled to exact specifications - there's no absorption of moisture as with some other materials; the weight remains the same in wet or dry weather; this assures uniformly easy operation.

Strand Doors are sturdily built to meet conditions of shipping, delivery and handling. Welded construction is a feature - no screws or bolts to work loose.

These doors are galvannealed for rust resistance with a heavy galvanized zinc coat, plus high-temperature heattreating that assures an excellent base for paint, without special priming coat.

There are 2 types of Strand Doors for 8' x 7' opening -Receding (track) and Canopy. Also a Double-Garage Door (Receding type only) that fits 16' x 7' opening, unobstructed by center post. Order from your dealer, or



Welded All-Steel





Welded All-Steel





MAIL COUPON FOR INFORMATION AND DEALER'S NAME

ALL-STEEL . GALVANNEALED . OVERHEAD

STRAND GARAGE DOOR DIVISION Detroit Steel Products Company Dept. AB-7, 2250 E. Grand Blvd. Detroit 11, Michigan

Please rush detailed description of the dall-steel Garage Doors, for 8' x 7' and 16' x 7' garage mings.

am a | Builder | Deliv | Prospective Owner | Other Name | POIT | PUBLIC | 1884

DETPORT FURLIC City_

Every building needs doors...

there's a Truscon Steel Door for every building need!



Industrial Steel Doors are made of carefully formed heavy gauge tubular steel members, reinforced at the corners and electrically welded at the joints. The stiles and rails are made from No. 16 gauge steel tube, 5" x 13/4". The corners are welded solidly and ground smooth. Stock types are in sash panel design only. Solid panel doors will be furnished for shipment from Youngstown at same price.

Doors can be equipped with lever latch or cylinder lock hardware. Slide doors have hasp and staple hardware.

Sizes shown are door leaf sizes. See table for door opening and masonry opening sizes. Doors No. 2868, 3070 & 3870 may have muntins omitted or have solid panels in place of sash panels. Solid panel doors are not stocked.
Doors No. 4080 & 50-100
are furnished only with
sash panels as shown.
Single doors shown are combined to make double doors.

| DOOR NUMBER | DOOR SIZE | | SWING BOOR OPENING DIM. | | SWING DOOR "MASONRY OPG. DIM. | | SLIDE DOOR OPENING DIM. | | ELASS SIZES | |
|---|--|--|--|--|--|--|----------------------------|-------------------------|--|--|
| | Width | Height | Width | Height | Width | Height | Width | Height | | |
| 2868 3070 3870 4080 50-100 | 2' 7'8" 2' 11'8" 3' 7'8" 3' 11'8" 4' 11'8" | 6' 7' 4" 6' 11' 4" 6' 11' 4" 7' 11' 4" 9' 11' 4" | 2' 8" 3' 0" 3' 8" 4' 0" 5' 0" | 6' 8" 7' 0" 7' 0" 8' 0" 10' 0" | 3' 0 12" 3' 4 12" 4' 0 12" 4' 4 12" 5' 4 12" | 6' 1014" 7' 214" 7' 214" 8' 214" 10' 214" | 2'8" 3'8" 4'8" | 6 10" 7 10" 9 10" | 21 4e" x 16" 25 3e" x 18" 16 3e" x 18" 18 3e" x 15 7e" 24 3e" x 15 7e" | |
| Double Doors 5468 6070 7470 8080 100-100 | 5' 35e" 5' 115e" 7' 35e" 7' 115e" 9' 115e" | 6 7 4 6 11 4 6 11 4 7 11 4 9 11 4 | 5' 4" 6' 0" 7' 4" 8' 0" 10' 0" | 6' 8" 7' 0" 7' 0" 8' 0" 10' 0" | 5' 812" 6' 412" 7' 812" 8' 412" 10' 412" | 6' 10 ¹ 4" 7' 2 ¹ 4" 7' 2 ¹ 4" 8' 2 ¹ 4" 10' 2 ¹ 4" | 5' 8" 7' 8" 9' 8" | 6 10" 7 10" 9 10" | 213 a" x 16" 253 a" x 18" 163 a" x 18" 183 a" x 157 a" 243 a" x 157 a" | |

*Masonry opening dimensions listed for swing doors are based upon the use of Truscon Standard Pressed Steel Door Frames,



Single Swing

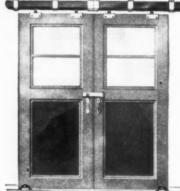


Single Slide





Double Swing



Double Slide



WRITE FOR FREE ILLUSTRATED

LITERATURE. New folder containing complete specifications, sizes, details and hardware now available.



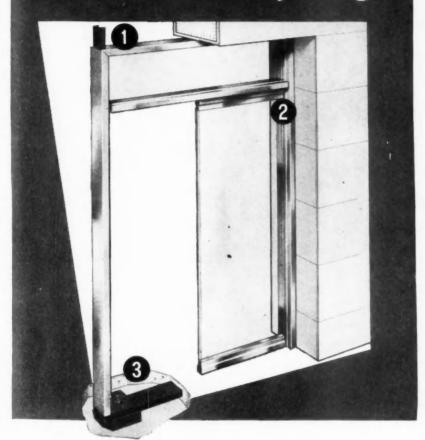
EEL COMPAN

YOUNGSTOWN 1, OHIO Subsidiary of Republic Steel Corporation Warehouses and sales offices in principal cities

Manufacturers of a Complete Line of Steel Windows and Mechanical Operators • Steel Joists • Metal Lath • Steeldeck

Roofs • Reinforcing Steel • Industrial and Hangar Steel Doors • Bank Vault Reinforcing • Radio Towers • Bridge Floors.

NOW...a doorway that has everything!



WITH the new Pittsburgh Doorway you don't even need a screw driver; there's no drilling of holes in the frame. And there's nothing to assemble. You just unpack the frame, bolt it into the building opening, and hang the massive Herculite Tempered Plate Glass Doors—for which the frame is especially engineered. Everything is in one "package"—the famous Pittco Checking Floor Hinge, moldings for transom glass, supports for sidelights, strikes for locks, sockets for bolts, everything! No time-consuming calculations. No worries about setting and fitting. But this is only a small part of the story. For complete information, why not fill in and return the coupon? There's no obligation.



DOORWAYS

PAINTS . GLASS . CHEMICALS . BRUSHES . PLASTICS

PITTSBURGH PLATE GLASS COMPANY



EVERYTHING IN ONE PACKAGE

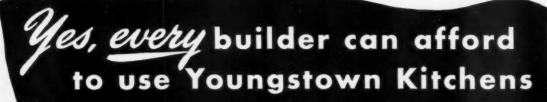
Pittsburgh Doorways reach the job, ready for bolting into the opening. Twelve standard designs are available which, singly or in combination, will fit any job.



PITTCO CHECKING FLOOR HINGE

Only 61/4" x 61/4", it is an engineering marvel. Has positive door-speed control, separate checking control, built-in hold-open feature. It's sealed in oil for life.

| Pittsburgh Plate (| Glass Company Iding, Pittsburgh 19, Pa. |
|--------------------|---|
| Without obligatio | on on my part, please send me your booklet on Pittsburgh |
| Name | 1000 |



DOLLARS-AND-CENTS-MINDED builders all over the country are finding it's good business to use the famous Youngstown Kitchens of white-enameled steel.

It's good business for you-because you save!

You save the costs and delays of laborious installations. (Youngstown Kitchens go in fast!)

You save the costs of painting, touching up, special fitting of doors and drawers... and repairs after the job is completed. (Youngstown Kitchens need no finishing... no extras. They're complete, and ready for use!)

You save the headaches of hidden and inexact costs. (Youngstown Kitchens are sold as a package . . . complete!)

Yes, with Youngstown Kitchens you can give the buyer a beautiful, worksaving kitchen with a brand name known from coast to coast—without increasing the cost of the house!

Our representative would like to prove that statement to you. Why not let him go over your plans and tell you exactly how little these white-enameled steel kitchens will cost? There will be no hidden costs in his price!



"... regularly advertising . . . Youngstown Kitchens!"

Charles H. Reis, Reis Homes, Demarest, N. J.

Read what Charles H. Reis, successful New Jersey builder, has to say about Youngstown Kitchens: "We are regularly advertising our personalized homes as equipped with Youngstown Kitchens! This is in line with our policy of using the finest everywhere from cellar to roof."



MULLINS MANUFACTURING CORPORATION . WARREN, OHIO

World's Largest Makers of Steel Kitchens

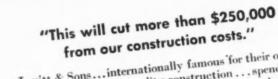
1949.



ALFRED S. LEVITT, Vice-President, Levitt & Sons, says:

"ES-nails really work

now we can use gypsum siding for sheathing purposes instead of boarding.



Levitt & Sons...internationally famous for their organization, volume and quality construction . . . spend millions of dollars looking for new products, new methods for getting small homes to buyers—BETTER AND FASTER. Their complete acceptance of ES-nails, the first

POSITIVE "LOCKING" nail to let them take full advantage of all savings and construction traits of non-wood sheathing -lower unit cost . . . faster application . . . less waste . . . absolute weather tightness — more than proves ES-nails' value as an outstanding building tool.

Other practical reasons they had for turning to ES-nails for attaching wood or asbestos shingles DIRECTLY to gypsum or insulation sheathing were; ES-nails' case of application—no special tools are required, a regular shingling hatchet or hammer is used . . ES-nails are selfclinching . . . and ES-nails can be driven at any conven-

ient point - no need to locate studs. Use this modern construction method on your next job—a method that thousands of other builders, as well as Levitt & Sons, find affords unquestionable strength

and enduring safety—at a saving. For more information about the value of ES-nail construction—and the savings it will mean to you, call your supplier, or write: Elastic Stop Nut Corporation of America, 2330 Vauxhall Road, Union, New Jersey.

Accepted on F. H. A. Insured Houses



A portion of Levittown, Long Island, showing houses being completed in this tremendous housing develop-



One of the houses in the development, using ES-nails to apply shingles to insulation sheathing.



A finished house, built with ES-nails, which require NO special technique to apply. Standard building practice



ELASTIC STOP NUT CORPORATION OF AMERICA



No basement! No excavating!

a

TEMCO

GAS FLOOR FURNACE fits right into the floor



All you do is make a floor opening the exact dimension of the outer jacket of the Temco and lower the furnace in! No excavation needed!

Temco Floor Furnaces are only 25½" deep (overall construction) and are built with a recessed control assembly for additional installation convenience.



NATIONALLY ADVERTISED

SMART HOME BUILDERS FROM COAST TO COAST ARE TAKING ADVANTAGE OF THIS MODERN, LOW COST AUTOMATIC GAS HEAT. FOR COMPLETE DETAILS MAIL THIS COUPON NOW

| MAIL THIS | COUPON NOW | |
|--|--|-----------------------------------|
| TENNESSEE ENAM | MEL MFG. CO., DIV | AB-121 ENN. |
| I would like to kno heat with a Temco | ow how I cap save me Gas Floor Furnace. | oney while getting make efficient |
| Name | Time | |
| Address | 0 | - |
| City | 1/2 | State |

WHITE FIR

is good for \\
low cost paneling





As manufactured by member mills of the Western Pine Association, it comes to you carefully graded and well seasoned. Ask your dealer about it and write for our White Fir Species Book which describes fully White Fir's qualities, grades and uses.



Western Pine Association
Dept. 61B, Yeon Building, Portland 4, Oregon



These are Associated Woods

Larch • Douglas Fir • White Fir Spruce • Cedar • Lodgepole Pine

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

Richmond's at home in any Bathroom!



WATER CLOSETS — Illustrated is the Claremont, plate G-210—a fine vitreous china fixture available in four colors plus Richmond's Whiter-White. A two piece close-coupled reverse trap combination with self-draining jet, shelf type cover and chrome plated trim.

Below is the Phoenix, plate G-217, a syphon action close-coupled combination. Also available in four colors or Whiter-White vitreous china.



LAVATORIES—The Lavelle, plate 717 shown above, one of Richmond's de luxe enameled cast iron units, features special combination supply and drain fitting, rear outlet, front overflow and is available in color and Richmond's Whiter-White. Chromeplated legs and towel bars, optional.

The Bromley, below, plate G-132
—a shelf back vitreous china fixture
with the same features as the Lavelle
is also available in color and with
legs and towel bars.



BATHS—Richmond has either recess or corner enameled cast iron baths—in color or Richmond's Whiter-White. Illustrated is the Breslin, plate 225—an attractive recess bath of modern design—has wide rim seat, flat bottom and is available with either left or right hand outlets.

Below is the Blake, plate 219, for right or left corner installations. It has wide rim, flat bottom and straight tiling line.



Variety in design and color—Constant Uniformity in quality

You can be sure of a job well done when you specify or install Richmond. The wide range of modern design insures a fixture to meet your every space and style need. Richmond's four beautiful pastel colors—Bermuda Coral, Azure Blue, Fern Green and Oriental Ivory—give you colors that will fit in with any decorative plan. This variety of design, rich pastel colors and guaranteed uniformity of quality make Richmond a plumbing line that is sure to be at home in any bathroom.

Look for this guarantee — it's on every Richmond vitreous china or cast iron plumbing fixture.



AR-7





Vitroous China



Cor Baller



Inmaled Cart Iron Warn



Winter Air Conditioners Gas—Cast Iron or steel See your wholesaler or Mail Coupon Today:

Richmond Radiator Company 19 East 47th Street, New York 17, N. Y.

Please send me additional information and literature or the Richmond line of floor liththing fixtures. No obligaions, of course.

Name NEWN PUBLIC LAW.

Address.....DETROIT

MORE and MORE Builders are getting in on these cost-saving

> AETNA FRAMES. **HOW ABOUT YOU?**

CHECK THESE BIG ADVANTAGES OF AETNA STEEL DOOR FRAMES: Installed in less time and at lower cost than multiple unit frames · Hinges are welded to frames · Brass

strike plate with dust box attached Prime coated at factory • More permanent and wear-resistant • Less handling required • Mass production economy • Sup-

ply problems simplified.

Get in line for big dollar savings and cut building time with the original 1-piece Aetna Steel Door Frames which can save you as much as \$5.00 per "inside opening."

Because they arrive completely built and prime-coated, you can easily erect many times the number of these Aetna bother-free frames in a fraction of the time required to set up one multiple unit or "knockdown" frame.

Aetna Frames won't crack or warp, and the mitres won't open. The size won't change because they neither absorb moisture nor swell.

Available in quantity and all standard sizes at your building supply or lumber dealer.

ABTNA FRAMES

MANUFACTURERS OF STANDARDIZED STEEL DOORS AND FRAMES FOR HOUSING UNITS

FABRICATORS OF QUALITY HOLLOW METAL PRODUCTS FOR SCHOOLS, HOSPITALS, OFFICE BUILDINGS, ETC



BUILDING MATERIAL - EQUIPMENT - APPLIANCES

The Possibilities for Rental Housing

OUSING starts, like most indicators of business activity, show a decrease as compared with peaks reached last year. In April a total of 86,000 new dwellings were started as compared with 99,500 last year, a decrease of 16 per cent. It is likely the comparison with last year will begin to get better this summer and fall. According to an American Builder survey (now in the process of completion) most builders plan to build more dwelling units this year than last year. This is particularly true of those who build from 3 to 15 dwellings a year. A total of 712 builders said that they built 9,136 dwellings in 1948 and plan to build 9,488 in 1949. While this is only a slight increase, it is nevertheless an indication that there will be no drastic slump this

The best insurance that a builder can have against a slump in his community is a set of well conceived plans for modern rental units. Although there are more home owners in the United States at present than at any time in history, they represent only 53 per cent of the population while the remaining 47 per cent are renters. Circumstances force many of the latter to move frequently and home ownership is unwise.

Of course, the principal reason why more building for rent is not being done is rent control. The other reasons are high construction costs and the reluctance of investors to put money in projects where the prospect of a continued satisfactory rate of return is so dim.

Rent control won't last forever, and there are indications of lower construction costs, yet the prospect of profitable investments seems to diminish with the years. In 1929, bonds of the best grade could be bought to yield 5 per cent. Bond yields on the average are now only 2.99 per cent, having decreased from 3.01 a year ago.

Investors in stocks are at the mercy of boards of directors who.

in spite of record profits after taxes, are paying dividends in inflated dollars in about the same amounts that were paid twenty years ago.

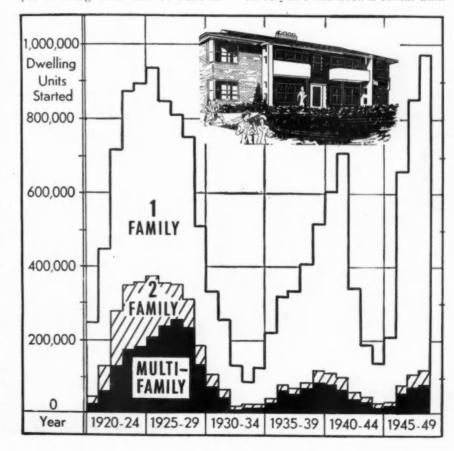
More than half the national wealth of the United States is in land and buildings. Residential building is by a wide margin the most important form of non-farm real estate. Well planned investments in residential real estate can absorb several billion dollars of investment money.

Most rental units in cities are in congested areas, planned inside and out to make use of every inch of valuable real estate. This was necessary because a prime requisite of all apartments built prior to 1930 was that they be placed within one-half mile of public transportation. Increased use of automobiles and buses has changed all that. Multiple dwelling units can be built in

the suburbs surrounding or adjacent to acres of open space. Play yards for children can be placed nearby.

Many renters can be attracted by attached dwelling units of two stories with or without basements, placed in courtyards instead of row houses or the conventional threestory apartment. Park Forest, developed by American Community Builders in a suburb of Chicago, is an example of this. A total of 800 attached houses have been built and promptly rented in the last three years; 2,200 more are under construction.

To most builders the combination of rent control and high building costs make construction of rental units seemingly impossible. Nevertheless, about one out of every seven starts during the last three years has been a rental unit.



Ameri

CONTRACTORS:



Dollars Are Important to You

Dollars saved are dollars earned. So why shouldn't you save every dollar you can . . . on *delivery* costs? Dodge "Job-Rated" trucks are built to do just *that*.

They're priced with the lowest. They're built to fit your particular hauling needs. They stay out of the repair shop and on the job...saving money every mile you drive them.

For example, your Dodge truck will have the right one of 7 "Job-Rated" truck engines. You will pay only for the power you need . . . on your job.

Your Dodge will have the right clutch, transmission, rear axle, and every other unit . . . "Job-Rated" for maximum dependability; minimum upkeep expense.

So, if dollars still count in *your* business, see your Dodge dealer. Ask him to recommend the right "Job-Rated" truck for your business. Remember . . . only Dodge builds "Job-Rated" trucks.



For the good of your business -

Switch to DDDGE
"Fob-Rated" TRUCKS

1949.

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GEORGE MILLER—He has built more than 10,000 houses in the Detroit area in the past 30 years. The 1949 program calls for more than 1,000 small homes requiring monthly payments of \$40 to \$50 in an area where the average factory worker's pay is \$66 per week.

GIVE-AWAYS-Wonder how prevalent the "give-away" practice is becoming. Noticed a February advertisement by a builder in his local newspaper. The advertisement simply stated that no down payment was required. In May the same builder advertised the same houses at the same price-still no down payment-but in May he added, at no extra cost to the buyer, an electric refrigerator, electric washer, electric range, or, if the buyer has all of these, a television set. Buyer also gets at no extra cost a 5-foot fence to enclose the entire rear yard and a garbage disposer. The offer moved 80 houses within a few days after the appearance of the advertisement. It's one way of moving unsold housing.

H.R. 4009-That is the House public housing bill. It could be disposed of one way or the other by the time this gets in print. At mid-June the 27th of the month appeared to be the critical date. At that time, if President Truman and Congressman Sabbath had been unable to get the bill out of the rules committee by vote, House debate would begin on the validity of forcing the bill out of committee. At this writing, the rules committee was voting every few days, and was deadlocked at 7-5 against committing.

OUTLOOK HOPEFUL—Despite the Senate vote of 53-13 for public housing, there was no reason to give up the fight in the House at the mid-June mark. At that time it looked like a very close decision when the House vote finally is taken, probably early in July.

ILLINOIS—The law-makers in that State, hard pressed to find something to tax, looked at build-

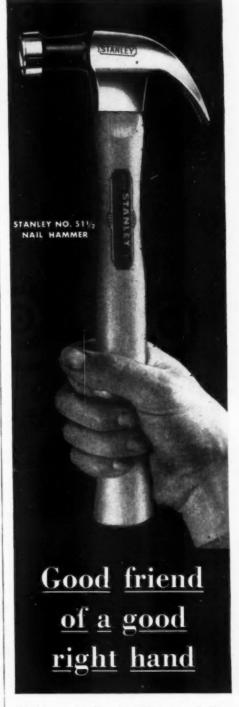
ing, and drafted bills that, if passed, will add more than 2 per cent tax on every home built. One tax would be on all materials, and another on all contracts, general and sub. In Chicago, all building trades were granted a straight 10 cent an hour increase. That, added to the new tax plan for building, certainly will defeat attempts to reduce home building prices.

OIL BURNERS—It's interesting to note that in the face of declining sales of some building materials, oil burner sales for 1949 will be 20 per cent above sales for 1948. The industry expects to sell 540,000 power-driven units, and 1,000,000 space heaters. It didn't just happen. It's being accomplished with aggressive advertising and sales.

LOCAL ADVERTISING—C. W. Chapman, retail lumber dealer of Waterloo, Iowa, recently ran a newspaper ad headed, "Stop! More and More Taxes." He then detailed the amount of tax increase that will come if the public housing bill is passed. It was effective.

BACK END TO—NAHB's technical director, Carl Lans, says that the typical American home is turning in its tracks. That is, the contemporary home is being oriented toward the rear or garden section of the lot. The old fashioned back yard is giving way to a planned garden. Larger windows enable fuller enjoyment of the garden, and make use of the sun as a booster to the heating plant.

COMMUNISM—It costs the American public at least 21 billion dollars a year according to Senator Karl E. Mundt. "If it were not for Communism," said the Senator, "our national budget would be in balance. Of the 42 billion dollars the President asked in his budgetary message, 21 billion is to arm and equip America in case of war with Communism." Other billions, of course, are going to build or sustain the morale of threatened European countries, and to help protect them from Communism.



Picking up a Stanley Hammer is like grasping the hand of an old friend. It feels just right because it's skillfully made to the measure of your own skill. Forged from special analysis steel and given two super heat treatments. Handle is locked in head by "Evertite" process, exclusive with Stanley. Stanley Tools, New Britain, Connecticut.



HARDWARE HAND TOOLS · ELECTRIC TOOLS

HOME BUYERS CAN GET THEIR BACKS **UP, T00!**





. of course, it's Electric!

When customers are about to sign the contract, they can "get their backs up" if you don't offer them the kind of cooking equipment more people want-modern Electric Ranges!

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

So build houses that are modern today and will stay modern for years to come. During construction, include wiring for an Electric Range, leading to a range outlet in the kitchen. An Electric Range, like electricity itself, is now a "must" in every modern home!

ELECTRIC RANGE SECTION, National Electrical Manufacturers Association, 155 E. 44th Street, New York 17, N.Y.

ADMIRAL • COOLERATOR • CROSLEY • FRIGIDAIRE • GENERAL ELECTRIC • GIBSON • HOTPOINT KELVINATOR • LEDO • MONARCH • NORGE • QUALITY • UNIVERSAL • WESTINGHOUSE

Follow the trend ...

YOUR HOUSES

Another 1,000,000 American families switched to Electric Cooking last year

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EDITORS' Round Table

THE PASSING of Don Montgomery, late secretary of the Wisconsin Retail Lumbermen's Association. marks the removal of a great figure from the building industry. Many men command respect. Many others are universally liked in the spheres in which they operate. To only a few are given the talents that command both respect and liking. Don was one of those. He was a man of firm and undeviating convictions. No one ever had to guess where he stood or why he stood there. He knew and wanted everyone else to know. Those characteristics are the products of innate and unflagging honesty, the characteristics that won him respect. With them was a deep understanding of human frailties and readiness to make allowances for them. These qualities and a rich sense of humor won him a host of friends and admirers. While these friends and admirers were legion, Don chose his own friends sparingly from among those who met his own rigid moral and ethical standards. Toward those few to whom he gave true friendship there was no limit to his loyalty. For those who knew him well there will be lonesomeness. But there will also be a continuing solace in the fact that each of them, through association with him, has absorbed and forever will use and pass on to others, some of the qualities for which he was respected, admired and revered. Perhaps that is real immortality, and if it is, Don Montgomery merely has come home to live eternally in the hearts and minds of those who loved him.

LISTS probably are the bane of editors' lives. Many readers, when reading a story of a given building operation, like to have a list of the materials and equipment used on the job or project. Our editors try, as far as possible, to obtain and publish these lists. And right there is where trouble is likely to start. A few months ago a building operation on Long Island was reported in one of these issues, and the fact that Bennett-Ireland fireplaces were used was omitted. Probably everyone on this staff knows Russel Dean, and knew that his Bennett-Ireland fireplaces were used on the particular job. Russ was very nice about it, and merely asked if it was editorial policy to omit the names of products manufactured by our good friends. It is easy to (Continued on page 55)

water lines short, cuts piping cost. Customers like Electric Water Heaters because they are: (1) AUTO-155 Egst 44th Street, New York 17, N. Y. UNIVERSAL . . WESTINGHOUSE



How to reduce construction costs and add customer features ...

Electric Water Heaters can save you money on construction costs. Installation can be made anywhere-in the kitchen, in the bathroom, or the utility room-even in a closet. This keeps hot

MATIC (continuous hot water, no attention); (2) CLEAN (smokeless, sootless); (3) DEPENDABLE AND TROUBLE-FREE (as electric light); (4) ECONOMICAL (fully insulated storage, short hot water lines); (5) SAFE (all electric, dependable temperature control); (6) FLEXIBLE (can be installed anywhere, even in living quarters; no flue or vent).

ELECTRIC WATER REATER SECTION, National Electrical Manufacturers Association

BAUER . BRADFORD . FAIRBANKS-MORIE . FOWLER . FRIGIDAIRE . GENERAL ELL TRIC . HOTPOINT MOTSTREAM . JOHN WOOD . KELVINAR . LAWSON . MERTLAND . MONARCH . GRE . PEMCO REX . RHEEM . SELECTRIC . SEPEC . SMITHWAY . THERMOGRAY . I STMASTER

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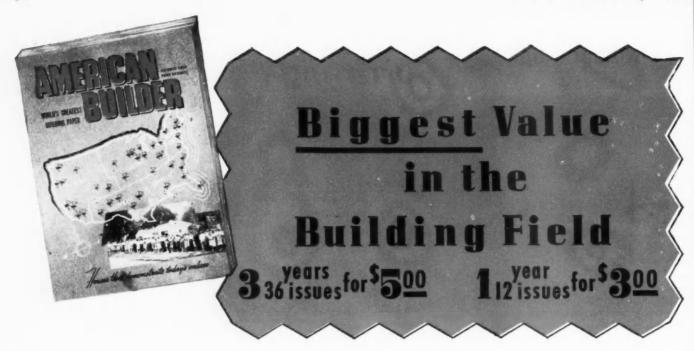
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KEEP POSTED—read the American Builder every month. The highly competitive building business demands that you keep abreast of the times. Be informed on the latest techniques of building—keep posted on the new and improved products, materials and equipment—get the benefit of tried and proven methods of selling homes, new ideas on financing and land development.

Special information on small commercial and industrial structures—stores—motels—shopping centers and farm buildings.

In addition you get the latest in home designs—pictures and plans of the best sellers from coast to coast.

AND EVERY MONTH a complete blueprint of a selected home drawn to 1/8-inch scale, plans, elevations and details.

Read the monthly review of the National Association of Home Builders—items directly from local association headquarters. Study the better detail plates and "How-To-Do-It" features contained in every issue.

DON'T MISS A SINGLE COPY. Start your personal file of this valuable building magazine **NOW!**

If you are already a subscriber, renew your subscription to make sure of receiving your issue each month. The coupon below is for your convenience.

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| PLEASE NOTE— Kindly check your principal activity |
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| Builders and Contractors: |
| Builders and Contractors specializing in Resi- dential or Light Commercial or Light Indus- trial Building. |
| Contractors specializing in Heavy Building |
| ☐ Builders and Contractors engaged in both Residential or Light Commercial or Light Industrial Building and Heavy Building Con- struction, not specializing in either. |
| Construction other than Buildings. |
| General Contractors engaged in Heavy Con- struction of both Buildings and other than Buildings, not specializing in either. |
| Special Trade Contractors, contracting for only such parts of Building Construction as carpentry, masonry, plumbing, roofing, heat- ing, ventilating, electrical, painting, concret- ing and excavating. |
| Distributors: |
| Retail Dealers—lumber, building materials and installed equipment. |
| Wholesalers, Jobbers and Manufacturers' Agents of lumber, building materials and installed equipment. |
| Distributors of Construction Equipment. |
| If none of the foregoing applies, please advise the type of business with which you are affili- ated: |

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Round Table

(Continued from page 53)

understand how red the editors' faces got. If we had been bawled out properly we might not have felt so badly about it. Anyway, we appreciated the way it was called to our attention, and everybody is more conscious of completeness in lists than before

IN SPITE OF THAT, however, only a few months passed when, in the May issue, a list of manufacturers of portable tools was carried. There were other lists, too. As soon as the first copies were received at the office, a check for accuracy was made, and red faces were evident again. This time the name of Sterling Tool Products Co. of Chicago was omitted. Before we had a chance to write, there arrived at the office a letter from J. M. Warnimont, sales promotion and advertising manager of Sterling. It was a very polite, gentlemanly letter. It merely asked why the names of all portable tool manufacturers were not included. The fact is that the list had been checked and rechecked by both editors and members of the advertising department. The only thing we could tell Mr. Warnimont was that we had checked and re-checked, and that for no explainable reason Sterling Tool Products Co. was omitted. The only thing anybody really knew was that the omission was unintentional. May we say here, in embarrassment, that the Sterling Tool Products Company of Chicago makes a line of portable tools, and that everybody on the staff knows it, and has known it. We'll go a step further, and say that we now know it so well we'll bet a hat the omission does not occur again.

OUTLOOK for business was pretty thoroughly delineated at a recent meeting of the Industrial Advertisers Association in Buffalo when a panel of eight editors, each taking seven minutes, outlined current conditions and trends in the fields served by their respective magazines. At the conclusion, the opinion was voiced that perhaps the editors, who traditionally should be on the pessimistic side, might be leaning too far toward an optimistic view.

RECESSION was variously forecast, recognized as current, or said to be about over in the several industries. The editors who recognized re-(Continued on page 57)



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TEXOAK FLOORING

BUILDERS PREFER BEAUTIFUL TEXOAK FLOORING FOR THESE REASONS:

- TEXOAK FLOORING is scientifically kiln dried.
- 7 TEXOAK FLOORING is precision machined in one of the nation's most modern flooring plants.
- 3 TEXOAK FLOORING is carefully and accurately graded.
- 4 TEXOAK FLOORING makes the ideal flooring whether you are building one house or a thousand.

For further information, see your distributor or write for our free booklet.

TEXOAK PARQUET FLOORING

Interlocking tongued and grooved floor blocks of beautiful kiln dried oak, 9" x 9" x 25/32". Write for free sample. No obligation.



TEXOAK STAIR TREADS

These beautiful glued warp-proof Texoak stair treads and risers are of fine quality. All your customers will like the rich texture of the wood.



TEXOAK THRESHOLDS

Scientifically kiln dried and machined to a beautiful finish, Texoak thresholds are made under same specifications as our Texoak Flooring.

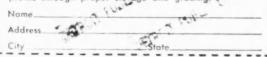


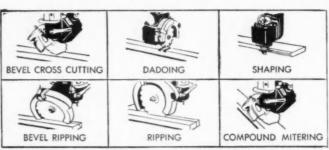
TEXOAK FLOORING COMPANY

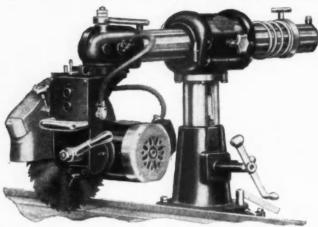
CROCKETT, TEXAS

Please send me the complete tory of Texoak Flooring including the new booklet at How to make flooring profits through proper storage and grading."

Name







POWER PACKED and VERSATILE

Makes all the cuts—with extra power and accuracy. Perfectly engineered for easy operation. Minimum replacement cost. Maximum service. Many outstanding superiorities. Actual tests indicate up to 20% more cutting per 8 hour shift. There is no use owning another saw when you can have a Comet. All models immediately available. Contact your nearest Comet dealer or write direct.



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Distributors of Davis and Wells Woodworking Machines

CONSOLIDATED MACHINERY & SUPPLY CO., LTD.
2029-33 Santa Fe Avenue, Los Angeles 21, California



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Round Table

(Continued from page 55)

cession or predicted it varied in their estimates of the duration from three months to a full year. No one would concede that there is anything like a prolonged depression in the foreseeable future.

BUYING, generally, was said to be on something approximating a hand-to-mouth basis because of the reluctance to pile up inventory in the face of possible price declines.

SEVERAL of the editors stated that in their judgments, prices had about reached a long-term postwar level, and that what was needed more than anything else is some good old fashioned selling at all levels.

AS ONE OF THEM put it, the time has come to separate the allocators from the sales managers. It's a buyers' market and will continue to be, and the sales manager who has become so steeped in the business of allocating short supplies among insistent customers that he has forgotten how to sell, will have to change fast.

RUSS PRATER, largest home builder in Wichita, and one of the largest in Kansas, was killed on June 13 while piloting his own airplane. Prater was a veteran pilot who used his plane most of the time to fly between his various home building operations.

THE CRASH which cost Prater his life occurred just after his take-off from the Wichita airport, and when the plane had attained an altitude of about 100 feet. With him were two guests, a local judge and his wife, the three on their way to an outing in Colorado. All were killed.

LAST OCTOBER Prater gave Bernie Wambolt a thrill when he took the American Builder's senior associate editor from Wichita to Oklahoma City after the two had spent several days preparing an article on Prater's building operations. The article was published in the March issue. Prater's death removes one of the most successful home builders in the west from the industry.

National Home Week September 11-17



Americ

CUIT COSTS

AND IMPROVE

WITH FIREPROOF GOLD BOND GYPSUM SHEATHING



Gold Bond

TODAY builders use everything short of magic to keep down mounting costs. That's why so many are switching to Gold Bond Gypsum Sheathing. It not only saves money but offers these advantages:

5 quality advantages with Gold Bond:

- 1. Fireproof—a real plus for resale.
- 2. Asphalt treated core can be stack-piled outside.
- 3. Weatherproof, water-repellent surface.
- 4. Windtight tongue-and-groove edges.
- 5. Adds greater structural strength.

Cut costs 4 ways with Gold Bond:

- 1. Costs about 1/3 less than wood sheathing.
- 2. Can be applied in half the time.
- 3. About 50% fewer nails required.
- 4. Less waste. No random lengths, no lap loss.

Try it on your next job and keep a close check of these savings.

NATIONAL GYPSUM COMPANY, BUFFALO 2, N. Y.

Over 150 Gold Bond Products, including gypsum lath, plaster, lime, wallboards, gypsum sheathing, rock wool insulation, metal lath products and partition systems, wall paint and acoustical materials.

1949.

ANSWERING YOUR QUESTIONS ABOUT MODULAR SIZE WOODWORK



TO HIGH BUILDING COSTS?



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Yes, there is a proved, practical way to help cut the high cost of building. It is modular design-which means that you can cut costs by using plans and materials based upon a 4-inch unit of measurement or "module." Prominent manufacturers of windows, window frames, screens and other woodwork are now providing these products in modular sizes, joining in a great national movement which can help YOU keep

building costs down!

WOOD GAINS ANOTHER ADVANTAGE!

Modular design adds another major advantage to WOODthe ideal material for windows, sash, window frames, screens, storm sash and other building products. For wood is a natural insulator—retards the passage of heat and cold. It takes paint or other finishes easily—and holds them in a vise-like grip. Wood discourages condensation, thereby cutting redecorating costs. And today, windows and other exterior woodwork are available toxic preservative treated at the factory, for EXTRA resistance where staining, decay, insect attack or humidity are problems.

Q. WHAT IS MODULAR SIZE WOODWORK?

Modular size woodwork consists of windows, window frames, sash, screens, etc., sized on a 4-inch unit of measurement. With modular sizes, all types of check-rail windows, whether 2-light, 4-light, 8-light, 12-light, top divided or other type, are built to the same standard 2-light opening size.

Q. HOW DO MODULAR SIZES CUT BUILDING COSTS?

By reducing cutting and trimming on the job. Modular size woodwork, used with a modular plan, means that units go together quickly and easily on the job-that construction time is materially reduced-that labor costs are considerably lower.

ARE MODULAR PRODUCTS GENERALLY AVAILABLE?



In woodwork such as windows, window frames, sash and screens, modular sizes are available in all standard designs, including the leading pre-fit or pre-assembled units. Other modular products are now available for the entire exterior shell of a building.

Q. IS MODULAR DESIGN SUITABLE FOR ALL TYPES OF BUILDINGS?



Yes, the planning of any building on the 4-inch modular system is easy and convenient. Modular design imposes no limitation or restriction on free architectural expression.

GET ALL THE ANSWERS-MAIL THE COUPON!

Your lumber dealer will gladly explain all the details of modular size woodwork-show you how it can save you time and money. Or, mail the coupon for our free folder.

NATIONAL WOODWORK MANUFACTURERS ASSOCIATION

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332 SOUTH MICHIGAN AVENUE . CHICAGO

This seal of approval identifies woodwork products which meet NW MA minimum standards of toxic preservative treatment.



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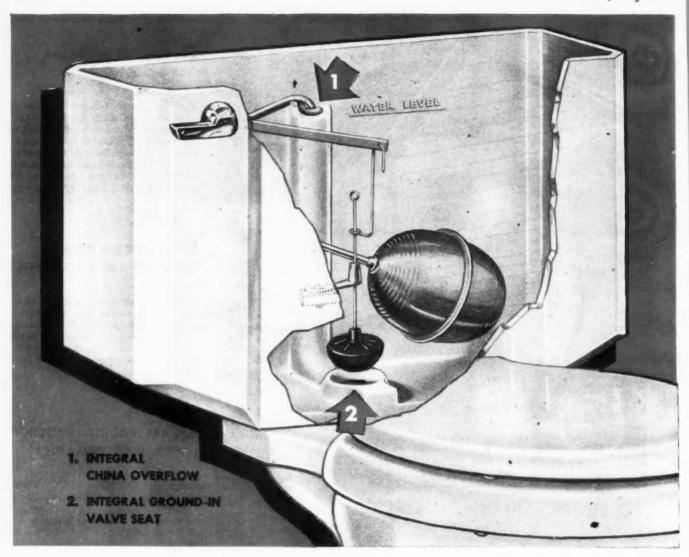
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SELL THESE FEATURES...WIN CUSTOMER SATISFACTION

Your customers can easily see wby the construction of Eljer Water Closet Tanks is the finest available.

The Eljer integral china overflow and ground-in valve seat are made of real vitreous china . . . a part of the tank itself. This eliminates thin metal tubes and metal seats that wear and corrode. The construction is foolproof . . . built to last the life of the closet. Vitreous china cannot corrode. An Eljer Fixture with

this extra quality costs no more than an *ordinary* fixture...even less, considering the resulting savings in maintenance expense.

Any plumber who points out these extra values to homeowners will make extra sales . . . and have satisfied customers. To have quality customers, sell quality plumbing fixtures. Sell Eljer . . . see your Eljer Distributor or write Eljer Co., Box 192, Ford City, Pa.

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





949

MONTHLY REVIEW

NEWS OF THE NATIONAL ASSOCIATION OF HOME BUILDERS AND AFFILIATED ASSOCIATIONS

National Home Week Survey Indicates Wide Chapter Participation

A large number of NAHB chapters throughout the country are planning active unit participation in National Home Week, Sept. 11-17, according to a recent survey made by the *American Builder*.

More than 25 local chapters have already made preliminary plans, which indicate that several thousand participating builders will place homes on display, many of them completely furnished. A large percentage of these homes are already in various stages of construction.

At least half of the reporting groups are making arrangements with local newspapers for the publication of special editions to coincide with national promotion of Home Week. Most will use the National Home Week theme in their individual advertising prior to the event. A few chapters are not taking part collectively, but are urging members to take active parts.

Several associations have arranged outstanding functions which will call wide attention to observation of the national event. The Home Builders Association of Greater Boston will sponsor an industry-wide and state-wide banquet at which the governor will read his proclamation. Mayors of leading cities will also be present.

The Associated Home Builders of San Francisco will use a publicity tie-in with

the California Centennial Celebration, the admission day of the state falling on Sept. 9. In Sacramento, the Associated Home Builders are preparing an outstanding home ownership exhibit at the California State Fair, which is being held in that city at the time of National Home Week.

The Home Builders Institute, Inc., of Los Angeles has made plans to utilize the week as an occasion for improvement of producer-consumer relations. A publicity and advertising campaign will stress the "security" of home ownership; will enlighten the public on current home costs and values and on improved workmanship and materials.

Home shows of some of the local chapters have been scheduled for the week, but most of these shows were planned for other times. Publicity features, such as contests to select "Miss National Home Week," erection of homes in public places (such as city squares, public parks or other places near large crowds), will be sponsored by a few of the chapters.

Chairmen of National Home Week arrangements have been appointed by practically all of the chapters that have indicated an intention to participate. Subcommittees are being appointed and noteworthy interest is being shown.

Lockwood Tells Facts At House Hearing



MEMBERS of the House banking and currency committee in Washington learn details about economy houses throughout the nation from Rodney M. Lockwood, NAHB president. In his recent appearance before the committee, Lockwood showed samples of a number of projects.

Talk on Citizenship Heard by Utah Group

A recent dinner meeting of the Utah Home Builders Association in the Temple Square Hotel, Salt Lake City, was attended by 85 members.

The program featured a ten minute talk by George B. Earl of the Utah Power and Light Co. on "Be a Good Citizen." A movie, "Of This Be Proud," was shown. George B. Earl arranged the program.

102 Exhibits Feature Dayton Home Show



VIEW of exhibition hall at 1949 Builders Show of Montgomery County Builders Association, Inc., Dayton, Ohio. The event, held April 16-22 at the Dayton Fairgrounds Coliseum, had 102 exhibit spaces, was attended by more than 20,000 persons. Merchandise prizes with a value of approximately \$2,500 all purchased by the Association, were awarded. Special events included an "Easter Parade" and daily "Grandmothers Teas." Lois F. Zeiger, chairman of show and E. Clarke King, secretary, were in charge.

Patrick J. Callan, Long Island Builder, Dies at 45

Patrick J. Callan of Munsey Park, Manhasset, L.I., active in building circles for more than 25 years, died of a heart attack May 30. His age was 45.

Mr. Callan, who began his career in the building business when he was 20 years old, had worked as a carpenter before he organized his own company at the age of 25. He had built hundreds of homes and apartment units in many sections of Long Island's North Shore.

Just before his death, he had perfected and patented a method of constructing a low-cost masonry house and had begun mass-scale production on Manhasset Isle in Port Washington, L.I.

He was vice president of the Long Island Home Builders Institute, a trustee of the Flushings Savings Bank, and a member of the North Hempstead Golf Club and Manhasset Bay Yacht Club.

American Builder Editor Honored At Dallas Association Meeting



EDWARD G. GAVIN (center), American Builder editor, who was honoree at Home Builders Association of Dallas dinner, chats with Avery Mays (left), president of the Dallas group, and E. P. Lamberth, Texas State Association president, in penthouse of Mercantile Bank building.

