

National Home Week Wins Acclaim



# HONEYW ELECTRONIC MODUFLOW F



**Electronic Relay Amplifier** 



**Outdoor Anticipator** 



**Electronic Thermostat** 

HERE'S actual proof of "Pin-Point" control for panel heating-actual results obtained from independent scientific tests during installation of a typical domestic radiant floor paneling application. Room temperatures were held within a fraction of 70%. despire extreme variances in outside temperatures!

At the slightest temperature change, every sensing element in Honeywell's Electronic Moduflow responds instantly. There's no time lag-no chance that room temperature will fluctuate as with mechanical controls. Overcome is the slow response that occurs when any radiant panel is enclosed in concrete. Electronic Moduflow means dependable automatic comfort from every radiant panel, properly designed and installed. It means the ultimate in accurate control Two interesting booklets about Electronic Moduflow have been prepared by Honeywell. They are entitled: "Electronic Moduflow," and "Electronic Moduflow in Radiant Panel Heating." Send for your copies, today! Minneapolis-Honeywell, Minneapolis 8, Minnesota. In Canada Leaside, Toronio 17, Ontario,

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1299

10.00

# **4**-Step Fenestra Door Installation

# Saves On-the-Site Time and Money

Fenestra Door — Frame — Hardware Units are Lew Cest. Although beautiful Fenestra\* Hollow Metal Door Units are mortised, drilled, tapped and prime painted for you by the manufacturer, the first cost is remarkably low. For Fenestra's great plant is set up to run out so many doors and frames ... with such smooth efficiency.

Maintenance cost is less because Fenestra Hollow Metal Doors can't sag or splinter or warp or swell. An occasional coat of paint keeps them as sleek and gleaming as they were when you slipped them out of their sturdy cartons.

Because they're rugged, yet beautiful ... because they're packed with insulation for quiet performance—they're perfect for stores, service stations, offices, apartments, schools, hospitals ... almost any building.

So order now for quick shipment. You can also get Fenestra Doors with the Underwriter's B Label. Call your Fenestra representative (listed in your Yellow Phone Book) or write Detroit Steel Products Company, Department AB-10, 2260 East Grand Boulevard, Detroit 11, Michigan.

Tradamark





Balt the strong stool frame together



Attach fram to floor and anchor to walls



Anach hinges and hang



Screw on template loc

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# WHEN THE CUSTOMER SAYS:

YOUR BEST ANSWER IS

# BECAUSE:

Upson Kuver-Krak Panels have a long record of satisfaction in gr-covering cracked ceilings!

No other material makes such beautifully modern home-style ceilings!

No material produces such trouble-free, longlasting ceilings!

No other material is designed for use with Upnon Floating Fasteners which eliminate visible face nailing!

No material decorates more effectively.

No other material is so widely advertised to home owners for re-covering cracked ceilings!

No other ceiling material has greater sales appeal.

UPSON KUVER-KRAK

PANELS

Upson Kuver-Krak Panels are scientifically processed under an exclusive formula. Lami-nated! A full 5 plys thick! Crackproof! Pre-sized! Attractively pebbled surface!

Install them with confidence. Their time-proved qualities produce unusual ceilings of enduring beauty—steady jobs through the years. For Instruction Sheets, mail the coupon!

Only Upson Panels can be applied with unique Upsan Flaating Factorer. If an panels securally from the back. Eliminates vi face nailing. Designed to compensate narmal structural movement.	table fable far
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Cracked Ceil



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# IN YOUR NOVEMBER ISSUE

Builder

Gypsum Products — Where and How to use them in remodeling and new construction. A graphic I6page editorial feature that will contain many new ideas and give factual data on the use of gypsum products in the building field. A guide book for the alerit reader.

Modernization "know-how." Read how new materials are being utilized to serve the vant modernization market that exists for builders today, Actual modernization jobs will be (catured, illustrated with "before" and "after" pictures.

American Builder's Blueprint Plan, drawn to %, inch scale and fully detailed, will give you a practical house for the average middle class hourer. Dun't miss this house which was designed by one of American Builder's most popular contributing architects.

Editorials, How-To-Do-Its, Retter Detail Plates and news from all segments of the building field will be contained in this big November issue.