Edward G. Gavin, American Builder editor, was guest of honor of the Home Builders' Association of Dallas at a dinner in the Adolphus Hotel May 18. Gavin, introduced by Avery Mays, association president, spoke on the outlook for building in 1949 and the factors 'ikely to determine the volume of home building for the next decade.

The meeting was attended by a representative group of Dallas home builders, distributors, realtors and others. Attendance of a group from Fort Worth was prevented by a flood of the Trinity

Robert H. Morris, publishing director of the American Builder; W. L. Taylor, circulation manager; Joe Sanders, Southwestern representative; and W. J. Griffith, field staff, were also guests.

Grover Godfrey, executive vice president of the Texas group, and Angus Wynne, Jr. program chairman, had charge of arrangements.

Unusual Model Homes Displayed At Los Angeles Exposition

Three model homes, two of them built by the exposition's sponsors and the third by an exhibitor, were outstanding features of the 1949 National Home and Building Exposition at the Pan-Pacific auditorium, Los Angeles, June 2-12. Thirteen major Southern California building trade associations sponsored the event in cooperation with the Los Angeles Chamber of Commerce.

The exhibition houses sponsored by the exposition management were built by Laurence Hawthorne Construction Co. and Ray Conners and Co. Alan G. Siple, prominent Southern California architect, designed both, Kaiser Community Homes constructed the third model house.

The Hawthorne house, containing 450 square feet, is designed for a single person or a family of two. It includes a living room with sleeping alcove, full kitchen and bath, a large, open porch and outdoor patio at rear. Exposed beam ceilings and natural brick, along with an unusual fireplace, are featured in this "apartment-type" home.

The Conners model home, called the "1949 National Show Home," covers

1,134 square feet. It is a full scale brick dwelling with living room, dining area, two bedrooms, kitchen and bath. Natural Simons grout-lock reinforced rough brick is used extensively; in every room the brick is used in its natural coloring or painted directly. A large fireplace has a copper hood from fire area to ceiling. The inside of the fireplace is designed to provide a reflection of heat off the

Maryland Statesmen Dinner Guests of Washington Builders

Top-ranking Maryland statesmen were guests of honor at a recent dinner-dance sponsored by the Home Builders Association of Metropolitan Washington. Association members from Montgomery and Prince Charles counties, Maryland, shared the spotlight.

Honorees at the event, held at the Congressional Country Club, included Gov. Preston E. Lane of Maryland, U.S. Senator Millard E. Tydings, State Senator Harold Southern and Commissioner E. Brooke Lee.

Governor Lane, the featured speaker, paid a tribute to home builders in Maryland as well as throughout the nation and discussed plans for highways and other improvements in the state. He was followed by Senator Tydings who spoke briefly on national and international

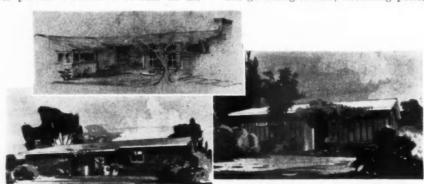
A talk by Commissioner Lee stressed the large amount of home building which is being done in the District of Columbia as well as in Montgomery County. State Senator Southern, who represents St. Georges County and is majority leader of the Maryland Senate, also spoke briefly. Speakers were introduced by President William E. Banks of the Washington Association.

Another highlight of the program was the presentation to Robert Furman of a traveling bag in recognition of his work as director of a bricklayers' apprentice training school. Don Gingery, Mont-gomery County director of the Association, made the award.

Edward R. Carr, NAHB past president, was in charge of entertainment. Assisting President Banks in arrangement of the program were Gingery, T. Girard Lee and other Montgomery County sub-chapter members.

copper hooding sufficient to solve the entire heating problem.

The Kaiser home was a feature of the newly added 30,000 square feet outdoor area of the exposition. This area was added for the first time this year to the 100,000 square feet of exhibit space within the auditorium. Other exhibits in the outdoor space included landscaping and gardening models, swimming pools.



PATIO of "1949 National Show Home (top). one of two model homes built for the Los Angeles exposition by sponsors. Above,

'apartment type" home, a small, compact house designed for one person or a family Americ

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NAHB Launches Special Land Planning Study

Special studies in land planning and site arrangement have been undertaken by NAHB, under the direction of the national group's land planning committee. The committee's goal is to determine the best possible physical environment for America's homes. David D. Bohannon of San Francisco, Calif., nationally known builder and developer, has been named chairman of the land planning group.

Bohamon emphasizes the point that the old pattern of "buy a lot and build a house on it" no longer prevails. He points out that careful engineering, mapping, location, transportation and other studies precede home construction today. "The modern developer," Bohamon stated, "thinks in terms of creating better neighborhoods, rather than merely building a given number of homes."

Although large projects now are planned as integrated units with proper facilities, it is still essential that sound land planning be applied to even the smallest development of only a block or more, according to Bohannon. Proper site arrangement must be attained for each individual house and lot, if the most satisfactory results are to be achieved.

Thirty prominent home builders from all parts of the country make up the committee. They plan, through consultation and study, to make the latest techniques of land use and development available to builders.

Dallas Publication Has New Manager

Mike Michelow has been appointed to the post of publication manager of the "Dallas Home Builder," official publication of the Home Builders Association of Dallas

J. C. Grimes, publication manager of the magazine since its origin in 1947, left June 1 to take a public relations position in New York City.

Analyst Speaks at San Antonio

Reece Hatchitt, market analyst for the Southwest Research Institute, San Antonio, Texas, was a special speaker at the May 10 meeting of the San Antonio Home Builders Association.

The Southwest Institute has been carrying on research in a number of fields, one of which is cancer. Recently they made a study of construction problems, with special emphasis on building foundations in the San Antonio area,

Texas State Group Meets

A meeting of the Texas State Home Builders Association was recently held at the Herring Hotel, Amarillo. G. W. Maguire, president of tht Panhandle Home Builders Association gave an address of welcome.

The meeting was called by E. P. Lamberth, state president.

Cortright's Column

By Frank W. Cortright

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



COMMUNISTS REJECT PUBLIC HOUSING IN POLAND!

Weird as the above statement sounds, it is almost literally true. Here is the story:

With the end of the war, the urgency of the need for housing rehabilitation and construction in Warsaw was beyond the imagination of anyone who has not seen such ruined cities as Rotterdam, Berlin, Warsaw and Munich.

Although behind the iron curtain, the Kremlin-trained and dominated government did not nationalize the construction industry when the general law of September 1946 was enacted nationalizing the entire economy.

Why was this done? Simply because the Commies realized that unless a big construction job was done fast, even a reasonably good economy could not be rebuilt.

In permitting home builders and general contractors to go to work on a private enterprise basis, the Communist Commissars, of course, set up rigid regulations. They required competitive bidding and stipulated that most of the profits earned must be ploughed back into further construction activities.

However, they permitted a reasonable salary to be drawn by contractors and the result has been a higher percentage, relatively, of rebuilt and new structures than anywhere in Eastern Europe. During the summer of 1948 some 2500 buildings were erected in Warsaw alone, a total of 3,000,000 cubic meters, of which 1,875,000 were residential.

During that year, the total investment outlay for housing exceeded 17 billion zlotys, an increase of 10 per cent over preceding years. (And 17 billion zlotys is a lot of mazuma behind the Iron Curtain!)

It must also be said that the government supplements private construction by authorizing the building of a large number of workmen's housing units for rental. But in Communist Poland these are not ordinary public housing units. The fact is that servants' rooms are provided to assure the comfort of those political favorites who gain possession of these accommodations. Quite unlike the rigid austerity program of England, and the pure Marxist theory of leveling all classes and sharing the wealth, the Polish Communist believes in enjoying the comforts of life.

Although the industry suffers from a deficiency in manpower, there is no lack of materials for construction. The procedure is as follows: the prospective home owner selects a ruin, generally consisting of a pile of rubble, and purchases it from the owner. Although the government holds title to all the land, the prewar owner is permitted to sell the ruin at the best price he can secure. Engineers then survey the ruin to see how much can be saved structurally; the balance is removed and all useable materials are salvaged.

Generally there is enough brick standing on the site to reconstruct the building and, since a large part of the city is demolished, there is plenty more available in the neighborhood.

Amazingly enough, there is no problem in securing hardwood flooring and other materials and equipment necessary to modern construction. Electric refrigerators are one of the few exceptions; these must be imported from the United States.

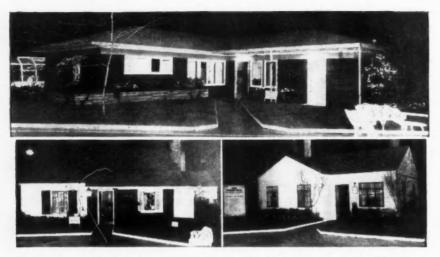
One very interesting development, which is general in the devastated cities of Eastern Europe, is the establishment of innumerable small plants to clean and renovate damaged building materials and equipment. Lumber, brick, block and stone are cleaned up and re-used. Tile is reglazed, bathtubs and plumbing fixtures renovated for continued use.

We have said many times that home builders in every part of the world are distinguished by their skill, ingenuity and enterprise.

The builders of Poland, tackling the endless piles of rubble and shell facades of their indescribably war-torn cities, are doing an amazing job—not for the salary allowed them but because of their irrepressible desire for activity.

So, although private enterprise is still functioning in modified form in this one European nation, it may be presumed that when the most critical housing need has been met Nationalization will be their reward. As in England, they will then work directly for a government agency and will become merely a capable tool of a bureaucrat or Commissar boss.

Featured Homes at Cleveland Show



THE "House of Ideas" (top) was feature home of the 1949 Greater Cleveland Home and Flower Show, sponsored recently by the Home Builders Association of Greater Cleveland. A home designed especially for paraplegics (left) was one of the most popular exhibits. At right is front view of Cleveland's "Economy House," a low-cost home.

Long Island Builders **Conduct Interesting Panel** On Heating Problems

About 140 members and guests of the Long Island Home Builders Institute gathered in the Stewart Manor Country Club on the evening of May 18 to hear a panel of experts discuss home heating problems and some of the systems now

Members of the panel were: Daremus I. Mills, manager of the pipe and tube section, research department, Revere Copper & Brass Co., Rome, N.Y.; John Hart, heating engineer with FHA, Washington, D.C.; John Dillon, consulting heating engineer, New York City; L. Grandstaff, application engineer. A. Olsen Mfg. Co., Elyria, Ohio, and Keith Davis, chief engineer, Bryant Heating Co.

Following the discussion by panel members, questions came thick and fast from the floor so that the meeting ran considerably past the regular adjournment time and then was adjourned only after those builders in the audience whose questions had not been answered were promised that the panel members would answer them by mail.

Montgomery County Group Host To Ohio Membership Meeting

A state-wide membership meeting of the Ohio Home Builders Association was held June 8 in the Biltmore Hotel, Dayton, Ohio, with the Montgomery County Home Builders Association, Inc., Dayton, serving as hosts.

Robert Gerholz, Flint, Mich., past NAHB president, was principal speaker. The meeting included a special luncheon and dinner and an inspection tour of

The Montgomery County association staged its annual picnic June 22 at Circlé Park. Dayton.



Student Contest Feature of Chicago Show **Attracts Wide Interest**

A display of the winning entries in the "Chicagoland Homes and Household Convenience Design Competition" for high school students was one of the outstanding features of the Chicagoland Home Show, held at the Chicago Coliseum May 14-22. Student interest in the contest was high, and prizes were awarded in three divisions-home design, construction of scale model homes, and the invention of household utility devices.

There were more than 150 exhibits at the show. These represented most of the leading manufacturers of home products, and a number of Chicago area deal-Included in the displays were late developments in home design, building materials, home services and all types of home equipment and appliances.

The Chicago Metropolitan Home Builders Association, sponsors of the exhibition, conducted a "Home Seekers' Super Mart" where visitors obtained information about home projects and houses for sale in the Chicago area and saw photographs, mounted on easels, of new houses in all price ranges. builders' representative was on hand at all times to consult with persons interested in building or purchasing homes.

Representatives of the Veterans Administration and FHA were also present and furnished information about financ-Other exhibits also provided data on home purchase methods, financing and insurance.

A number of products were given their first public showing at the exhibition. These included two heating systems-a simplified, low-cost radiant heating method, and a system making use of prefabricated air ducts and a new type of air register.

Another exhibit which attracted considerable interest was a two story scale model home, six feet long and four feet wide, which could be dismantled automatically from the roof to the first floor line, exposing all the framing members of the house. Showing the advantages of proper insulation, it also illustrated the construction details of a home.

The comprehensive exhibits of major appliances included more than a dozen custom-built kitchens. Free kitchen designs and layout services were given by exhibitors

Other highlights of the show were demonstrations of painting and wallpapering; a display of model homes designed by nationally known architects; and a number of acts by professional entertainers.

(LEFT), NATHAN MANILOW, president of the Chicago Metropolitan Home Builders Association, congratulates top winners in the "Chicagoland Homes and Household Convenience Design Competition," a feature of the Chicagoland Home Show, Three hundred and thirty-four students from 20 Chicago high schools entered the three divisions of the contest, with 27 winning prizes amounting to \$1,500.

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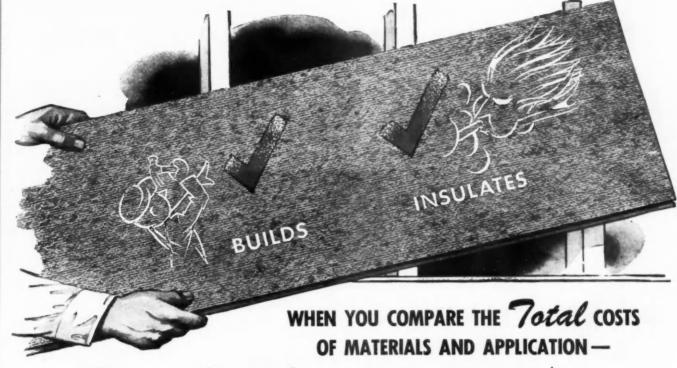
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your best buy is *BILDRITE

To get the *real* story about sheathing costs you have to figure the total applied costs . . . not just the cost of materials alone. It's the *total* cost that the customer pays for.

LOOK AT THESE FACTS: The things that make up the total applied cost of any sheathing are the labor scale, man hours needed for application, waste of material, insurance, and cost of materials used. You can figure these for yourself.

FOR EXAMPLE: Standard handbooks for estimating building construction state that—

Wood sheathing horizontally applied has a 12% waste. But BILDRITE has less than 1% waste.

Wood sheathing requires 15 man hours to apply 1,000 feet.

But BILDRITE takes only 8 man hours per 1,000 feet. See how these savings begin to mount up?

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TOOUDER CONTROL WANDO MINNESOTA & ONTARIO COMPANY MINNESOTA MINNESOTA

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FIGURE IT YOURSELF!

WOOD SHEATHING Per 1000 Sq. Ft. of Wall Area

| ITEM AND QUANTITY | RATE | TOTAL |
|--|--------|-------|
| 1,000 sq. ft. 8" wood sheathing (horizontal) | | |
| Waste, 12% (120 sq. ft.) | | |
| Carpenter labor, 15 hours | | |
| Insurance, 10% of carpenter costs | | |
| 2.8 rolls building paper | | |
| Carpenter helper to apply paper | | |
| Insurance, 10% of helper costs | | |
| TOTAL APPLIED COST, WOOD SHE | ATHING | |

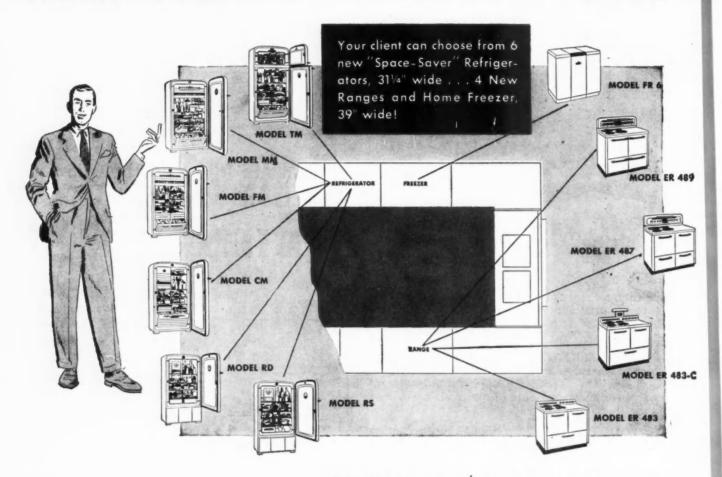
BILDRITE SHEATHING Per 1000 Sq. Ft. of Wall Area

| ITEM AND QUANTITY | RATE | TOTAL |
|--|---------|-------|
| 1,000 sq. ft. Bildrite Sheathing | | |
| Waste (Practically none. Less than 1%) | | 0 |
| Carpenter labor, 8 hours | | |
| Insurance, 10% of carpenter costs | | |
| Building paper (None needed) | | 0 |
| Helper to apply paper (None) | | 0 |
| Insurance on helper (None) | | 0 |
| TOTAL APPLIED COST, BILDRITE SH | EATHING | |

That puts a different light on it...doesn't it? And in addition, BILDRITE provides 2½ times the insulating value and more than twice the bracing strength of wood sheathing horizontally applied! You can't get around the facts. The best buy in sheathing today is INSULITE (BILDRITE) Sheathing!

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Kitchen plans amazingly flexible with ONE-WIDTH KELVINATORS!





EXCLUSIVE! Architects and builders the country over are finding kitchen planning easier than ever—with one-width Kelvinators. It's insurance against costly changes—for whatever Kelvinator model is chosen, according to the client's budget—it fits the floor-plan exactly.

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

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The Outlook Is Good

OME manufacturers and distributors of some classes of building materials are disturbed because sales during the first four months of 1949 have not maintained the levels established in the same months of 1948. A glance at the facts underlying the building outlook indicates that fear or anxiety about the immediate future is unwarranted. The facts indicate that curtailment of sales and sales promotion efforts and expenses, and withdrawal from or curtailment of support to the research and public relations programs of trade associations can be harmful to the general economy. They indicate that quite certainly the producers and distributors who curtail their activities now will suffer continued sales declines in the later months of this year.

The facts underlying the situation are that individual savings accounts and bond holdings are higher and more numerous than at any time in history; that therefore, potential purchasing power is almost unlimited; that unfulfilled desires for home ownership and home modernization have been whetted to unprecedented heights; that new housing units to be built in 1949 will not be more than ten per cent less than the 1948 total; that remodeling and modernization work in 1949 will far surpass the figures for any recent year; and that, as a result of all this, the actual and potential markets for building materials are at an all-time high. Accepting these facts, some producers ask, "Why, then, are some classes of building materials bottle-necked in the factory warehouses?"

There are many answers. In the first place, with material shortages resolved, and the critical phase of the housing shortage behind, distributors do not buy in any quantity offered. Secondly, due to unsound publicity given the cost and price structure of home building operations, both distributors and the public have slowed their buying to await a levelling of a price market that has declined from 10 to 15 per cent. The level has been reached, but buyers have required time to test the fact before going back into the market. They are coming back, and the last half of the year will see materials moving, and distributors' inventories climbing. These are only a few of the answers, but instead of a paradox existing between the fact of a sound building outlook and the fact of slow sales in the spring months of this year, accelerated movement of materials was merely retarded during the price levelling period and distributor and consumer acceptance of the fact that the level had been reached.

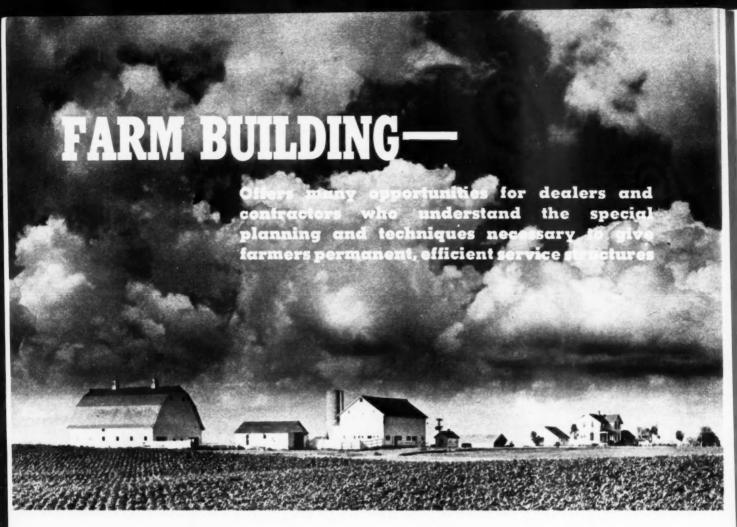
This is not the time for curtailment of sales effort or sales expense. There is neither a depression nor a prospect of one. There has been an adjustment recession, the kind that always has to occur sometime after a war to establish a new post-war economy. This is a time for full sales and advertising campaigns, and for all-out trade association public relations programs to convince a home buying public that now is the time to build. It is the time. The market is good. It can be much better with aggressive and intelligent selling.

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THE farm market for building materials has changed tremendously in the past 20 years but most contractors and dealers serving farm areas have lived so close to the market that they do not realize the full importance nor the extent of all the changes. During these years electric lines have reached the bulk of farms in the principal farming areas, not only to provide a dependable source of good light, but also to furnish power with which to do many chores. New machines have made farm work easier and released more labor to work additional acreage. These new machines are expensive and must be well housed when not in use. A well-equipped shop where minor adjustments and repairs can be made is required.

More important than any of the physical changes that have come to the farm is the increased cost of labor that affects every type of farming enterprise. In 1938, when \$45 a month hired a mature man from dawn to dusk, there was little incentive for any farmer to spend time or money on ways of saving labor. Today, when that same man must be paid \$142 a month for a 10-hour day, there is plenty of justification for farmers to spend

money on machinery and buildings that will conserve manpower and increase output. Under present conditions it is only with correct construction and efficient layout of service buildings that farmers will be able to show continued maximum profit on investments.

Farm buildings, from a construction standpoint, fall into two categories: they are either portable or permanent. Portable buildings are used in two ways: (1) as a regular part of the day-to-day operation of the farm; or (2) as supplemental structures to house excessive crops or animals in years of high yields. When the buildings are a regular part of the year-to-year operation. they are moved to different locations on the farm. Permanent buildings are the regular structures that form the fixed plant of the farm. These structures are located on a central site, usually around

the service yard so that the relationship of one building to another provides efficient operation.

The most important decision that must be made in selecting a design for a portable building is whether it will be used from year to year as part of the normal farm operation or for only a short period of time. If it is to be a permanent part of the operation it must be well built of quality materials that will assure long life and low upkeep. If it is to serve only one, two or three years, it should be designed and built as inexpensively as possible consistent with safeguards for animal health and shelter. In either case the size of the unit will be primarily determined by the width of the narrowest gate through which it will have to pass. Skids should be selected carefully and if possible, should be treated to give long life in contact with the ground. Skids should be attached in such a manner that they can be replaced without disturbing the construction of the building. They should be long enough to make pulling easy and should be cross-braced firmly. Sidewalls and roofs of portable buildings should be wellbraced and wall finishes should be durable and strong enough to conAmeri

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part of built barns be bu walls carry Many all p heigh Anch cente Th

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port anin trol, fine the animals and withstand serious damage by them.

Doors are an important factor in portable buildings. They should be of simple, sturdy construction and hardware must be strong enough to hold them under all conditions. It is best to have small doors pull or swing up to prevent wind damage and minimize destruction by animals.

The major, or permanent buildings on a farm are expected to last at least a lifetime—barring fires, floods or tornadoes. The only protection against obsolescence is the design of the structure. If the width is such that it will serve a number of farm uses reasonably efficiently, if it is simple to add to and if the frame is such that the interior can be rearranged without major cost, the structure will be adaptable to a farmstead.

Footings and foundations are as important as any part of a structure yet footings are generally carelessly built in farm construction. Foundation walls for dairy barns, general barns, houses and similar structures may be built with concrete blocks. However, foundation walls for storage buildings, or any structure that will carry excessive loads should be of reinforced concrete. Many experts recommend that foundation walls of all permanent farm service buildings be built to a height of eight feet above the finished floor level. Anchor bolts should be included in all foundations. Minimum recommended length of anchor bolts is 18 inches long and one-half inch thick, placed on six-foot centers for large buildings.

The conditions to be met should be of prime consideration in designing the floors for farm buildings. In some cases rodent protection is the first and most important problem; in others a dry, warm surface for animals is essential. Ease of cleaning and disease control, as well as permanence in the presence of destructive silage and uric acids, must often be given first consideration. Concrete, with various aggregates, is used for floors in practically all types of farm buildings, and is generally considered most satisfactory.

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The life of a farm building depends on the quality of the framing and the manner in which it is assembled. Braces are essential in sidewall construction and when placed should be used as a tie or in connection with other structural members to form triangles which will prevent distortion of the structure. There has been a

ASPHALT FELT

I'x 6" T & G Sheathing

VAPOR SEAL

ASBESTOS

BOARD

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BOARD

3" 46" Sill

\$" 24" Anchor

Bolt 6-0" ac.

Hooked End

Expension Joint

4" Concrete Floor

Frost Line

10" Min

Masonry Foundation

4" Title

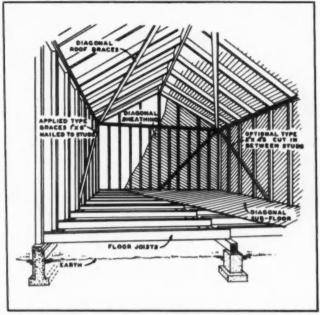
Drain

NOTE:

Width & Depth of Footing
Dependent on Local Soil

Conditions

ALWAYS place footings below frost line. Use gravel fill below floor slab and expansion joints between the walls and the slab



GOOD bracing is essential in farm building construction. Flooring and siding nailed diagonally add to building's rigidness

vast amount of carelessly framed roofs put on farm buildings. Regardless of the type of roof used, it must be braced diagonally to prevent racking. It is simple and economical to nail a 1x6 board diagonally to the underside of rafters.

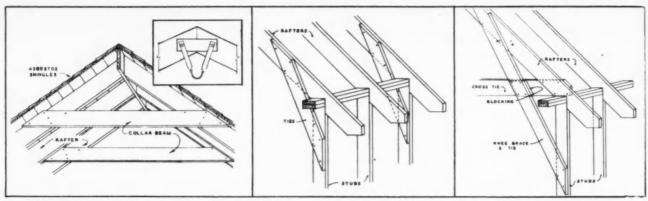
Unsightly sagging doors are common on farms. All doors must fit tightly and must be hung with hardware that is strong enough for rough daily operation. In northern climates insulated doors are needed for those buildings housing dairy cows or young stock. In poultry houses a double door is usually installed, with the door on the inner face of the stud made of wire and raised six or seven inches from the floor by a removable board. The outside door is often the dutch type.

Modern farming practices call for well-insulated buildings. This has brought a whole new series of problems to builders in controlling humidity and providing adequate healthy ventilation systems. These systems vary with regions and with the kind of animals to be housed. It is such a broad subject that close cooperation with county agents and agricultural colleges is essential if the contractor and dealers are to provide the best type for their particular area. Farm buildings contain much more humidity than the residences for which most insulating materials are designed. It is essential, therefore, that the side walls and ceilings be properly vapor sealed.

The advent of new types of machines, plus research on hay treatment by universities and colleges is lowering considerably the requirements for hay mow capacity in dairy barns. As a result, latest dairy barn designs show from one-fourth to one-third less hay mow capacity than formerly. Baled hay, which is becoming increasingly popular with farmers, permits storage of the same quantities in much more compact space and this has also been an important factor in reducing the requirements for hay storage space.

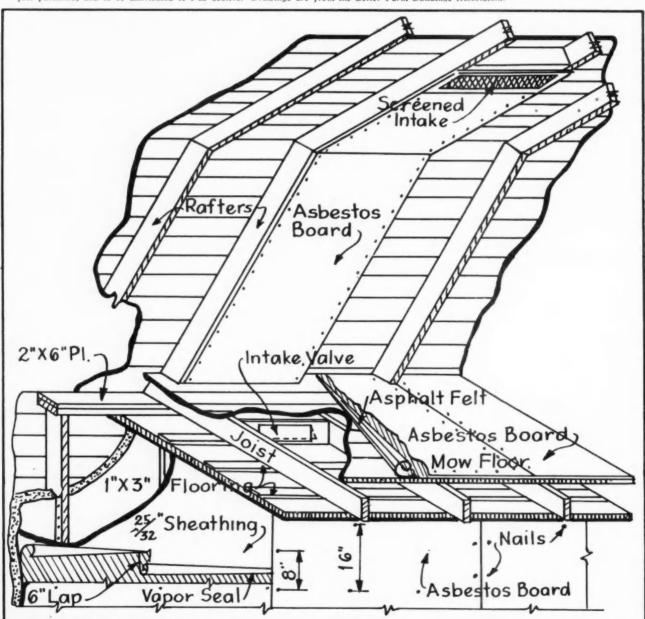
The high cost of farm help brought about stock feeding methods that conserve manpower. Newest feeding structures are designed so they will not only hold hay and other feeds in large quantities, but also permit the stock to get it out themselves.

Changes in methods of handling dairy cattle and milk have brought about major changes in design of barns, with the addition of milking parlors and milk houses.



COLLAR beams should be used to tie the roof frame together at the ridge. This is shown at left above. Rafters must be well anchored to side walls, with ties at every third rafter as shown in center drawing. Toe nailing is not sufficient. Even where cross ties are used in structures at the plate line, the roof must be anchored as shown in drawing at right

Much of this data on farm buildings and farm wiring was obtained from Johns-Manville's "Farm Handbook and Building Reference Guide," just published, and to be distributed to J-M dealers. Drawings are from the Better Farm Buildings Association.



THIS detail shows how to construct the newest type of fresh air intake system for mechanically ventilated barns. The flue takes fresh air from the mow space instead of from outdoors and releases it into the space between the barn ceiling and the mow floor. The cross furring under the ceiling joists allows the incoming air to fill the space between the joists so that the entire

unobstructed area between the joists becomes a reservoir for still air. In this reservoir the fresh air is pre-heated by heat that escapes from the barn through the ceiling finish. Because the fresh air is tempered in this reservoir, it does not chill the barn like cold outside air does when it is released into the barn. Side walls require thick insulation in such a structure

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Electric Service For the Farm

Electricity is such a large factor in farm operation that builders of farm structures must have knowledge of the principles of an installation



FARM showing overhead wiring to buildings and from the distribution line

LECTRICITY has become such an important factor in farming that builders and dealers who assist farmers in planning new structures and remodeling others must have a basic knowledge of correct wiring techniques for farms. Machines operated by electricity are important to today's farmer, but they will not function safely, efficiently nor economically if the farmstead is not adequately wired.

Service wires must be large enough to deliver the necessary amount of current to each piece of equipment. The electrical service entrance must have ample capacity to carry the entire load for the farm. It is most efficient when installed as near as possible to the center of the load. Generally, it should contain three wires not smaller than No. 4. It is good practice to install a disconnected switch at this point so the entire farm system can be cut off if necessary.

Feeder lines that run from the service entrance to the various buildings must be of adequate size, preferably three No. 6 wires. It is important that branch circuits be protected by the right type of fuses or circuit breakers. There are three common types of branch circuits:

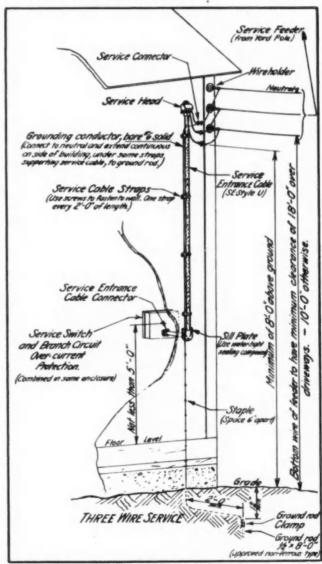
One is the general purpose circuit, intended only for the attachment of small appliances such as radios and lamps. One such circuit will serve up to ten light and convenience outlets. A No. 12 wire is satisfactory when protected by a 15-ampere fuse or circuit breaker.

The second is the appliance circuit which is intended for attaching portable appliances commonly used in outbuildings and barns—such equipment as smoothing irons, refrigerators, brooders and devices with motors no larger than one-third horse power. Here a No. 10 wire is needed, but in some instance a No. 12 wire can be used. Either wire should be protected with a 20-ampere fuse or circuit breaker.

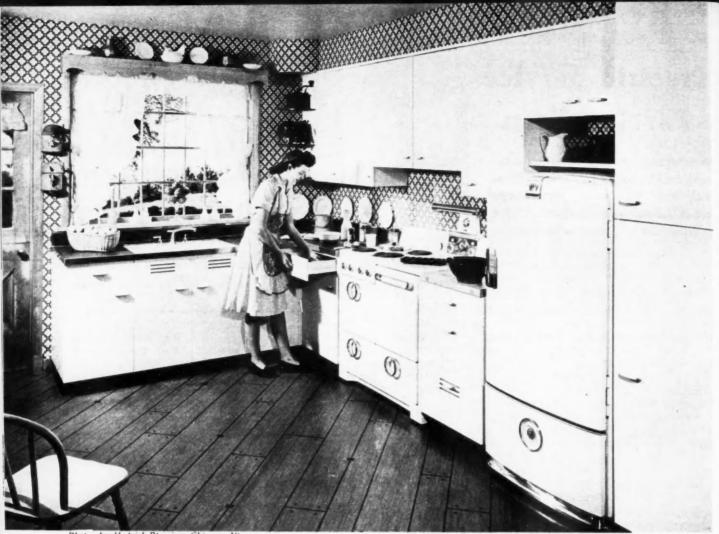
The third type of circuit is intended for use where only one piece of equipment can be operated on the circuit. Hot water heaters, five horse power motors, ranges and that type of equipment require separate circuits. Power companies in the various communities can give specific recommendations on circuit breakers and wire sizes for all special equipment. Many farmers equip portable motors with 50 or 100 feet of heavyduty power cable to permit free movement of the motors from one location to another to eliminate the expense of providing several separate large power outlets. These outlets supply 220-230 volts.

The number of circuits in each building depends entirely on the load inside the building so that no firm or fixed rules can be given. The addition of spare circuits will make any installation more flexible and provide for future needs.

At each building the wiring system must be grounded. This is in addition to the ground at the power pole. Grounds must be established at each point of entrance to each building and if possible, all of these grounds should be tied together on driven grounds. Also, for added safety, the farm water system should be tied at each building to the driven ground for that building. This is important, A well-grounded wiring system adds to the safety of the entire installation.



TYPICAL service entrance installation where the service metering equipment is located on a pole in center of farm yard



AMPLE space is available for informal dining and for all equipment and cupboards in this large remodeled farm kitchen

ALL ELECTRIC Kitchens for Farm Homes

A LARGE potential market in new and remodeled farm structures exists within the various rural communities throughout the country. This is a phase of construction work that has been neglected for a long period of time.

This potential market has reference to barns and all the other sundry farm buildings, but it primarily refers to the farmer's own house. The bulk of the remodeling work on the rural home revolves around the kitchen. This is the room in which effective changes can be made with the minimum amount of alterations to the structural elements of the house. Remodeling is well adapted to the average farm kitchen because of its generous size and its adaptability to the installation of new cupboards, cabinets, sinks, electric dishwashers, stoves, refrigerators and frozen storage units. However, before the new equipment is added to an existing line it is a good idea to refer to the local electric company for up-to-the-minute

The universal use of modern appliances have changed planning methods so that the age old difference between rural and urban living is disappearing

data on proper wiring for every type of farm remodeling.

Converting an old fashioned farm kitchen into a convenient modern electric one requires careful thought and planning, especially when a number of old doors and windows and perhaps a pantry must be considered in the change. If kitchen is located in the corner of the house then cross ventilation should be arranged by providing windows on two walls. The U-shaped kitchen is the most practical for a farm home. Second choice is the L-shaped kitchen which adapts itself better to a wider room. In this

type room ample space is available for dining on the opposite side.

In addition to the normal kitchen requirements of an urban home, the kitchen of the farm or rural home must contain adequate storage for every day coats. It also should contain a convenient "wash-up" place for men, or a separate room. Approximately 20 per cent more cupboard space should be provided. If space permits, a frozen storage locker should be located adjacent to the other fixtures. Preparation of canned foods is still a requirement on the farm; therefore, additional counter space should be arranged. A feature, often neglected due to lack of space but very essential, is a place for sitting comfortably while working. This would be a good spot for an old fashioned rocking chair.

The arrangement of the appliances such as sink, and refrigerator should follow the routine recommended by the manufacturers of kitchen equipment and appliances.

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"New Freedom Gas Kitchens" Planned for Farm Home Efficiency

WHETHER it be a new or remodeled house the "rural" kitchen may now be as modern as that of the best urban home. This is made possible beyond the city gas distribution systems through the availability of a complete fuel service provided by liquefied petroleum gases—butane and propane.

Practically all appliances used in the home which are operated by LP gas are equipped with features that provide automatic operation. These are the gas range, refrigerator, water heater and house heating appliances.

Remodeling of old kitchens and the installation of new equipment are factors not to be discounted in current or future market potentialities. The equipment in a kitchen and its arrangement usually date a house. Women as a rule are zealous of its appearance and usefulness and are anxious to keep their workshop in as up-to-date and modern condition as their finances will permit. When a kitchen in an old home is remodeled and re-equipped, the same serious, detailed planning should go into that job that goes into a similar kitchen designed for a new home.

Complete kitchen remodeling jobs are usually inspired by the need for new major appliances to replace old worn out units that have also gone out of style. Frequently at the same time appliances need to be replaced, cabinets and other components of the kitchen need also to be replaced. In such cases, it is considerably cheaper to do the entire job in one undertaking and thus deliver a brand new kitchen to the home owner.

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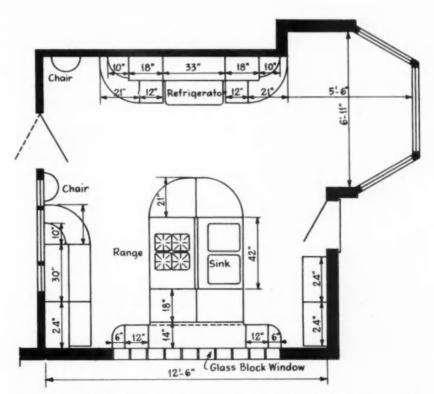
When structural changes in kitchens are desirable, such as moving or enlarging windows or doors, the builder should follow the sound policy of planning such changes around the equipment to be installed. This will permit the use of standard units thereby reducing costs and obtaining for the owner a more attractive room.

The importance of good lighting, adequate wiring and plumbing facilities should never be discounted in remodeling or new work. A completely remodeled or new kitchen with ample area for good circulation can become the most used room in the home—a room the owner will delight to own and be proud to show.



A GOOD example of a remodeled farm kitchen. The generous width permits a preparation bay to extend into room. The bay in background is breakfast-nook

Courtesy of St. Charles Manufacturing Co., St. Charles, Ill.



PLAN of kitchen showing fixtures and appliances arranged in a manner to produce the greatest efficiency in operation. Area in bay window devoted to informal dining



MODERN four-room apartment is incorporated in this dairy barn built by Henderlong

Farm Construction is

BIG BUSINESS

For this Dealer-Builder

Firm maintains ample personnel, equipment and storage facilities to satisfy variety of town and country building demands

ARNOLD HENDERLONG, left, manages farm construction, which is firm's specialty

HONDE TOSE

RETAIL lumber shed holds enough material to complete 75 homes. Office, above

ARM construction is a specialty with this dealer-builder firm, although both speculative and contract home building is done. Rich farm land is abundant around Crown Point, Ind., where the Henderlong Lumber Co., is located. Large scale dairy farming creates a consistent demand for modern feed storage facilities, milk barns, and machine sheds. During the past few prosperous years for farmers the demand for construction has been active.

Besides building and supplying materials for about 60 homes last year, the Henderlong Co. did a large volume and variety of farm building. In the words of Arnold Henderlong, who handles the farm construction, they "built everything from dog kennels for canine farms to complete dairy farms."

On one job, all buildings on a

large farm were moved to another farm a mile-and-a-half away, where they were remodeled and put into service. At another farm, a modern four-room apartment was added to a new dairy barn. The firm completed three residential subdivisions and one resort subdivision at nearby Cedar Lake, Ind. Homes were built in all price ranges.

To meet both town and country demands for new construction and remodeling, Henderlong Co. has a staff of about 40 men for the office and yards which occupy 4½ acres. The retail lumber shed, one of the largest in the United States, can hold enough materials to build 75 homes.

Fully equipped to meet the growing demand for farm construction, the firm offers one-stop buying service to home-buyers as well. A prospective home owner can get Americ expert or an firm, o tracto buildin constr partm

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expert attention from an architect or an engineer employed by the firm, or from one of several contractors. A farmer may have his building completely planned and constructed by the farm service department.

Arnold Henderlong, who takes his job of managing farm construction seriously, is the son of Arthur J. Henderlong, president of the firm. He is acquainted with farmers throughout the area, and keeps posted on their needs and the latest in modern farm construction.

The barn-apartment combination illustrated with this story was his solution, in one case, to the need for extra housing for farm workers. One section of this 38x136 foot barn was already constructed for the milk house when the owner decided he needed extra living quarters; Arnold drew a rough floor plan to show how the area above the milk house could be converted into an apartment.

The barn is typical of the firm's modern farm construction. It contains the latest in insulation, ventilation and lighting equipment, as well as facilities for healthful sanitation for dairy herds. It is built on a 5-inch concrete slab. A poured concrete foundation is placed under the outer perimeter of the slab. Twelve-inch piers spaced about 12 feet apart support the slab. The piers are placed under the entire slab, and rest on footings 12-inches thick, 2 feet 8 inches square. Interior footings are 24 inches below grade; exterior, about 42 inches below grade.

The 12-inch masonry walls, which extend to the mow floor joists, consist of two courses of concrete block alternated with two courses of brick. The roof is covered with 250-pound asphalt shingles over building paper and sheathing. The ceiling is insulated with four inches of mineral wool with 25/32-inch Johns-Manville insulating wall board over Flexboard for the finished ceiling. A 2x8-inch plate is bolted to the top of the masonry wall. Half-inch insulation is placed between the plate and the wall. All windows are glass block. Doors at each end of the barn are upward acting.

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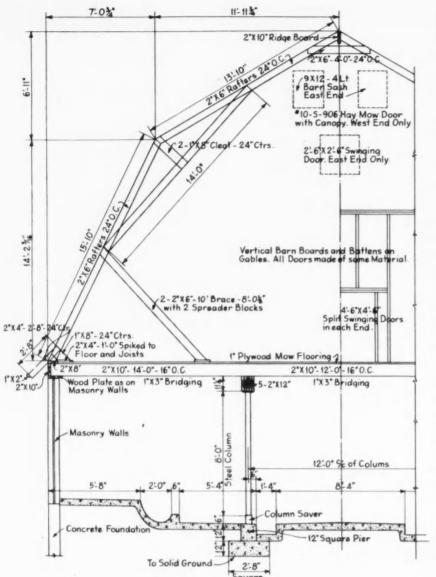
Ventilation is provided by six large power ventilators, two controlled by thermostat, and 17 fresh air intakes.