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# Here's how to start



This St. Louis sales riot is not an unusual event. Rather, it is the typical success pattern of huilders all over the country. From Maryland, Colorado, New York and other sections come similar enthusiastic reports of builders who install General Electric Kitchens. Why not let General Electric help sell your houses faster, too?

# General Electric offers you all this :

- Tested merchandising programs that have helped so many other builders enjoy phenomenal sales results.
- The brand of electrical appliances that people prefer to all others.
- Assistance in designing and improving kitch-

en layouts for your houses.

- One source of supply for matched equipment
   ... a full line of cabinets and appliances.
- And most important: G-E equipment is world-famous for its dependability! Remember, you can put your confidence in G-E!



"Rather than spend money to sell our houses, we installed complete General Electric Kitchens so that people would buy. Result: We sold 109 houses the very first day!"

Mr. N. R. SCHUERMANN of Schuormann Building & Realty Co., St. Louis, Missouri

Today, more than ever, people want houses that include all-electric living.

They want low-priced homes that have kitchens in which dishes are washed and double-rinsed automatically-where there's a Disposall® for food waste.

They want plenty of hot water at all times . . . and they want an electric range that takes the trouble and guesswork out of cooking, and a family-size refrigerator.

# What Schuermann did

The Schuermann Building and Realty Company offered the people of St. Louis, Mo., that kind of a house for the full price of \$8995... with less than \$1000 down!

You can see from the photograph at the left what happened. Hundreds of people were waiting to enter the General Electric equipped house at 10:00 a.m. More than 7000 people came out

# As little as \$4.80 more a month!

You can include General Electric Kitchens in your houses for as little as \$6.30 a month extra when the G-E "Kitchen Package" is included in the long-term realty mortgage.

Furthermore, the slight increase in monthly payments may be offset by the economical operation, low maintenance and long life of General Electric appliances?

GENERAL GER

to see the Schuermann home on opening day. 109 people bought homes the very first day!

## A suggestion for you

We would like to work hand-in-hand with you to achieve similar results for your in your area. We can help you pre-sell your houses just as we have for so many other builders throughout the United States.

Get complete facts about the G-E "Kitchen Package" through your local General Electric distributor, or write to the Home Bureau, General Electric Company, Bridgeport 2, Connecticut.



The new Schuermann heme and its General Electric Kitchen made a deep impression on future home buyers of St. Louis. It includes: Dishwashee, Disposall®, Refeigerator, Electric Range, and Steel Cabineta. Think how this type of worksaving electric kitchen would stimulate sales of your houses!

ELECTRIC

7

You can put your confidence in-

OCTOBER, 1950

# Home buyers say: "That's what I want!"

Here's a

Bruce Ranch Plank Floor has created more interest than any hardwood flooring introduced in the past twenty years. Here's why:

(1) It's a distinctive hardwood floor at moderate cost. (2) Alternate 244" and 344" widths, walnut pegs and new "Decorator Finish" gives the effect of an expensive, custom-laid floor. (3) It's nationally advertised, in full color, in leading magazines.

This distinctive floor will give your homes so much extra style and beauty. Yet, when you figure how much time and labor the prefinished feature saves you, the cost of Bruce Ranch Plank Floor is little more than that of regular oak floors finished on the job.

Ask your dealer for color booklet and prices. Or write E. L. BRUCE CO., MEMPHIS 1, TENN, IT'S PEGGED AND FINISHED AT THE FACTORY

red hot brand!

# **Publisher's Page**



# The Twin Dangers-Communism and Inflation

THE GOVERNMENT of this country and our free economy are being threatened with destruction by two tremendous forces --Communism and inflation. And yet there are so many fools or traitors in government that almost nothing is being done by government to prevent this destruction.

But those having important places in government are by no means entirely responsible for the danger. The people themselves are much more responsible. The people directly put and keep in office all the fools or traitors, who adopt ruin-ous policies, and do not condemn the policies enough to cause them to be changed. A powerful uprising of public sentiment against these policies would soon drive from office the politicians and bureaucrats who sponsor them and destroy the policies. But a great majority of the people sit by ignorantly and su-pinely while their country is being pushed toward ruin.