INTERIOR finish of living room in this barn apartment is knotty pine. Since the barn is well ventilated and the living quarters well insulated, residents in the apartment are not bothered by barn adors. Floor dimensions are 30x29 feet



UPWARD acting doors are provided at each end of barn. Machines run trough cleaners





TYPICAL CROSS SECTION

Gutters in the barn are kept clean by electrically operated chain conveyers. Fresh water is piped to each stanchion. Two large hay driers are conveniently situated on one side of the barn, and feed from a large silo is easily accessible at the other. A modern cooling tank is installed in the 30x29-foot milk house. Drying racks and wash tanks for milk cans are also located there. Ceiling lights throughout are fluorescent.

The apartment above the milk house is fully insulated with mineral wool in the ceiling and balsam wool in the side walls. Flooring is finished yellow pine. Since the dairy barn is kept immaculately clean and well-ventilated, residents in the apartment are not disturbed by barn odors.

Along with this barn, which represents one of the most modern of its kind in the country, the Henderlong Co. had the job of converting a large chicken house into a modern calf barn. To do this, they added insulation and power ventilators, built in a system of interior board fences which form partitions, and provided feed racks.

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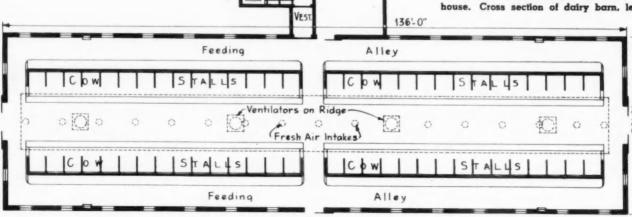
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Ar

This firm, in business 50 years, has built up a good reputation for both farm and residential construction. Although they consistently advertise in local newspapers, they realize that the most effective advertising is in the many houses and



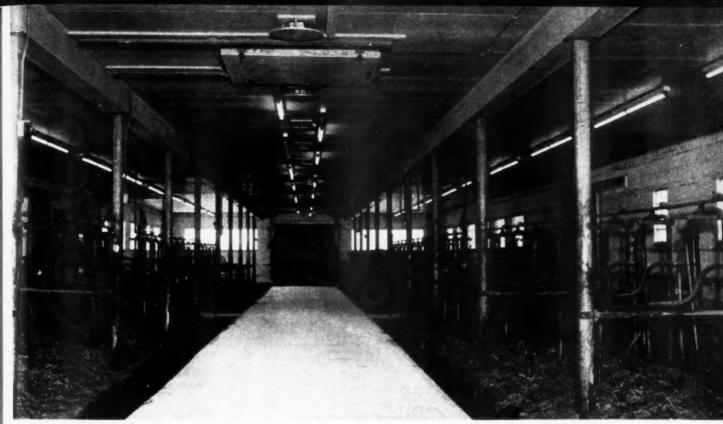
CALF shed was converted from chicken house. Cross section of dairy barn, left



FEED ROOM

COOLER

FLOOR PLAN



ALL windows in dairy barn are glass block. Steel columns support beams built by bolting five 2x12's together: Lights are fluorescent

farm buildings they have already completed. Their completed homes number in the hundreds. The company in 1942 built a mile of dwellings in one subdivision north of Crown Point. Currently they are building a house to sell for \$4,800, without lot, and other homes in various price ranges. They are able to offer low cost construction mainly because of their facilities to buy and store large quantities of materials and thus effect some savings.

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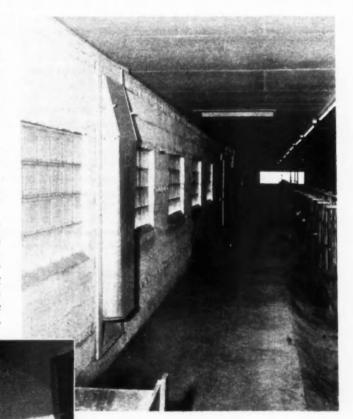
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Arthur Henderlong and four of his sons, Paul, Edward, Clarence and Arnold, manage the company. Besides their sales manager, Henry O. Newman, seven outside salesmen and four counter salesmen are employed. The office building is departmentalized to better serve the needs of clients.

Whether material is demanded for a lone house or for ten, the firm can insure prompt delivery with a part of their fleet of 20 trucks. It is becoming a common expression in Crown Point that "you can't go anywhere in the area without seeing a Henderlong truck." The firm realizes, also, the value of this as an advertising means. People are always quick to notice a firm that is constantly on the job, doing a good job.

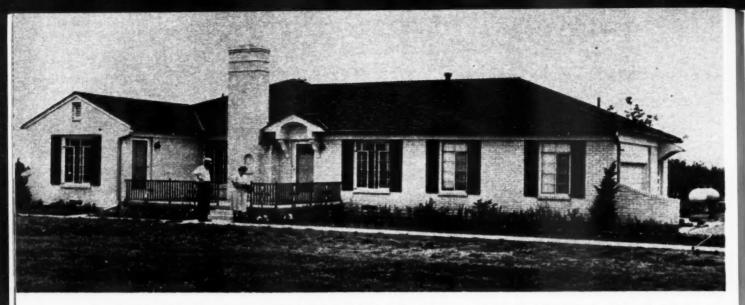


SIX large ventilators, made by Starline, Inc., provide fresh air for the dairy barn. Two ventilators are thermostatically controlled

APARTMENT window is shown, upper left.

Ventilator is same one shown in photo above.

Barn is typical of modern farm construction
that is done by the Henderlong firm



LP gas service makes this farm home near Dallas, Texas, modern in every respect, including a New Freedom Gas Kitchen

City Conveniences Available Beyond the Gas Mains

THOUSANDS of homes are springing up in farm and suburban areas beyond city gas distribution systems due to the availability of a complete fuel service provided by liquefied petroleum gases—butane and propane.

Incentive for this fast-growing exodus has been furnished by the LPgas industry itself in making gas available in quantities sufficient to assure a fuel supply the year round.

Practically all appliances operated by LP-gas are equipped with features that provide automatic operation. These are the gas range, refrigerator, water heater, house heating appliances, and the Servel gas air-conditioner that provides either cooling or heating. The rural kitchen may now be as modern as that of its city cousin that uses pipe line gas. This is made possible through the colorful and efficient cabinets that help make up the "New Freedom Gas Kitchen" which can be applied to the liquefied petroleum gases.

The C. P. Nevill farm home, located on the north edge of Dallas, Texas, is an outstanding example of the comfort, efficiency and convenience provided by liquefied petroleum gas service. The Nevills use butane gas furnished by the Dallas Division of Distribution of Lone Star Gas Co. Although this public service company is primarily a distributor of natural gas through pipe lines in 337

cities and towns in Texas and Oklahoma, it also furnishes tank gas to thousands of suburban and rural homes in portions of the area covered by its pipe line system.

The Nevill household depends on LP-gas for all fuel requirements—cooking, house heating, water heating and refrigeration. The Nevills use an automatically controlled central heating system. The heating unit, located in a closet just off the garage, distributes warm air throughout the house by means of a duct system that opens into each room.

The other appliances using LP-gas go to make up the all-gas kitchen. These are a gas range with automatic features, a Servel gas refrigerator with silent operation in the freezing unit, and a 30-gallon automatic water heater that furnishes all the hot water needs for the family of three. In addition, the servants' quarters are equipped with butane gas for cooking and heating.

(Continued on page 148)





THE gas-equipped kitchen in the Nevill farm home located beyond gas mains. At right is gas-fired central heating plant

Cash Market for builders and dealers in variety of farm buildings Humerous structures of different types make every farmstead an opportunity for increasing business



POURING and rodding vermiculite insulating concrete in a 10-inch tile cavity wall

Iowa Contractor Designs and Erects a Model Hog House

THERE is an air-conditioned hog house near New Hampton, Iowa, that is a model of its kind. It incorporates 30 years of experience in farm building construction by its contractor-owner, R. A. Stoltz.

The structure is 22 feet wide and 48 feet long. The double (cavity) walls are ten inches thick, made of variegated, mat-faced tile. Insulation was provided by filling the 2½-inch void with vermiculite insulating concrete, 1:16 mix. An asphalt paint moisture barrier was applied to the cavity side of the interior wall during construction.

Plates in this hog house are anchored by placing pieces of steel four inches long and two inches wide in the mortar joint four tile courses from the top of the wall. A \sigma_6-inch hole through the steel plates accom-

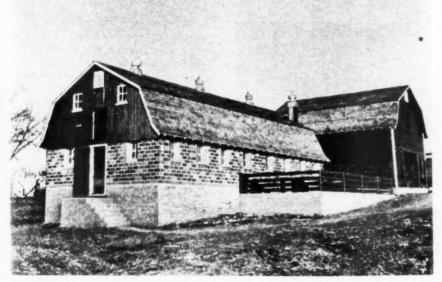
modates a bolt which extends above the top of the wall through the 2x8 plates to hold them firmly to the top of the wall.

A 7-foot false ceiling is finished with waterproofed gypsum board. Above this four inches of vermiculite insulating fill is placed and covered with flooring so straw can be stored in the loft. Eight windows, four 9x12 lights, face south. These can be opened and tilted in. By placing all the windows on one side, Stoltz eliminated the possibility of cross currents of air when the windows are open. There are two windows at the west end.

The ventilating system represents years of thought and experience by Stoltz. Swine are peculiarly sensitive to drafts, so it is designed to eliminate all drafts and at the same time keep the interior fresh and dry. There are eight air intakes, 4x14 inches, extending along the roof about two feet above the side walls. These intakes are screened and each is equipped with an adjustable shutter for regulation according to temperature, wind direction, velocity, and number of hogs in the building.

From the interior of the house the intakes have the appearance of small boxes hanging from the ceiling openings which are 12 inches square. A plywood baffle the size of each opening is suspended on 2x2's three inches below the opening so that air coming in from the outside is broken and diffused instead of falling in a cold stream on the animals. There are eight outlet flues, 16x16 inches, insulated to avoid chill. These carry off odors and moisture.

Warm, sanitary, comfortable quarters for hogs cut losses.



INTERIOR of this hog house is divided by a full-length partitioned alley three feet wide

RADIANT HEAT

A New Trend in Animal Shelters

Advantages of hot water in slabs outweigh initial high cost



ABOUT 10,000 feet of copper tubing was used for this hot water radiant slab heating system in large shelter for turkeys

NE of the newest developments in animal shelter construction is the radiant heated floor. A successful installation of this system is one by Wallace E. Wright, a turkey raiser in Mitchell County, Iowa. Foth & Sons, heating contractors, Osage, Iowa, made the installation.

The building is a two-story double quonset of 24-gauge steel, 60x220 feet. The ground floor area was filled with gravel to within four inches of the top of the footings. The fill was covered with a vapor barrier of two layers of glossy-surfaced, asphalt-

impregnated paper with the edges lapped four inches and sealed. Above this a three-inch slab of vermiculite aggregate concrete was poured, 1:6 mix. Copper tubing, one inch in diameter, was laid 18 inches on centers on top of the vermiculite concrete slab after it had cured. The floor was then finished with three inches of ordinary sand-and-gravel concrete. Insulation was placed between this top slab and the foundation to stop heat loss. The vermiculite insulating concrete slab retards heat loss to the ground, accelerates heat flow through the top slab,

and prevents condensation in summer months. This floor can be carried at any reasonable temperature but Wright keeps it between 50 and 70 degrees in winter. Four unit heaters attached to columns supplement the radiant heat during extreme weather conditions. The second floor of the turkey house is heated entirely with unit heaters when heat is required.

The radiant heated floor is divided into quarters, each zoned so it may be heated or shut off separately. Water drains and automatic air vents are also provided for each quarter. Controls for heat are located both inside and outside. Water for the system is heated by an oil-burning boiler located in a room in the center of the south side of the structure. About 3,500 breeder hens or 20,000 poults can be housed in the building and can be cared for by three men.

Remodeling Salvages Poultry House



AFTER remodeling, the 30-year-old poultry house shown here has inside temperatures as much as 50 degrees warmer than the outside in extremely cold winter weather. Walls do not frost or sweat



REMODELING of old farm service buildings is a lucrative source of business volume for contractors and dealers. The 30-year-old poultry house shown here was so flimsy that it

swayed in the breeze and in winter inside temperatures fell well below freezing. Walls were plumbed, the two old doors removed and a battery of new windows installed on the south side. A new door was cut in the west end nearest the dwelling. The dirt floor was excavated to a lower depth, lined with clay floor tile and finished with two inches of 1:6 vermiculite insulating concrete. A vapor barrier was tacked to the inside studs, and walls filled with fill insulation. The walls were boarded with sheathing to a height of 27 inches from the floor, and the balance finished with gypsum board treated to resist moisture. Four inches of vermiculite fill insulation was put in the ceiling and the loft floored with rough boards so it could be used as storage space for litter. A slot ventilating system, manually operated, was installed, which directs cold air from the outside so it mixes with the warm inside air to avoid dangerous drafts on the poultry.

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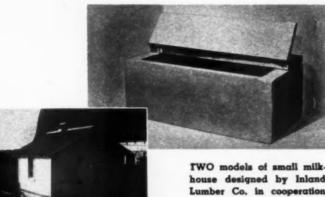
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house designed by Inland Lumber Co. in cooperation with creamery field man. Above is milk cooling tank

Wisconsin Dealer Promotes Milk Houses

MPHASIS on Grade A milk pro-duction means a nice volume of business in milk house construction for both the building material dealer and the contractor. In many areas, a farmer cannot qualify for Grade A premiums unless he has a separate milk house. Even without this incentive, farmers have learned that a milk house is a decided advantage.

Walter A. Hassemer, sales-minded manager of Inland Lumber Co., Bloomer, Wis., foresaw the possibilities in milk houses several years ago. His first step was to consult with the field supervisor of the local creamery, who was working under the state dairy improvement program, and who was very anxious to get insulated milk houses erected. Together they drafted a basic plan that could be adapted either to on-site construction or to a portable house that could be built in Inland's yard and sold like any other prefab. A test milk house and cooling tank, embodying these plans, were then installed on an operating dairy farm for observation under working conditions. Accurate temperature records, kept by the farmer for an entire year, showed results so good that in only 15 months Inland Lumber sold more than 150 milk houses and tanks.

The portable houses are built in three sizes: 10x12, 8x10 and 7x8 feet. Stationary houses approximate these sizes. Six-inch drop siding is used on the exterior and asbestos cement board for the lining. Heavy felt paper, the seams calked with calking cement, forms the vapor barrier. Walls are insulated with 35% inches of vermiculite insulating fill, with four inches in the ceiling. When walls are of masonry block construction, they are insulated by filling the cores of the blocks with vermiculite con-

There is one 10x12-inch ventilator

flue. Two 9x12, 6-light windows, two lights wide, are set directly across the center of one side wall. The exterior door is also insulated and equipped with three hinges and a refrigerator door handle. The gable roof has a louver at each end, and is built at about a 1/3 pitch. Narrow-line roof trim with 31/2-inch crown molding and asphalt shingles complete the roof. The house is primed, painted and wired for electricity.

A portable weighs from one to oneand-a-half tons, and is mounted on skids. Footings, foundation, floor and milk cooling tank are all placed and cured before the house is delivered. The house is set into asphalt mastic on the foundation, and fastened to bolts embedded in the concrete.

An original feature of all Inland's milk houses is the draftless, filtered ventilation provided by a box window, the pattern for which was made in Inland's shop. It provides a minimum of one square foot of window light and one square inch of ventilation for every ten feet of floor area. The window has side ears, and tilts in from the top. Inside, cheese cloth screening is fastened with thumb tacks to the top of the casing and to the top of the window frame. This can be easily removed, washed and replaced. Outside screening is not needed, but is furnished if desired. Farmers in the area prefer the cheese cloth, however, because outside screening catches snow, has a tendency to discourage washing the windows, and eventually rots. A 6-light window has a 12-inch tilt; a fourlight, slightly less.

The milk cooling tank developed by Hassemer is made of vermiculite insulating concrete, 1:5 mix. It is six inches thick, reinforced at the bottom and through the sides with 3/2-inch rods spaced six inches apart. The rods on the bottom of the tank are bent upwards. After the vermiculite concrete has set, two or three inches of ordinary concrete is placed over the bottom of the tank to provide a wearing surface. The buoyancy of the water aids in keeping the cans from bumping and damaging the tank floor. The tank is 27 inches deep, 18 inches above the floor and 9 inches below, to facilitate lifting cans in and out.

Like the milk house, the size of the tank varies with the size of the dairy herd. A 16-can tank is 34 inches wide and 96 inches long, inside measurements. There is very little piping in the tank. The overflow pipe, when unscrewed, acts also as a drain to empty the tank for cleaning. When the farmer has a pressure water system, the water can be brought in through this pipe.

The efficiency of the insulated milk house and cooling tank was shown in the year's temperature record. Outside temperatures varied from 20 degrees below zero in winter to 91 degrees above in the summer, morning readings. Temperature of the tank water varied only from 47 degrees in winter to 58 degrees in summer. This is remarkable temperature stability for a concrete cooling tank dependent only on running water. The temperature of well water in the area runs from 46 degrees to 50 degrees.

Bruce Kanpton, the creamery's field supervisor, summed up the case for the milk house as follows:

The need for such a house should not have to be argued at all," he said. "Here is a dairy farmer with a valuable barn and farm and \$5,000 or \$6,000 worth of milch cows. The milk house and cooling facilities are the one little step he needs to handle a perishable commodity and finish the product properly. The cost is a fraction of his product investment.

AMERICAN BUILDER

Blueprint House

Number 31

Designed by National Plan Service

HOUSE shown in its completed state with the addition of wing to the original layout, containing two bedrooms and bath





Farm or Urban Home-That Can Grow

TODAY a fine line is drawn between the requirements of a farm and urban home. It is found that the needs of both are similar in that the two types perform the same functions in a general way. This similarity has come about primarily through the widespread usage of electricity which has simplified farm work, particularly as it applies to the home.

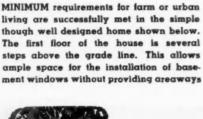
The planning of the farm home with the exception of a few fundamental features such as the work room (or mud room as it is often times called) and the kitchen, follow the lines of the basic planning of the urban house. The position of the

work room with relation to the balance of the house is important. This should be easily accessible for cleanup purposes by the occupants as they return from the field.

The home described on this and the adjoining pages shows this plah arrangement. The work room has a close relationship to the kitchen and bathroom through an adjoining hall. In planning, the work room can be increased in length if necessary without making any appreciable change in the exterior design.

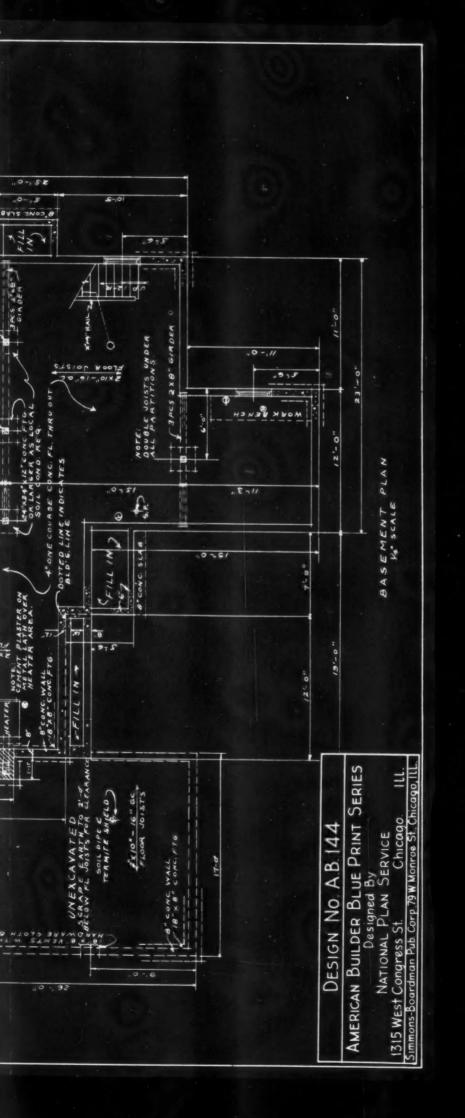
The basic plan containing one bedroom can easily be expanded when the need arises by adding two bedrooms and bath on the living room end of the house, as indicated on the plans. The large kitchen in the basic house is equipped with sufficient cupboards to provide for the needs when house is expanded.

The exterior design of this house is an architectural expression of the plan. The house has more than just an attractive "front." All views are pleasing. On the large sites available for farm houses this "all around" attractiveness is desirable.





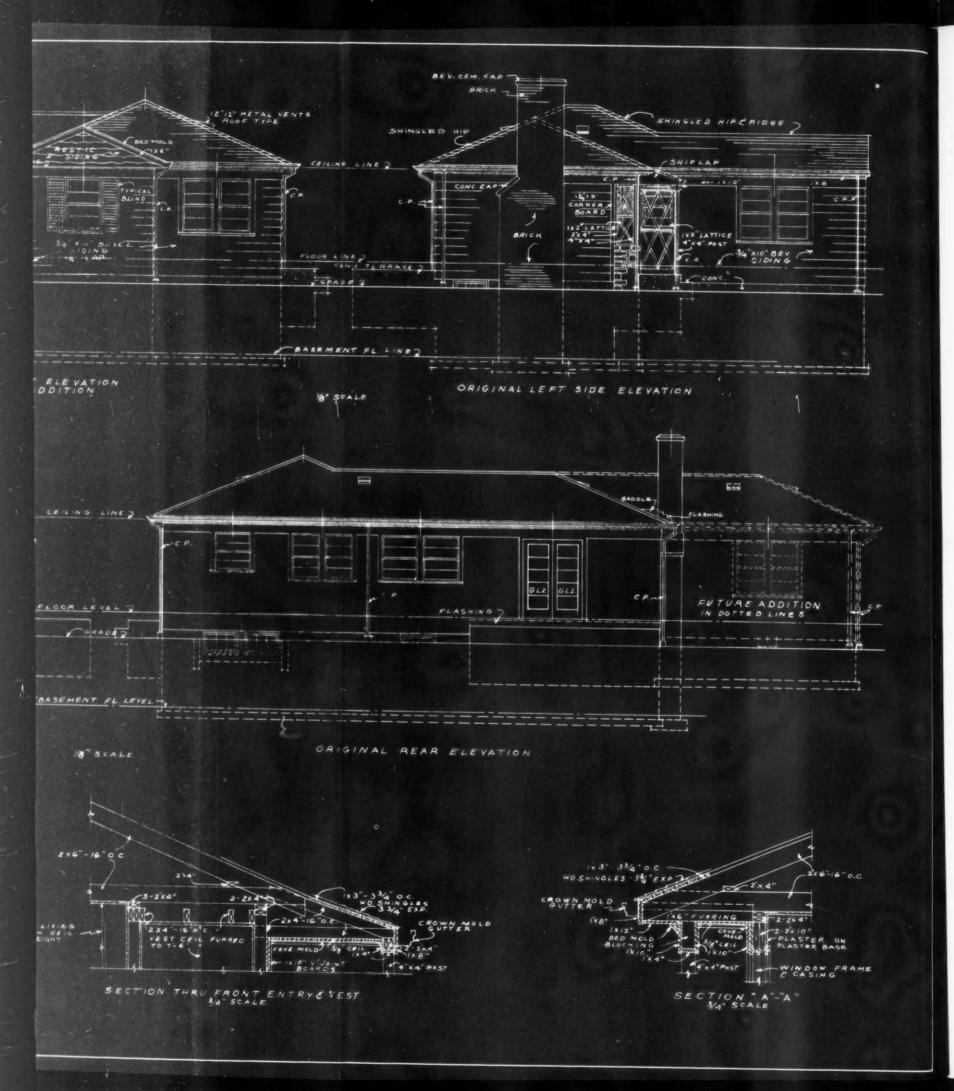




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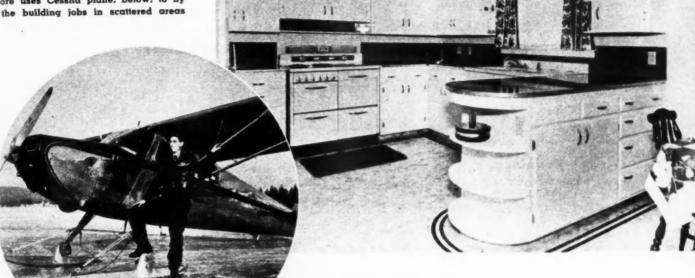
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MODERN kitchen in farm home built by George Moore contains the latest in planning and equipment. Equipment of this kind helps sell, according to Moore, "to a market that is still virtually untapped." Moore uses Cessna plane, below, to fly to the building jobs in scattered areas



GEORGE M. MOORE, 26 year old ex-GI and builder of Spokane, Wash., recently discovered that he had tapped a large and profitable new market. When he built a good \$35,000 house with the latest modern equipment for a farmer in Wilbur, Wash., he gave full value, and became the farmer's friend. Within the next few weeks, Moore had the job of constructing six more houses for farmers in the surrounding territory.

He has found that most farmers "are funny that way." They don't like to be sold—they like to sell themselves. And they like to go where they are well treated. That was Moore's experience. Additional jobs came to him without previous solicitation.



FLOOR plan illustrates the typical high cost home George Moore builds for farmers in Spokane area. Price. about \$30,000



LATEST modern bathroom equipment is installed in this farmer's
home near Spokane.
Wash. It is desirable
for farmers to have an
additional bath in rear
of house so they may
wash up when they
come in from fields
without walking
through the house

This year Moore's program is to build about a dozen low cost houses in Spokane to sell for \$7,000, but his real effort will be in building contract houses for farmers. In addition to the jobs now in hand, he has many leads and finds that each new job brings about others.

Helps Sell Farm Homes

Modern Equipment

He is finding that the market for farm homes is extremely rich and as yet virtually untapped. Up to now, most farmers have been building and remodeling barns and other service buildings. Many farmers have now completed their programs of plant improvement and are ready to consider homes for themselves, and frequently for their married sons and daughters. Some of Moore's customers are retired farmers.

In the past, many farmers in the Spokane area have gone to California and other warmer climates when they retire. Now that farm homes can be made as modern and comfortable as city homes, however, more and more farmers are building new homes where they can be with their children who carry on the farm work.

Many large farmers now have their own airplanes and have landing strips on their farms. One of the reasons why George Moore fits into the farm picture in the way that he does is that he, too, has his own airplane and finds it invaluable in handling widely scattered jobs.

He says he was somewhat surprised at first to find that most of his customers want nothing but the best. With many, cost is no consideration. Many farmers want all the modern improvements, and some have spent as much as \$60,000 for their homes.

The home pictured here was built for George Kunz, retired farmer, in Wilbur. It is located in town about four miles from his farm. The home contains a 14x18-foot kitchen, a complete automatic laundry, a home freezer, two large bathrooms, Thermopane glass in the front window, and forced warm air heating.

One of the youngest builders in Spokane, Moore believes he is keeping up with the times by using an airplane in covering his jobs in the Inland Empire.

Not So Hidden After All!

By R. E. Saberson

All you have to do is take a trip through the farming areas, and you can see for yourself the vast opportunities offered by this neglected market

STICK a pencil and a pad of note paper in your pocket. Grab your hat. Polish off your specks. Crank up the Chevvy. Let's take a trip back to the farm where we were born . . . or perhaps to the old homestead where we used to spend the summers with Grandma.

This imaginary trip is taken in the interests of the farm buildings . . . a sales opportunity referred to invariably as a "hidden market." Let's take a look and see, if we can, where and how and why it is hiding.

We roll along wide, smooth paved highways at express train speed in an automobile that runs day in and day out for month upon month with little or no attention. We give its dependable performance little thought. For years now it has been taken pretty much for granted and has become a part of our daily activities to such an extent that we merely jump in and hie away to wherever we want to go with nary a comment concerning the invention that demolished distance and banished remoteness.

The magic carpet upon which we travel is only one of the countless miracles that has taken form since Grandma was a girl, or even since we used to go barefoot and wade in the creek that meandered through the meadow on the South Forty.

"What wonders God hath wrought" in the meantime includes giant ships that fly through the skies, pictures that travel invisibly and noiselessly over the air waves from where the action originates to the television set which adorns the living room. We pick up an innocent-looking gadget and talk almost instantaneously with someone in any city of our choice. An internationally-known symphony in Philadelphia, or New York or Boston plays for us in our homes on Sunday afternoon.

Nothing in the world is the same . . . except Grandma's farm!

This too-literal statement is, of course, subject to a variety of modifications and it will, no doubt, arouse the ire of our agricultural friends when we point to the farmsteads of our great and glorious nation as the

outstanding holdouts in the march of progress which has changed America from what it used to be in our boyhood days into what it is today. Cities and towns are no longer what they were then, when Main Street was a quagmire of mud and tired horses lined the curb line known only because of the long rows of hitching posts.

That was the way it was then . . . a far cry from what it is today . . . as far as the town is concerned. On the other hand, a mile from town the Jones farm, hasn't changed much down through the years . . . the old horse barn, the cattle shed, the hog pens, the corn cribs and even the house itself all look pretty much as they did when the Jones boys were growing up.

Nor is the Jones farm the exception. You can drive out No. 57 as far as you want to go . . . clear across the nation if you wish . . . or you can head in the opposite direction until you hit the shores of the Atlantic . . . or you can travel south until you come to the Mexican border. It matters not in which direction your whim may take or what highway, or side road, you select. As you roll along mile after mile, day after day, for month after month you will become eye witness to a mammoth undeveloped market for building materials . . . the need for the rebuilding or the modernization of the millions of farm buildings of the world's greatest agricultural nation in order to make them conform to the presentday methods of farming and the commonly accepted standards of comfort, convenience and health now enjoyed by families who do not live on farms.

We are not naive enough to claim that the long arm of progress has not extended to agriculture, especially as it pertains to the raising, harvesting and storing of crops and to a lesser extent livestock. Farm mechanization has taken over more and more of the routine activities. Machines now do in the twinkling of an eye what sweating, hired-hands used to accomplish in an hour of grueling toil. Electricity has brought relief

from the disheartening drudgery that used to dog the footsteps of the weary farmer and his wife. All these, and many more things, have taken place to accelerate the changing scene on the farm.

It is in these changes that we find the point of our story. While this transition has been taking place it has not been possible for the great majority of American farmers to change their buildings to conform to the revolutionary advances that have taken place in farming methods.

You'll appreciate this all the more as we take our imaginary trip back to the farm of our childhood days where we'll have no difficulty in recognizing the barns and the houses that were there when we used to trudge a mile to the little white schoolhouse which constituted the seat of learning for the township. In later years, the consolidated school was built and buses gathered up the pupils from far and near. But the barns and the houses along the route failed to keep up with the procession.

It will be a simple matter for any critical reader to point to the spectacular changes that have taken place, structurally speaking, on innumerable farms with which they are familiar. Granted! But once again we sit back stubbornly on our haunches and insist that the rebuilding and modernizing of America's giant farm plant, in order to make it conform to modern farming methods, constitutes the nation's largest market for building materials and that it is so huge it is beyond the ken of most manufacturers. To more fully appreciate its size is necessary in order to adopt ways and means for the wider application of their products to its immediate needs.

Nor is this huge market so hidden. It is plainly visible for mile on mile on every highway and railroad in the land. The trouble is we view it with unseeing eyes.

As we journey on our imaginary tour across country, let us pause here and there and cast an appraising eye at what we see on the farms we pass. Suppose this particular farmer, for



"NOTHING in the world is the same . . . except Grandma's farm!"

example, were to decide to relocate his farm buildings on a more suitable site and erect a set of farm structures, planned to conform accurately to today's farming methods. Furthermore that, in the construction of his home, he would take advantage of the many conveniences and comforts made possible through the intelligent use of today's attractive, economical, labor-saving materials and equipment.

When the new buildings were completed, they would have little resemblance to the old structures in appearance, number or functions.

Modern Structures Needed

Now take your pencil and paper, adjust your bifocals and do a bit of figuring. Multiply the cost of bringing these farm structures up-to-date functionally, by the number of farms there are in the United States which need such treatment.

What? You haven't enough paper? Certainly not!

So let's do a little trimming down in order to be able to get the figures a

bit more under control. Furthermore it's incorrect to assume that all existing farm buildings will ever be replaced, modernized or even repaired. Consider the number of tenant farms alone. Does anyone assume that absentee owners will be as inclined to revamp their structures as if they lived on the premises?

Certainly not!

So let's cut our estimates in half or even more. Even when we carve them into comparatively small segments we still find ourselves engulfed in a wilderness of figures.

Take the modernizing of the farm homes alone, and the application of only a few of the step-saving, comfort-giving conveniences now available. Or turn horse barns into utility buildings. Or convert old-fashioned dairy barns into low-cost shelters adjacent to a small, sanitary milking parlor which can be made to conform to the requirements of the milk area which serves the nearby city. Or revamp the pork-raising and the poultry-raising facilities. Put in a new plumbing system. Re-arrange the fence lines. Repaint the structures.

What a job it is on a single farm. Now start multiplying again!

But what's the use! The market actually is so big that the figures promptly seem fantastic.

No one imagines for a single moment that such a job or any substantial segment of it will ever be done in any short period of time. It will only be accomplished in an orderly, evolutionary manner. But the process can be accelerated by those who dream out, develop, manufacture and distribute the materials and equipment that enable farmers to do things better, easier and more economically.

To date the equipment people are miles and miles ahead of the building material manufacturers . . . so far in fact that no cloud of dust on the horizon marks the direction in which they went.

There is something more or less ludicrous... or shall we say tragic... in the appearance of a \$3,000 tractor standing out in the open beside an empty twenty-stall horse barn!

Perhaps this is the opportune time for the far-flung building material industry to quit peering around the corner in search of a depression and turn its attention upon the world's greatest market for its materials.

Farmers Have Money

And while we are on the subject, perhaps we should pause for station announcement to call attention to the cash position of said market. For a long succession of years the farmers of this fair land of ours have enjoyed unprecedented prosperity due to bountiful yields, high prices of farm products and the ever-watchful eye of the busy bureaucrats down Washington way . . . never forgetful of elections yet to come.

With so many billions of farm dollars piled up in reserves, with mortgages paid, it really seems an appropriate time to tackle America's biggest construction job.

The need is there. So is the money. But it will take intelligent, intensive salesmanship to turn the trick. Unfortunately, it is the latter essential ingredient that is lacking at the present time, as is evidenced by the fact that far too many businessmen are mistaking the reappearance of competition as the sure sign of an approaching depression.

That, kind friends one and all, is indeed something to think about, faced as we are with an overwhelming market that is "hidden" only because we are no longer looking at it or are doing it with eyes that no longer see!

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From Two Plans a Residential





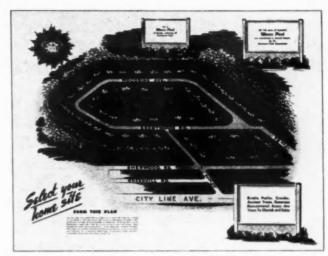
THE two houses shown here were built from the same floor plan. This builder has achieved many savings in luxury houses by using the same plans with good exterior and interior variations



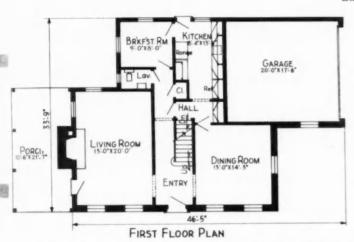
BASE price on these houses is \$32,700, including a large porch. Minimum lot width in the subdivision is 70 feet with most of the lots wider. Houses in project designed by Architect E. Wenge

Community Grows

Judicious variations in exterior treatment and interior appointments result in many fine variations for these luxury houses from two basic floor plans



INSIDE spread of large folder shows layout of Green Hill Farms





FLOOR plans for houses on opposite page. Poured foundations with full basements, waterproofed, are standard practice

USING standard basic plans for the speculative erection of high-priced houses is always dangerous. It is dangerous because purchasers of houses in the \$30,000 to \$40,000 price range are usually particular about individuality in both exterior and interior appointments.

In his Green Hill Farms project in Overbrook, near Philadelphia, John H. McClatchy is successfully using only two basic floor plans for the erection of fifty-five \$30,000 to \$40,000 houses. Excellent variation in setbacks, window arrangements, roof lines, garage locations and entrances plus fine taste in the use of brick, stone and wood combinations has resulted in the creation of a community of luxury houses that, to the inexperienced, appears as though each home were individually designed.

One of the basic plans is termed the "large house" and the other is the "small house." They are entirely different, both inside and out, but all houses in the project are built from one or the other of the basic plans. The larger house lends itself to more exterior variation than the smaller because of the attached garage and a wing on the other side which can be attached in different ways. Although the small house is a conventional rectangular plan, by changing the position of a side porch, adding bay windows, different entrances and changing roof lines, a wide variety in appearance is achieved.

The fact that the project is laid out with curvilinear streets and large lots also makes it easy to achieve varying effects in appearance with only the two basic floor plans.

Interior variation in each of the two plans is necessarily limited but judicious choice of different types of stair rails, doors and trim, fireplace mantles, kitchen arrangements, lighting fixtures and built-ins add individuality to each

house. Home purchasers are permitted to choose interior decoration items such as wallpaper, light fixtures and linoleum for the kitchen. If homes are sold far enough in advance of completion, purchasers are also permitted to choose colored bathroom fixtures, and tile colors for the bathrooms

Lots in the Green Hill Farms project are 70 to 150 feet in width and 165 feet in depth. Basic shrubs and landscaping are included in the price of each house. Foundations are poured concrete, coated with Thoroseal on the inside. Basement floors are covered with asphalt tile as a standard feature. Floors are all 13/16 select oak and interior walls are plastered over gypsum lath. All bathrooms are completely tiled and glass enclosures for shower stalls and tubs and showers are standard equipment. Each bathroom is also equipped with infra-red and ultra-violet lamps.

Kitchen equipment includes adequate cabinets with a Formica counter top, an automatic dishwasher and a gas range.

McClatchy is a firm believer in installing quality equipment and using only the best materials in his houses. He has found that when he does this he can advertise and promote his special features to prospects and materially reduce sales resistance. One of the features of all his houses which he gives a great deal of attention to in his promotion is Webster baseboard heating. Although he freely admits that the original installation cost on this type of heat is substantially more than it would be for some other systems, he has been able to capitalize on it as another of the major features of McClatchy houses. His advertisements refer to it as "perimeter heating," a term which inspires curiosity in the minds of interested home seekers. Water for the





THE second or "small" basic house being built in this well-planned subdivision. Base price on this model is \$28,900

Webster baseboard heat in McClatchy houses is heated with G.E. gas-fired boilers.

Other special features which receive much attention in advertising are exhaust fans in kitchens and powder rooms, mirrored panels over marble and tile fireplaces, mirrored doors on master bedroom closets, door chimes and recreation room facilities.

After describing environment, layout and location of the Green Hill Farms project in one of his large newspaper display advertisements, McClatchy discusses his houses as follows: "Quite as important, we think, are those added features built into these homes—features which you will not find—in total—in any homes at comparable prices. We invite you, just as we have invited the happy families who have already selected their homes in Green Hill Farms in Overbrook—to visit all other four bedroom two-bath houses and then compare their features with the check list below." A detailed list of the special features of McClatchy houses then follows. Closing line in the advertisement is usually: "Comparison proves that McClatchy gives more value for your home dollar—always has and always will."

BED ROOM 12-6*x12-0* BED ROOM 12-6*x9-0* BED ROOM 12-6*x9-0* BED ROOM 12-6*x10-1* BE

FIRST FLOOR PLAN

THIS house is offered with four different stages of interior completion. Base price is for four bedrooms, 2 baths and a powder room. Highest price of \$32,700 includes four bedrooms, three baths, powder room, finished den, and a double deck porch

Branded Products Used in McClatchy Houses

American Standard plumbing

Anderson gas ranges

Armstrong linoleum

Bradford 40-gallon gas-fired hot water heaters

Briggs bathtubs

Donley area walls

Edwards door chimes

Eljer plumbing fixtures

Eller plumbing fixture

G. E. dishwasher-sink combinations

G. E. kitchen cabinets

G. E. gas-fired hot water boilers

J-M asbestos cement shingles

J-M insulating board sheathing

Keystone shower stall doors and bath tub enclosures

Leigh metal shutters

McKee garage doors

Sanitas wallpaper

Sargent hardware

Thorne aluminum double-hung windows

Thoroseal on foundations

USG lath

Voigt bathroom cabinets

Voigt exhaust fans in kitchens and powder rooms

Webster baseboard heating systems



TYPICAL street scene in Ellinor Village beach colony, a livable community of winding tree-lined walks and broad paved streets

WHEN a great deal of promo-tional literature announced the projected \$5,000,000 Ellinor Village development, the residents of the surrounding Florida communities assumed that it was just another paper project and that nothing more would be done. They had seen many projects of this type fall by the wayside in the past. However they failed to take into consideration the drive and enthusiasm of the promoter of the Village, Merrill F. Ellinor of the building firm of Shelfer & Ellinor, who is carrying out this project to a successful conclusion.

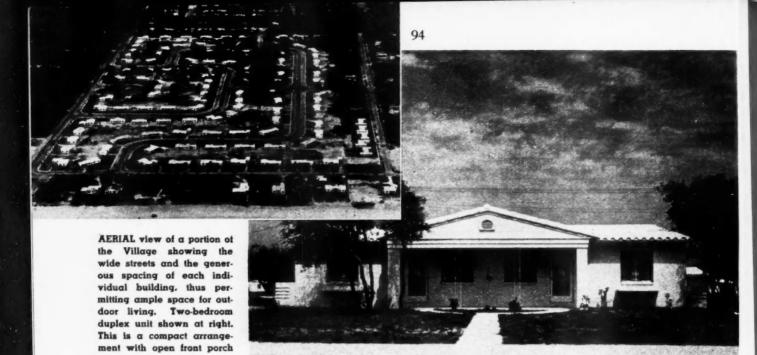
Long a resident of Florida, Ellinor never could find an ideal place for his family to spend a southern vacation where there would be bathing, fishing, various recreational activities and luxurious livOrmond Beach, Florida, is the site of a community of modern home-apartments which will eventually provide accommodations for more than 2,000 people

ing at a cost that the average American could afford. He felt there was a crying need for just such a vacationist's paradise and determined that some day he would create this Utopia. The result of this decision is Ellinor Village, an actual city composed of 650 modern home-apartments where everyday persons—Mr. Average Man and his family—can afford to spend a few weeks, a few months, or the remainder of his life.

Ellinor Village is situated be-

tween Ormond and Daytona Beach with the ocean on one side and the Halifax river on the other. It is one of the largest FHA 603 apartment operations in the South. The development consists of 283 ranch type buildings containing duplex, triplex and single family rental units. Each building is placed on a large landscaped lot with ample provision for each occupant to enjoy the maximum of outdoor living.

A great deal of thought was given to the planning of the Village by the architects and builders before any actual work was started. The number of plan variations was held to a minimum in order to produce the greatest economy in production. One- and two-bedroom plans were established for the duplexes, and a one-bedroom arrangement for the triplex.



ONE half of plan of one-bedroom duplex unit. Opposite half is identical. This arrangement provides maximum sleeping quarters within a limited area. Space heater is conveniently located at end of service hall

The single family house is a combination of two onebedroom apartments, with a large plaster opening cut through the wall separating the two units; thus one of the living rooms becomes a dining room, and one of the kitchens is used as a third bedroom making in all a six room house with two baths, two porches and a one car garage. The three basic units are arranged in relation to each other in a manner to provide a large number of variations in the exterior designs. This has been done to give the impression each building is individually designed.

Coloring of the buildings is carried out in the traditional Florida manner with pale pinks, blues, greens, yellows and white being employed on both walls and tile roofs. Furnishings are in keeping with the character of the apartments and are co-ordinated with the interior color schemes. Every unit is entirely modern, complete with an electric refrigerator, stove and hot water heater. An oil space heater is provided in the closet. Venetian blinds are furnished on all windows. Ample wall cabinets are installed in the kitchens.

A convenient schedule of rents has been established for all units. They are arranged to meet the requirements of every possible type of tenant. Based on a yearly rental the triplex apartment (which is the smallest of the group) containing living-dining room, kitchen, bedroom, bathroom and porch, rents for \$82.50 per month furnished, or \$57.50 unfurnished. The du-

MATERIALS AND EQUIPMENT USED

A. B. C. aluminum casement windows
A. B. C. aluminum screens
Briggs plumbing fixtures and trim
Hynes & Cox Red Crown water heaters
Peaslee Gaulbert paints
National Gypsum plaster base
Schlage & Dexter hardware
National Gypsum insulation
David E. Kennedy asphalt tile (Kentile)
A-B electric ranges
Globe American Safeway space heaters
R. G. Coffman ornamental iron
General Switch no-fuse load centers
G. E. refrigerators



VIEW of typical kitchen with complete facilities and equipment. Hot water heater at end of sink is encased in plywood cabinet.



THIS attractive duplex contains two one-bedroom apartments, one having an attached garage and breezeway, the other a porch

PLAN of building above containing two one-bedroom apartments. All rooms are generous in size with ample closet space for storage. The same room arrangement prevails for the individual house except that one kitchen becomes a bedroom and a plaster opening is cut between the two living rooms, making one into a dining room

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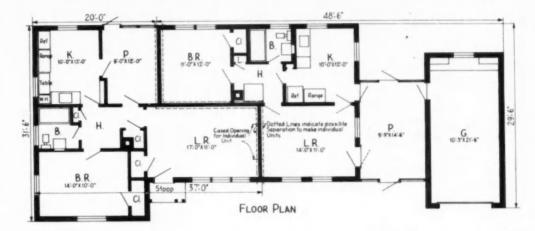
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plex apartment with one bedroom and garage, furnished, \$94.50; unfurnished, \$69.50. The same unit without garage, furnished, \$89.50; unfurnished, \$65.00 per month. The duplex apartment with two bedrooms, without garage, furnished, \$99.50; unfurnished, \$69.50. The individual house containing three bedrooms, two baths, dining room, kitchen, screened breezeway, porch and garage, furnished, \$195.00; unfurnished, \$135.00. Houses are basementless with a concrete slab over the

entire first floor and with asphalt tile cemented to slab. Exterior walls are frame with brick veneer facing. Roof areas are covered with clay tiles. All windows throughout are aluminum casement type. The building firm has employed the latest labor-saving devices and power equipment in all construction work. Precutting and site assembly methods are used to reduce costs and speed up operations. The original schedule accomplished in less than one year, attests to the success of these methods.



ANOTHER version of the two one-bedroom apartment building. The same design and plan are used for the individual house

Building Trades course offered by nonvocational school is paving the way to better training and background for—

Tomorrow's



BY ACTUALLY working on a house from foundation to finished trim, teen-age boys at the Deerfield-Shields Township High School, Highland Park, Ill., are learning construction techniques from skilled workmen on the job.

Though the school is non-vocational, the increasing need for more and better trained craftsmen in all the building trades is recognized by authorities of the school, and young men who care to enter the industry are provided with the best facilities available for learning. Supplied with modern tools and equipment, they

work with skilled tradesmen on the job, and receive instruction from Walter E. Durbahn, head of the Building Trades course, who has been a builder for about 30 years.

Durbahn, chairman of vocational training for the school, helped organize the course in 1925. At that time there was only one other school in the state with a similar course. Now there are about 25 schools in Illinois that offer this kind of training to students.

Since the organization of the course, students under Durbahn have completed eight homes, a large auto shop and bus garage for the school. This year 23 students finished a six-room stone front Pennsylvania Dutch Colonial house, and, as in the case of homes completed in the past, it will be sold to the highest bidder. Proceeds will go into public school funds.

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Main requirements for entrants in the class is that they have mechanical aptitude, sufficient interest in construction work, and that they have satisfactorily completed two years of regular high school work. Additional requirements are that the students enroll with the intention of completing two years in the building trades



EXCAVATION finished, school class begins work on foundation walls, and participates in every phase of building a house

Craftsmen





DON COLEMAN, popular athlete and good student, will be an apprentice mason after graduation from high school. Boys spend half day in classroom, and remainder of the day on the job working with experienced craftsmen

course, and that they plan to enter a trade. The students do not specialize on any one job, but do the work as it comes along, gaining practical experience in all of the trades involved in building a home. They work a half day on the job, and spend the other half in classrooms.

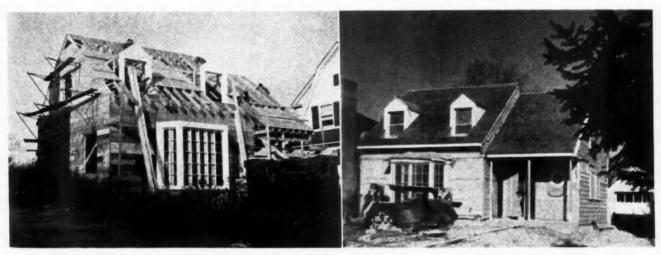
The objective of the course is to prepare the students for entrance into a building trade as an apprentice. Though most boys in Durbahn's class this year expressed the desire to go into a particular trade, some of them ultimately hope to be home builders in their own right. This latter attitude

was expressed by one student, 17year-old Don Coleman, whose father has been a mason for about 30 years.

"I'll be qualified as an apprentice mason when I graduate," he said, "and I suppose that will eventually be my trade. But if I go to college I'd like to study architecture and later go into home building."

Finishing his first year in the building trades course, Coleman had a typical background of courses as preparatory work. Courses included mechanical drawing, shop work, auto mechanics, principles of electricity, science and mathematics.

Durbahn times work on the homes so that they are finished, as nearly as possible, by the end of the school year. This gives the students the feeling of having actually completed the building from the ground up. "The ideal project," says Durbahn, "is the building of a two-bedroom house, a dwelling of about 15,000 to 20,000 cubic feet." He believes there should not be more than 16 students in a class, so each may get more individual instruction from him and a craftsman representative from each trade. He recommends that home plans selected for the project require the use



WORK by students progresses only after each job has had meticulous attention. Varied materials are used throughout

of many different types of materials and a variety of construction methods. "The frame house with shingle and siding exterior wall covering and possible asphalt or slate roof shingles are good," he says. The students do all the millwork for the house in the school's shop.

In addition to a building trades course, Deerfield-Shields High School offers a Carpenter Apprentice training course which young men out of high school may take. This year 22 apprentices graduated from this course. Enrollment for this phase of the school's training has steadily increased since 1946. That year there were 22 apprentices in training. In 1947 there were 51, and last year there were 75. This fall, the school expects even a larger enrollment in the course.

Apprentice training in all the trades is at present growing by leaps and

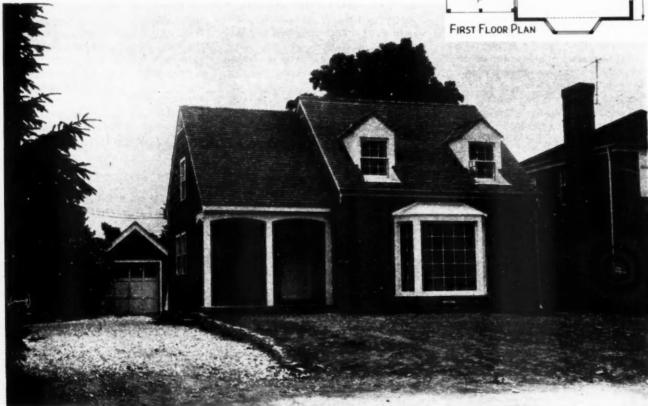
bounds, and schools such as Deerfield-Shields are doing an important job for the building industry. The need for highly skilled craftsmen who are prepared and willing to do a good day's work is constant. Schools can play a significant role by supplying these technically trained men, and by adding more prestige to the position in the industry that these men actually occupy. For schools that are helping, the building industry is grateful.



FLASHING is installed over bay window, left, as student's project this year nears completion

PLAN of home completed by high school boys is selected by head of course because it offers varied construction methods and use of many different types of materials. Home, below, has 10-inch reinforced concrete basement walls, with precast concrete floor joists under first floor. Gas-fired, forced warm air heating unit is installed. Boys made all duct work for heating system in shop

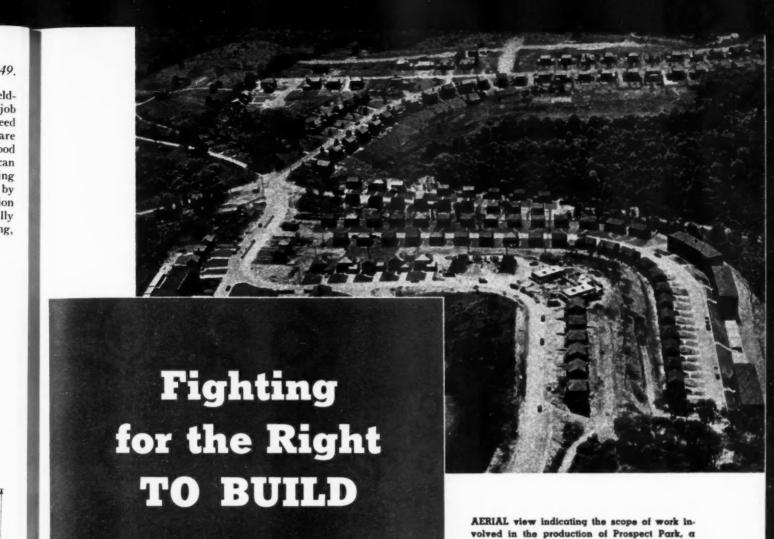




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BUILDERS of large developments will concede the fact that the greatest amount of time and energy expended in a project is devoted to the multiplicity of details involved in financing and obtaining permission from local authorities before a shovelful of dirt is turned.

This proved to be true in the case of Kovach and Benson, builders of Prospect Park, a \$5½ million development of single and multiple units in Whitehall Borough, a suburb of Pittsburgh, Pa.

Up until 1946 this area was composed primarily of individual home owners who did not want the sanctity of their domain invaded by renters.

When Lt. Col. Stephen Kovach, Jr., who was a builder prewar, took off his uniform and put on his "work clothes", so to speak, he found himself involved in a battle of wits greater than any experienced in the service. Having purchased a site that was ideal for apartment house development because of its accessibility to the

A Pittsburgh builder in the face of innumerable obstacles turns 95 acres of farm land into an address of distinction in two years

business area of Pittsburgh, he was not inclined to give up when his request for a change in zoning was refused by the local zoning commission. Rather it encouraged this builder to continue his efforts untiringly for a period of two years until he finally broke down all resistance.

To successfully carry out this large project, Kovach teamed up with J. C. Benson, a veteran realtor. A large part of the 95 acres is a plateau providing several near-level tracts. Concrete streets with curbs were laid and are being expanded as building proceeds. On the plateau, which commands an unexcelled view, three story apartments have been completed. These total 274 units of from one to five rooms

each. Most of these buildings are of the garden type with large courts and ample space for recreation.

development of single family, duplex and 603 apartment units. Photograph was taken during the latter days of the construction period. Note amount of fill and cut required for units

Surrounding the center plateau at a lower level are a series of two-story two apartment buildings. These are built on sloping terrain thus permitting garages to be built in the basements. A group of single family dwellings are built on approximately the same level as the three story apartments. The pattern of placement is not arranged in any uniform method. It avoids the stereotype effect which results when regularity is emphasized, and yet there is a distinct orderliness with regard to the entire development.

Prospect Park is composed of individual homes for sale and rental duplexes and apartments. At present 53 acres out of a total of 95 are completely developed. Eight acres of the 53 are used for recreational facilities such as children's playgrounds, mush ball field, and a picnic grove. The buildings com-



CLOSE-UP aerial view showing the bulk of the 608 development in process of construction. Entrance to Park is located at right hand corner of photograph

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pleted in Prospect Park include 35 single family dwellings at \$11,000, 5 singles at \$18,000, 32 half-doubles at \$9,500, 12 half-doubles at \$10,500.

The apartment and rental unit program is as follows: Prospect Terrace, 75 units; Parkline Courts, 41 units: Parkline Dwellings and Prospect Gardens (garden type 608's), 72 units; Sky-View apartments, 29 units; Skyline Courts, 44 units; Whitehall Dwellings, 105 units; new 608's now under construction to be completed in 1949total 273 units. The rental scale for the 639 units range from \$55 to \$125 per month, depending upon their size. At the main entrance to Prospect Park there is now under construction a shopping center and office building costing \$150,000

The entire building program is broken down by builder Kovach into six major building projects, each one of which has its own type of architecture and design. The single family dwellings and duplexes were completed first. The large apartment buildings located on the plateau were just recently finished. The shopping center which is the last of these projects is now in the course of construc-

Architect Clarence V. Blezard of Pittsburgh in designing all of the structures in Prospect Park has adhered to a general pattern of design throughout. The buildings are referred to as a modified adaptation of the Georgian Colonial style. This is typical of the Pittsburgh area where adherence to the traditional is implanted in the hearts and minds of the people.

No attempt has been made by Kovach or his architect to overemphasize the exteriors, the primary thought being one of economy with the maximum square foot area devoted to living space. Slight variations are made in the appearance of the individual homes and duplexes by changing the roof lines, entrances, window treatment and color schemes.

All of the buildings in Prospect Park are of masonry or masonry veneer construction. The single family houses and duplexes are of frame with four inch face brick exterior. The exterior walls of the apartments are of four inch face brick and eight inch backup block. Dividing walls between apartments are of cinder block (eight inches thick). All framing throughout is of wood construction; steel sash are used for all window openings, stairways are enclosed.

The apartments are among the most modern and best equipped in the Pittsburgh area. Floors are hardwood, doors are flush type, bathrooms have tile floors and wainscot, and each building has its own incinerator. Kitchens are completely electrical containing General Electric ranges, refrigerators and dishwashers. In the singledwelling units, a Bendix automatic laundry is also included. In commenting on this phase of his program, Kovach said, "Electric kitchens are good business. When people want something, it's a good idea to give it to them."

The apartment units range in size from the small living room, bedroom, kitchen and bath unit to the five room apartment with two bedrooms. Special emphasis is placed on large roomy, closets, adequate storage space and convenience in layout.



A HALF plan of each level of a compact typical duplex unit for an average family



THE 42 units of the Parkline Court buildings consist of one- and two-bedroom apartments that rent for \$70 and \$95 per month

All the latest labor saving methods in construction work were employed by Kovach and Benson in this project. This included site fabrication, precutting of materials and the extensive use of power equipment. Dirt moving machines were required because of the hilly nature of the building site.

BRANDED PRODUCTS USED

J-M asbestos shingles Fenestra steel windows

J-M Rockwool insulation G. E. refrigerator

G. E. stove

G. E. dishwasher

Bendix automatic laundry American-Standard gas-fired boiler

Overhead garage doors American-Standard bathroom fixtures

Kohler bathroom fixtures Armstrong linoleum





THE two apartment building with garage and 50x130 foot lot sells for \$9,500 a side 101

TYPICAL floor plan of one of the Parkline Court apartments. The other building is identical. A large center parking area surrounded on the open ends with an ornamental brick and concrete wall, except for the entrance and exit openings, is located between these two buildings



THIS typical single family dwelling with six rooms and basement garage, \$10.500

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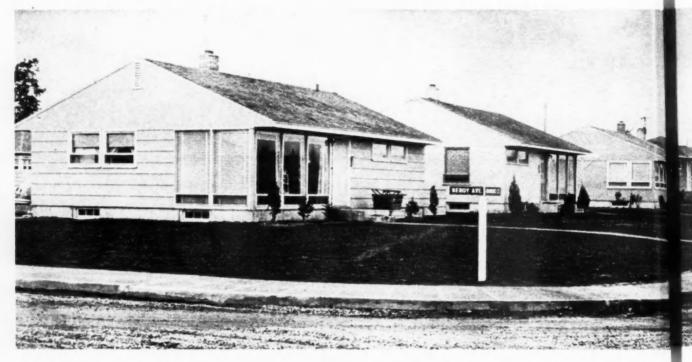
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133 Individual Houses that are Not For

Tenants enthusiastically approve these rental units where there are no restrictions against children, and conveniences of private homes are offered



TWO-bedroom homes in this project rent for \$75 per month; three-bedroom houses for \$85. Full basements are provided

MOMES in Wellesley Village, a 133-house project completed by Western Builders, Inc., Spokane, Wash., are not for sale. They are for rent only, and there are several reasons why they are finding ready tenant approval.

First, there are no restrictions against children or pets, and second, the rentals are reasonable. The two-bedroom houses rent for \$75 a month, and the three-bedroom homes for \$85. If a tenant wants a garage, it is built for him at a rental of \$6.50 a month. Corner dwellings carry higher rents than the other units. Ranges and refrigerators, included in the homes, are charged for at a monthly rate of \$5 a unit.

Most of the tenants in the homes average one child per family, and the average income per family is \$400. Many of the tenants are military personnel.

The curved streets of the Village discourage fast, through traffic, making it an ideal place for children to



live and play. The homes are well designed and have plate glass picture windows in the living rooms and high windows in the bedrooms for privacy and convenient placement of furniture. The living room picture windows are fixed with vents underneath for ventilation.

Full basements are provideû in the houses, with coal burning furnaces and laundry trays. Exteriors are machine-grooved shakes or plywood, in combination with some brick veneer. Roofs are cedar shingles.

Hardwood floors, storage wall cabinets, linoleum counter tops, showers over tubs, clothes poles and lines are attractive features to tenants. Lawns and trees are planted.

R. Kline Hillman is president of Western Builders, Inc., and Leo Higbee and Wells Huntley are vice-presidents. Seventy homes in the project were built with a prefab technique, using plywood in stressed skin construction on both sides of studs. The other 63 homes were built conventionally. Gypsum board is used for interior dry wall finish. The company does its own carpentry and concrete work and sublets all the other jobs.

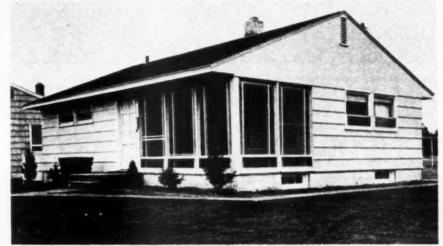
The company takes care of general maintenance of the dwellings, but the renters tend the furnaces and lawns and shovel snow.

Leases are on a 12-month basis. Huntley points out that since the houses are individually financed, they can be sold. If they were to be sold now, the price would be around \$8,500 for the two-bedroom homes.

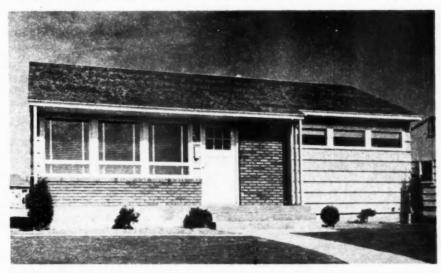
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CURVILINEAR streets discourage fast through traffic in Wellesley Village



VENTS are provided under the large plate glass picture windows in the living rooms



EXTERIORS are machine-grooved shakes or plywood. Here, brick veneer is used



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DEALERS Yaeger and Laws, extreme left and right, tripled their business by building new store and offering special services

New Store Offers Special Services to Builders

NCREASED volume of business in a short period of time has proved to this building materials firm that special services make a hit with builders and contractors.

Since the dealers, Laws & Yaeger Co., moved into their new Santa Rosa, Calif. store, drop-in trade has tripled. The volume of paint, hardware, and miscellaneous items sold has increased more than 300 per cent.

Special services offered builders by the firm include leads on prospective home owners, assistance in the arrangement of financing, advice on construction, and information on the latest materials. Moreover, a builder or contractor does not have to look through a maze of disorganized counters to find what he wants; nor does he have to wait long for delivery.

Provisions for these numerous services are credited mainly to the advantages of a well-designed store. Ample floor space is devoted to eve-catching

display counters and islands, and to conveniently arranged offices which are departmentalized. Several small offices are at the disposal of contractors and prospects, and may be used for the discussion of building plans or for the transaction of other business. Ceilings of the offices, which are located at the back of the store, are furred down and lined with attractive tile. Translucent glass windows let in light but shield the offices from the view of customers. Glass brick are used in some of the walls along the back of the store for the same purpose. Sound-insulating partitions are used where toilet walls adjoin offices.

All merchandise in the store is displayed in an orderly manner. The main displays are on 4x7-foot islands, 32 inches high; others are on numerous 3x3 and 4x8-foot platforms, 12 inches high. These islands and platforms are in the forepart of the store.

"Our display room is invaluable as a means of providing information on new materials," says Steve Yaeger, store manager. "It is surprising how many people just browse around to get ideas for use in their contemplated building." Well-organized, the displays offer the builder convenience in selecting materials.

Walls and ceiling of the display room are plastered. The floor is asphalt tile. Light is provided by four rows of fluorescent tubing.

Another special service is a plan book department from which the firm sells and loans books displaying stock plans. These plans are ordered from agencies at nominal cost, and are delivered usually in three or four days after they are ordered. A table and chairs are available, and often, according to Yaeger, prospects will spend hours in this section, going over house plans at their leisure.

Facilities in the firm's lumber yard

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FLOOR PLAN is designed for customerconvenience. Small offices at rear of store are for use of builders and home buyers who wish to discuss building plans. Cashier counters are placed at rear so that clients must first pass display counters

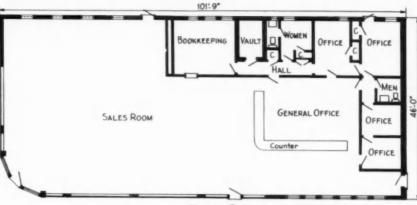
are equally as efficient as those in the store for offering convenient service to clients. A new type life-truck enables the dealers to make up unit loads in advance of orders. These loads may be lifted on a truck within a few minutes after being ordered. The exact amounts that will be needed for a job cannot be anticipated, but the loaders can estimate closely

enough so that only the adding or un-

loading of a few pieces is needed to

make the order come out right. For example, units of 300 2x4 eight foot studs are made up, as well as 1,000 board feet 2x4's for plate stock, and 2,000 foot loads of 1x6 boards. These units are usually fairly close to the amount required for the average house, Yaeger says. No matter how small or how large an order may be, immediate delivery is given. For contractors who haul their own material, a staff or yard clerks are on duty to

Additional stimulus to business has been through advertising. The firm advertises weekly in newspapers, and, in addition, sponsor a five minute radio program each week. Because of the many calls which come as a result of advertising, they have installed a switchboard. The operator refers calls to the proper department of the store, and thus saves time for the cus-



FLOOR PLAN

The operator also is receptionist.

In addition to the lumber yard, the company operates its own planning mill and has a separate building for the sale of glass. Laws & Yaeger have had an office and warehouse on the site for a generation. After the war, with the greatly increased building activity, they wanted a "one-stop" store where home owners doing repair work and builders could get almost anything they needed, quickly and conveniently. They gave their ideas to C. A. Caulkine, Jr., architect of Santa Rosa, and he came up with plans for the present store. The store was constructed by Robert R. Todd, who is a local contractor.

Builders and contractors are not unique from any other clients, in that they react favorably toward good salesmanship. That is the essence of the Laws-Yaeger business - expert use of sales techniques. And they have started emphasizing sales without waiting for competition to tighten.

"Lumber from Laws-You'll be Satisfied"—has long been a slogan cf the Laws & Yaeger Co. From the appearance of their new store, and from the way clients are accepting it. an additional slogan might well be written about satisfaction through special services.



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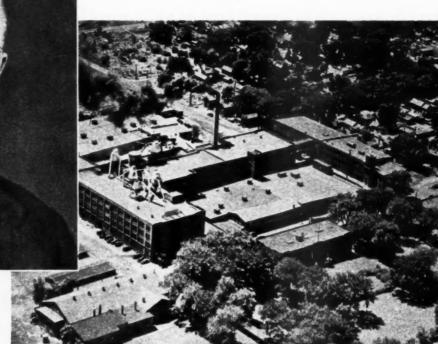
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Pioneer Master



H. H. (HAL) HOBART, vice president and general sales manager of Curtis Companies Inc., who retired July 1

AIR VIEW of Curtis plant at Clinton, Iowa. Curtis also has plants at Chicago, Ill.; Wausau, Wis.; Minneapolis, Minn.; Sioux City, Iowa; Lincoln, Neb., and Topeka, Kas.

PIONEER, who leaves in his A wake an ever-broadening 40-year record of contributions to high standards and ethical promotion in the woodwork industry, retired July 1. Employed by Curtis January 1, 1910, H. H. (Hal) Hobart, with his enthusiasm for progress and intense loyalty to ideals, has played no small part in making Curtis Companies Incorporated, Clinton, Iowa, one of the world's largest woodwork manufacturing firms. He is known to thousands of retail lumber dealers and other industry personnel in all sections of the United States.

Drawing on an accurate memory, Hobart can recite many interesting facts about the industry during the period he has been associated with it. He has always been extremely interested in new processes and new products. His present age and the many years he has been merchandising woodwork have not in the least dulled his enthusiasm for the very latest in sales techniques or the newest of products.

Sending young Hobart "on the road" in March, 1910, was an experiment for the Curtis brothers. There were few complete catalogs at that time and very few stock items, nor any stable price lists as we know them today. Woodwork was sold to dealers for specific jobs and made in specific sizes to fit requirements of the jobs.

It was often the salesmen's wits against those of the buyer which became the determining factor in the size of the net for the woodwork manufacturer.

The first territory Hobart traveled was west from Clinton, Iowa to Des Moines and south to Kansas City on the Milwaukee line with the return frip on the Rock Island. All travel was by rail and the salesman's time was guided entirely by train schedules. If he was on a good railroad line and budgeted his time properly he was able to make a maximum of about three towns a day. Frequent over night stops were made in small towns with limited hotel facilities.

'There was nothing wrong with the retail lumber dealer then any more than there is now," says Hobart. "The dealer did very little merchandising because the training he received from most manufacturers was about as bad as his merchandising, if judged by today's standards. There was little help from lumber or millwork manufacturers.'

The mail order firms, however, were selling hard on the idea of home ownership to the consumers. These same firms were also selling readycut houses to tie in with the home ownership sales theme.

Shortly after Hobart went on the road as a salesman, a mail order firm issued a price book which, at a casual glance, seemed to drastically underprice all other firms, including Curtis and similar manufacturers. It took a good salesman and a good mathematically-minded dealer to figure total costs from this catalog. It lacked full and complete information on just what the prices did include. When prices were featured on frames, for example, the price was on the smallest frame made and one which was seldom used in a house. The price did not include pockets, pulleys and many other items that gave the true price of the frame. When these extras were added, the so-called low price dis-

appeared entirely.

Early in 1913, G. L. Curtis, president of the firm and now chairman of the board, wanted to do more to help dealers combat mail order competition and to improve their sales methods so they might become better merchandisers. He gave Hobart his choice of taking a job as assistant sales manager, or managing a new department - which later became known as the Curtis Companies Service Bureau. Hobart chose the latter job because he felt that if he made good it would lead him back into sales work-with a much wider experience. This new department-the Curtis Companies Service Bureauwas established and was one of the first moves by a manufacturer to help lumber retailers merchandise a manu-

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Woodwork Merchandiser Retires

facturer's product. To set up a standard merchandising program, it was soon apparent that the woodwork line had to be standardized as much as possible. Glass sizes, rail sizes, sticking, and other components of millwork, were standardized by Curtis. This later led to the establishment of a stock line of architectural woodwork -also a first and pioneer effort. Colonnades, doors in several styles, and other items were manufactured and put in stock so shipment on the standard items could be made promptly. Previous to this time most woodwork was made to order, with the attendant delays in making shipment.

Standardizing items for pricing and stock production made it possible to issue a catalog for woodwork-a catalog with illustrations, specifications and list prices. In 1914, Hobart completed and published one of the first complete woodwork catalogs. He had handled all preparation on the catalog, correspondence and details incident to standardizing and pricing all the items. It was a monumental task at that time but it proved extremely popular with dealers and all buyers of woodwork. Hobart recalls that it took an unprecedented amount of nerve for a manufacturer in those times to print prices with pictures and specifications on his products. The principal tool used by most salesmen then was price-the lowest price usually got the order.

Despite these circumstances, however, this early catalog issued by Curtis resulted in a tremendous increase in sales volume. About the same time the catalog was issued, Curtis announced the publishing of two plan books called "Attractive Bungalows' and "Home Like Homes." These offered a series of stock house plans for dealers to use in selling the consumers. It was another phase of the plan to give more merchandising assistance to retailers. This led to a long series of plan books called "Better Built Homes," which were con-tinued for 22 years. Dealers sent the names of good new home prospects to Curtis and the firm then forwarded attractive booklets and literature to them. This program is considered a major factor in the growth of the Curtis business. It was supplemented by advertising in farm journals at the start. This proved successful so the advertising program for consumers was broadened to include other media. The trade press had always been included in the firm's advertising promotion. Since this program was started before World War I. Curtis has always been a consistent national advertiser. The first advertisements featured homes and not products. Shortly after the program was launched, however, policy changed to promote specific Curtis

In 1917, Curtis was convinced that it was necessary to retain architects to obtain well-designed woodwork to maintain progress for the firm in the post World War I period. Up to this time, most products were of "planing mill design," limited by the machinery and tools immediately available. Architects were retained by Curtis and a new era of high standards in quality and design was started. Some of the designs in the 1920 catalog. which architects helped prepare, still lead in sales after almost 30 years.

Also during the World War I period, the firm was attracted by the large eastern market. Hobart then got back into sales work and was given the management of sales in all undeveloped territories which consisted mainly of states east of Ohio, south of the Mason-Dixon line, and the far west. In 1927, Hobert, was named vice-president in charge of sales and advertising on a nationwide basis. Since that time Curtis distribution has grown until it now is national in scope. Since 1939 there has been little broadening in the firm's distribution setup. The severe shortages following World War II forced distribution to those dealers who had been served before the war This condition is changing now, of course.

Hobart attributes much of his success as a sales manager to a religiously firm policy of fair play at all times and under all conditions. To this, he says, must be added the progressive-mindedness of the firm's management, particularly that of G. L. Curtis who was president during the time many of the "firsts" in merchandising practices were being inaugurated prior to and during the World War I period, and to E. J. Curtis, now company president.

When leading architects were retained to design architecturally correct woodwork in 1917, the basic thought was to make it possible for the small householder to buy attractive and well-designed woodwork at economical prices. Such a thing would add to the beauty of the small home and in time contribute to the



I. H. RAMSEY, newly-appointed general sales manager for Curtis Companies, Inc.

appearance of all the homes in the country as well as add to the pleasure of the people who live in them. "G. L. Curtis was emphatic," Hobart states, "in his idea of offering more value for the money in Curtis woodwork."

Hobart inaugurated the first sales course for lumber retailers and in 1922 the first perpetual inventory system for them. He also started the dealers in preparation of attractive office displays to help sell products.

In the period from 1917 to 1949, Hobart has watched with keen interest the immense strides made by retailers in their merchandising techniques. He is proud of the fact that today some dealers have stores that equal or surpass the facilities for sales of department stores and mail order houses in their communities. He does not feel it is necessary to teach merchandising to today's dealers. He does feel, however, that it is necessary to constantly remind them that they must advertise and promote intensively and constructively.

For years Hobart says he has looked forward to the time when he could retire. Now that the time has arrived he reports that he does not know what he wants to do, although for the immediate future he will play golf, fish and take several extensive trips along the west coast of the United States.

The new general sales manager of Curtis Companies Incorporated, is I. H. Ramsey, who has been with the firm for 21 years. All of his experience with the firm has been under Hobart-from the time he started as a salesman in New England.

How Contractors and Dealers Influence Wholesale Prices

Selling is the key to production and production is the key to price

DEALERS and contractors play a significant but unrecognized role in the wholesale price structure.

When dealers and contractors maintain a high volume of sales through alert salesmanship, they help manufacturers sustain production, which is the only way to realize the economies of mass production.

In general, as production increases, unit costs drop; conversely, as production drops, unit costs increase; and unit costs necessarily are reflected in the wholesale price of any commodity.

Wholesale prices of building materials have followed a highly irregular pattern since 1941. All materials have increased in price, some spectacularly. A few materials have continued to sell at low wholesale prices in the face of sharply increasing manufacturing costs and despite a demand which would not have diminished even if prices had advanced sharply.

By and large, the increase in prices has been in keeping with the inflationary trend of the country's economy. Uninformed critics of the building industry to the contrary, it has not been reasonable to expect building material prices to stay down while prices of goods in other categories have gone up.

Today, manufacturers of building materials face a buyer's market. The demand is for lower prices, and in recent months, moderate declines have occurred. The composite index for all building materials, as reported by the Bureau of Labor Statistics, shows a 7.5 per cent drop from the peak in September, 1948, to April, 1949.

While the insistent demand for lower prices continues, it would be foolhardy to think that prices of building materials will drop with any more uniformity than they increased. And certainly, prices will not return to prewar levels, any more than will the price paid for pork chops, or for a day's labor.

As a matter of fact, it would not be surprising to see some building materials increase in price. A drop in production of any magnitude may make it impossible for manufacturers to continue to absorb the increases in unit costs which high volume has permitted them to do so far.

The record of the asphalt roofing industry is perhaps the best example to cite to prove that production is really the key to low price. Perhaps no dealer or contractor was able to get all the asphalt roofing he would like to have had or could have sold in recent years, but none failed to get more than he ever had before. Manufacturers had to take up the slack created by the virtual disappearance of other roofing materials, and meet the demand of a war economy.

How unparalleled demand affected shipments of asphalt strip shingles is shown by the solid line on Chart 1. Shipments in 1937 were slightly more than 7 million squares. They continued to increase year by year until they exceeded 28 million squares in 1947, an increase of 303 per cent in 11 years.

Unit costs also were setting new ceilings while the industry was establishing successively higher records of shipments, as shown by the broken line on the chart. At the end of 1948, a large multiple line manufacturer, generally recognized as an efficient, low-cost producer, reported that unit costs were 39 per cent higher than in 1937.

In the meantime, the wholesale price of asphalt strip shingles (shown by the dotted line), as reported by the Bureau of Labor Statistics, had advanced only 7.8 per cent, considering the 1937 price as 100 per cent. In relation to 1926, the year on which the Bureau computes the rise and fall of wholesale prices, strip shingles were up 5.7 per cent.

Unparalleled demand for asphalt roofing products and record shipments in recent years enabled asphalt roofing manufacturers to keep prices low, despite a sharp increase in the cost of raw materials, labor, taxes, and the many other factors which enter into unit costs. In other words, manufacturers were able to take a lower net per square of roofing shipped because volume was high.

But Chart 1 tells only a part of the story. It will be noted that shipments of asphalt strip shingles in 1948 were less than in 1947 by about 2 million squares. The seriousness with which manufacturers viewed this drop is not apparent until Chart 2 is studied. This chart shows shipments month-by-month from January, 1946, through the first quarter of 1949.

After setting a new monthly record of more than 3 million squares in August, shipments dropped precipitously until the "bottom fell out of the roofing business in November."

Figures tell a better story of the first quarter of 1949:



HOME building activity reached a new high in 1948

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1949:

Year First Quarter Shipments
(Thousands of Squares)
1946 5,146
1947 6,552
1948 6,476

In one year, first quarter shipments of asphalt strip shingles dropped 40 per cent.

3,938

What happened to unit costs? Though many economies were effected, unit costs climbed to an all-time high, 44 per cent above 1937, and five per cent higher than the average for 1948. In part, this was due to the fact that dealers refused to stock roofing during the winter months, apparently in false anticipation of a break in the price of an already low-priced commodity. However, the Bureau of Labor Statistics reported that the April price of asphalt strip shingles continued to be 5.7 per cent above 1926.

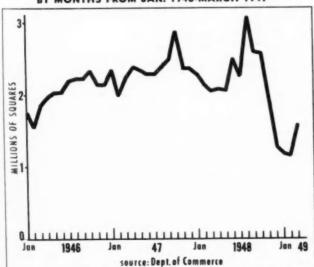
The answer to a continued low price for asphalt strip shingles is just what it is for other building materials that are low in price because of high volume. The answer, obviously, is continued high production. High production permits a manufacturer to take a lower net and absorb higher unit costs. Lower production means that it may be necessary to pass some of the cost on to the consumer through a higher wholesale price to the dealer.

The answer to high production is more aggressive, more enlightened salesmanship, and more teamwork between manufacturers, dealers, and contractors to earn a higher share of the consumer's dollar.

And a dealer or contractor doesn't earn a higher share of that dollar by waiting for the consumer to come to him. He earns a higher share as he calls on the consumer and sells a new roof before a new roof is a necessity, or sells new siding or insulation. The well organized, aggressive roofer, siding and insulating contractor has only one thing on a dealer or local contractor—he makes calls and sells harder to get the business. An aggressive roofer succeeds only where the dealer or the contractor fails to do an intelligent selling job.

The key to low price is high production. The key to high production is salesmanship. And salesmanship, high pro-

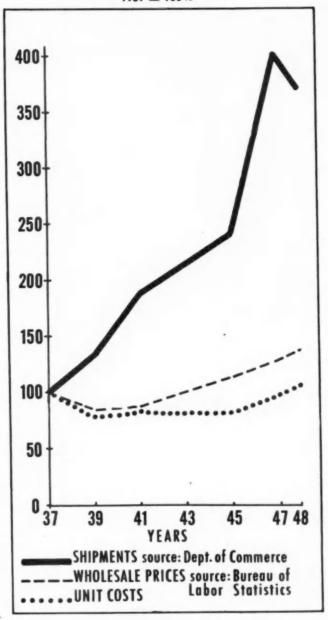
SHIPMENTS OF ASPHALT STRIP SHINGLES BY MONTHS FROM JAN. 1946-MARCH 1949



duction, and low price are good answers to those who believe the solution to our problems is socialization of the building industry.

The American system of free enterprise cannot be

SHIPMENTS, UNIT COSTS AND WHOLESALE PRICES
OF ASPHALT STRIP SHINGLES
1937 = 100%



healthy and prosperous if production is geared to a prewar, pre-depression plateau. Vigorous, intelligent salesman-

| Year | Shipments | in Shipments | Unit | Wholesale | | |
|------|------------------|---------------|--------|-----------|--|--|
| | Thousands | of in Percent | Costs | Price | | |
| | Squares | | | | | |
| 1937 | 7,009 | 100% | 100% | 100% | | |
| 1939 | 9,353 | 133% | 85.5% | 79.3% | | |
| 1941 | 13,242 | 189% | 88% | 83.8% | | |
| 1945 | 16,924 | 241% | 113.7% | 83.1% | | |
| 1947 | 28,278 | 403% | 129.7% | 98.4% | | |
| 1948 | 26,225 | 374% | 139% | 107.8% | | |
| 1949 | 3,938 | (1st qtr.) | 144% | 107.8% | | |

Sources: Shipments—Dept. of Commerce. Wholesale price—Bureau of Labor Statistics. Unit cost—an asphalt roofing manufacturer.

ship is the key to an economy which is based on mass production, mass distribution, and mass consumption.



PATIO is accessible from three rooms through sliding doors. Brick at entrance adds variation in lines of aluminum siding

Model Home Stimulates Sales

THREE advertisements in local newspapers, drew more than 10,000 visitors to the model house built by Platt & Goheen in Walnut Creek, Calif., a 30 minute drive from Oakland. The house was described as a "Home of Spacious Outdoor Living."

The exterior design of the house follows the general pattern established in the area for a one-story structure. Long, low roof lines give the effect of the house literally growing out of its site. Wide projecting roof eaves shelter the windows from the direct rays of the sun. Where there are no windows, such as in the garage, the roof line is cut back to the wall.

Aluminum siding was used on the exterior side walls; it provides a deep shadow line. Pattern brick comprise the walls surrounding the front entrance and break the monotony of the horizontal lines of the siding. The planting box below the kitchen window provides a colorful note to the entrance motif. The roof which is covered with a built-up surface has an imbedded aggregate that sparkles in the sunlight. The pitch of the roof is kept fairly flat to further reveal the characteristics of the house.

(Continued on page 150)



ROOM arrangement in this floor plan makes for convenient outdoor living

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TECHNICAL GUIDE for Builders and Craftsmen

How to Figure Cabinet Space for Urban Kitchens

A STUDY of the amount of cabinet space required in kitchens for urban family use, in terms of factory-built cabinets, has provided data which can be used as a primary step in establishing kitchen planning standards.

To permit flexibility in the study of storage, two representative lists of packaged foods, utensils and cleaning sup; lies were used—limited and liberal. The lists, based on previous research, are not minimum and maximum; either is sufficient for preparing and serving meals without waste of time or motion. The number of items hasbeen set as follows: Packaged foods—limited, 100; liberal, 156. Fresh, non-refrigerated foods, 6 and 8. Utensils, 84 and 114. Cleaning supplies, 9 and 12.

Ample space requirements are recommended for either the limited or liberal list. If minimum space requirements are used, provision should be made to increase space later.

Total storage allowance should always equal, or exceed, the standards given; specified totals should not be reduced.

In planning a house for an undesignated owner, space for a dinnerware service of eight should be allowed.

Whenever kitchen arrangement permits closely related centers to be adjacent, combined storage specifications for wall cabinets should be used.

To fulfill the storage specifications given in the charts: Count only wall cabinets which are at least 30 inches high. Do not count an over-refrigerator cabinet, usually

Individual Centers

| | SERVE | RANGE | SINK | MIX | TOTAL | | D | INNE | RWAR | E |
|-----------------------|-------|-------------------------|---|------|--------|---|-----|------|------|-----|
| Ample Space | | | | | | | 4 | 6 | 8 | 12 |
| LIBERAL SUPPLIES Wall | 27" | 21" | 15" (1/s shoff unused) | 30" | 7' 9" | | 24" | 36" | 48" | 72" |
| Base | *30" | 18" | 78" (Count only 36" under sink bowl) | *36" | 13' 6" | _ | | | | |
| LIMITED SUPPLIES Wall | 21" | 15" | 15" (1% shelves unused) | 24" | 6′ 3″ | T | 24" | 36" | 48" | 72" |
| Base | *24" | 15" | 60" (Count only 30" under sink bowl) | *33" | 11' 0" | | | | * | |
| Minimum Space | | | | | | 1 | _ | | | |
| LIBERAL SUPPLIES Wall | 21" | 15" | 15" (1½ shelves unused) | 24" | 6, 3, | | 21" | 30" | 42" | 60" |
| Base | *24" | 15" | 66" (Count only 30" under sink bowl) | 27". | 11' 0" | _ | | | | |
| LIMITED SUPPLIES | | | | | * | T | | | | |
| Wall | 15" | 15" (I shelf unused) | 15" (2 shelves unused) | 18" | 5' 3" | | 21" | 30" | 42" | 60" |
| Base | * 18" | 15" | 48" (Count only 24" under sink bowl) | 21" | 8, 6, | | | | | |

Some space unused

Storage space is considered ample when supplies can be stored without crowding and with practically no stacking of unlike items. Minimum storage is defined as requiring the crowding together of some items and the stacking of some unlike items.

In conjunction with use of the charts, the following information should be considered:

For families of less than four, cabinet widths for the limited lists of supplies should be used; for larger families, four to six, the liberal list.

18 inches or 24 inches high.

Because they are more easily accessible, use drawers in preference to shelves for most base cabinet storage. These should be fitted with dividers where needed.

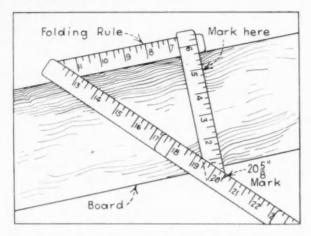
No shelf should be higher than 72 inches from the floor. To make this possible, wall cabinets should be placed not more than 15 inches above the counters of base cabinets.

The above material is reprinted by permission of the University of Illinois Small Homes Council from its circular C5.31, "Cabinet Space for Kitchen." Other circulars available for 10 cents each. Write Small Homes Council, Mumford House, University of Illinois, Urbana, Ill.



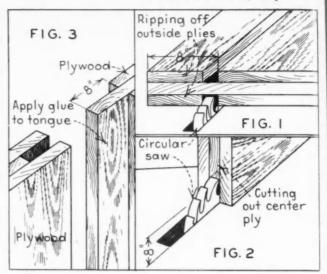
TECHNICAL GUIDE for Builders and Craftsmen

(The following four suggestions were submitted by Herbert E. Fey New Braunfels, Tex.)



How to Square Boards with Folding Rule

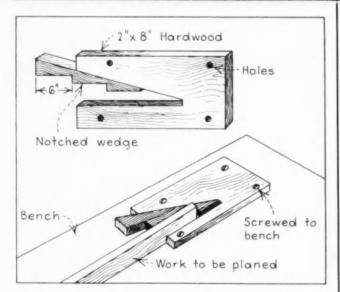
IN CASES when no try square is available, narrow boards can be squared by using a folding rule in the following manner: Open rule and hold second section against edge of board. Then bring outside corner on end of first section in direct line with the 205% inch mark on the third section (see diagram). Mark along outside edge of first section to get a perfect right angle.



How to Splice Plywood To Form Large Panels

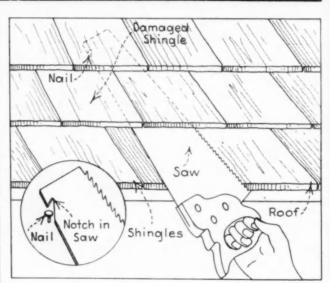
WHEN a plywood panel larger than any available is needed, it can be made by splicing together two pieces of plywood. First, a tongue is formed on one piece (Figure 1) by removing top and bottom ply with a circular saw. In Figure 2 a groove is made by cutting out the center ply to a depth of about eight inches. The panel is assembled (Figure 3) by coating the tongue with glue and pressing it into the groove. After the glue has dried, the joint is sanded.

HOW TO DO IT . HOM TO DO IT . HOM TO DO IT . HOW TO DO IT



How to Make an Adjustable Clamping Jig

THE JIG illustrated above is very useful for the planing of long work, and in cases where bench vises are not suitable for large work. In construction, one side of the cutout portion which is screwed to bench is beveled at a 25 degree angle to form a keyway in which the stepped insert, also beveled on back face will be held. The insert should be just wide enough so that, when advanced nearly to the apex of the inside cutout, it will hold narrow work securely. Steps are ¾ inch wide and hold boards of various widths securely in place for working.



Removing Damaged Shingles With Notched Saw

A SAW with a small notch filed on the back can be used to remove damaged wood shingles in a way which makes replacement simple. The notch is filed to only a size large enough to allow hooking over nail. Saw is forced under shingle. A quick pull or jerk on saw will slip off nail, permitting damaged shingle to be slipped out and another inserted in its place. Adjoining shingles are not damaged.

A LUM wood, require paper placed sheath directl nailed

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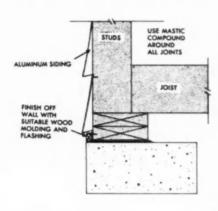
Method of Applying Aluminum Siding

LUMINUM siding may be applied A to studs, or to sheathing made of wood, wallboard or equivalent where required by local building codes. Tar paper or building paper should be placed on the outside of the studs or sheathing. The siding is then applied directly over the building paper and nailed through to the studs or sheath-

Window, door and gable end frieze flashings, inside corners and outside corners, are installed before the siding is applied. However, profile corners, when used, are applied after siding is in place. Likewise, the strip or trim used with window and door flashings is applied last. If wood trim is employed on inside and outside corners, it should be installed first, then

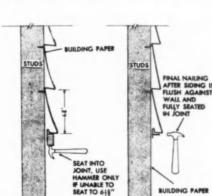
This distance should be divided by the covering width of the siding (6-15/16 inches) to determine the number of full width courses to or near the roof line.

If the top course then turns out to be less than 6-15/16 inches, up to



DETAIL of finish of siding at foundation

four inches may be cut off the upper edge of the top course and a suitable wood molding nailed on to cover the top edge of this starting course. But, if it is necessary to cut away more than four inches, the wood molding should be of sufficient width to eliminate the top course and lap the upper part of the next (full) course down.



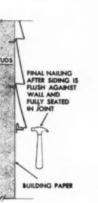
TYPICAL wall application of siding

It is important at this point to make sure that siding is applied perfectly level so that the following siding will follow the same true parallel lines. The use of chalk lines, approximately five per building face or story poles will provide a ready check of work during construction. The top edge of the second course of siding is then inserted in the slot of the first and in so doing the bottom edge of the second board will curve outward.

By pressing the lower edge into position ready for nailing, the radius in the siding is partially removed, creating a tension in the joint which provides a tight, weatherproof joint and eliminates any possibility of looseness. The same installation procedure is continued down the face of the wall. The siding should be inserted to the full depth of the slot. If any difficulty is experienced in seating siding to 6-15/16 inch coverage, this may be facilitated by a light tap of a hammer on a block of wood placed under the lower projection of the siding (see nailing details).

Molding not more than 7/8-inch thick should be applied to cover for sealing the final nailing face (wall sill details).

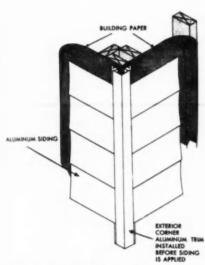
For better paint adherence and bond, the siding should be finished with a prime coat of zinc chromate paint. Before applying finish coats, the surface should be wiped down with mineral spirits or high flash naphtha to remove any grease or dirt which may have been deposited on the



DETAIL view and plan of outside corner

siding during installation. Siding is then ready for finish coat of paint. Because of its non-porous surface, aluminum siding requires less paint than porous materials.

(Data and drawings through courtesy of Per-manente Products Co., Kaiser Bldg., Oakland 12, Calif.)



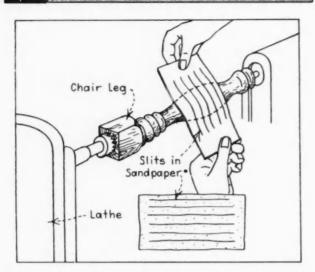
METHOD of application using corner trim

flashed with the aluminum flashing in the same manner as used with window and door openings.

The siding should not fit too snugly at the ends. It should be cut from 1/16 inch to 1/8 inch short to allow for breathing of the wall. The trim strip will cover the gap. This also provides for easier installation of the siding. Butt joints in sections of the siding should all be cut with approximately a 1/16 inch gap to allow for expansion. The back-up plate will cover the back of this joint and make it weather-tight.

Aluminum siding is applied from the top down. To eliminate unnecessary cutting of siding over window and door openings, a reference line should be taken at the top of the openings which occur with the greatest frequency at one level. Measurement should be taken from this line to the starting point of the siding.

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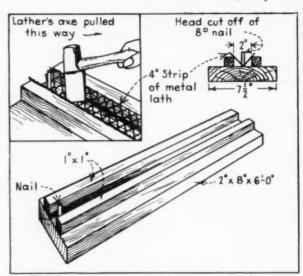


How to Sand Irregularly-shaped Turnings

LATHE turnings which are irregular in shape, such as table or chair legs, can be sanded by use of a strip of sandpaper in which several slits have been made. The slits should be spaced about one inch apart, ending about an inch from the edges of the paper. When the work rotates the slits in the sandpaper permit adjustment to the varying shapes and diameters. Herbert E. Fey, New Braunfels, Texas.

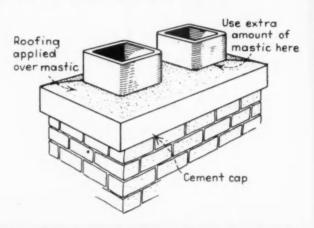
How to Protect Chimney Tops

DAMAGE to chimneys can be minimized if adequate protection is provided for the cement chimney cap. This can be accomplished by application of a good roof mastic over the tops of chimney cap surface, using an extra amount next to the flue, and covering the mastic with several plies of roofing felt. The roofing material will slow the drying process of the mastic. (Drawing right). Arthur N. Nelson, Kansas City, Mo.



How to Bend Metal Lath

DEVICE for bending metal lath can be made by nailing two 1-inch by 1-inch strips to a 2-inch by 8-inch by 6-foot plank. An 8d nail is then driven between strips at end of plank and its head removed. Lath is hooked over nail and a 90 degree bend creased in it with one stroke of lather's axe.-J. G. Caldwell, San Mateo, Calif.



HOW TO DO IT . HOW TO DO IT . HOW TO DO IT . HOW TO DO IT

Overhang Essential for Picture Window By R. J. Alexander

PICTURE windows are a popular feature of today's houses. The windows can be arranged into a number of different types by combining fixed units with ventilating sash. The number of variations to be obtained are limited only by the ability of the designer.

While the subject window frame and sash are made of steel, they can also be produced in wood or aluminum with or without dividing muntins. Plate glass or double glazing is used depending on the size of each unit and the climatic condition prevailing in the area in which the house is built. A further suggestion for design would be the use of a large wood center sash with double-hung flanking windows, all with horizontal lights.

A picture window need not conform to the basic heights established for the other windows of the house. The window may start at the top of the base and extend to a point just below the ceiling line. Its character and size should be proportionately correct with the balance of the house.

A feature that is very necessary, but so often ignored

when picture windows are used, is an appropriate overhang on the outside of the house to protect the room from the direct rays of the sun. This can be done in a number of different ways.

In the one-story house detailed on the opposite page an extension of the roof lines was found to be the simplest and most effective method for creating an overhang. This overhang is supported on either side by three diagonal braces secured to the wall of the house. While acting as structural members the braces also add to the appearance of the house.

Facia members of the roof overhang are few and simple. This is in keeping with the design of the house which follows the present day functional trends. A moulded gutter at the eave line, sloped to downspout at one end, takes care of roof drainage. Ceiling heights, which vary from nine feet in the living room to the standard eight feet for the balance of the house, make possible the projecting roof and a picture window of generous proportions.

AMERICAN BUILDER'S BETTER DETAIL PLATE

NO D-56 PICTURE WINDOW WITH OVERHANGING ROOF TAIL OF AKE . COR. NICE. Fin. ceiling. Living Room ECTION. THRU WALL OVERHANG. Metal Corbead Plaster Return Wood stop. TION . A.A. C. steel sorh. rB ECTION. · ENTRANCE & WINDOW. . ROOM . ECTION. C.C. SECT. E.E. SECT. D.D. MAIN. WALL.

manufacturers details for proper inof steel rash and other adoptable windows; showing relation to ows or sash; aluminum windows; Thermopone; etc. living room wall.

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DEALER REVIEW



NEWS OF NRLDA AND STATE AND REGIONAL ASSOCIATIONS

Government Threat to Free Enterprise Primary Topic at Directors Meeting

HIGH government spending and the threat of pending government legislation to the free enterprise system were the primary topics of discussion at the annual spring NRLDA Board of Directors' meeting, May 9-12, in the Shoreham Hotel, Washington. The directors also heard Senator Taft of Ohio discuss the overall legislative program of the 81st Congress.

The theme of the meeting was established by President C. B. Sweet, who said in his opening address, "If this threatened loss of freedom in almost every field of private endeavor and free enterprise is carried out, of what importance are new products and use, the supply situation, grading rule practices or the mark-up we happen to get per board foot?"

Topics directly affecting the industry which were given comprehensive treatment included legislation on wages and hours, the Taft-Hartley law, housing (including slum clearance, public housing, money grants to farmers, government research, and implied control of every phase of the building industry), aid to financing of homes and changes in transportation basing point practices.

Each legislative act was carefully considered as to content, past action taken by NRLDA and action contemplated for the six months prior to the November meeting.

In discussing the adverse effect which would be caused by government ownership of housing, the directors pointed out that the acute shortage of homes is rapidly being overcome, and that the improvement of housing and the clearing of slums is a state, local and industry responsibility. The point emphasized by all in attendance was that the real need in housing is for adequate financing of the low-cost home.

Joseph King, NRLDA legislative counsel, pointed out the clear (Continued on page 154)

Arizona Convention Attracts 3,000

Exhibits, included for the first time this year, attracted more than 3,000 persons to the annual convention of the Arizona Retail Lumber and Builders Supply *Association, Inc. The meeting, held at the Gadsden Hotel, Douglas, set a new attendance record.

Elected to office for next year were S. A. Douglas, president, Mulcahy Lumber Co., Tucson; James C. O'Malley, O'Malley Lumber Co., Phoenix; W. D. Ketchersid, Arizona Mining Corp., Prescott, and Louis Jennings, Jennings Lumber Co., Phoenix, vice presidents; and Emron T. Wright, Valley Lumber Co., Phoenix, treasurer.

Fourteen resolutions were adopted at the convention, including a statement opposing public housing. Mesa was named convention city for the 1950 convention



The President's Column





During the past few months I have had the opportunity to attend many regional association conventions. It has been a most enjoyable experience and I have gained much through my contacts with the fine and intelligent people who make up these associations.

It is shocking to me, however, to discover the almost total lack of understanding that these same association members have of the dangerous situation which has come about in their own communities and throughout the country. They are complacent in their beliefs that our government is being handled to a great extent by the same type of democratic and public spirited statesmen who gave us a free nation in which to live and rear our families, build up our businesses and pass them on to our children.

It is understandable that men whose freedom has so long been a thing taken for granted will be slow to grasp the fact that it is threatened. The natural reaction of the average man when told of the present socialistic trend is disbelief and resentment toward the speaker. In all sincerity let me tell you that there is not only a socialistic trend in the thinking of our ordinary citizen but also in the thinking and acting of too many of our educators, our law-makers and our young-

The time has definitely come when America must face what lies ahead, unless immediate steps are taken. If we, as in(Continued top next page)

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President's Column, Cont'd

dividuals and as a nation, continue in our present state of lassitude there will be no point from which to turn back. Our liberties, our right to do business unshackled by government controls are being jeopardized. We must forget personal gain and personal advantage, forget party allegiance, but work and fight for our right to sell our own merchandise to our own customers, to send our children to schools where there is no political influence, to choose our own medical services and to receive profitable returns on investments in rental properties.

STOP AND THINK. Contemplate an America without freedom! Make it your duty to see that the "AMERICAN WAY" is preserved.

Edward Libbey Named NRLDA Secretary

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Edward H. Libbey, former NRLDA assistant secretary, was promoted to the post of secretary of the association at the May meeting of the board of directors in Washington. Libbey has been connected with the industry for the past eight years, serving the association as liaison man with government agencies.



E. H. LIBBEY

Libbey has been lauded for his war time service to retail lumber dealers in interpreting changes in war orders issued by WPB, OPA and other control agencies. His knowledge of the war agencies was of high value to the association in the reconversion to peace time economy.

He has served recently as coordinator of the association's educational program, known as the 30 day short course, now being conducted in 14 major universities.

Libbey's appointment to the position of secretary follows the change of H. R. Northup's title to executive vice president of the national association.

Industry Mourns Don Montgomery

The building industry lost one of its best thinkers and most dynamic personalities in the death on May 19 of Donald S. Montgomery, 62, secretary of the Wisconsin Retail Lumbermen's Association. In poor health for more than a year, he had been seriously ill during the two months preceding his death. His last industry appearance was on March 28 when he attempted to conduct a training course for lumbermen at the University of Wisconsin, against the wishes of his physician and friends. He collapsed on the platform, thus retiring from public life in harness as he always had wished to do.

A native of Wausau, Wis., he attended the Wausau High School and graduated from Carroll College in 1908. For many years he served with distinction as a member of the board of trustees of Carroll College. He began his career working in lumber yards in Wisconsin and Minnesota for four years, and for six years after, sold lumber in his native State for the Virginia & Rainy Lake Co.

He was a founder of the Mil-

waukee Home Show, a member of the Milwaukee Board of Realtors, a member of the American Trade Association Executives, and a past Supreme Snark of the Interna-



DON MONTGOMERY

tional Concatenated Order of Hoo Hoo. He was prominent in Masonic circles, and was a life member of Tripoli Temple of the Shrine.

Mr. Montgomery is survived by his widow, Louise; two daughters, Mrs. W. J. Iber, and Mrs. G. B. Nelson, Jr., and six grandchildren.

Contest Creates Good Will for Industry

The problem of how to create good will for the private home building industry was solved by one lumber dealers firm in a way which can be followed to good advantage by dealers anywhere in the country.

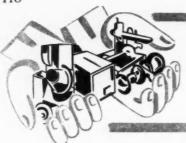
The dealer firm, William P. Proctor Co., North Chelmsford, Mass., was convinced that something concrete should be done in their community to demonstrate to the average citizen the value of private initiative in home building. Their

solution was to sponsor in cooperation with the officials of the four local high schools, an essay contest on the subject, "Home Ownership Under the American Incentive System." The contest was open to all students of the junior and senior classes in each school. Writers of the best essays were awarded a trip to Washington with all expenses paid.

With the trip as an incentive to Washington by plane and re-(Continued on page 158)



ESSAY contest winners prepare to leave Washington after three days of sightseeing



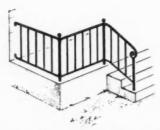
NEW PRODUCTS

Offered by Manufacturers

STEP RAILINGS

AB7913

Coffman "Seven by Twelve" step railings (for 7 inch riser by 12 inch tread), manufactured for two, three, four and five step masonry, use conventional ornamental iron

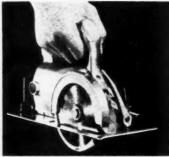


construction throughout. Handrail is 3/8 inch x 11/4 inch bar stock terminating in a hand-wrought scroll finish at newel post. Pickets are one-half inch square. Horizontal straight rail sections are manufactured for use in conjunction with 7x12' rail section. Railing sections bolt together, using intermediate newel posts; will fit a number of masonry conditions. R. G. Coffman Co., Inc., 2809 N. Orange Ave., Orlando, Fla.

POWER SAW BLADE

AB794

New power saw blade cuts slate-surfaced insulating siding. Blade is used on Porter-Cable Model A-4 Guild Saw. Siding is cut from rear surface to depth which just avoids slate. Siding then breaks off clean. Teeth of new blade have no set, are ground



to knife edge on periphery. Blade is installed on saw with slanting edge of teeth leading (opposite to wood cutting). Can be cleaned while running by holding to felt dipped in kerosene. Can be resharpened by holding stone against it, also while running. Porter-Cable Machine Co., Syracuse 8, N.Y.

JOINT FILLER

AB793

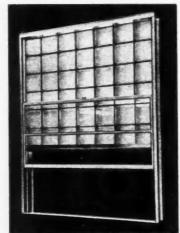
"Kork-Pak," resilient, non-extruding, premolded joint filler, carries out two functions—keeps joints effectively filled and acts as insulating material to prevent heat loss from slab going out through footings. Material is composition of cork granules bonded with asphalt, between two layers of asphalt-saturated paper. Produced in one-quarter inch, three-eighths inch, onehalf inch, three-quarters inch and one-inch thicknesses; widths to 36 inches; length, optional. Servicised Products Corp., 6053 W. 65th St., Chicago, III. INSULATION BOARD

AR7906

Nu-Wood Sta-Lite is a white matte finish board with long edges machined to provide a slightly chamfered edge. Board can be applied over framing, furring or old plastered surfaces. Surface has light reflection factor of 76 per cent. Manufactured in standard sizes 4 feet wide by 6, 7, 8, 9, 10 and 12 feet long. Standard thickness, one-half inch. Wood Conversion Co., First National Bank Bldg., St. Paul I, Minn.

GLASS BLOCK WINDOW

Window has sliding vision strip sash, can be installed in conventional window openings of any type building. Has sufficient strength and rigidity to provide its own lintel. Glass block units may be used



singly or in multiples. When installed in groups, jambs act as mullions, eliminating need for additional intermediate structures. American Structural Products Co., Toledo I. Ohio.

INSULATING MATERIAL

Plastic foam made from synthetic phenolic resin expands to 100 times its original volume when baked. Material weighs from



10 to 20 times less than pie meringue, is resistant to fire, moisture, fungus growth, insects. Liquid resin can be foamed into place at site of use. Westinghouse Electric Corp., 306 Fourth Ave., Pittsburgh 30, Pa. CORNER LAVATORY

AR7910

Americ

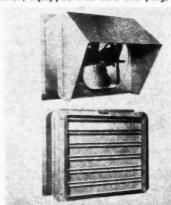
"Vivian" vitreous china lavatory manufactured in white and colors is 18 inches by 18 inches over-all. Basin measures 16 inches by 11 inches, with a depth of six inches at



outlet. Spout is of vitreous china, integral with body of fixture on bevel panel at back. Chromium-plated handles mounted on either side of spout operate controls which use water pressure to help shut off water flow. Equipped with positive action waste fitting. Designed to provide convenient use in rooms where space is at premium by fully utilizing corner space. Crane Co., 836 S. Michigan Ave., Chicago 5, III.

OUTSIDE WINDOW FAN AB7904

Chelsee Type AP is a belt driven fan for mounting on outside window frame. Manufactured with either hood or automatic shutter; equipped with cord and plug, and



pull-chain switch. Two sizes available: a 24 inch fan with an air output of 4500 CFM, I/4 HP motor, and single fan speed of δ20 r.p.m.; and a 30 inch fan with an air delivery of 6500 CFM, I/4 HP, single fan speed of 500 r.p.m. Chelsea Fan and Blower Co., Inc., Irvington, N.J.

REVOLVING SHELVES

AR7931

Ames revolving shelves turn on ball bearing to bring all stored items to front of cabinet. Shelves are made of aluminum, adjustable to any desired vertical spacing. Shelves made in width of from 12 to 20 inches to fit standard base and wall cabinets and coolers; include from two to six shelves. Vegetable bin has cooler unit which is optional with base cabinet units. W. R. Ames Co., San Francisco, Calif.

(Continued on page 120)

DOORS

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Open . Business!

Full clearance on all four sides

Any one of the thousands of busy industrial plants now equipped with Ro-Way Doors will tell you that when they are opened, they are really "open for business."

No other type of door gives so much clearance on all four sides of the door opening. Big loads ... wide loads ... high loads roll in and out of Ro-Way equipped plants freely...easily...and safely.

Time is saved ... tempers are spared ... operating costs are lower all because Ro-Way Doors are designed and built completely in Ro-Way's own plant to serve industry faster...better...and longer.

> For name of Ro-Way authorized distributor near you consult the yellow pages of your telephone directory, or write us.

> > ROWE MANUFACTURING COMPANY 753 Holton Street Galesburg, Illinois, U.S.A.



There's a Rollay for every Doorway!

(Continued from page 118)

PUTTY KNIFE

AB7932 A dual-purpose tool, the blade end of "Duo-Fast" putty knife serves as scraper



or conventional type putty knife, and the V-shaped end acts as guide in complet-ing putty job. Manufactured of plated hardened steel. Fastener Corp., 860-902 Fletcher St., Chicago 14, III.

SPINDLE SHAPER

AB7938

Vertical spindle shaper has two speeds, 7,000 and 11,000 r.p.m., to provide cor-rect speed with cutters of different size. area is 22 inches by 33 inches.



Shaper has three inch vertical spindle travel, with bearing assembly moving as a unit. Elevating is controlled by hand wheel and graduated dial; independently adjustand graduated dial; independently adjust-able guides are controlled by hand wheels. Motors are I HP single phase or II/2 HP three phase. Walker-Turner Div., Kearney and Trecker Corp., Plainfield, N.J.

ROUND VENTILATING WINDOW AB7929

"Roundvent" window can be opened for ventilation, is built of western pine, dipped



in Woodlife. Inner sash is a complete circle, with screen in upper half; sash ro-tates to provide ventilation. Operation is on a patented stainless steel weatherstripped track. Webb Manufacturing Co., Conneaut, Ohio.

STORM SASH-SCREEN

"Bilt-well" unit consists of complete storm sash (upper and lower sections) and a screen section which interchanges with lower section of the storm sash. Has safety hook which does not rattle or re-



lease until sash is extended beyond 45 de-grees. One part of hardware, 3-in-1 Multi-Purpose Hanger, functions as upper sash support, lower sash hook and upper sash fastener. Made in 41 modular sizes of kiln-dried Ponderosa Pine. Carr, Adams and Collier Co., Dubuque, Iowa.

CLOTHES WASHER

Apex "Wash-A-Matic" deluxe model washer is fully automatic, does not require bolting down. Has recommended maximum load of eight pounds of dry clothes. Finished with white baked enamel skirt and top and white porcelain tub. Trim is pol-



ished stainless steel. Electric automatic timer controls wash-rinse-dry-fluff cycle. Two dial settings for wash--hot (tank temperature) and warm, 100 degrees F. Motor is heavy duty 110 volt, 60 cycle AC. Dimensions: 36 inches high, 261/4 inches deep, 26 inches wide. Apex Electrical Manufacturing Co., Cleveland, Ohio. ished stainless steel. Electric automatic

ELECTRIC DRILL AB7901

Model 24A 1/4 inch electric drill, built with surplus power for drilling in metal, wood and composition materials, has speed of 1800 r.p.m. with no load, 1100 r.p.m., full load. Can be used at full load for continuous drilling without stalling. Construction features include aluminum alloy die cast housing, helical gears, oil impregnated bronze bearings, three-jaw Jacobs chuck, trigger type switch with locking device. Stanley Electric Tools, New Britain, Conn.

AUTOMATIC TEMPLATE

This automatic template is especially designed for measuring between two surfaces or walls. Will scale from 32 to 42 inches. In measuring stair treads and risers, adjust-

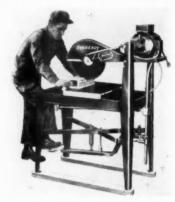


ments in length are made for the first stair only. Template will automatically adjust to the length and angle variations in other stairs with a slight turn of the handles. Eliason Tool Co., 2117 E. 56th St., Minneapolis

MASONRY SAW

meri

Eveready Briksaw with "Adjusta-Height" device can be quickly adjusted for different sized materials, such as quarry tile, brick, partition tile, concrete block. Saw may be



operated for standard dry cutting or converted to wet cutting with simple installation of wet cutting kit. "Toe-Matic" control enables operator by upward tilt of foot treadle to reset cutting head to angle desired. Blades include abrasive, wet abrasive and diamond. Eveready Briksaw Co., 1509 S. Michigan Ave., Chicago 5, Ill.

FIRE ALARM SYSTEM

In "Detecto-Master" system, outbreak of fire causes critical temperature rise in any of "hot" thermostats, transmitting message



to control unit which rings a bell, switches on a red light and designates on a meter dial location of the trouble. Equipment includes 15 master thermostats, with provision for auxiliaries where needed. System also is effective in giving warnings of cold damage. Lord-Taber, Inc., Canandaigua,

(Continued on page 122)



Everybody in the building industry knows about Brixment for masonry. But do you know that Brixment also makes a very superior stucco?

When the new Central Public Library was built in Washington, D. C., stucco was specified for each of the building's tremendous ends (96' high by 120' and 140' wide). Materials and workmanship of the highest quality were of course required.

After due consideration and experimentation, Brixment was selected for the stucco. James Kane & Sons, Inc., the plastering contractors, report that the job is entirely satisfactory, that they have now used Brixment stucco with equally good results on several other jobs, and that they "do not hesitate to recommend Brixment as a completely satisfactory stucco mortar."

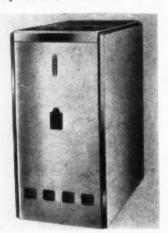
Brixment stucco is mixed and used exactly like portland cement stucco, except that no lime is required. It makes better stucco, however, because it is more plastic, has a more convenient hardening time, resists moisture and is less liable to hair-checking and crazing. And Brixment stucco costs less than any comparable mix of portland cement and lime. Ask your dealer for "Brixment for Stucco and Plaster"— or write us direct.

LOUISVILLE CEMENT COMPANY, Incorporated, LOUISVILLE, KENTUCKY

GAS-FIRED BOILERS

AB7939

Five models are included in York-Heat boiler line, all with baked green enamel housing. Boilers, manufactured for steam,



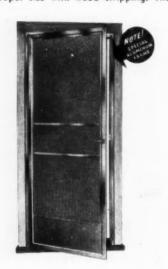
hot water or vapor heating applications, range in capacity from 350 square feet of AGA rating of standing steam radiation, to 970 square feet. Boiler section is cast iron and built in accordance with A.S.M.E. code. Burner for boiler is furnished for manufactured, natural or mixed gas. York-Shipley, Inc., York, Pa.

PLASTIC WALL TILE AB791

"Styron," plastic material from which wall tile is fabricated, is produced in eight new decorator colors—blue, gray, two soft blues, delicate peach, "greige" (gray and beige combination), yellow and orchid gray, with trims in complementary colors. Shades are more delicate than in previous years, with definite trend toward pastels for kitchen. Tile has been adapted for a variety of applications. Dow Chemical Co., Midland, Mich.

ALUMINUM SCREEN DOOR AB7905

All aluminum door is fabricated of hollow extruded aluminum sections. To install, door opening is first squared and adjusted to proper size with wood stripping. Then



a special aluminum frame is used to cover wood stripping. Door is manufactured in all sizes, with one inch variations in width and height. Fractional sizes not needed as frame takes up to one inch variations. Alumatic Corp. of America, 1229 S. 41st St., Milwaukee 4, Wis.

ROCK DRILL AB7916

Medium-weight J-40 Jackhamer is capable of drilling in any kind of rock, is particularly adapted for general utility service in mines, quarries and road work. Has double-kicker port valve. Specially designed auxiliary port allows full line air pressure to pass through drill steel when blower valve is opened, providing blowing action for cleaning holes. Three-in-one backhead enables machine to be readily adjusted for wet, dry or blower-type drilling. Ingersoll-Rand Co., II Broadway, New York 4, N.Y.

REFRIGERATOR

AB7925

Norge "Self-D-Froster" Model SR-849 has built-in automatic defrosting system. An eight cubic foot model, refrigerator has



storage capacity of 27 pounds of frozen food, space on beverage shelf for more than a case of 12 ounce bottles and "foldaway" shelf for greater flexibility in food package arrangement. Norge Div., Borg-Warner Corp., Detroit 26, Mich.

ACCESS PANELS

AB792

Panels provide access to control points of plumbing, heating, ventilating, air-conditioning and refrigerating systems. Have removable type hinged door with automatic backout device. Manufactured in plain or grained finishes, in all types of metals, with or without expanded metal wings. Can be installed in metal lath, wood lath, marble, tile and plastered openings. Watson Manufacturing Co., Jamestown I, N. Y.

GLASS BLOCKS

A R7027

mer

Designed to give appearance of melting ice, "Random Clear" glass block is adaptable for use in homes, theaters, stores and



other places where decorative effects are desired. Random effect is achieved in production by use of several slightly dissimilar molds to form two halves of block, then using different combinations of halves. Designated as Insulux Glass Block No. 331. American Structural Products Co., Toledo, Ohio.

ELECTRIC WATER HEATER AB7918

"Saturn" water heater, designed for hot and cold water outlet installations, has galvanized storage tank. Easily connected with water supply system and can be at-



tached to wall next to basin. Has Fiberglas wool insulation, spreader tube, blanket type heating elements. Models have capacities from one to five gallons, with 110 volt AC current. Widths from 8 inches to 13½ inches; heights from 19½ inches to 35 inches. Barton Products Inc., Defiance, Ohio.

(Continued on page 130)

CHECK NUMBERS AND MAIL COUPON FOR INFORMATION

American Builder, 79 W. Monroe Street, Chicago 3, Illinois

CITYSTATE..... AB7901 AB7910 AB7928 AB7919 AB7937 AB7902 AB7911 AB7929 **AB7920 AB7938** AB7903 AB7912 AB7921 AB7930 **AB7939 AB7904** AB7913 AB7922 AB7931 **AB7940** AB7905 AB7914 AB7923 AB7932 AB7941 **AB7906** AB7915 AR7924 AB7933 **AB7942** AB7907 AB7916 **AB7925 AB7934** AB7943 **AB7908** AB7917 AB7926 **AB7935 AB7944** AB7909 **AB7918 AB7927 AB7936 AB7945**

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.

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Take any room in the house . . . a Sloane-Blabon floor covering will make it more livable! For Sloane Quality Linoleum Products mean added beauty through "better design and truer color"less work for homeowners because these floors are easier to keep bright and clean. And, there's a Sloane-Blabon floor covering for every need and specification. Write for further information. (



















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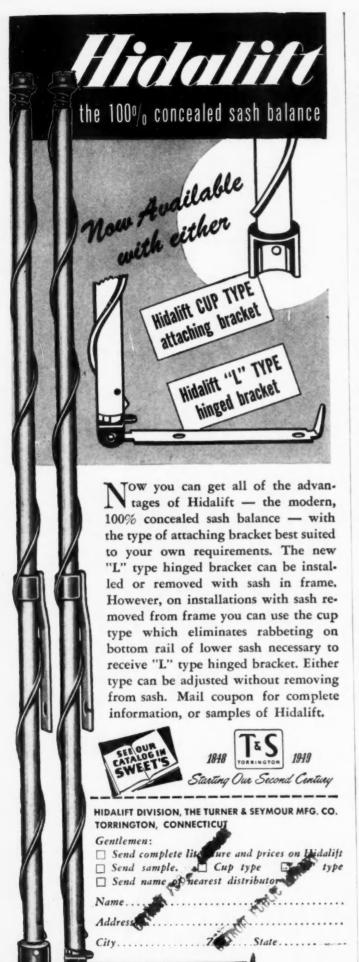
- Inlaid and Marbletone Linoleum
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For further information and samples, write Dept. AB-4.

SLOANE-BLABON CORPORATION 295 FIFTH AVENUE, NEW YORK 16, N. Y.



* B. F. Goodrich Company



Catalogs and

589—HARDWOOD FLOORS—The Maple Flooring Manufacturers Association, 46 Washington Blvd., Oshkosh, Wis., has published an illustrated folder, "Finishing Northern Hard Maple Flooring the MFMA Way," which features information on many phases of hardwood floors and reviews MFMA research in the development of finishes.

590—MASONRY TOOLS—A new catalog issued by the Goldblatt Tool Co., 1515 Walnut St., Kansas City 8, Mo., contains information about the firm's regular line of tools for the masonry trade and includes a number of items not available in recent years. Tool cases, scarifiers, feather-edges, pants, shirts, leveling instruments, mortar boxes and adjustable steel trestles are some of the items in the 80 page, illustrated catalog.

591—ELECTRIC TOOLS—A pamphlet illustrating the "Silver Line" of Thor portable electric tools has been published by the Independent Pneumatic Tool Co., 600 W. Jackson Blvd., Chicago 6, Ill. One of the featured tools is a 3% inch reversible impact wrench.

592—RADIAL SAWS—Action and feature illustrations, specifications and performance features are included in a six page folder, No. 1009, published by Walker-Turner division, Kearney and Trecker Corp., Plainfield, N.J. The catalog also shows standard components for setting up high speed production line cutting.

593—STEEL RESIDENTIAL BOILERS—Specifications, ratings, dimensions and engineering data pertinent to a line of hand-fired residential steel boilers are given in Catalog No. 538 issued recently by the National Radiator Co., Johnstown, Pa. Jacketed, unjacketed and cutaway views of the 26-inch, 29-inch and 39-inch boilers are shown.

594—"BLUEPRINT FOR BETTER KITCHENS"—
is the title of a 12 page booklet for builders and architects published by Mullins Manufacturing Corp., Warren, Ohio. The booklet includes specifications, dimensional features, examples of installations and data on the full Youngstown kitchen line.

595—DOUGLAS FIR PLYWOOD—The 1949 basic catalog of the Douglas Fir Plywood Association, Tacoma 2, Wash., contains designations of new plywood grades, new grade-marking system and uses for the new and the established grades. Also listed are plywood's physical properties, including rigidity, insulation and condensation tables; and finishing data.

1#

596—CONCRETE FORMING SYSTEM—A 32 page booklet on the "Uni-Form" system of forming concrete has recently been published by the Universal Form Clamp Co., Chicago 51, Ill. The booklet illustrates the operation of locking, tying, and aligning devices and shows pictures of installations on a variety of buildings.

597—BATHROOM CABINETS—A new catalog issued by the Faries Manufacturing Co., Decatur, Ill., gives details about the firm's line of bathroom cabinets. In addition to illustrations of cabinet styles and features, the catalog includes installation charts and tables.

(Continued on page 126)

SCHLAGE ... first name in cylindrical locks

Novo Design

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te m ne id Philadelphia's ... Smith, Kline and French Pharmaceutical Laboratories,

a Schlage installation of heavy duty cylindrical locks.

Architects: The Ballinger Company





SCHLAGE

SCHLAGE LOCK COMPANY

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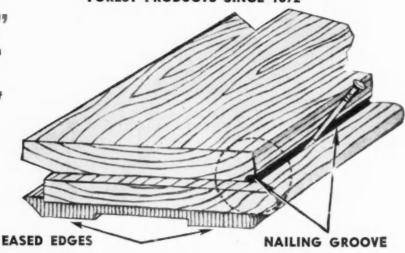
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Teletype No. 26 Mills: Laona, Wisconsin and Connorville, Michigan

Behind The Mills-The Connor Timber Stands

Catalogs

(Continued from page 124)

598—JOB STUDY NO. 83—published by Towmotor Corp., 1226 E. 152nd St., Cleveland 10, Ohio, features a survey of the handling operations of a specific company engaged in unloading, storing and loading materials and products, and transporting lime and sand from storage to hopper.

599—SLIDING DOOR—Facts about the "Gliding Door Unit," including floor plans and diagrams of installation, are given in a well illustrated booklet published by the Huttig Sash and Door Co., Inc., St. Louis 10, Mo. One section of the booklet is devoted to technical information about sliding doors and another to descriptions of finish hardware.

600—"BETTER HOMES BY BETTER METHODS"
—is a 16 page illustrated booklet prepared and distrib-

uted by the Prefabricated Home Manufacturers Institute, 908 20th St., N.W., Washington 6, D.C. The booklet explains the construction, erection, financing and distribution of prefabricated homes. Photographs of typical houses manufactured by 34 different com-

panies are shown.

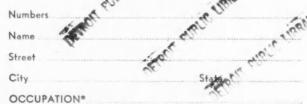
601—"DISTINCTIVE DOORS"—A pamphlet published by Newman Brothers, Inc., 660 W. Fourth St., Cincinnati 3, Ohio, gives diagrams and construction details of several types of extruded aluminum doors. Photographs of some of the firm's special metal installations in storefronts and public buildings are also included.

SERVICE COUPON-CLIP and MAIL to CHICAGO

Readers Service Department (July, 1949)
American Builder,
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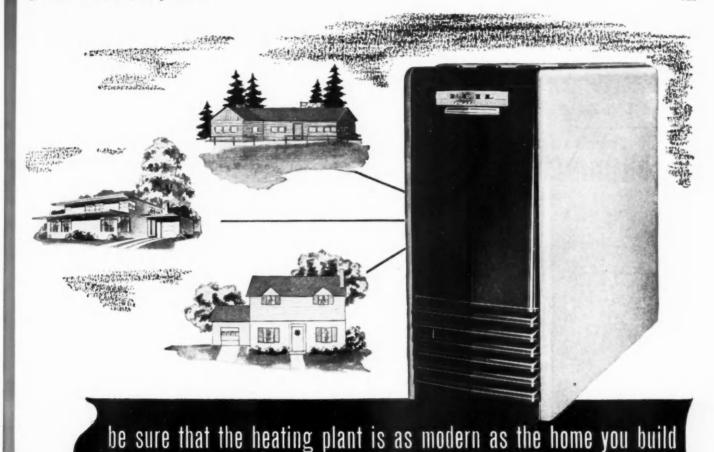


*Please note that occupation must be stated if full service is to be given.

602—"INSULATING SIDING FOR YOUR FARM"

—is intended as a sales creating, consumer type booklet. Illustrations show in detail application techniques and characteristics of the product. This 16-page 4-color booklet is available from the Insulating Siding Association, 530 Echo Lane, Glenview, Ill.

603—"ALUMINUM STRUCTURAL DESIGN"—is title of 124-page handbook on how to design load-carrying aluminum structures. Available by writing directly to Reynolds Metals Co., Louisville 1, Ky. The purpose of the book is to enable engineers familiar with mechanics of materials to design an original structure of aluminum, or to convert existing structural design from other materials to aluminum.



You know that it takes modern features to sell a home today-and you work hard to see that the houses you build are up-tothe-minute. But what about their heating plants? Do you know that comfort comes first, that a modern heating plant and a well-heated home will make firm friends faster than any number of gadgets?

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LAST WORD in heating

New Heil units have every modern heating feature-uniform heating, higher efficiency, quieter operation, better looks. Heil means quality to the millions of people in over 50 major industries regularly supplied by the Heil Co., with its diversified line of products. When you install a Heil Winter Air Conditioner, or a Heil Boiler-Burner

Unit you can be sure of a delighted buyer. You know that the house will be comfortable, that there will be no complaints about high fuel bills. It's a sure way to satisfied owners, and satisfied owners are your best prospect-getters.

There's a HEIL unit for every house

You can select from a complete size range in Heil Oil-Fired Boiler-Burner Units, and Oil-Fired or Gas-Fired Winter Air Conditioners. There's no need for an oversize unit. Factory wiring and pre-assembled units cut installation time, to save money on the job. Any way you look at it, your homes will be better-and better buyswith Heil Automatic Heat.

You'll be interested to know about two special propositions Heil has for builders. For more details, write Dept. 8279, today.

ENERAL OFFICES: 3082 W. MONTANA STREET, MILWAUKEE I, WISCONSIN

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OIL-FIRED WINTER AIR CONDITIONERS. BOILERS





Quality Automatic Heating

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COFFMAN Blue Print Service will help you screen a porch, whether ornamental iron panels or posts are already installed—or whether you plan to build a porch combining screen and ornamental iron. See how simple it is to screen for utility yet retain the charm of hand wrought ornamental iron! No screen porch need be without the decorative beauty of screen door grilles, wrought iron porch posts, or panels.

Corner Porch Post

Screen and Ornamental Iron Can Be Prefabricated

Prefabricated frames may be built with screen and decorative panels pre-installed to make use of unframed ornamental iron in combination with wood framing. Or, prefabricated frames with screen attached may be built to slip behind corner or flat porch posts. Thus, small homes mass produced may combine the elegance and refinement of Coffman low cost ornamental iron with the utility of screened porches or breezeways.

Send for Blue Print Instructions

Write on your letterhead for your copy of Coffman's handy blue print instructions for screening a porch in combination with ornamental iron grilles, posts or panels. For complete builders' line in wrought iron products—ask for catalog.

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Manufacturers of the Original
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TECHNICAL GUIDE for Builders and Craftsmen

(Continued from page 114)

Application of Glazing Materials

PROBABLY one of the most serious causes of material failure on commercial glazing jobs is the oversight of details—such as failure to paint after the glazing material has set.

Facts about the consistency of glazing material made for either wood or metal sash reveal the necessity of painting. On wood sash, which is porous, glazing material dries a little on the wood



side as well as on the exposed side; but in metal sash, whether steel or aluminum, drying takes place only on the exposed or hypotenuse side of the glazing triangle.

The metal sash putty must contain tiny air pockets and certain oils in order that the dry outside air may enter and properly set in; and after this oxidation has taken place and the material has set, it is necessary to close the material from the air to prevent moisture from entering.

To prevent penetration of this outside moisture, the putty should be painted. Repeated tests have shown that the thin natural film which usually forms on the outside of the putty is not an adequate barrier. Painting of putty and compounds is recommended by the National Paint, Varnish and Lacquer Association, the Bureau of Standards and by most glazing material manufacturers.

Weather is another vitally important factor. Glazing cannot be properly done in freezing weather, but can be successful in winter if certain precautions are observed. While the National Paint, Varnish and Lacquer Association advises against application of putty in temperatures under 40 degrees, it is believed that under certain dry conditions 35 degrees is sufficiently warm. Sash must be clean and dry.

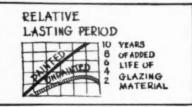
The most important point in new

industrial installation is to be sure to avoid sweating on the lights until after the glazing has set and has been painted.

Ventilation will reduce condensation in winter installation, with this being especially important in inside glazed sash. A freshly poured concrete floor should be thoroughly dry before glazing.

Another reason for painting all commercial jobs after glazing is that paint often seals joints and reduces the chance of failure when improper bedding results from hurried, careless glazing in winter.

In the glazing of aluminum sash, both cast and extruded aluminum are subjected to a greasy oxidation, which makes it harder for any glazing material to stick. Because of the flexibility of aluminum sash, glass breaks or glazing material loosens under semi-severe conditions of use. Also, because of flexibility, a hard setting glazing material is not recommended. Painting helps to seal joints and protect compound even on aluminum sash.



Some important rules for all glazing jobs follow:

Dust and dirt should be removed from sash.

The sash should be dry.

Wood sash must be primed, metal sash free from rust.

Clips must be suitably installed. Use of thinners should be avoided.

Glazing material should be fresh and mixed with all the oil.

Lights should be protected from condensation until glazing material is set and painted.

Sash frames should not be jarred or handled until glazing material has set.

After putty has set (about 14 days) it should be painted immediately. It is recommended that compounds also be painted.

(Data and drawings furnished by the Dicks-Pontius Company, Dayton, Ohio)

149.

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- 1. HAMPTON: K-2710-A. 19 x 17", 22 x 19". Available without legs or towel bars.
- 2. TAUNTON: K-2740-A. 16×14 ", 20×14 ", 24×14 ".
- 3. DELTON: K-2745-A. 18 x 15".
- 4. TRAVELER: K-2750-A. 13 x 13".



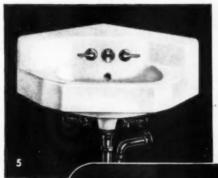
KOHLER

Enameled Iron LAVATORIES in types and sizes to meet every need

Does your customer wish a modern lavatory for a home bathroom or washroom? Whatever the need—you can win approval with one of these eight lavatories. All have practical features that satisfy important requirements—and the name "Kohler" assures a sound investment in first quality.

These lavatories have surfaces of lustrous, durable, glass-hard, easy-to-clean Kohler enamel which resists cracking or crazing because it is applied to iron cast for rigidity. The chromium plated brass fittings are engineered to provide highest efficiency. Kohler Co., Dept. 9-H, Kohler, Wisconsin.







- 5. MARSTON: K-2760-A. 16 x 16%; (sides).
- 6. MARFIELD: K-2770-A. 11 x 11%, (sides).
- 7. HUDSON: K-2825-C. 20 x 18", 22 x 19".
- 8. WESTCHESTER: K-2790-C. 24 x 20".

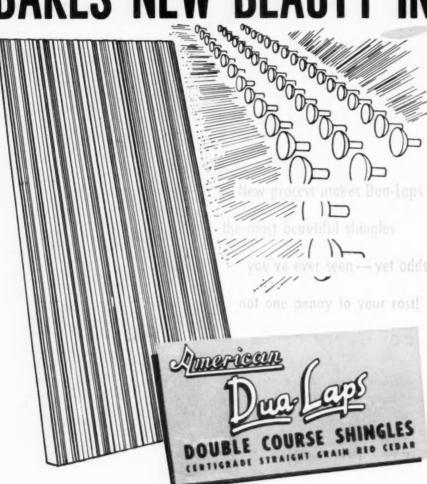


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- A harder, more durable protective finish.
- A more beautiful, more uniform coating.
- Available in all greys.

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

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

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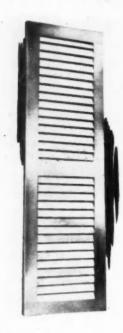
COLUMBUS 8, OHIO

NEW PRODUCTS

(Continued from page 122)

ALUMINUM SHUTTERS, WINDOWS

Ornamental aluminum shutters, in nine different sizes, are individually packaged and ready to install. Offered in ten modern colors. Picture windows designed for use



with Metalart double hung windows are available, glazed or unglazed, in 20 dif-ferent sizes. Custom-built extruded aluminum frame screens also available, as well as aluminum louvers, zinc chromated, ready for painting, in three popular sizes. Metal Arts Manufacturing Co., Inc., P. O. Box 4144, Atlanta 2, Ga.

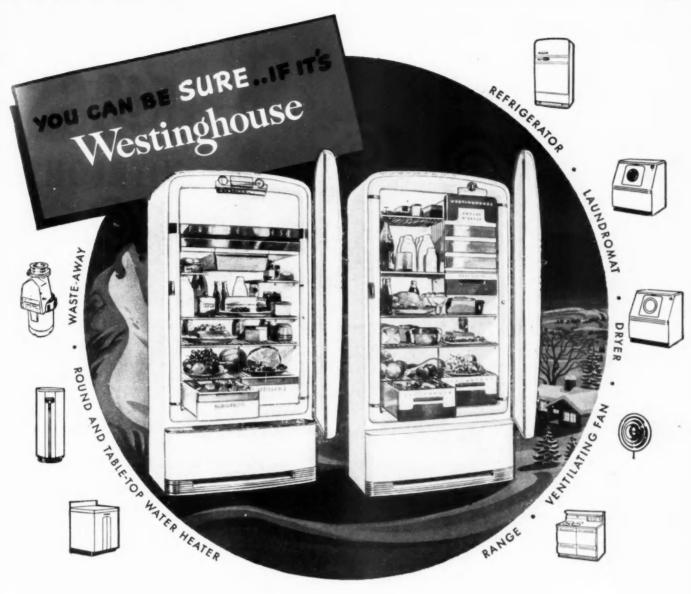
TRUCK BODY LIFT

"Dumpcrete" body is especially designed for hauling and placing air-entrained con-crete, also used for hauling premium con-crete, aggregate, stone, coal, earth and



ready-mix lime mortar. Has four cubic yard capacity. High discharge point allows use of long, fully adjustable chute. Vertical dumping angle and rounded interior corners aid clean discharge. Dumpcrete Div., Maxon Construction Co., 131 N. Ludlow St., Dayton, Ohio.

(Continued on page 134)



THERE'S Magic IN THE NAME Westinghouse

You'll Sell Houses Faster When It Appears in Your Kitchens

Most of the trademarks of the quality materials you use in building houses are covered with plaster and paint. So, when prospects see the Westinghouse name, it indicates that throughout the house you are giving them the best.

New Westinghouse Refrigerators have glamour galore and, of course, they're ELECTRIC. Your prospects have seen them advertised. They want the Colder Cold made possible by the exclusive Automatic HOLD- COLD CONTROL. They want the better, safer, surer food-keeping built into Westinghouse

Electric Refrigerators. Make it easy for them to have it and you'll be getting the jump on your competition. Write for full particulars.

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City & State



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| Please send me yo | ur booket "How to Sell Houses |
| Faster". | all and |
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| Address | LUBE. |

VESTINGHOUSE ELECTRIC CORPORATION

Briggs BRIGGS VITREOUS At New

NEW, NEW! A complete line of vitreous china lavatories by Briggs to add to the already outstanding line of Briggs Beautyware plumbing fixtures and brass fittings!

SMART, SMART! A wide variety of fixtures and fittings to harmonize with any decorative scheme for new homes or modernization work! DIFFERENT, DIFFERENT!

Yes . . . full of design features you'll find in no other lavatories! COLOR,

COLOR, COLOR! Sandstone . . . sky blue . . . sea green . . . ivory. FOUR exciting colors, plus white, moderately priced to fit every building budget.





The new Briggs Beautyware lavatories are:

- 1 THE WHITTIER (B-3210 HT), 19" x 17", shelf back, wall pattern, with chromium towel bars. Also available with chromium plated legs.
- 2 THE WHITMAN (B-3310 HT), 20" x 18", ledge back, wall pattern, with chromium towel bars and soap depression. Also available with chromium plated legs.
- 3 THE LONGFELLOW (B-3280 H), 22" x 14", shelf back, wall pattern, with soap depression. A great space saver due to its narrow front-to-back dimensions.
- 4 THE WHITMAN (B-3370 H), 24" x 20", ledge back, with chromium legs and towel bars, soap depression.
- 5 THE WHITTIER (B-3270 HT), 22" x 18", shelf back, chromium legs and towel bars, soap depression.

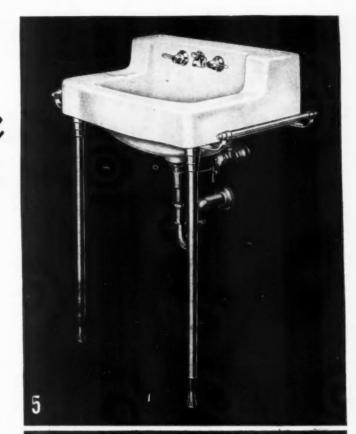
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Beautyware CHINA LAVATORIES Low Prices!

Points of superiority in Briggs Beautyware vitreous china lavatories:

- Ample shelf space—"beaded ends and back"—prevent side soiling.
- Double front corner concealed overflows with smooth underbowl front—no unsightly bulge—installation made easier—no cramped quarters.
- Deep anti-splash rim-non-splash with valves open.
- Deep bowl-greater water capacity.
- Special safety-wall-locking feature—"fixture cannot come off hangers".
- No-slip hexagonal towel bars—attached to lavatory, front and back.
- Special easy-fastening methods for towel bars and legs.
- Attractive fittings—hug the back—black index supply handles—quick opening valves.
- Priced right-smaller premium for color.







Copyright 1949, Briggs Manufacturing Ca.

Write for complete details to BRIGGS MANUFACTURING CO. 3025-g Miller Avenue, Detroit 11, Mich.

BRIGGS Beautyware



that has Everything builders want

BEAUTY—The rich brilliance and natural beauty of fine northern oak provides, in Hasko block floors, a fitting setting for modern or period furnishings. 12-inch square Hasko Blocks create a floor with fewer joints. Each block has a smooth, unbroken surface — no unsanitary dirt-catching crevices. The blocks, laid with their grains running in alternate directions create an unusually attractive patterned effect. Hasko Floors are available in golden oak or the new dark oak . . . the two finishes may be combined to make a unique checkerboard pattern.

PERMANENCE—Each Hasko block is laminated of three plies of veneer permanently bonded with phenolic resins... they are guaranteed not to delaminate. There are no butt joints in a Hasko floor. Instead, Hasko's exclusive tongue-and-groove feature interlocks each block with adjacent blocks. This assures floor flatness, prevents buckling,

and forms a tight seam that eliminates the danger of mastic extrusion. Hasko blocks are factory finished with an exclusive process which impregnates the wood fiber with varnish, forming a scratch and mar resistant surface. They are thoroughly waxed and polished before shipment.



LOW - COST INSTALLATION —Factory-finished Hasko blocks are designed for laying with a minimum of labor, waste and cost. They may be set in Mastic over concrete without the use of costly screeds or wood subfloors. Over old wood floors or new subfloors they may be blind nailed in the conventional manner. They are ready for use as soon as laid since all sanding, sealing, varnishing and waxing is done at the factory.

For full information regarding Hasko block flooring write for complete bulletin or see Sweet's Architectural File.

ADVERTISED IN LEADING NATIONAL MAGAZINES





MANUFACTURING

CORPORATION

Dept. AB

Grand Rapids 2, Mich.

New York Chicago

Detroit

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Philadelphia

NEW PRODUCTS

(Continued from page 130)

RAFTER DIAL

AB7930

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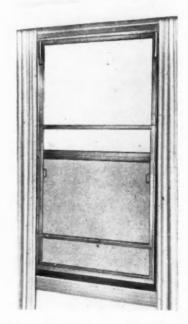
Quick, accurate calculation of lengths and cuts of all roof rafters can be made with this instrument of Vinylite plastic. Two dial settings indicate the length of com-



mon rafters, length of hip and valley rafter, length of shortest jack rafter (16 inches or 24 inches apart), top and bottom cuts of common rafters, top and bottom cuts of hips and valleys, side cut of hip against ridge board and side cuts of jack against hip. Instrument also an aid in roof design. Edward Weyer, 40 W. 77th St., New York 24, N.Y.

VERTICAL SLIDE WINDOWS AB7935

Rusco all-metal prime window is packaged as completely assembled unit, including glazing and screen panel. It is fully paint-

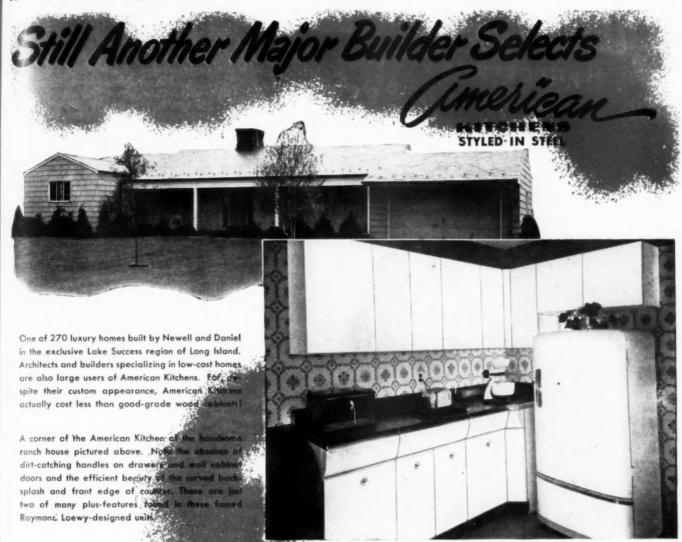


ed and ready for installation. Designed to permit inclusion of storm sash. Available in wide range of sizes. Window is added to firm's present line of combination windows and related products for attachment to existing construction. The F. C. Russell Co., Cleveland I, Ohio.

(Continued on page 136)

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American Kitchens Are the Favorite of Architects and Builders the Country Over!

More houses in the recent Chicagoland Home Festival were equipped with American Kitchens than any other kind, wood or steel! And they're the first choice of architects and builders in every other section of the country, too-for the simple reason that American Kitchens are demonstrably superior. All other so-called "modern" kitchens are on thioned by comparison. And none other has American Kitchens' many easy-to-see added conveniences. Yet, experience has proved time and again that American Kitchens are really more economical than quality wood cabinets! See our catalog in Sweet's for illustrations and specifications on all units.

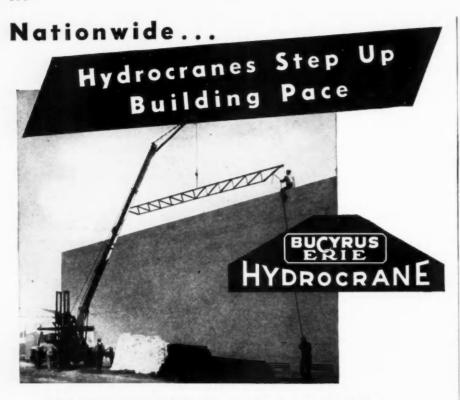
FREE: Architects-Builders -gives complete specifitions and roughing-in digrams of all units. Ask your carest American Kitchens pplier. If you don't know s name, write direct.







AB7912



SETTING STEEL TRUSSES AND COLUMNS - OKLAHOMA

"We travel over a 150-mile radius and handle steel erection with our Hydrocrane. For fast placing and accurate spotting of steel members, the Hydrocrane far outclasses the old winch truck — there's no comparison." — Patterson Steel Co., Tulsa, Oklahoma.

HOISTING CONCRETE - WISCONSIN

"We use our Hydrocrane to hoist concrete for pillar and beam construction. It sure beats hand pulley hoists on overhead work — both in speed and manpower savings." — Minervino Brothers, Milwaukee, Wisconsin.

SETTING STONE - MICHIGAN

"We set costly stone sills and facings on a recent job with the Hydrocrane. Its precision control was a real cost saver as the slightest bump would chip the stone. In addition, the Hydrocrane saved 15 man hours." — Thomas M. Casey & Co., Buchanan, Michigan.

LIFTING ROOF SLABS - FLORIDA

"On one job our Hydrocrane raised 240 roof slabs in 2 hours. With a hand winch it took 3 men 5 days to do the same work. The Hydrocrane saved 118 man hours!" — J. P. Driver Company, Tampa, Florida.

Builders throughout the country are speeding up home and commercial construction with the fully hydraulic, truck-mounted Hydrocrane. It travels up to 50 m.p.h. on good open highways. Simple to operate, hand levers only. Fill in the coupon for full information.

BUCYRUS-ERIE HYDROCRANE DIVISION, South Milwaukee, Wis.

| UCYRUS-ERIE HYDRO | CRANE VISION, | South Milwaukee, | Wisconsin |
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| Gentlemen: | 100 | | |
| Tell me how the | drocrane can sp | eed up ny const | ruction jobs. |
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| Company | Char | | 2 / |
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| Address | | | |
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NEW PRODUCTS

(Continued from page 134)

KITCHEN CABINETS

Marvel "Custom Kitchen" line of wall cabinets are manufactured in standard cabinet sizes of heavy gauge metal. Doors are flush type, fully insulated, with concealed hinges. Refrigerator type baked-on enamel and chrome hardware are used. Base cab-



inets have mother-of-pearl grey plastic tops with metal molding. Sides of cabinets are flush for placing against each other or against stoves or sinks. Height and depth of cabinets match stoves and sinks. Cabinets have recessed black kickplate. Marvel Metal Products Co., 1100 S. Central Park Ave., Chicago 24, Ill.

ELECTRICAL TAPE

AB7911

Made with plastic backing, "Scotch" Electrical Tape No. 33 is listed by Underwriters Laboratoriees, Inc., for temperatures up to 176 degree F. Tape is seven mils thick, has dielectric strength of more than 7,000 volts, adheres to plastic wires. Resistant to abrasion and affords protection against electrolysis and corrosion. Minnesota Mining and Manufacturing Co., 900 Fauquier St., St. Paul 6, Minn.

ELECTRIC WALL HEATER AB7924

Self-contained thermostat for Electromode Model WA-12 built-in wall heater provides automatic control of room temperature. Thermostat comprised of heavy duty switch combined with sensitive bulb. Bulb influenced by changes in room temperature



only; switch operated by hydraulic pressure changes in bulb. Specifications: 1500 to 4000 watts, 115 to 230 volts, 5122 to 13,660 B.T.U., 42 pounds in weight. All model WA-12 heaters fit same wall opening: 141/4 inches wide, 181/4 inches high, front plate 17 inches wide, 21 inches high, 53/8 inches deep and extending one inch from wall. Electromode Corp., 45 Crouch St., Rochester 3, N.Y.

(Continued on page 138)

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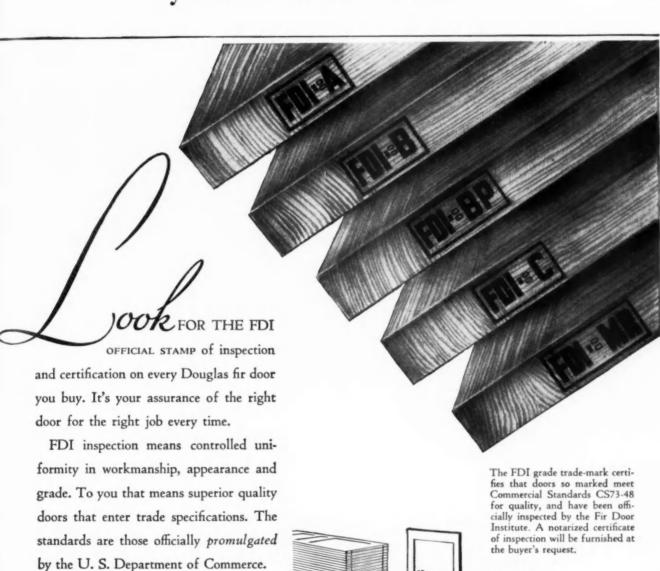
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All penhigh, high, inch ouch

These are the Grade Trade-Marks that appear on all Douglas fir doors officially inspected by the Fir Door Institute!



Always look for the FDI Grade Trade-Mark. Be sure it says "FDI" on every fir door you buy!

FIR DOOR INSTITUTE

Tacoma 2, Washington



NEW PRODUCTS

(Continued from page 136)

STEEL DOOR FRAME Interior-exterior door frame for residential and commercial construction is a one-piece all welded steel unit. Requires no additional trim. Made with extra reinforce ment in all four corners of the mitred joints. using a universal adjustable brass strike plate, an enclosed dust box, and hinges applied at factory. Shipped in single unit. Designed for 134 and 136 foot doors. When required, exterior frames are provided with screen door hinges. The Steelcraft Many. facturing Co., 9137 Blue Ash Road, Ross-moyne, Ohio.

GAS-OIL FURNACES

AB7928

680000

Three automatic warm air heating plants especially designed for small homes and



multiple housing unit developments. Units feature interchangeable burners permit-ting switch of fuels at any time. Dimenting switch of fuels at any time. Dimensions are 21 inches x 52 inches x 52 inches. Rated capacities range from 70,000 to 100,000 B.T.U. per hour. The Heil Company, Milwaukee I, Wis.

SWITCH-OUTLET-PILOT LIGHT

AB7902

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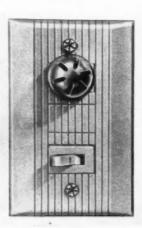
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Combination plastic switch, outlet and pilot light is factory assembled on-theoutlet and plate to make a one-piece unit. Made in



combinations of four devices: three-way combinations of four devices: three-way switch, single pole switch, outlet and pilot light. Switches "T" rated at 5A-250V; outlet, with double wipe contacts rated 10A-250V, 15-inch-125V; pilot light (six watt lamp), 75W-125V. Monowatt, Inc., 95 Hathaway St., Providence, R.I.

(Continued on page 140)

36) AB7941 residential one-piece no addi. reinforce. tred joints, rass strike hinges apingle unit. ors. When

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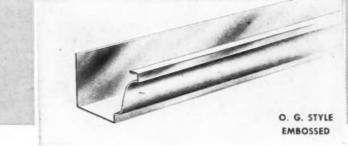
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4-250V; rated ht (six t, Inc. BEAMOTOR FILELIME LUM BUILDING PRODUCTS USED IM THIS CONSTRUCTION

low-cost feature that helps sell houses!



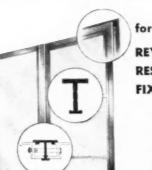
REYNOLDS*[ifetime* ALUMINUM



- Rustproof Permanence at about half the cost of other rustproof materials
- Non-Staining
- New Reynolds Stipple-**Embossed Finish**

A sales feature that prospective homeowners can see and you can advertise, for very little more than the cheapest gutters. No painting, ever. No staining of walls. Simple slip joints, no soldering. Complete fittings. Half-round also available in plain finish. See your dealer or write for folder. Reynolds Metals Company, Building Products Division, Louisville 1, Ky. Offices in 32 principal cities.



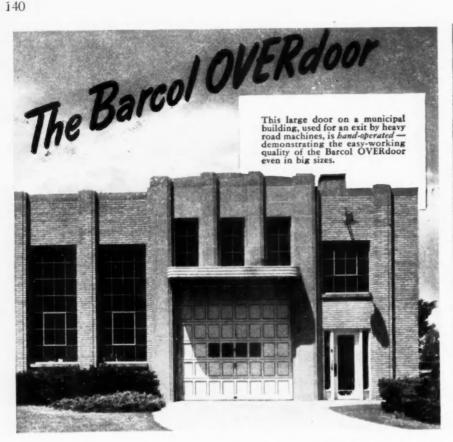


for any type of construction REYNOLDS ALUMINUM RESIDENTIAL CASEMENT, **FIXED and PICTURE WINDOWS**

> Four-point superiority: mechanical joints, extra deep muntins, full range of mullions, wide-opening extension hinges. 98 types and sizes. Write for 16-page booklet.

Reynolds Metals Co., Building Products Div.,

| 2003 So. Ninth St., Lou | isville 1, Ky. |
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| Check here for free sa | mple of Aluminum Nails |
| Check here for literature | on: |
| Reflective Insulation | Flashing Windows ** Stipple-embossed finish |
| Company Name. | EURANT HBRANKLIC LIBITATION |



Easy-Working!

The simplest and surest way to tell how well the Barcol OVERdoor works is ... work it. Raise it ... lower it. Note the roller-bearing glide of the sections ... upward and downward. No other overhead door works any easier!

Weathertight!

To keep out weather, a door must close snugly ... and a really snug door won't rattle. So ... take hold of the handle on that same door that closed so easily ... and try to rattle it. You can't ... because the exclusive closing action of the Barcol OVERdoor insures all-around weathertightness...and easy operation.



CATALOG IN SWEET'S



FACTORY-TRAINED SALES and SERVICE REPRESENTATIVES in PRINCIPAL CITIES



NEW PRODUCTS

(Continued from page 138)

OUTDOOR GRILL

Americ

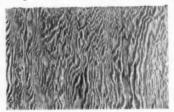
Charco-Grill is designed for cooking over lump charcoal or charcoal briquets. Built of grey cast iron with ten-bar malleable iron top grill; finished with aluminum



paint. Unit has two hinged grills, lower close to coals for fast cooking, upper for broiling. Measures 193/8 inches wide, 171/8 inches deep, 131/4 inches high; weighs 84 pounds. Char-co Grill Senior is 18 inches by 223/4 inches by 13 inches, weighs 134 pounds. American Brake Co., 75 E. 45th St., New York 17, N.Y.

DECORATIVE PLYWOOD AB7920

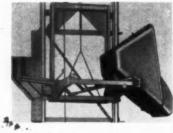
Fir plywood, "Plytex," is wire-brushed to smooth surface which accentuates raised grain figure of wood. Decorative effects



include plain lacquers or wax for natural finish; oil or water stains; blond finish; and two-tone effects with paint. Two grades:
"A" for natural finishing; No. I for painting. Produced in 5/16 inch three-ply panels, 48 inches wide by 96 inches long. Davis Plywood Corp., 12555 Berea Rd., Cleveland

CONCRETE BUCKET

One-half cubic yard concrete bucket fits on frame manufactured by this firm, and is interchangeable with the 5 feet 6 inch by 5 feet 9 inch material platform which



has been standard equipment for the tower now in service. Bucket is roll-over type and will hold full load of 11-S mixer. Descends to low level to permit loading directly from concrete mixer at ground level, or from truck mixers. Automatic discharge regulated in 3-inch increments at any point from 10 feet above ground to within 5 feet 6 inches of tower top. Jaeger Machine Co., Columbus 16, Ohio.

(Continued on page 144)

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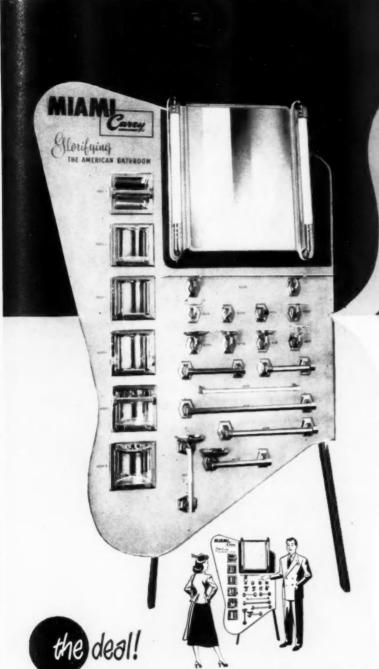
AB7936

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It's simple! A profit-making display can be yours in no time at all—just ask your Miami-Carey representative to make the arrangements, OR return the coupon today.

"HE'LL" WORK THE CLOCK-AROUND ... HELP YOU SELL THE "BATHROOM BEAUTIFUL" WITH PROFIT-MAKING RESULTS

a "silent salesman"

to work for you!

new!

modern!

Yes—this beautiful, compact "silent salesman" display board costs you nothing! It's given to you at no cost when you purchase the Miami-Carey bathroom accessories displayed—at your regular discount!

This handsome display is shipped to you F.O.B. Middletown, Ohio. Accessories are mounted as illustrated. Single items and ensembles are effectively grouped for ready identification. You simply add (in space cut out) a Miami-Carey bathroom cabinet with fluorescent lighting that fits a 14" x 20" wall opening. (For example: #2030)

Your next move? Put your display in a window or on your floor—and watch sales and profits move your way!

MIAMI CABINET DIVISION, THE PHILIP CAREY MFG. CO., MIDDLETOWN, OHIO.

(In Canada: The Philip Carey Mfg. Co., Ltd., 1557 MacKay Street, Montreal 25, P. Q.)

Please tell me how I can increase my sales with your new cabinet and accessory display.

NAME

FIRM

ADDRESS



MIAMI GABINET DIVISION, THE PHILIP CAREY MANUFACTURING CQ. MIDDLETOWN, OHIO

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HOTPOINT

Maqic Circle

Hotpoint round models range from 30- to 50-gallon sizes in the new "Builder's Special" line. One or two Calrod Units may be specified for any size.



Hotpoint table-top models are available in 30- and 40-gallon sizes. One or two Calrod Units may be specified for 40-gallon size only.



1949.

eu Low Cost Line Of Famous

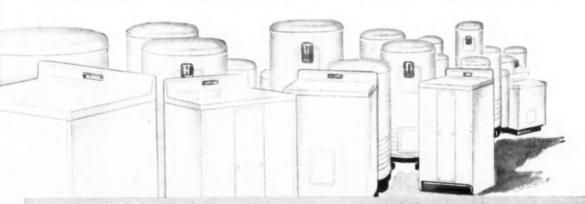
WATER HEATERS

Our Name Is Right...Our Price Is Right ... And Your Profit Is Wonderful!

Now you can equip your new building projects with America's most famous electric water heaters at the same low cost and for the same high mark-up formerly offered only by less desirable makes!

Yes, Hotpoint—America's leading manufacturer of electric water heaters—presents a new line made expressly for builders. Called "Builder's Specials," they combine Hotpoint's traditional quality with new manufacturing economies which in no way affect performance. The resulting savings mean more profits for you!

All nine "Builder's Special" models offer Hotpoint's famous "Magic Circle Heat" of pressurized Calrod® Units, automatic thermostat, heavy-duty tank, thick Fiberglas® insulation plus all the other features which have made Hotpoint America's largest-selling electric water heater. See your Hotpoint dealer for all the money-making details. Hotpoint Inc. (A General Electric Affiliate), 5600 West Taylor Street, Chicago 44, Illinois.



Everybody's Pointing To

Hotpoint

RANGES • REFRIGERATORS • WATER HEATERS • DISHWASHERS • DISPOSALLS®
CLOTHES WASHERS • DRYERS • IRONERS • CABINETS & SINKS • FREEZERS

SPEED CONSTRUCTION

with new

SPEED-WALL

FOR FASTER AND BETTER BUILDING

Increases Builder Profits
Offers More Beauty
Is More Economical
Has Greater Durability
For Any Floor Plan

Reduces construction time 50 to 60%! Actual building records show this astounding fact, where Speed-Wall was used, and other factors were normal. Exterior and partition Speed-Wall, the new, practical materials-method approach to building, offers sparkling opportunities for multiplying profits . . . immediately! . . . to builders, contractors. With Speed-Wall substantial time and material savings are made. Studding, diagonal bracing, fireblocking, insulation, plaster and stucco are unnecessary. Made from No. 1 and better air dry Douglas Fir (o. p.), precision cut Speed-Wall is exceptionally fire resistant, provides 25 to 34% more insulation. Interior surfaces may be stained, varnished, papered, calcimined or paneled. Bathrooms, kitchens may be tiled . . . Everywhere builders and contractors will find using Speed-Wall eliminates many heretofore accepted construction difficulties. Learn ALL the important facts about completely new Speed-Wall. Today! write or wire for free literature.



Patents Pending

Three way sectional view of Speed-Wall elements showing typical corner details.

To those properly qualified, some **EXCLUSIVE** and profitable distributor and dealerships are still available. Wire or write Speed-Wall General Offices.



NEW PRODUCTS

(Continued from page 140)

A D 704

A total lift of 130 inches is reached with mast for Towmotor models LT-40, LT-44 and LT-48. Free lift is 65 inches, lowered



mast height 83 inches. Machine is simple in design and construction; maintains standard capacity ratings. Towmotor Corp., 1226 E. 152nd St., Cleveland 10, Ohio.

VENTILATING FANS

AB7942

Two new models added to Challenger ventilating fan line are the V-520 with 20-inch blade and V-524 with 24-inch blade. Light in weight, models are easy to install. Two-speed split-phase motor, enclosed and featuring porous bronze self-lubricating bearings, is designed for vibration-free continuous fan duty. Signal Electric Manufacturing Co., Menominee, Mich.

LADDER STILT

A R 794

Primary purpose of safety stilt is to maintain ladder in a plumb position on inclined surface, irregular terrain, stairways, etc. Device is comprised of aluminum



channel and indexing lock-pin assembly. Channel envelopes lower end of ladder rail and permits extension of rail from 11/16 inch to 16 inches. By extension of both rails, ladder's reach may be increased 11½ inches. Busse Products, 217 E. Peace 5t. Canton, Miss.

(Continued on page 146)

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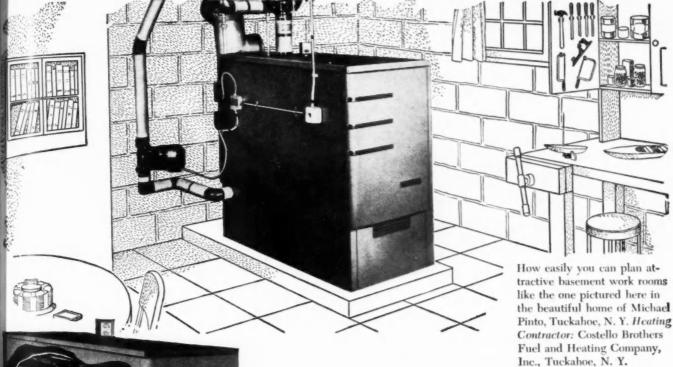
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Gracious living begins in the basement...

With the Spencer "C" Steel Heating Boiler

It's a pleasant feeling to know that your plans fit your clients' every need-especially when clients have the kind of heating they can depend upon all year round. For more than fifty years the name "Spencer" has meant the finest in clean, economical, efficient heating.

Today you can combine beauty and efficiency in every type of residential heating by installing a Spencer "C" Steel Heating Boiler. Just a few of the many fine features-

- Nine different sizes, with capacities ranging from 700 to 3000 square feet (steam)
- Available with a handsome twotone jacket, styled for grace and beauty
- Steel integral door frames with gas-tight doors
- Easily adaptable to either oil burner, automatic stoker, or hand
- All tube surfaces easily and quickly cleaned through front flue door
- Patented Spencer service water heating method, with coils hidden inside the boiler-rear connections



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

COMMERCIAL SERIES:

"A" (steel)-for industry, schools, apartments

"L-2", "L-3" (cast iron, magazine feed) -for large homes, churches, apartments

RESIDENTIAL SERIES:

"R" (steel) and "21" (all purpose, cast iron)-for homes and small buildings "F" (cast iron, magazine feed)-for small homes



THE SPENCER MARK OF ENGINEERING SKILL .

All Spencer Heaters are High Standard Avco Products -Backed by over fifty years of

Precision-engineered-to meet

Individually tested and inspected

Installed only by the heating trade

Clean - Quiet - Economical

heating experience

rated specifications

-Effortless-Safe

ments. Fully approved by Steel Boiler Institute.



1949 CLIPPER MASONRY SAWS

Yes, nine NEW models to choose from and each Yes, nine NEW models to choose from and each with outstanding features for smooth, fast and economical Clipper Cutting Action. See the 1949 DUSTLESS Model HD—cuts wet or dry—the 100% Answer to All Masonry Cutting. Contact your nearest Clipper Factory Branch for a FREE TRIAL on any of the nine Clipper models. See the "ADJUST-A-CUT" Control; "PRESSURE EQUALIZER" Spring; and the STREAMLINED Conveyor Cart... you'll know why Clipper is Conveyor Cart . . . you'll know why Clipper is more outstanding than ever before!

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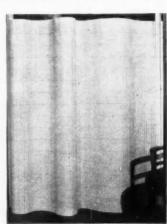
Philadelphia • St. Louis • Cleveland • Austin, rex. • San Francisco

NEW PRODUCTS

(Continued from page 144)

DOOR SCREEN

A flexible-type door screen for use in homes and offices, the "Vudor" is produced in several colors. Construction is of light-



weight wood slats; screen can be adjusted to number of positions. Used as partition, shield for nursery crib, concealment for radiator, etc. Hough Shade Corp., Janesville, Wis.

FLOOR POLISHER

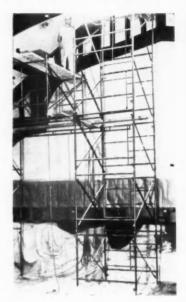
AB7908

AB7926

FPII floor polisher has cast iron base with motor centered directly over brush. The 10 inch brush with 11 inch bristle spread revolves at 300 r.p.m. Polisher cable holds cord taut, releasing cord as needed. Has bicycle type handle bars, pistol grip switch, white rubber bumper. Detached base can be used for polishing small areas, Operates on AC or DC, weighs 30 pounds, Red Devil Tools, Irvington 11, N.J.

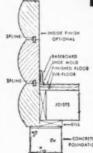
SECTIONAL SCAFFOLDING AB7944

Waco tubular type sectional scaffolding includes basic fixed types with adaptations and rolling towers. Locking device elimi-



nates wing nuts and threaded bolts, permitting rapid assembly. Connector pins are riveted to each frame. Ladders are welded into each frame, provide planking every 15 inches. Wilson-Albrecht Co., Inc., 3565 Wooddale Ave., Minneapolis 16, Minn.





Here's a virtually untapped market ready and waiting for you. Low cost, exceptionally attractive real log homes in 30 days - approved for FHA financing. Walls 3 to 31/2" thick of healthy, precision-cut Douglas fir logs, treated to prevent discoloration and deterioration — ample insulation - no studding required. Adaptable to any floor plan, residential or commercial - hundreds of attractive designs already built!

HOMES IN 30

LOW COST



Distributors in Principal Cities A FEW CHOICE DEALER TERRITORIES STILL OPEN Write or wire for complete information

LOG STRUCTURES OF THE SOUTHWEST, INC. 344 W. Colorado Street, Glendale 4, Calif.

Most ro particul and sha that is below t narrow

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Length Shake 16" 18"

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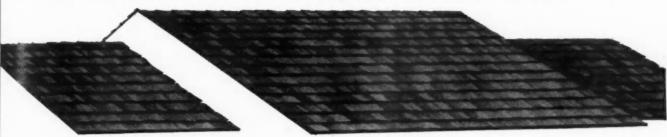
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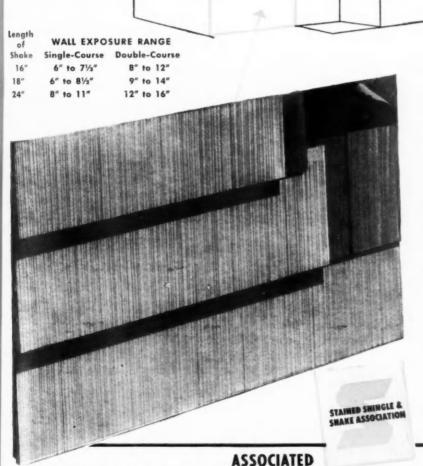
Every Builder Should Know These Facts About Stained Shingles and Shakes...



Most roof and wall materials must be applied in one particular way. Not so with stained cedar shingles and shakes! Builders apply them at the exposure that is just right for the job. Note from the table below that walls of shakes can have exposures as narrow as 6"...as wide as 16".

For economy, and for best roofing results, each different roof pitch requires a different "coverage" value. Stained shingles can be applied at exactly the right exposure to suit the pitch. Pre-staining preserves shingles—saves building costs.

| Roof | Exposure | Exposure | Exposure | |
|------------|--------------|--------------|--------------|--|
| Pitch | 16" Shingles | 18" Shingles | 24" Shingles | |
| 1/s to 1/6 | 33/4" | 41/4" | 5%" | |
| 1/4 to 3/4 | 5" | 51/2" | 71/2" | |



Pre-staining impregnates all surfaces with preservative oils...adds surface "seal" to the excellent weather resistance of cedar shingles.

Double-coursing extends exposure maximums. Economical use of second grade shingles, covered by exterior courses of stained cedar shakes, permits 12-inch exposure of 16" shake length. 18" shakes are similarly applied on 14-inch exposures.

Shake edges are machined parallel and vertical to butts, insuring straight horizontal course-lines. Parallel edges permit tight joints which blend with processed grooves, eliminating the "shingled" vertical breaks.

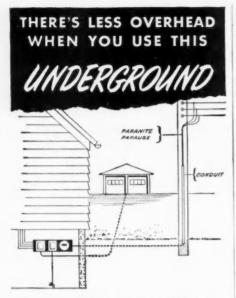
Edge view illustrates double-coursing application. First course is tripled, eliminating costly drip-cap. Corners are mitered. Application is simple, rapid, economical. Rabeted shiplap strip guides both under and outer courses for butt-nailing.

Complete application instructions and specifications for all shingle and shake products in Sweet's File

.....

MANUFACTURERS

Wood Beautifiers, Seattle, Washington
 Colonial Cedar Co., Inc., Seattle, Washington
 M. R. Smith Lumber & Shingle Co., Seattle, Washington
 Canadian Forest Products, Ltd., Vancouver, British Columbia
 The Robert McNair Shingle Co., Ltd., Vancouver, British Columbia
 Creo-Dipt Company, Inc., North Tonawanda, New York
 Everett Shingle & Shake Company, Everett, Washington
 Capilano Timber Company, Ltd., Vancouver, British Columbia
 Perma-Products Company, Cleveland, Ohio
 West Coast Stained
 Shingle Co., Seattle, Washington
 Portland Shingle Company, Portland, Oregon



ParaUSE "Type RR" Cables are made with a high grade heat and moisture resisting insula-tion protected by a tough neoprene sheath over the conductor insulation. This jacket provides an armor for the conductors which is resistant to heat, (even to flame), oils, acids, alkalis, and moisture. Sunlight, air or exposure to weather has little or no effect on its life. ParaUSE Cables are designed for direct burial in the earth, or for installation in street ducts or on overhead

PARANITE "ParaUSE" CABLE "Type RR"



NON-METALLIC-NEOPRENE SHEATH

ParaUSE "Type RR" Parkway Wire and Cable provides economical permanent underground installation from power line to meter and for connecting several buildings from the same service. Examples of its application are on farms, estates and institutions, and for lighting streets, airports, ball parks, drive-in-theatres and many other outdoor lighting and power

It eliminates the trouble from sleet, windstorms and weathering. Unsightly outside wire is also done away with. You save labor. You save time. Simply dig a trench and cover; no other protection necessary.



City Conveniences

(Continued from page 78)

The Nevills have their own water system. The water supply comes from a spring located about 1,800 feet from the water tank of 7,500 gallon capacity. The water system provides forty pounds pressure at all outlets in the house. An irrigating system connects with the tank and the water flows by gravity through 4-inch removable aluminum pipes to the garden and orchard.

The Nevill home consists of three bedrooms, two tile baths, a long hall, living room and dining room combination, kitchen and breakfast room combination, and a two-car garage and laundry room.

During recent years the growth of the liquefied petroleum gas industry has been extensive, making it possible for many householders like the Nevills to take up residence in suburban and rural areas.

The LP-gas industry is meeting these demands by earmarking millions of dollars for continuous expansion of facilities to provide complete fuel service and more comfortable living conditions for thousands of homes not reached by distribution mains. While some of these homes represent new construction, many are homes that have converted to LP-gas.

All liquefied petroleum gas tanks are installed out in the open and require little space for installation. Once set up, the system is the source of supply of all gas used by the householder. The gas flows from the yard tank to appliances through the house piping system.

Engineers point out that handling liquefied petroleum gas is less hazardous than handling other liquid fuels because LP-gas tanks are closed and are designed to prevent release of vapors into the air. With proper piping and appliances, and with a system installed and maintained in proper condition, liquefied petroleum gas service is as safe as any other fuel used in the home and safer than many fuels in general use.

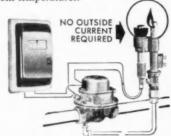
The customer may choose one of two methods of getting LP-gas service. He may purchase and maintain his own system, or he may obtain a system on a lease basis. Lone Star Gas Co, and many other LP-gas distributors use the latter method of supplying butane or propane.

In addition to homes, there are hundreds of industrial and commercial users of LP-gas-restaurants, cotton gins, hospitals, feed mills, and schools. Some railroads have butane or propane drums under dining cars and coaches to provide fuel (Continued on page 150)

Control AUTOMATICALLY

without Outside Current

The tiny pilot flame generates the electrical current to operate the contol system. All three units scientifically designed to provide safe, remote control of room temperatures.



Automatic.

Safe, Silent and Self-Operated



Put GENERAL CONTROLS heating comfort in the plans. It's the easy, modern way and effects construction economies, too

Request Free Descriptive Literature on the B-60 "All-Gas" Control System

GENERAL CONTROLS 801 ALLEN AVENUE, GLENDALE 1, CALI

Manufacturers of Automatic Pressure, Temperature, Level & Flow Controls Factory Branches and Distributors in Principal Citi





Red Cedar Closet Lining

Only SUPERCEDAR is of Only SUPERCEDAR is of the same uniform high quality standard that quarantees every package to contain 90% Red Heart or better, and 100% oil content which produces the pleasing aroma.

PACKAGED LABELED

Guaranteed 90% Red Heart or Better 100% oil content Suggest Cedar Line Closets to Every Hom Builder. There is Nothing Better than



More home builders are specifying cedar lined closets today than everand Brown's SUPERCEDAR is nationally advertised to thousands of new home propects, architects and builders SUPERCEDAR closet lining is surfaced, tongue and grooved ready to put on with no waste Packaged and sealed with the Geo. C. Brown label and guarantee, famous since 1886. More home builders a

Product of GEO. C. BROWN & CO.

GREENSBORO, N. C.

ESTABLISHED 1888

LARGEST MANUFACTURERS OF AROMATIC RED CEDAR IN THE WORLD

30 and 5

Model Z

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coal burn

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airbank

OCOMOTI . RAILRO

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TAN LLY enerates contol Model ZB self-feed ally de-atrol of bituminous stoker. In

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coal burning capacities of 15, 30 and 50 pounds per hour.

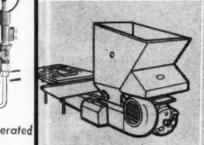


Model 8-15 hopper type bituminous stoker. Features high and low feeds for houses up to 5 rooms.

Model BD self-feed, commercial type stoker. In capacities of 75, 100 and 150 pounds of coal per hour.



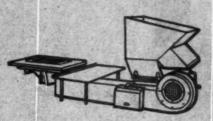
Model 550C-Coal-fired boiler. Convertible to gas or oil fuel.



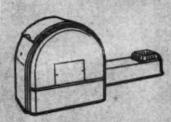
lodel H 225 industrial hopper type stoker.



Model 510-OW-Oll or gas-fired packaged unit boller.



Model N 630 Industrial hopper type stoker.



Model Z hopper type bitu-minous staker. For houses of 6-12 rooms.

ous Recommend and Relax

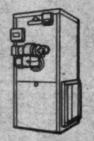
he builder or contractor who recommends Fairbanks. forse heating equipment does so confidently. The high uality of materials and construction in every Fairbanksforse product is assurance of dependable performance nd trouble-free service—of harmonious relationship with ustomers for the lifetime of the equipment. Recommend airbanks-Morse heating equipment ... and relax. For full formation, write Fairbanks, Morse & Co., Chicago 5, Ill.



FAIRBANKS-MORSE,

a name worth remembering

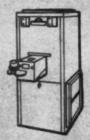
OCOMOTIVES . DIESEL ENGINES . PUMPS . SCALES . MOTORS . GENERATORS · RAILROAD MOTOR CARS and STANDPIPES · FARM EQUIPMENT · MAGNETOS



Model 70-OH-OIIfired packaged unit utility furnace.



Model 90CG-square case gravity furnace.



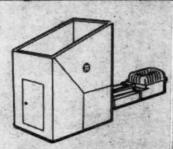
Model 80-GH-Gas fired packaged util-Ity furnace.



Model AH 400 hopper type anthracite stoker, with automatic ash removal.



of lodel 120CF—Forced inter air-conditioning rnace.



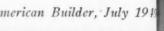
Model D 150 hopper type commercial stoker.



Model FM2-Conversion oll burner.



Model AB 600 self-feed anthracite stoker, with automatic ash removal.



Auerica





√ Lighter colors ✓ Greater color variety

✓ Brighter colors
 ✓ Grease resistance

PLUS ECONOMY!

Installation of AZPHLEX Asphalt Tile flooring adds a lot to the beauty, value and "livability" of any home - and the modest price tag on this premium-quality tile makes it perfectly in line for low and medium priced home construction! AZPHLEX goes in fast and with minimum difficulty .. it has a protective, factory applied wax finish that makes initial polishing easy . . . it is colorful and attractive . . . and it offers maximum resistance to the effects of animal, mineral or vegetable greases, alkalis, alcohol and mild acid solutions. It will take a very high polish — and keep it for an exceptionally long time; and its resistance to denting and marring is unsurpassed.

*From results of national poll

TO LAY BETTER FLOORS FOR LESS . . . AND HAVE THEM WORTH MORE -PREMIUM-QUALITY

For detailed information se Azrock-Azphien Deal or write direct to Dept. B. **UVALDE ROCK**

City Conveniences

(Continued from page 148)

for cooking, water heating and air conditioning.

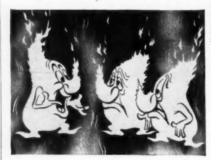
Industrial engineers are studying closely the LP-gas boom, foreseeing that many small industries, too far away from gas mains, may arise as a result of the availability of this clean, convenient and dependable fuel.

The most important application of this all-purpose fuel however is for the comfort, convenience and safety of the millions of persons living bevond city gas mains. In the years to come it will serve the vast majority of rural and suburban households not reached by gas distribution systems.

LP-gas can give every remote farm and suburban home a kitchen that will please the most exacting householder. This "tank" gas is making a definite and enormous contribution to better living in the United States.

Gypsum Animated Film

JAUNTY The Flame, a new animated movie character in color originated by the Gypsum Association, is making a nationwide hit on movie and television screens. Jaunty was invented to dramatize the fact that gypsum is fireproof, but he has been winning



friends on personal appeal. He tells a "believe-it-or-not" story of gypsum. Starring in "White Magic," he is assisted by top Hollywood performers in two other 16 mm. sound-color shorts produced for builders and dealers by Jerry Fairbanks, several-time winner of Academy Awards. These films are available for any showings to dealer or builder groups or their customers, civic and service organizations. For booking dates write to Gypsum Association, Civic Opera Building, Chicago 6, Ill.

Fiat Names Sales Manager

THE appointment of Hugh A. White as sales manager of its Shower Cabinet division has been announced by Fiat Manufacturing Co., Chicago, Ill.

For more than ten years White has been a member of the sales staff of Fiat's Long Island City, N.Y., plant. He will be located in

RESIDENTIAL INCINERATOR



ESSENTIAL AUTOMATIC

Easy even-block installation. Fits in base of chimney. A low cost packaged unit, completely insulated. Write direct for information.

> Residential and industrial territories still open.

INCINERATOR PRODUCTS CO. DETROIT 17. MICH. 667 POST S.

Model Home

(Continued from page 110)

The arrangement of rooms is distinctly different from the ordinary. All service units which include the garage, kitchen, utility room and service porch are located on the street front. The bedrooms and bath are lined up alongside of each other at the rear, thus forming a quiet zone away from the service end. Living room, dining room, porch and master bedroom occupy the center portion of house. In this manner an inside patio is formed which is enclosed on the open side with a grapestake fence. A series of sliding doors open up one wall of the living and dining room to the porch adjacent to the patio.

One of the features of this model house is the use of Kaiser Aluminum siding for the exterior wall finish. Platt says that the public reaction to this material was very good. The people were impressed with the practicability of the concave surface of the siding when they were shown that it could withstand blows and normal rough usage that an exterior surface material would have to bear.

This house, which is priced at \$31,-500 including landscaping and draperies, is part of a 65-home project that is currently under construction by Platt & Goheen.

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Sound lumber construction at lower cost...every builder's goal...is possible by specifying the least expensive grade that fulfills the requirements suitable for the purpose. Time-tested WEST COAST WOODS are graded to meet your requirements through every phase of construction...and cut costs at the same time.

The market for low-cost housing is limitless. An important factor in supplying this market is proper use of the lower-grades of lumber.

Timber is a crop...and grows on tree farms. Lumber, properly used, represents less than 20% of the cost of the average home.

FREE BOOKLET!

This illustrated booklet "How to Build Well and Save Money," is being offered to your prospective customers through national advertisements. You'll want to get a copy for your own information.

SEND THE COUPON TODAY FOR YOUR FREE COPY!



NEST CORST NEWLOCK DOUBLES PIR

IT'S SMART TO BUILD WITH THESE

WEST COAST WOODS

WEST COAST WOODS 1410 S.W. Morrison, Room No. 644 Portland 5, Oregon

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World's Largest Manufacturer of Combination Windows

You've never seen a more complete vertical slide window...
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that has so many advantages
that has so many advantages
FOR THE BUILDER...
FOR THE HOMEOWNER!



The Rusco Prime Window represents an adaptation of the basic engineering principles that have made Rusco all metal, self-storing combination windows today's most widely accepted unit of its kind.

The highly successful and proven features of the Rusco Combination Window have been altered slightly to meet the requirements of new construction. The result is a trim appearing, efficient, prime window unit that is extremely practical, durable and trouble free . . . simple to install, low field costs, and provides year 'round protection, comfort and convenience for the homeowner.

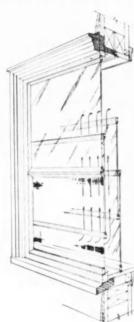
A COMPLETELY
ASSEMBLED UNIT..
ASSEMBLED UNIT..
GLASS AND SCREEN
GLASS AND SCREEN
PANELS, WEATHER
PANELS, WEATHER
STRIPPING AND
SURROUND!

THE RUSCO PRIME WINDOW

. the most complete, practical, package unit ever developed!

ALL WORKING PARTS OF STURDY, TUBULAR, GALVANIZED STEEL ... ALL INSTALLATION MEMBERS OF TOXIC TREATED WOOD ...

The Rusco Prime Window Unit is made of finest quality galvanized steel-bonderized for perfect paint adherence -treated with rust-resisting zinc chromate-and finished with baked-on, outdoor, aluminum enamel-REQUIRES NO FURTHER PAINTING IN THE FIELD-except wood surround. Its tubular construction gives maximum strength and rigidity with minimum weight. Glass is bedded in mastic and held in place by removable, stainless steel spline . . . simplifies glass replacement . . . NO UNSIGHTLY PUTTY IS USED. Lumite plastic screen cloth is standard - will not rust, rot, corrode or bulge ... can be left in place the year 'round . . . never needs painting.



Long life waterproof felt weather stripping assures a completely weather-tight window, and ease in operation without sticking or rattling. Steel is used where strength, ease of operation, permanence and beauty are desired . . . wood is used where ease of installation and architectural harmony are essential.

AVAILABLE WITH STORM PANELS

Rusco Prime Windows may be had in conjunction with inside-adjustable, selfstoring, storm panels . . . factory fitted . . . complete in frost-break frame. This affords all of the benefits of the famous Rusco Combination Window...the leader in the field since 1937.



SIMPLE, FAST INSTALLATION CUTS FIELD COSTS

Insert wood surround into window opening and nail in place. Glass and screen panels may be inserted when desired.

Always fits-steel frames cannot warp, shrink, expand or bind.

SLIDES FREELY-LOCKS IN ANY VENTILATING POSITION





No weights, balances or cords are used in the Rusco Prime Window . . . the light steel frames never swell or bind . . . always slide easily. Locking

mechanism is simple and positive, nothing to get out of order » » Slight pressure with thumb on side of handle releases lock so that panel can be moved to position desired. Release of pressure locks window.

LIGHTWEIGHT, STREAMLINED GLASS PANELS ARE EASILY REMOVED FROM INSIDE

MAKES WINDOW CLEANING EASY

Housewives can now clean windows and screens from the inside. Just slip out the panels-it's as easy as that-takes only a second or two.



SEND COUPON FOR COMPLETE CATALOG. Valuable Franchise Territories Still Available.

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| Gentlemen: Please se specifications on Rusco | - | ormative data and |
| (Please check) I am Building Supply De | | uilding Contractor |
| NAME | Tiblos. | 1000 |
| COMPANY | LIC LIBRARY | PATO FIRSTA |
| ADDRESS | ELKY | |
| CITY | ZONE | STATE |

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HOW TO GIVE VARIETY TO MASS PRODUCTION HOMES!



Arch. HAROLD SPITZNAGEL Sioux Falls, S. D.

CABOT'S CREOSOTE STAINS . . .



Easy to apply . . . won't peel or blister. Practical and inexpensive . . . cost only one-third as much as good paint. High proportion (60–90%) of refined creosote oil gives years of protection against decay!

Write today for free color card and complete information.

Samuel Cabot, Inc.

724 Oliver Building, Boston 9, Mass.



Dealer Review

(Continued from page 116)

intent of Congress in its original bill to exempt retail dealers from the wage-hour law. It is on this intent that the industry bases its opposition to the present proposal, which places the industry within the provisions of the law.

A report was made on NRLDA's activity in developing the farm grain storage market for the retail lumber dealer. The association has prepared a folder, "The Farmer's Forties," for distribution by dealers to farmers in the grain states.

The educational committee reported on the successful operation of seventy-two 30-day short courses at 16 universities in the country. Plans were made for training lecturers to direct these courses, to make wider use of visual aids, and to reduce the number of product hours while increasing the emphasis on salesmanship and merchandising.

It was suggested that the national association plan a series of regional meetings for members of the national affairs committee early in 1950, in order to provide the industry with more complete information about the pending legislative program. A tentative schedule will be presented at the annual NRLDA convention to be held November 6-11 in San Francisco.

Charles Price, of Scott, Mac-Leish and Falk, emphasized the competitive aspect of today's market. He also outlined the types of services which could be rendered by state and regional associations to their members without infringing in any way upon legal restrictions placed by government on the industry.

In his report Philip Creden. chairman of the public relations committee, emphasized the premise that sound public relations must be based on actual industry performance. The committee is preparing a public relations "primer" for distribution to the entire NRLDA membership. In addition. the committee has made plans for the organization of a group of dealers known as "minute men," who will be on call for public relations assignments. These men will be acquainted with all facts about the industry, public housing, etc., and will be provided with material for newspaper releases and for talks before civic organizations.

The dealers agreed there is a need for selling and educating the public.



SUMMER

a

Deer Trail Lodge

 Summertime is most delightful at Deer Trail Lodge — warm days and cool nights.

There are thrills of horseback riding along beautiful trails, to say nothing of boating on Lake Nokomis with its 45 miles of shoreline. In fact, there is not a dull moment any time of the year for old and young.

Tennis courts, shuffle board, badminton courts, horseshoe courts, archery ranges, swimming — pool and beach, baseball, croquet, bicycling, bowling, trapshooting—all in the midst of Wisconsin's pine country. American plan. Distinguished clientele.

SEND FOR ILLUSTRATED BOOKLET

Deer Trail Lodge

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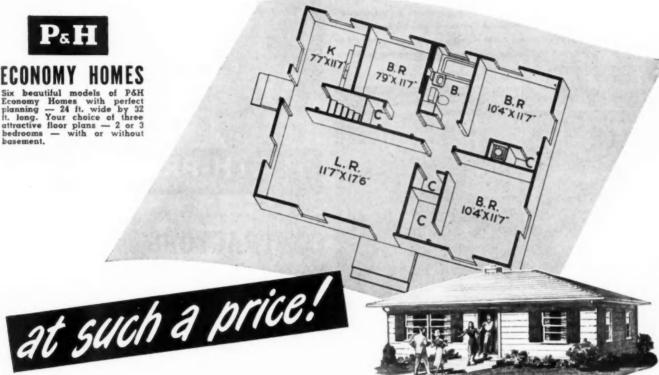
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such a home...

It's a bigger home — with 35 square feet more living space than ordinary houses of the same dimensions. And it's packed with sure-fire selling features -features that appeal to customers and make them buyers. No wonder builders have been so quick to recognize its big profit opportunities!



\$6.995! That's the price of this well-constructed P&H Economy Home, complete, ready to move into. Builders say it's the home they've been waiting for - the home that's designed to tap the heretofore unserved mass market!

Erected in a Single Day!

One day, not weeks or months! P&H Economy Homes come from the factory 83% complete. Quick erection really pays off — ties up your money for a shorter time—eliminates months of waiting for your customers.

Sound Construction - Durable

They're sound basic dwellings. No unnecessary or costly frills but true charm, beauty and generous space for living. Strong and durable, too - because amazing strength and rigidity are built into permanent wall sections that are 14 times stronger than customary construction!

Make More Profit in '49

Builders! Write, wire or phone us concerning the P&H Franchise in your territory. It's a big profit opportunityl Speedy erection means-quicker occupancy quicker sales - more houses - more profit. Get in step now.



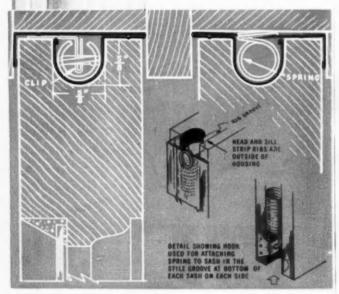
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LOOK!

Balance Sash and Weatherstrip with One Enclosed Unit

THE ALLMETAL SASH BALANCE & WEATHERSTRIP UNIT

MAKE IT EASY FOR YOURSELF. Give your client a better installation and better sash control by using this sombination Sash Balance and Weatherstrip Unit. The ALLMETAL Sash Balance is rolled from one piece of metal and new engineering principles have been applied to give true two-way balance action—making use of both spring tension and metal tension—thus gaining stability. In raising and lowering sash, spring housing (in itself the most effective weatherstrip) compresses against groove yet does not hinder vertical movement. Hemmed side ribbing against the stops gives additional weatherstrip protection. Spring never shows. It is completely enclosed.



- 1. Spring for vertical tension.
- Enclosed housing for lateral stability and neater appearance.
- 3. Complete metal runway coverage.
- One-piece tubular housing conceals spring.
- 5. Specially designed sash clip for secure spring holding.
- 6. Full %" x %" sash groove

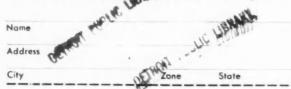
Write today for complete details about this new, better, economical window equipment which saves so much in labor and time.

ALLMETAL
WEATHERSTRIP COMPANY
2243 North Knox Avenue Chicago 39, Illinois

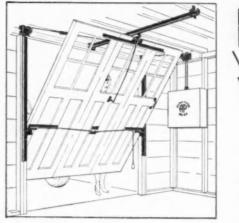
ALLMETAL WEATHERSTRIP CO.

2243 North Knox Avenue, Chicago 39, Illinois

Gentlemen: Please send me plete information and prices



50-50 PUSH-OVER GARAGE DOOR HARDWARE





Heavy duty, well-engineered garage door hardware. Result; a quickly installed, easily operated, overhead door. Designed to insure **customer satisfaction**.

Standard set fits any opening up to 9' wide x 7'6" high when doors do not exceed 275 lbs. Other sets available for openings up to 10' wide x 10' high.

ALLITH-PROUTY, INC.

CONTRACTORS & BUILDERS



Have your masonry THOROSEALED and satisfaction is assured......

The foundation is the most important part of the structure, have it THOROSEALED on the outside surface to keep water out of the walls.

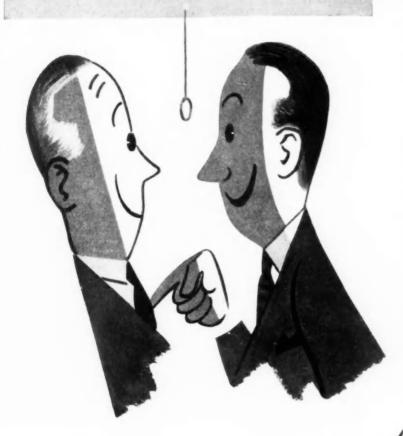
If foundation is already built and leaks, have it THOROSEALED on inside surface to keep water out of the room.



WRITE NOW for NEW 20 page brochure with 4 pages of specifications pictorially described. No. 144

STANDARD DRY WALL PRODUCTS
BOX X. NEW EAGLE, PENNSYLVANIA

" and believe it or not ROOM-DARKENING too!"



Columbia Window Shades and Venetian Blinds are sold only in leading department and furniture stores and shade shops designated as Columbia Authorized Dealers. May we send you samples of our room-darkening shades and the name of the Columbia Authorized Dealer nearest you? Write today.

Ask a Columbia Authorized Dealer

Columbia
WINDOW SHADES
AND VENETIAN BLINDS

Columbia's room-darkening window shades revolutionize light control. They're decorative and functional, too. Sturdy, long-wearing... with the additional special talent of shielding a room from light.

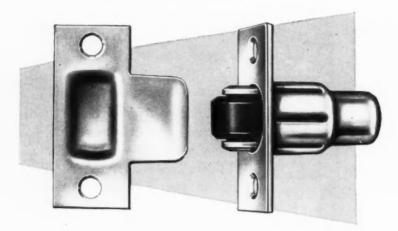
Look for room-darkening shades in Columbia's REGAL grade. Made of high-count cambric, with a truly beautiful "hand" and a smooth, dust-shedding surface. Economically priced... and easily washable for thrifty maintenance. In light as well as dark colors.

See Columbia's VELLMO, too, a super quality grade, so completely lightproof that it's standard for such uses as X-ray rooms. And here's the surprise ... VELLMO boasts high-style pastels and dazzling white. Any size you need up to 150 inches wide!

PERFECT FOR

- · hotel rooms.
- · hospital rooms.
- · housing projects.
- · school rest rooms, auditoriums.
- recreation and convention rooms with television sets.

How to catch a client's interest . . . and build greater satisfaction into homes



New Stanley ROLLER CATCH for Interior Doors

For years home buyers have wanted just such a convenience. Watch your clients' interest mount when you point out the advantages of the Stanley No. 23 Roller Catch—how smoothly and silently the catch rolls into the strike pocket . . . holds door securely in closed position, and eliminates rattling.

It's the ideal catch for any interior

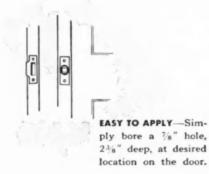
house door (closet, wardrobe, communicating) that does not require a lock. Case is of steel with rust-resistant finish. The strike and face-plate are furnished to match hardware finishes. Recommend and install the No. 23 Roller Catch, made by Stanley, a name your clients know and trust. The Stanley Works, New Britain. Connecticut.



EASY TO ADJUST

No tools needed. For variance in distance between edge of door and casing, simply pull roller-plunger for-

ward and turn with fingers. Each half-turn provides a 1/64" adjustment. Maximum adjustment 3/8".





HARDWARE . HAND TOOLS . ELECTRIC TOOLS . STEEL STRAPPING

Dealer Review

(Continued from page 117)

turn by train—interest in the contest ran high. Representatives of the firm attended special school assemblies to orient the students on the rules of the contest, and inform them where source material could be obtained. Mimeographed information sheets were given to each pupil.

Winners of the contest were announced May 2. Six were girls and

The winners were feted at a banquet May 4, attended by firm officials and faculty members. Norman P. Mason, head of the Proctor Co. and immediate past president of NRLDA gave a talk emphasizing the importance of maintaining the free enterprise system. Local press and radio representatives also were guests at the banquet and provided good coverage for the event.

Th

The winning contestants spent three days in Washington. Sightseeing trips and visits to Senate and House sessions comprised their program.

The Proctor organization pointed out that through the 600 essays entered in the contest, at least 600 families learned a lot of facts about the private building industry. In addition, there was much favorable publicity in the press and on the radio. They added that the contest was not only entirely gratifying as far as public relations was concerned, but that they thoroughly enjoyed doing it.

Timely Home Planning Facts Contained in New Manual

A book containing complete information on home construction and the use of building materials has been prepared by the National Building Material Dealers Service Corp., Entitled "Home Planners' Institute Manual," the 160,000 word volume has been recommended especially for reference work in retail lumber dealer and building material dealer offices, and for distribution to schools and libraries.

The manual contains 42 lectures, written in non-technical language, covering all the basic materials used in home construction, decoration, and maintenance. Research on which the lectures are based was carried on by 32 national associations. Some of the subjects are "Choosing a Homesite," "Financing a Home," "Paint and Decoration," "Builders Hardware."

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This Cost-cutting Building Combination Helps You <u>Sell More Houses</u>

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

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

First, modern stucco means lower cost construction—to produce homes that appeal to buyers price-wise. In most areas stucco siding costs only about ½ the cost of equivalent siding material.

Second, the Keystone System of Stucco Application produces stronger, more durable stucco—for lasting crack-resistance and permanent beauty.

So, take advantage of the cost reduction and quality construction you achieve with this sales-stimulating building combination now. Build with stucco—the Keystone way.

The KEYSTONE SYSTEM of Stucco Application—using Keymesh Reinforcing, furred out ¼" to ¾" from the felt backing—gives stucco strength right in the middle of the tension zone. Normal structural movement is counteracted by the rigidity and strength of Keymesh Reinforcing, to resist cracking and checking.

Stucco's durability has been proved on thousands of homes erected with Keymesh

Reinforcing—in both hot and cold climates. Use Keymesh Reinforcing for new home construction and overcoating—1½" hexagon mesh, 17-gauge galvanized steel wire, or 1" hexagon mesh, 18-gauge galvanized steel wire.



For complete information, see your building materials dealer or write direct. Find out all about the Keystone System of Stucco Application, and use Keymesh Reinforcing in easy-to-handle 3' x 150' rolls.

Keystone Steel & Wire Company
PEORIA 7, ILLINOIS

Manufacturers of Keymesh Reinforcing, Welded Fabric, Tie Wire and Nails

Durable, Low-Cost Stucco
Calls for **KEYMESH**



HOPE'S The Name Guarantees



Picture window at the residence of Mr. & Mrs. Ernest Fox, Frewsburg, N. Y.

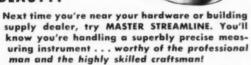
For the greatest satisfaction with a picture window, select Hope's standard (Holford) steel frames and casements. Hope's picture windows are made to receive standard sizes of nominal 1" thick double glass such as "Twindow" or "Thermopane", or they can be glazed with single panes of sheet or plate glass. The low cost and ease of installation will surprise you. Write for leaflets Nos. 102E and 116.

HOPE'S WINDOWS, INC., Jamestown, N. Y.

THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS

ACCURACY! CONVENIENCE! BEAUTY!

Bridget I MASTER 2



Note the extra-long 7/16" tip: STAYS PUT ALMOST ANYWHERE! . . . the positive Lever Tape Lock: HOLDS READING AUTOMATICALLY! . . . fine tempered steel blade graduated on both sides: ALWAYS RIGHT FOR ANY MEASUREMENT! . . . direct reading inside measure: QUICK AND EASY TO USE! . . . mirrorchromed case: STREAMLINE'S FUNCTIONAL BEAUTY LASTS!

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See, try and buy one now. If you prefer, mail coupon with remittance for your STREAMLINE today!

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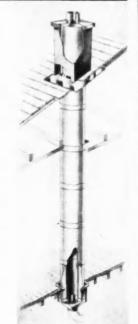
VAN-PACKER CHIMN TITLE II ECONOMY HO

SUSPENDED FLOOR SUSPENDED for FLOOR FURNACE BASEMENT HEATER

- FHA and Underwriters approved for gas, oil, coal, wood, etc.
- SHIPPED complete—all parts for the entire installation—packaged and illustrated installation instructions.
- CEILING or floor suspended—no foundation.
- INSTALLED in 4 man hours or less-summer or winter.
- IMMEDIATE shipment-one or a carload.
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It's the H.C. Little Oil Floor Furnace!

Tell a prospective buyer that your house offers heavenly, healthful warmth all winter—guarantee him an end forever to furnace tending—cater to his 10-room tastes and 5-room pocketbook—and you've sold a house!

FOR 10-ROOM TASTES

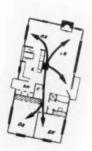
H.C. Little is the ONLY Oil Floor Furnace that Automatically LIGHTS ITSELF by means of exclusive H.C. Little Electric Ignition. No pilot light to waste oil or cause soot and smoke. Just carefree comfort around the clock, around the calendar.



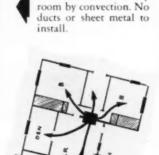
Exclusive H.C. Little Electric Ignitor. The Furnace LIGHTS ITSELF.

H.C.Little floor furnaces

distribute heat to every

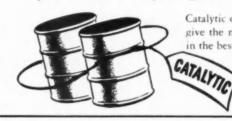


H.C. Little dual wall register floor furnaces stimulate natural heat flow and cool air return without ducts.



FOR 5-ROOM POCKETBOOKS

The H. C. Little Oil Floor Furnace Burns Low Cost Catalytic Oil. The provable saving in fuel bills is an important factor to today's budget-minded buyers.



Catalytic oils cost the least, give the most heat and are in the best supply.

CONDENSED SPECIFICATIONS

No. 70-47 No. 100-47 No. 70-47 No. 100-47 STANDARD STANDARD DUAL DUAL REGISTER REGISTER REGISTER REGISTER

| | REGISTER | KEGISTER | KEGISTER | REGISTER |
|---|---------------|---------------|----------------|---|
| Maximum Capacity, oil per hr. | 1.85 qts | 2.7 qts | 2 qts | 3.15 qts |
| BTU per hour Input to furnace | 64,750 | 95,000 | 70,000 | 110,000 |
| BTU per hour Output from furnace | 50,000 | 75,000 | 55,000 | 80,000 |
| Dimensions of floor opening to receive furnace | 22½"x 28½" | 22½"x 40½" | 22½"x 28½" | 22½"x 40½" |
| Distance floor level to bottom of unit | 441/2" | 441/2" | 441/2" | 441/2" |
| Size of stack connection | 6" | 6" | 6" | 6" |
| Distance center line of stack connection below floor level | 2714" | 2714" | 271/4" | 271/4" |
| Dual Register, width and height | | | 31%"x 1514" | 43 ¹¹ / ₁₆ "x 15 ¹ / ₄ " |
| Wall opening, width and height | | 1 | 30"x13½" | 42" x 131/2" |

For full details write

OTHER LUXURY FEATURES

Uniform warm air circulation and ample heat in the coldest weather ... silent operation ... cleanliness that means less housework, more leisure ... all ordinary service performed below floor.



H.C. Little
Burner Company

Dept. AB 7 SAN RAFAEL, CALIFORNIA

Or consult 'phone directory for offices in:

Baltimore, Md.
Belmont, Mass.
Boise, Idaho
Chicbgo, III.
Columbus, Ga.
Detroit Lakes, Minn.
Fayetteville, No. Car.
Kansas City, Mo.
Larned, Kansas

Newark, N. J.
Portland, Oregon
Prescott, Ariz.
Reno, Nevada
Salt Lake Gry, Utah
Seattle, Wash.
St. Louis, Mo.
St. Petersburg, Fla.

America

DO....

ALL OVERHEAD WORK
This easy, low-cost way!



"Trouble-Saver"

Adjustable

STEEL TRESTLES



SAFE! STRONG! ECONOMICAL!



 Details of the quickly-adjustable Trouble Saver Steel
Trouble Builders, contractors, maintenance men and others save time, labor and material with "Trouble-Saver" Adjustable Steel Trestles. They're unequalled as a safe, sure, low-cost method of handling all overhead work under a wide variety of conditions.

Write for new catalog and complete informa-

SIZES - SPECIFICATIONS, ETC.

| Size No. | Low | High Point | Number of Adjustments | | Wo | rking |
|-------------|-------|---------------|--------------------------|-------|----|--------|
| 2 | 16" | 22" | 4 | 71/3 | to | 73/4' |
| 3 | 2' | 3' | 5 | 8 | to | 9' |
| 31/2 | 21/2" | 31/2' | 5 | 81/2 | to | 91/2' |
| 4 | 3' | 41/4" | 6 | 9 | to | 101/4" |
| 6 | 4' | 6' | 9 | 10 | to | 12' |
| 8 | 51/2' | 8' | 11 | 111/2 | to | 14' |
| 10 | 61/2' | 10' | 15 | 121/2 | to | 16' |
| 12 | 7' | 121 | 10 | 13 | 10 | 18' |

THE STEEL SCAFFOLDING CO., INC.

856 Humboldt St., Brooklyn 22, New York Telephone: EVergreen 3-5510

Andersen Window Has New Weather Strip Principle

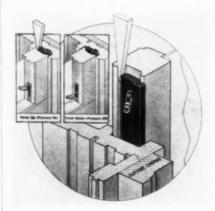
A NEW double hung wood window unit employing a weather stripping principle that eliminates the need for conventional weather stripping at the sides is being produced by the Andersen Corp., Bayport, Minn. The window, called the "Pressure-Seal," uses no weights.



1. REMOVABLE sash for easy cleaning

springs or balances to hold sash in place; and sash-holding and cracksealing mechanism is hidden in the sash stiles.

When levers are not depressed, the pressure strip "wedges" the sash against the parting stop, thereby sealing the crack on the sides. Depression of levers completely frees sash in sash runs, permitting lifting or lowering to any desired position. Sash not attached to cords, balances, or springs are easily removed.



2. TIGHT pressure is maintained except when lever is depressed to free sash for moving

Installation of the unit is simplified by inclusion of inside stops as part of the jambs and by the "built-in" weather stripping and operating mechanism. It is manufactured in commonly used modular sizes.



A Fluorescent Medicine Cabinet

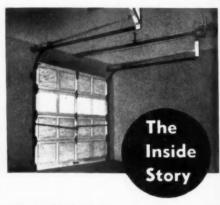
Heavy gauge all aluminum chrome plated throughout, lifetime guaranteed against rust and corrosion—the only one of its kind on the market—a beautiful addition to any bathroom.

This medicine cabinet bears the Underwriters' Laboratories, Inc., approved label for the outlet, two switches and receptacle and only needs to be connected to the main line. No other lighting or wiring is necessary in the bathroom which makes this cabinet less expensive than any other arrangement. You will find that this cabinet will not only give you satisfied customers, but will be an additional and attractive line with which to increase your business.

Retails Complete with Lamps at \$43.75

Manufactured by

FLUORESCENT LIGHTING CO.
MONTICELLO, N.Y.



WHY HALL PINE SECTIONAL DOORS ARE PREFERRED BY BUILDERS—USERS

- Shown above is the sturdy overhead track assembly . . . precision-built with the finest materials to make HALL pine sectional doors easier to install . . . easier to use.
- Made by craftsmen, HALL garage doors are shipped in convenient easy-to-assemble sets including track, door sections and all necessary hardware.
- HALL pine sectional doors are attractively priced and are available in various sizes to fit any garage. For complete information write:

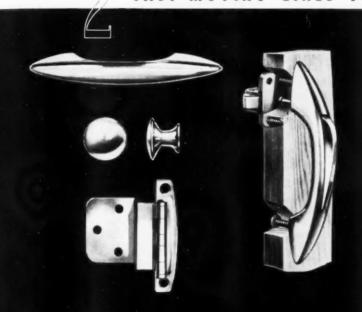
HALL ENTERPRISES Cosco, Wisconsin





NATIONAL LOCK

FAST-MOVING LINES FOR SUMMER SELLING



ORDER FROM YOUR JOBBER.



Chromium Plated

CABINET HARDWARE

Get it NOW! Get it from your jobber. Feature this distinctively-styled, Deluxe cabinet hardware that will breathe new life into any kitchen. It will sell FAST... at an excellent profit to you.

- Envelope Packaged
- Free Counter
 Display Boards
- · Four Matched Sets
- Order from Open
 Stock if Desired





Authentically correct, traditionally faithful furniture trim, ideal for use on furniture, old or new. French Gilt and Antique English finishes. Easy to apply. A popular, profitable item. Get it now.

- Envelope
 Packaged
- Free Counter
 Display Board
- Consists of only 10 Items



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ROCKFORD - ILLINOIS
MERCHANT SALES DIVISION



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More and more home owners are discovering how easily and economically troublesome swinging garage doors can be remodeled into smooth operating overhead doors. And dealers are enjoying fast, profitable sales on the Coburn #500 Overhead Hardware Set.

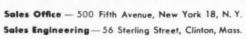
Adaptable to practically all types of garages, the Coburn #500 Set requires little headroom; does not interfere with passageway or floor space.

For FREE CATALOG and name of your nearest Manufacturer's Agent, write to New York Sales Office.

Other Coburn Products include fire door hardware, overhead trolleys and conveying systems for carrying loads up to 3,000 lbs.

COBURN PRODUCTS DEPARTMENT

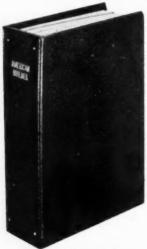
WICKWIRE SPENCER STEEL DIVISION THE COLORADO FUEL AND IRON CORP.







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Send Check or Money Order Direct to AMERICAN BUILDER

BINDERS NOW AVAIL-ABLE. These new binders are smart in appearance, easy to handle, made of extra heavy cardboard covered with dark blue fabrikoid which is washable and exceptionally tough and wear-resistant. AMERICAN BUILDER is embossed in gold letters on the back for ready identification.

Holds six big issues—issues are easily inserted. No punch holes required. A strong, flexible steel rod holds each issue in position.... A handsome addition to any library or office desk.

AMERICAN

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New York

Just try to MATCH

This GREAT 1949 **Roofing Advertising!**

It's the pacemaker for the roofing business! A grand total of 19,800,000 forceful, hard-hitting sales messages in America's top magazines, reaching most responsive roofing audience in America!

Smashing full-color advertising in The Saturday Evening Post! More color advertisements in the highly influential home-service magazines, Better Homes & Gardens and the American Home. Plus powerful half-pages in Country Gentleman, telling the advantages of Barrett* roofings to millions of the most progressive and prosperous farm families.

Advertising like this is the most exciting sales cooperation offered by any roofing manufacturer. And remember: It's backed by Barrett's unmatched reputation for top-quality, sales-tested products. Put it all together and it adds up to your best profit opportunity for 1949.



These roofs can stand weather worse than nature ever made!...





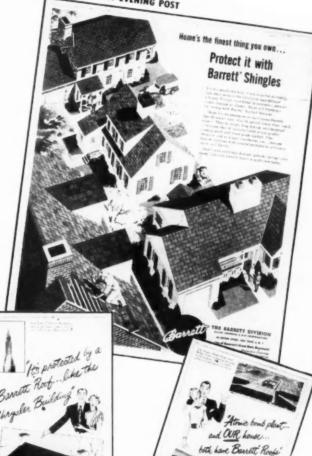
ALLIED CHEMICAL & DYE CORPORATION 40 Rector Street, New York 6, N. Y.

Chicago 6, III. Philadelphia 46, Pa.

1327 Erie St. Birmingham 8, Ala.



In the SATURDAY EVENING POST









In AMERICAN HOME d BETTER HOMES

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Tested by weather worse

than they'll ever meet again!

36th St. & Gray's Ferry Avenue

BUILDERS:

Get This Tested Plan To Help YOU Sell Houses

General Electric and successful builders developed this plan together. It sells houses-fast! It has been used with amazing success in every section. Use it to sell your houses. Whether you build one or a thousand, this is a surefire "home-merchandising" idea. It helps sell more homes-in all price ranges --easier, faster, and more profitably. Clip this coupon. Mail it today. A General Electric Heating Distributor will give you complete facts. Act now!

GENERAL ELECTRIC COMPANY Automatic Heating Division Bloomfield, New Jersey

I'd like full information about how your tested plan can help me sell houses.

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| Street | 7 500 | , |
| City | - TELL. | Zone |
| State | Tel. | |
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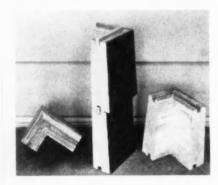
You can put your confidence in-

GENERAL & ELECTRIC

Complete Wall Provided By New Lumber Product

A NEW material for exterior and interior wall construction which provides a complete wall in itself, without studding, diagonal bracing, fire blocking, insulation, plaster or stucco, is attracting considerable interest in the building industry.

The material, "Speed-Wall," manufactured by Speedwall, Inc., Beverly Hills, Calif., is engineered and designed for any floor plan and is made



in standard lengths.

The Speed-Wall units are milled from No. 1 or better 4 by 8 inch or 4 by 12 inch air dry Douglas Fir lumber in 8 feet to 20 feet or longer lengths. The material lays up for

eight, nine or ten foot ceilings without notching for standard doors or windows. Window openings up to ten feet may be spanned without additional structural provisions.

The finish of both exterior and interior surfaces may be natural, stained, painted or enameled; and interior surfaces may be papered, calcimined or paneled.

New Directory of West Coast Sawmills Now Available

The West Coast Lumbermen's Association has published another edition of "Where to Buy". This directory of the members of WCLA is revised twice yearly and the information it contains is designed to help the lumber buyer. In addition to listings of lumber and wood pipe manufacturers, loggers, timber fabricators and treaters, there is also shown detailed information as to capacity, facilities, species and lumber items manufactured plus a growing list of wood-conserving by-products. The publication also lists 37 WCLA lumber promoting publications that are available in quantity to dealers for distribution to their customers. Only four of these carry a nominal charge, the rest are free.



Fireplace Equipment. Railings. Grills, Bal-conies. Marquee. Theatre Lighting. Steel Stairs. Gates. Fire Escapes. Hoods. Drapery Rods. Metal Furniture. Church Lighting. Sign Brackets, plus all kinds of architectural metal work. Write for information.

Artcraft produces the finest, most exacting custom-made ornamental iron work from specifications at amazingly low cost. This is in addition to our reqular, low-priced, stock ornamental work. Write today for more information, or send specifications direct.

Delivery: Two weeks for custom work: Immediate delivery for stock items.

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Arteraft Ornamental Iron Co. 710 E. Hudson Street, Columbus 11, Ohio

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710 E. Hudson Street, Columbus 11, Ohio Send me FREE by return mail my copy of your new 40-page catalogue titled ART in IRON."

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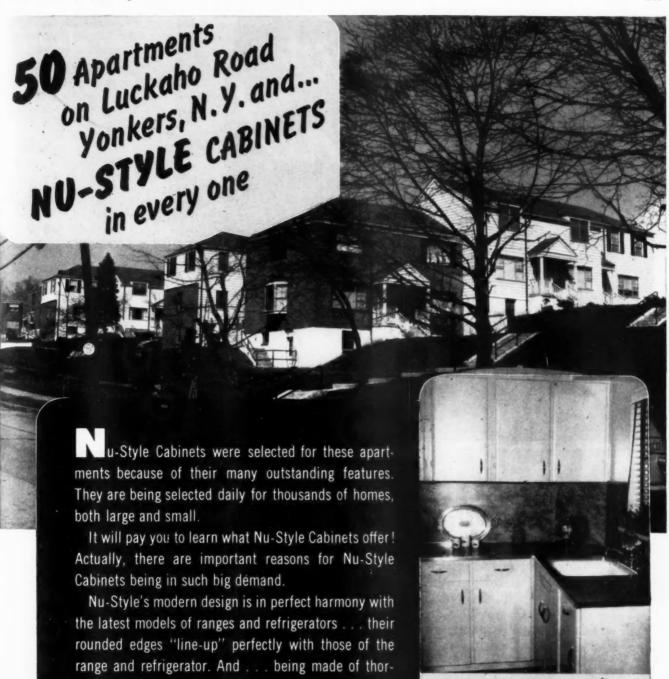
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The Bilt-Well Line

Typical of the Fifty Installations

Basement Windows . Breakfast Nooks . Bilt-Well Storm Sash & Screen Unit . Carr-dor Garage Doors . Clos-tite Case. ments . Combination Doors & Storm Sash . Corner Cabinets . Corner Cabinets for Smaller Homes . Doors with Tempered Presdwood Panels . Front Entrances for the Smaller Type of Home . Front Entrances . Exterior Doors . Gable Sash & Louvers . Gli-dor Kitchen Cabinets . Interior Doors . Ironing Board Cabinets . Linen Gabinets . Medicine Cabinets . Mantels . Nu-Style Kitchen Cabinets . Screen Doors & Window Screens . Shutters . Stair Parts . Superior Windows . Telephone Cabinets . Utility Window

eled any color or finished natural.

Builders find that Nu-Style Cabinets are easy to install and Dealers find them easy to supply.

oughly kiln-dried Ponderosa Pine, they can be enam-

See Nu-Style Cabinets and other Bilt-Well Products shown in Sweet's Architects' and Builders' Files or write us today for more complete information.

CARR, ADAMS & COLLIER CO.

Dubuque, Iowa

BILT WELL

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ALUMAROLL The Roll-Up Patio Cover

Your sales advantages go up when you install an ALUMAROLL Roll-Up Patio Cover. Yet your building costs are down with this one simple, low cost installation. Just think — you provide much needed protection indoors — the final touch to modern living outdoors.

And home-seekers will appreciate that you considered them in your plans. Almost immediately they feel the cooling comfort and restful relaxation of their dream home. They have two good reasons for feeling this way . . .

FIRST—You've added that extra liveable outdoor space to their home. And it's the space they need to rest weary nerves and muscles. They have a clear, unobstructed view, too.

SECOND-They get 100% enjoy-

ment and comfort from their living room with the large windowwall. That's because the direct rays of the sun are completely blocked out by their ALUMAROL Roll-Up Patio Cover.

When you tell them that their ALUMAROLL Roll-Up patio cover is made of strong, durable aluminum, they'll thank you again for a sound investment. And they won't overlook the selection of attractive colors of baked enamel finishes, either!

So make an ALUMAROLL Roll-Up Patio Cover a MUST in your plans for them.

| Orchard Bros., Inc. |
|---|
| 67 Meadow Rd, Rutherford, N. J. Please send full information about ALUMA |
| ROLL patio cover. |
| l am a Dealer I would like t Contractor know about th Builder K.D. plan |
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| Address |
| CityState |
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Edison Electric Institute Promotion Drive Features 'Kitchen-izer's Digest'

A COMPREHENSIVE promotional campaign for all-electric kitchens, to be carried on by electric utility companies in their respective territories, has been prepared by the Edison Electric Institute, 420 Madison Ave., New York 17, N.Y., as the initial step in a long range electric utility consumer campaign.

The program is centered on a recently published 40-page booklet, the "Kitchen-izer's Digest," which contains ten articles on kitchen planning by staff writers of outstanding consumer and trade magazines. The articles provide thorough coverage of kitchen planning, including arrangements that have proved adaptable in different situations, planning techniques, essential items and other important facts.

Tying-in with the booklet, which will be distributed free to consumers, will be newspaper, radio, outdoor and display room advertising, and kitchen planning kits.

The newspaper program makes available all sizes of advertisments, with a number of copy slants, all featuring the "Kitchen-izer's Digest." They are prepared either in mat form or in complete electrotypes.

For radio there are complete sets of professionally transcribed spot announcements. Each record contains thirteen announcements, from fifteen seconds to one minute in length. Space is left for local announcers to invite listeners to showrooms for copies of the planning booklet.

Cardboard kits enable planners to make a scale model of kitchens at home. The kit contains model floors, walls, doors, windows, closets, and cabinets.

Another feature of the campaign is a color and sound movie, "The Constant Bride," produced by Wilding Picture Products, Inc., which gives details about electrical installations in both new and existing homes. Two 15 minute movies, both with color and sound, are also being made available by the Edison Institute—"Five Days in the Cooler," concerning electric refrigerator and range kitchen; and a film on the electric dishwasher.

The promotional program is designed to supplement electric appliance manufacturers' national advertising featuring brands, and the National Electric Manufacturers Association's industry promotion at trade level. The Institute also recommends that appliance retailers, department stores, and electric wholesalers key their advertising to the program.

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FOR SALE BY LUMBER DEALERS

On July first, Armstrong's Cushiontone-a perforated, fibrous acoustical tile-was made available for sale by retail lumber dealers. Now, for the first time, you can take advantage of the large and growing market for attractive, lowcost ceilings that stop noise effectively.

The need for sound conditioning is recognized today in thousands of stores, restaurants, offices, and other places where noise causes inefficiency and discomfort. Years of Armstrong advertising in Time, Newsweek, and Business Week magazines have helped bring this about. And, as more and more Cushiontone is installed, this demand grows even larger. Each new job promotes the idea of acoustical treatment.

For you, this is an opportunity for profitable new business. Cushiontone is economical and

easy to install. No special tools or skills are needed on most jobs. Tiles are nailed to wood furring or cemented to any solid, level surface with Armstrong's Acoustic Cement. Cushiontone is a practical ceiling material for both new construction and remodeling.

Made of strong, lightweight fiberboard, Cushiontone is factory painted white both on surface and bevels. Each square foot is perforated with 484 cleanly drilled holes. These holes absorb up to 75% of the sound that strikes the ceiling. Cushiontone ceilings are easy to maintain and can be repainted without loss of acoustical efficiency. For complete information about Armstrong's Cushiontone, see your lumber dealer or write Armstrong Cork Company, 1607 Stevens St., Lancaster, Pa.

Armstrong's Building Materials

TEMLOK® • INSULATING WOOL • MONOWALL®

HARDBOARDS

CUSHIONTONE®



WRITE FOR DETAILS TODAY!

Weatherstrip Contractors Take Notice—Dealers Wanted Simple installation slashes labor cost! One man easily in-

stalls 30 or more windows in 8 hours. NO high-priced, skilled labor needed. Get more satisfied customers at lower cost . . .

Available with or without bronze covers that completely hide springs, as shown above.



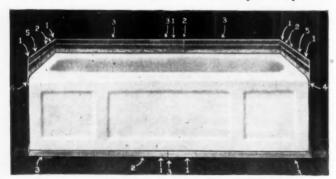


Smooth, positive action, accurate balance plus seal against draft, dust, moisture.

For Trouble-Gree Bath Tub Edges | LUCKE

Specify

Leak-Proof Bath-Tub Hangers No Leaks • No Cracks • No Repair Expenses



The Modern Way to Prevent Leaks

There is no excuse for cracks or leaks or repair expense in good building. Leading architects specify LUCKE to overcome this problem. Lucke Hangers build tubs into wall.

Sold by Leading Plumbing **Supply Houses**

MANUFACTURED BY

W. B. LUCKE, Inc. A





American Builder Wins Two Editorial Citations



REPRODUCTIONS of 12x16-inch certificates for editorial achievement awarded to American Builder in competition

AMERICAN BUILDER has been awarded certificates for outstanding editorial achievement in two classifications of competition conducted by Industrial Marketing magazine. One of the awards was tendered for the series of articles titled "Engineered House Construction" which was started in June, 1947, and is being continued. The other award for the best single issue of a magazine came to American Builder for the April, 1948, issue which was titled a "Five Star Issue-How to Plan, Build and Sell Individual Houses, Housing Developments, Garden Apartments, Home Communities and Commercial Buildings." Only the 1948 editions of publications were considered in the single issue competition. Presentation of the

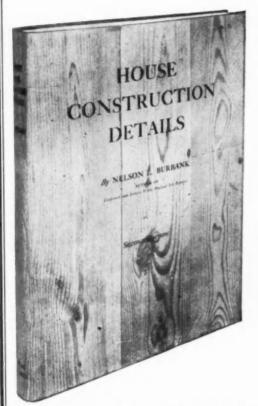
certificates was made at Buffalo, N.Y. June 15.

A board of judges selected by the editors of Industrial Marketing studied hundreds of business magazines to make final selections for the awards. One plaque and six certificates were given for the best series of articles and one plaque and six certificates were presented for

the best single issue.

HOUSE CONSTRUCTION DETAILS

By NELSON L. BURBANK



314 pages, 1,500 illustrations, index, 8½ x 11, cloth, \$4.50

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

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

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

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

Fill Out This Guaranteed Order Form

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Enclosed find \$4.50 for which send me a copy of the Second Edition of HOUSE CONSTRUCTION DETAILS by Burbank. If I do not find the book satisfactory I will mail it back within five days of receipt and you will refund my \$4.50.

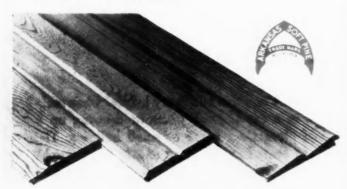
| | THE REAL PROPERTY. |
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| Name | KOLL BARRY TREASURE THE SERVE LINE SERVE LIN |
| Address | ROIT POT ZONE State State |
| City | ZoneStateA. B. 7-49 |

Contents

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

Crossett Siding Holds Paint

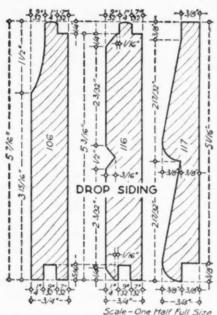
That's because it's produced from soft textured Arkansas Soft Pine which is free from pitch, absorbs primer and finish coats uniformly and does not bleed through.



NO. 106

NO. 116

NO. 117



These are the most generally used patterns of drop siding. Other standard patterns are available.

CENTER & END-MATCHED

SHEATHING

Goes on 1/3 faster. Disregards stud centers. Kiln-dried, holds nails, stays put. A superior, flush base for siding. Widths: $3\frac{1}{4}$ ", $5\frac{1}{4}$ ", $7\frac{1}{4}$ ".



Crossett siding and sheathing bear the Arkansas Soft Pine trade-mark. Ask your lumber dealer.

CROSSETT LUMBER COMPANY
CROSSETT, ARKANSAS

Staff Promotions Announced By Editor Ed Gavin

ANNOUNCEMENT of the promotion of B. H. Wambolt, associate editor, to the position of senior associate and eastern editor with headquarters in New York was made June 1 by E. G. Gavin, editor of American Builder, Mr. Wambolt will be permanently established with his family in their new home at Scarsdale, N.Y., early in July, and will assume his new duties in the office at 30 Church St. on July 15.

Mr. Wambolt brings a rich experience in business magazine and newspaper journalism to his new position. Born and reared in a northern Minnesota lumber town near what then was one of the nation's largest



B. H. WAMBOLT

sawmills, he began work in a newspaper office at the age of ten. He earned the expenses of a college education in journalism at the University of Minnesota by working as a linotyper on Minneapolis newspapers. Following his graduation from the university he worked on several country newspapers. In 1939 he joined the editorial staff of the Mississippi Valley Lumberman, Minneapolis, and served as its editor from 1942 until 1945 when he was named field editor of American Lumberman. A year later he joined the staff of American Builder as associate editor. He has a wide acquaintance in all sections of the country with home builders, distributors of building materials, architects, association executives and manufacturing executives. He is a recognized authority on building economics and in several technical fields.

With the announcement of Mr. Wambolt's elevation to his new important position came the appointment of Robert Charles as field editor, Ray Stein as assistant editor and Margaret Carroll as production editor. Mr. Charles, who worked part time on the editorial staff during the final year of his course in journalism at Northwestern University, became a full time staff member upon graduation. A native of Pitcher, Okla., he was reared in Kansas, and upon graduation from high school, entered the United States Marine Corps at the beginning of the war. As a combat Marine

(Continued on page 176)

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14 beautiful solid and marbleized faderesistant colors permit an endless variety of patterns. It is easy to select or originate a pattern which takes into consideration the elements of room size, location, temperature, lighting, traffic, furnishings, business aims and desired psychological effects.

Colors go all the way through, can't show wear.

 Extremely long wearing. Withstands heaviest traffic, resists denting and scuffing. Here's distinctive, lasting beauty.

Fire-resistant. Even burning cigarettes leave no blemish.

Cushions every step. Suppresses sound. Lessens fatigue.

Ease of application. Lies flat. Cut accurately. Uniform thickness.

Easy to keep spotlessly clean.

Slip-resistant.

In addition to squares in various sizes, Fremont Rubber Tile is also available with DUO-CUTS (9" x 9" tile die cut so that the center may be removed and a 6"x6" tile of another color inserted). DIAGONALS . . . POLKA DOTS . . . STARS.

FREMONT Grease-Resistant TILE

Impervious to all types of grease, oil, gasoline, vegetable and animal fats, citrus juice, alcohol, glucose, ink and paint. Ideal for restaurants, industry, auto showrooms, bakeries, filling stations, etc.

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164 MCPHERSON HIGHWAY FREMONT, OHIO

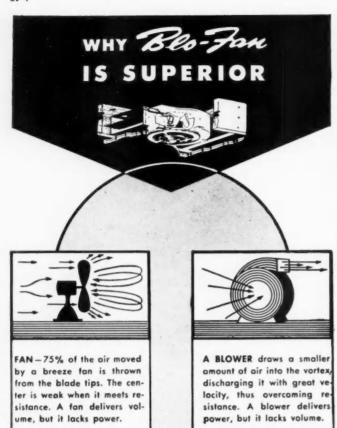
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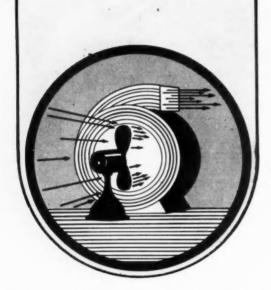
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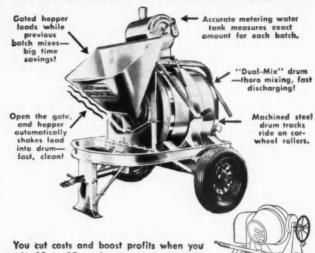
Blo-Fan combines the volume of a fan with the power of a blower. The fan blades supercharge the vortex of the blower so the vanes are fully loaded. That's why Blo-Fan delivers more air with more power.

SPOT VENTILATION AT THE POINT OF AIR POLLUTION IN THE KITCHEN, BATHROOM, DEN, OR LAUNDRY

PRYNE & CO, INC.

LOS ANGELES - SAN FRANCISCO - CHICAGO - NEW YORK

Mix 12 to 15 more yards a day with JAEGER 31/25 "AUTO-LOADER"



mix 12 to 15 yards more concrete daily with no more manpower. And, you can do that with the Jaeger 31/25 "Auto-Loader." It's the fastest half-bag mixer made. Tis the tastest half-bag mixer made.

Catalog M-8 tells why—shows the complete Jaeger line. Write for it.

31/25 End-Discharge
Tilter. Also 65, 115 and
165 Power Loaders.

THE JAEGER MACHINE COMPANY

Columbus 16, Ohio Leading Distributors in 130 cities sell and service Jaeger equipment.

COMPRESSORS . HOISTS . PAVING EQUIPMENT



ALL ALUMINUM

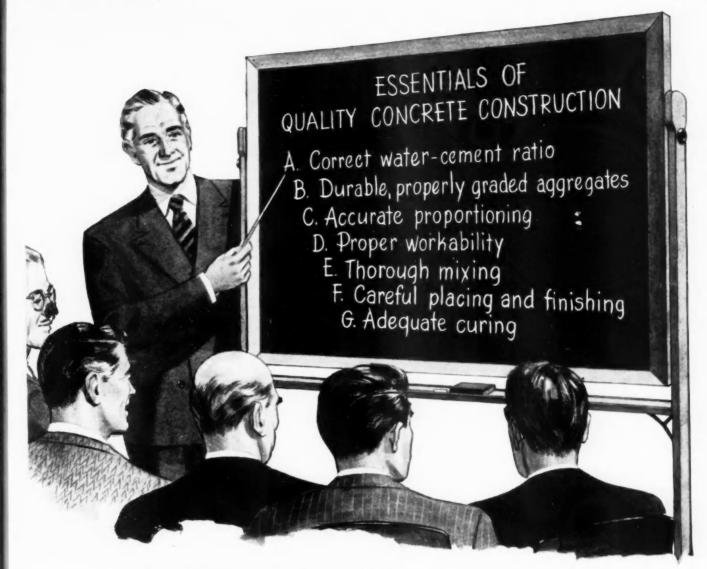
Frameless Tension Screen





● New all aluminum Keystone Frameless Tension Screens will be an attractive and profitable item to add to your line. Available in standard sizes for double hung windows, these full length screens have loads of customer appeal that can easily and quickly be turned into profits for you.

KEYSTONE WIRE CLOTH CO. HANOVER, PENN.



Making Quality Concrete Is as simple as A, B, C!

Learning the alphabet is tough at first but once mastered it becomes so easy that it gives rise to the saying, "Simple as A, B, C."

Making quality concrete is like that. Once the basic principles and procedures are mastered it is as simple as A, B, C.

By applying these easy-to-follow principles and procedures any builder can produce:

1. Concrete of great durability

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- 2. Concrete that will resist severe wear
- 3. Concrete with a compressive strength of 3,000, 5,000 or more lbs. per sq. in.

Quality concrete is good business, for a good job is your best salesman. It builds your reputation and sells more jobs for you.

If concrete fails to give good service—if floors dust, driveways check, walls leak—some one did not follow good concrete construction practice. Often new men are at fault.

If you want help in teaching such men the ABC's of quality concrete, have them write for the free, 48-page booklet, "Concrete Facts for Concrete Contractors," distributed only in the U. S. and Canada. It contains practical instructions about the essentials of making quality concrete.

PORTLAND CEMENT ASSOCIATION

DEPT. A7-3, 33 WEST GRAND AVENUE, CHICAGO 10, ILLINOIS

A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work



Please send us our free copy of the WATERPROOFING MANAL.

29 Pages, Illustrated A. file No. 7

Name

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State

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Staff Promotions

(Continued from page 172)

with the rank of Sergeant, his distinguished service earned him several medals and citations for valor in action, and the Order of the Purple Heart

Mr. Stein is a native of Little Rock, Ark., who was graduated from Earle High School in eastern Arkansas, and received an A.B. degree from Indiana University. Prior to the war he had six years of experience with newspapers in northern Indiana and Chicago. For four years he served as a public relations and administrative officer in the Army of the United States. He resumed newspaper work at the close of the war, and came to the American Builder on a temporary basis in February.

Miss Carroll, a former journalism student at Northwestern University evening school, joined the American Builder as assistant-to-the-editor three years ago. In that capacity she found time to help with and learn production work. When staff changes opened the position of production editor she succeeded to it.

> NATIONAL HOME WEEK September 11-17

New General Sales Manager of Skilsaw Announced

THE appointment of Paul Watts as general sales manager of Skilsaw, Inc., has been announced by Bolton Sullivan, president.

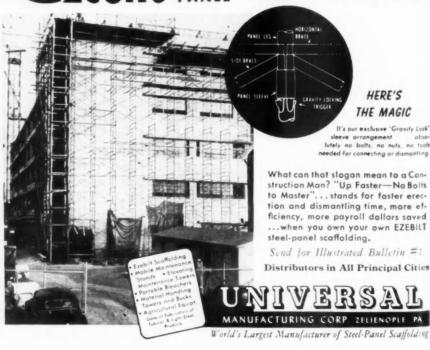
Watts, a veteran of 25 years in the electric tool field, has been with Skil-



PAUL WATTS

saw, Inc. for nine years and has been Pacific Coast manager since 1947. He will shortly move his headquarters to the company's recently enlarged plant and main offices in Chicago after 22 years in the San Francisco territory. Mr. Watts will direct the activities of 53 men operating out of 26 branch offices throughout the country.

Up Faster,no bolts to master" zebit STEEL SCAFFOLDING



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LW ADDITION TO THE TUTTLE & BAILEY LINE.



Designed for installation in schools, hospitals and institutions, offices, dormitories—the NEW Tuttle & Bailey Type S Wall Hung Copper Convectors offer outstanding features of construction, efficient performance, attractive appearance . . . plus important cost savings!

An addition to the widely accepted line of T & B Standardized convector types, the Type S is the ideal choice of heat distribution equipment where frequent cleaning of the floor area is essential...slanted top prevents use as "table" or "ladder." All-steel construction, fronts are furnished in 18 gauge, bodies 20 gauge ... for applications where extra strength is required, heavier gauges are available.

An added feature — the new Type S Units are packaged as complete units, ready for quick installation.

ASK YOUR JOBBER



NEW BRITAIN, CONNECTICUT



NORTHERN HARD MAPLE

is a "buy" for Residential Floors!

• These days, with pressure for lower residential costs, look to MFMA Northern Hard Maple for economy that makes sense!

Northern Hard Maple has been preferred by generations of home-owners for its warm beauty, its tough durability, its easy maintenance. And MFMA strict grading regulations bring you not only "First Grade" Northern Hard Maple Flooring, for the cream of the business, but MFMA "Second Grade," "Second-and-Better Grade" and "Third Grade" at very substantial savings, with no sacrifice of quality.

The ability of Northern Hard Maple to take stain is amazing. Thus, the varying grain and color patterns of these economical **MFMA** grades blend into beautiful tones with great sales appeal.

Figure these grades competitively on lower-cost housing and you can provide floors of top quality at prices hard to match.

School and institution jobs, too, and grain storage construction, make MFMA Northern Hard Maple the ideal flooring to stock and sell today.

Write for free folders: "Where Second Grade Means Excellent," "Use Third Grade for Economy" and "Finishing Northern Hard Maple the MFMA Way." See Sweet's, sec. 13/g/6, for full grading data.

MAPLE FLOORING MANUFACTURERS ASSOCIATION

Room 386—46 Washington Boulevard OSHKOSH, WISCONSIN







A powerful, handy, light-weight electric saw with 6" blade. Of highest quality—ball bearing and roller bearing throughout. Widely used by contractors, carpenters and builders. It rips, crosscuts, angle cuts rough or dressed lumber up to 2 inches. With Bevel-Depth attachment it will make straight cuts from 5/16" to 1-31/32" deep; and bevel cuts up to 45 degrees from 1/4" to 1-11/32" deep.

All Prices
F.O.B. Chicago
It will also cut metal, cut and score tile, concrete, aggregate compositions, and groove mortar joints. When mounted in Mall Saw Table it will serv (with attachments) as a shaper, disc and drum sander, wire brush and table saw. Furnished for 115-volt AC:DC or 230-volt AC-DC. For 32-volt battery lighting systems without Bevel-Depth Attachment, \$58.95. Other models with 2½", 2½", 3½" and 4½" capacities.

\$54.95

Attachment \$7.00

Write for literature and name of neares' dealer

MALL TOOL COMPANY 7737 South Chicago Ave.
(Power Tool Division) 7737 South Chicago Ave.
Chicago 19, Illinois

Here's what people are saying about the NEW Modine Convector



"It's beautifully styled . . . yet so unobtrusive. And what superb heating comfort. I don't blame our friends for insisting on the new Modine Convectors, too."

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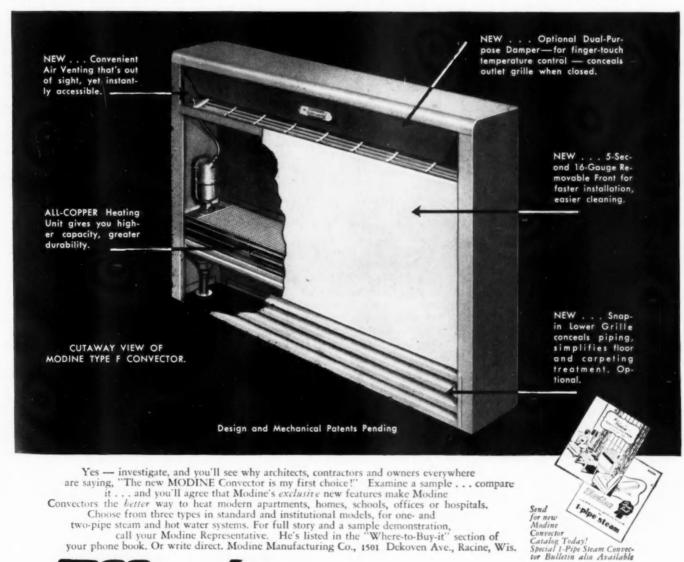
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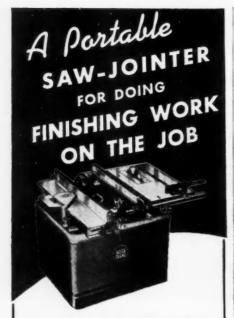
Ave.

"Seeing a sample sold me on the new Modine Convectors. Here's a product I can specify with confidence for my finest jobs because it's quality all the way."

"Since I began installing the new Modine Convectors, I've learned what satisfied customers really are. Every job I've put in has sold others for me."



your phone book. Or write direct. Modine Manufacturing Co., 1501 Dekoven Ave., Racine, Wis. Special 1-Pipe Steam Convector Bulletin also Available CONVECTORS



Also doubles as a production machine in your shop. Particularly useful in finishing cupboards, bookcases and special casements.

Only Boice-Crane makes this popular unit, in which a 10" tilting-arbor saw and a 6" jointer are compactly combined on a steel cabinet stand and driven by one, rather than two motors. Imitations have saws on which the TABLE not the BLADE tilts. Features improved saw performance by unique drive which permits mounting motor rigidly and separate from machine.

This "complete workshop" rips, cuts off, makes compound miter cuts, planes, rabbets, grooves and miters. Longer table and fence equipment on our jointer guarantee perfect work on longer stock than usually handled on 6" machines. Jointer planes or rabbets $\frac{1}{2}$ " deep. The saw cuts stock up to 3" thick, and rips up to 21" wide with standard bars for fence, or to 37" wide with No. 2537 bars at slight extra cost. Built to last.

Welded steel, cabinet floor stand collects sawdust and shavings. Possible to use both machines at once for maximum production.

Overall size: 47" wide: 45" deep; 39" high.

At minimum cost you can completely equip a shop that makes you practically independent of the mill.



BOICE CRANE COMPANY 966 Central Ave., Toledo 6, Ohio Please send FREE LITERATURE on BoiceCrane Saw Jointer Bulletin on Tru-Form Relief Safety Cutters for Shapers Name Firm Street City & State

Johns-Manville Launches Huge Farm Sales Promotion Program for Dealers

A COMPREHENSIVE program of promotion and sales aids for dealers catering to the farm market is being launched by Johns-Manville. It is predicated on the conviction that the greatest service J-M can render its dealers and their builder customers is to help them establish themselves as an authoritative source of information about farm building problems.

Reginald L. Johnson, I-M advertising manager, describes the promotion as a three-way program consisting of: (1) A 140-page "Farm Handbook and Building Reference Guide," just off the press, containing basic information about farm building problems. It is designed as a comprehensive reference source for the dealers. (2) A book of efficient farm building plans, detailed so the dealer can discuss specific buildings with any farmer customer. (3) A bi-monthly magazine about farm buildings. This is mailed by J-M to a list of names supplied by each dealer to enable the dealer to maintain regular contact with the farmers in his area. Each issue contains as one of its features an article about one of the new farm buildings included in the plan book. The only advertisement in the magazine is that of the I-M dealer who subscribes to the service. He uses a stock ad or prepares one of his own.

The new "Farm Handbook" is priced at \$1.50 a copy. It combines in one volume, the result of research and study by the U.S.D.A., various state agricultural colleges, the American Society of Agricultural Engineers and others on the construction requirements of different types of farm buildings. It covers such subjects as floor plan layouts for maximum efficiency, anchoring and bracing of farm buildings for maximum wind resistance, ventilation and insulation, types of structures necessary for various types of farming, and other subjects.

The farm building plan book contains 19 different farm buildings, each with a separate perspective and brief description of the structure. The bill of materials is completely detailed and one-quarter size reproductions of the actual working drawings are included. The plans in this book are prepared by the Better Farm Buildings Association of which I-M is a member. This association was formed to serve as a clearing house to study all available research data on efficient farm buildings and then to prepare plans to cover the needs of the various members. Each plan bears the seal of the association.





HEAVY-DUTY MIXER HALF BAGGER with

THIS mixe

gives the smaller contractor every production advantage found on larger mixers. Output is increased because high shoveling is eliminated. Automatic water measurement, rapid discharge, and Briggs & Stratton air-cooled engine insure perfect performance. Capacity 3½ cu. ft. mixed concrete, plus 10% overload.

Write for prices and specifications

MULLER MACHINERY CO., Inc. 750 WHITMAN AVENUE METUCHEN, NEW JERSEY

Tilters, Non-tilters, Plaster Mixers, Concrete Carts, Mortar Boxes

today's lowest price long-lasting

> Pollar-for-dollar, MA · TI · CO asphalt tile will cost you less than that of any other applied type of flooring. Just shop . . . compare!

SAVE in Long Wear

SAVE in Maintenance Daily dusting and an occasional mopping and waxing is all you need to keep your MA-TI-CO floor clean and beautiful. MA-TI-CO is odorless, sanitary, safe ... will not wear slippery with use.

SAVE in Replacement Should undue abuse or accident necessitate repairs, new MA. TI. CO

tile units are easily Because it is made to inserted. Expansion of Federal specifications, floor, as in remodeling, MA. TI . CO tile must be is just as simple with right! In close to 200 minimum disruption of million sq. ft. of installnormal store or plant ations, MA-TI-CO is proving its endurance to operation. wear under the most rugged conditions.

QUALITY CONTROLLED*

MASTIC TILE Corporation

FACTORIES: NEWBURGH, N. Y. . LONG BEACH, CALIF,

Sold By: MASTIC-TILE SALES CORP., 150 Watt 57th Street, New York 19, N. V.



Between studs it is easy to apply insulation with the Hansen. Simply place insulation in position, hold it with one hand and tack it with the other. Between rafters, overhead or in other hard-to-get-at positions, Hansen speeds the application.

With the strong gripping power of Hansen staples, material is held closer to frame, and less likely to buckle. Speedy, one-hand operation leaves other hand free to hold materials. REQUEST FOLDER.



A. L. HANSEN MFG. CO. 5055 RAVENSWOOD AVE., CHICAGO 40.ILL.

New Electric Freight Elevator is Self-Supporting

Inexpensive to Install



rise is limited to 35 feet—sufficient for a three story building. As illustrated, the elevator is installed as a complete unit in a new or existing hoistway. Only 11 feet of headroom is needed above the top floor landing. Expensive construction, such as a penthouse on top of the building for the electric motors and other operating machinery, overhead supports, roof alteration and building reinforcement, is eliminated, As the elevator supports itself, no heavy strain is placed on the building. The weight of car, load, hoist ropes and sheaves is carried by three guide rails in the hoistway and transferred to the bottom of the shaft. The elevator can be operated by any employee without special training. For complete details, write for Bulletin B-720H. Address: Otis Elevator Company, 266 11th Avenue, New York 1, N. Y



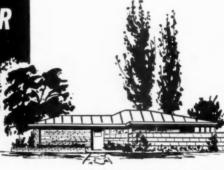
Why The NORMAN SOUTHERNER Was Selected To Heat The First Revere Quality House

It was only natural that a new and better type home such as the first Revere Quality House built in Houston, Texas, would select a new and better type of heating equipment such as the new Norman Southerner horizontally designed forced air gas furnace.

This revolutionary method of forced air central heating was developed by Norman engineers for small space and low cost heating installations. It permits a minimum of heating space in new home

construction because it can be installed in the attic, closet, under floor, ceiling or stairs, or on service porches. The Southerner meets all safety requirements of AGA for this type of installation. Ideal for replacement.

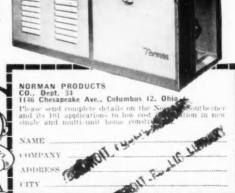
Operates on natural, mixed,manufactured or LP gas. Performance-proven in thousands of installations. Available in 30,000, 60,000, 80,000 and 100,000 BTUin both Furnace and Unit Heater Models.



Model illustrated: FUB-100, size 211/4" high by 23" wide by 52" long.



For low cost conversion to gutomatic heat, get the facts on Norman Gas and Norman Gas-Oil Conversion Burners. FIND OUT MORE ABOUT THIS
NEW NORMAN
SOUTHERNER



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INSULATED GROUND LEVEL FLOORS CAN BE INSTALLED EASILY AND ECONOMICALLY with NEW INSULATING CONCRETE



This diagram of a floor with radiant heat coils shows one of the many ways in which Zonolite vermiculite Concrete can be used efficiently.

GRAVEL :

SO EASY TO INSTALL

Zonolite Insulating Concrete is extremely light and is made by mixing portland cement with Zonolite Stabilized Concrete Aggregate—a material weighing only 8 pounds per cubic foot. Because it is so light and easy to handle, it can be efficiently and rapidly applied.

Here's How ZONOLITE* Vermiculite Concrete Gives You EXTRA ADVANTAGES

Architects and contractors are discovering a new type ground level floor that insulates against heat loss into the ground and is free from condensation the year around. This new floor is made of Zonolite Vermiculite Concrete, a revolutionary form of insulation.

Floors made with Zonolite Vermiculite are low in heat capacity, permitting better control of room temperature by minimizing heat lag—a real advantage when heating rooms. This advantage, combined with its insulating qualities, makes Zonolite Vermiculite Concrete the ideal base for radiant heat pipes installed in the floor.

Millions of square feet of Zonolite Concrete have been installed in large scale housing projects, industrial structures, college dormitories and many other type buildings. A fireproof Zonolite Concrete floor increases the building value and makes the property far more salable.



ZONOLITE COMPANY

CONCRETE

135 South La Salle Street Chicago 3, Illinois

> MAIL COUPON FOR DETAILS

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| | Zonolite Company Dept. AB-79, 135 S. LaSalle St., Chicago 3, Ill. |
| | Please send me FREE booklet that tells all the advantages of Zonolite Insulating Concrete to Charles construction. |
| | Name |
| | Address Address |
| | *Zonolite is a registered trademark of Zonolite Company |



ical parts easily accessible for checking, Fred W. Wappat Saws cleaning, etc. Freq w. wappar saws are carefully balanced for fatigue-free operation—even with one hand! Operate per-至 整 经 烈 主 经

EASY on the operator! SAFE for the operator!

point lubrication, air-cooled motors, keep

saws running smooth.

ly hour after hour, in

any climate. Mechan-

It Doesn't Cost You A Penny To Try A Fred W. Wappat Electric Hand Saw!

Ask your dealer to order one for you, without any obligation. If you don't agree that it's the best electric hand saw you can buy, return it, and it hasn't cost you one centl

If your dealer can't supply you, write direct to Fred W. Wappat, Inc., Mayville, New York.

MODEL A-9 3-7/16" Capacity

MAINTENANCE problems

MINIMIZED!

hangi Operate per-fectly in any position!

Instantaneous cut-off switches, fool proof

telescoping blade guards protect even the most inexperi-

enced operators at

13

⁵135.00

MODEL A-8 2-5/8" Capacity

₹115.00

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No balances, no bulky frames. Matching combination storm sash optional.

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Any size. Any type. Rigid frame, interlocked sec-tion designs for very large screens; For hotels, institu-tions and apartments.

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Makes it possible for a dealer or builder to be a fabricator-Earn two profits on every sale.

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It costs less than \$5.00 more than the cost of ordinary nails to use Never-Stain Aluminum NAILS on the siding of an average five-room house.

Because they are light in weight, tradesmen like to work with them since they reduce carrying fatigue. Almost three times as many per pound. They drive perfectly — billions already have been used.

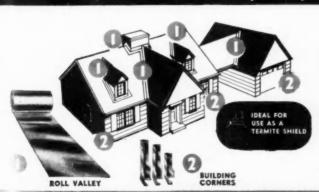
When you build or remodel, it will pay you to suggest Never-Stain Aluminum Nails to your architect or contractor for siding and roofing work.

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ALUMINUM NAILS

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Never-Stein ALUMINUM ROLL VALLEY should be used around dormers, stacks and in all places where roof surfaces meet as shown in drawing at left (1). It never produces unsightly rust. Easy to handle and extremely pliable, it is readily molded to any surface or shape.

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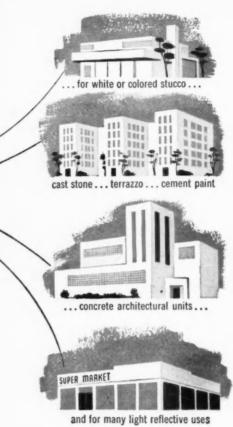
Never-Stain ALUMINUM BUILDING CORNERS last the life of the siding. They tightly seal siding joints at corners (2) and will never cause unsightly rust



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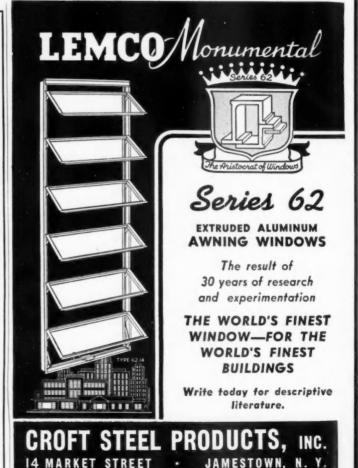
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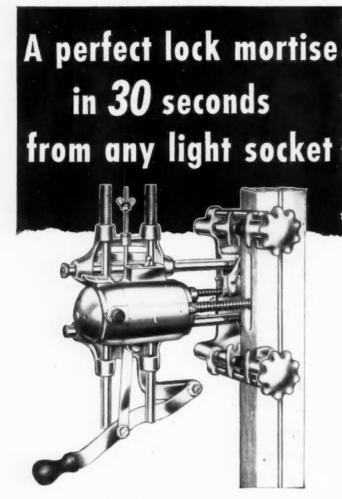
Complete information including construction details, stress tables, grades to specify, etc., are contained in this Builders' Handbook which is yours for the asking. Write for your copy today.

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Machine-perfect lock mortises made as easily and simply as a saw cut. Pick the size cutter for the width you want and set the Stanley-Carter Lock Mortiser for the depth and length. Two self-centering clamps automatically make sure that every mortise will be in the exact center of the door regardless of its thickness. Plug the extension cord into any house-lighting outlet and flip the switch. In 30 seconds the mortise is completed. Less than a minute to change adjustments from one size lock to another. After the first mortise is cut, height rods can be inserted in the machine so that subsequent mortises will be cut at the precise same point... from the top of the door. Use of heat-treated aluminum alloy makes this the lightest electric lock mortiser on the market... just $26\frac{1}{2}$ lbs. Sharpens its own cutters.

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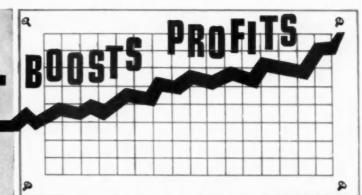
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TEL-O-POST, the original all-steel adjustable jack-post, is offered at lowest prices ever-insuring higher sales-greater profits. Write for new rate card. State whether distributor or dealer.

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Only TEL-O-POST carries regular advertising in the SATURDAY EVENING POST and BETTER HOMES and GARDENS. This concentrated, hard-hitting advertising reaches more than 6,000,000 potential buyers every month - creating a preference for TEL-O-POST. And plenty of merchandising aids, sales helps too, available upon request.

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The high quality inherent in TEL-O-POST is a result of constant supervision of the material from basic ore to finished product. And TEL-O-POST has many exclusive features found in no other post. It's truly a better post for the money.

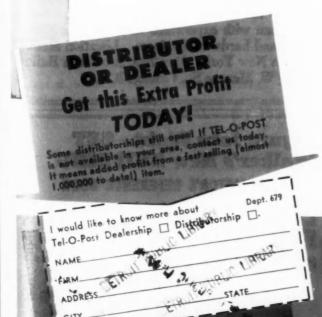
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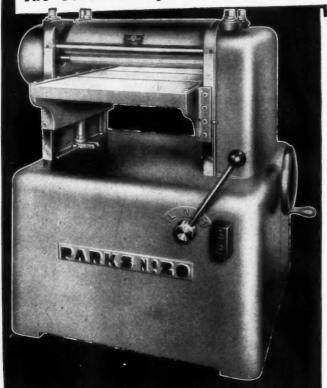
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A few PC Glass Blocks can help you make a lot of sales

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Include a few PC Glass Blocks in *your* homes. They'll help you make more sales with less effort. Meanwhile, why not send for our free booklet which gives detailed information on the many applications of PC Glass Blocks in all kinds of homes? It's free and there's no obligation.



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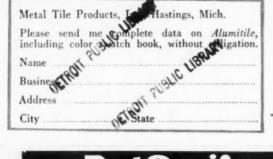
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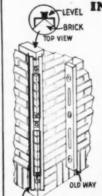
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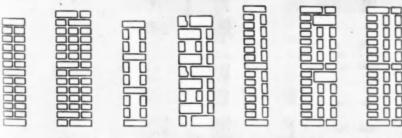
Not surprising that a big majority of you builders picked brick, "first for low maintenance cost" in a recent nationwide survey.

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You can easily translate these qualities into bigger sales values and bigger savings on maintenance and construction. You need only to remember, "brick first".

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Perhaps they are harder to sell than they were a year ago. Builders realize this—and they have been looking for something to stop the trend. Now, NuTone has come up with a definite plan that should make your homes easier to sell. It is based on the fact that the

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MOVE IT WITH 'TNT'...

"TNT" is the NuTone Home Selling Plan. It has been devised to pack a wallop in selling your new homes. With this plan every one of your salesmen can have 50-80-100 "TNT Assistants"-a salesman for every feature you are displaying. You can attract the woman's eye right to the conveniences that really sell her. Perhaps you have a new type bathroom fixture, a door



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Any plan is only as good as it works for you. Convince yourself. Try the "TNT" Home Selling Plan on one of the homes that is causing you trouble. Sit back and watch the plan work for you. Once you have tried the "TNT" Home Selling Plan we believe that you will want to use it in all your homes. Remember these points: RAÍSE THE FIXTURE AL-LOWANCE to "sell the woman." Then try the "TNT" Home Selling Plan to make "hard sellers" easy. Write today for complete literature

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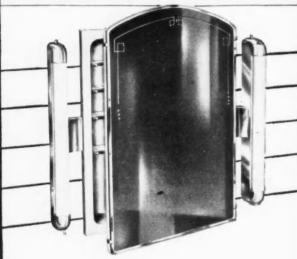
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