The Communists are organized and active throughout the world, including the United States, with the avowed purpose, first, of breaking down the economy of the United States, second, overthrowing our government by force and violence and third, establishing a government and economy patterned after those of Russia. Who says so? Every Communist and organization of Communists in the world! One of the most important books published in our time is that of Louis F. Budenz, entitled "Men Without Faces-The Communist Conspiracy in the U. S. A." Budenz was long a communist leader and editor of the Daily Worker, the official organ of the Communist party in this country. A few years ago he left the Communist party and returned to the Catholic Church. In his book, the authoritativeness of which cannot be questioned, he completely exposes the Communist conspiracy in the United States, proves that it is directed and financed by Stalin from Moscow, through agents of Stalin in this country-most of them of foreign birth-and that every member of the Communist party and of its many "front" organizations composed of "fellow travellers" is a party to this conspiracy and is working day and night to carry it out.

The Communist leaders of all countries recognize in the economic system of the United States their greatest obstacle to extending the domination of Communism throughout the world. They are also good enough economists to know that the surest way to wreck our economy is for our government to weaken it by excessive spending, resulting in heavy taxation and in increased government indebtedness, the latter of which must in time inevitably result in uncontrollable inflation and the complete collapse of the economy. And they are supported in their promotion of excessive government spending by almost every fool, whether business man or not, who believes that be will gain something by any form of government spending.

Meantime it is part of the Communist conspiracy to commit every act of sabotage in any American industry that will cripple even slightly out war effort in Korea and in every other country where we may become engaged in hostilities.

Why should hundreds of thousands of such known and dangerous traitors be allowed to stay at large and carry on their work of destruction? There is absolutely no good reason for it. They should all be arrested and, if proved guilty, put in jail or in concentration camps. Why is this not done? Because some politicians fear it might lose them a few votes and a lot of intellectual mollycoddles cry out that it might cause injustice to some citizens. But if a citizen has associations and so conducts himself as to cause reasonable suspicion that he is a traitor, why should he not be put on trial and opportunity be afforded to prove his guilt or innocence? Is not the paramount consideration the welfare and safety of the entire American people? If so, it is high time that the Communist conspiracy and menace in this country should be attacked and destroyed.

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Seme O. Dnun,

OCTOBIE, 1930



Costs in this floor installation and 1500 feed of 1/2" Chare Copper Tubo, Architect: Had W. Greer, Atlanta, Ga. Heating Contractor: Roy Manning, Plambing & Heating Co., Smyrna, Ga. General Contractor: E. M. Scarborough, Marietta, Ga.

A heating-and more Chase Copper Tube for radiant heating installations-every day!

Why? Chase Copper Tube is flexible, easy to bend by hand, needs no fittings at bends. Its long lengths-60 and 100 feet-cut number of connections. Few needed joints are quickly made with solder-joint fittings.

Chase Copper Tube is light, easy to handle. Its small diameter means ceiling installations without extra plaster depth. Its resistance to corrosion means long service life.



#### FREE BOOKLET

Just mail the coupon for free book, packed with helpful design information and data tables an radiant heating design.

Waterbury 20, Car	per Co., Dept. A&-1050 in. send your "Suggestions for Panel Heating with Capper TITLE
FIRM	
STREET	STATE





WESLOCK No. 230 five-pin tumbler entry lock set.

WESLOCKS provide you with his koarty and digensitive true of the most advanced design and highest quality for every theor in the home. Enversingle, the NEW Evropesintcheor phows gries any home in instituting touch of hypers, set the root is so how that a can be included in the most modest budgets. Quality institutions by initial designs, low must and while whether any all removes whi WESLOCKS are accepted by architecty, builders and bending institutions. Send for the latest station to be

# WESTWOOD

MANUFACTURING CO. 1420 Son Excogreen Avenue



# Another WESLOCK Installation:

5,000 Norwalk Manor Homes, Los Angeles County, Calif. Fils. and VA insured

Builder

Milion Kauffman, Inc., Los Angeles

Hardware Contractor. Sterling Wholesale, Gardena, Calif.

# 85% of all prospective home owners want oak floors



# oak – ushers in a sale

"When I show one of my homes, I just let the oak floors invite the prospects in. Since 85% want oak anyway, I know the floors speak for themselves and set the stage for the rest of the inspection trip.

"The men want oak throughout because it lasts a lifetime and makes the resale value higher. Women like it because it looks wonderful with any furnishings and it's so easy to take care of. It is this universal acceptance of oak flooring that makes selling my homes so much easier.

"No wonder I put oak in all my houses to lead prospects to a sale."

NATIONAL OAK FLOORING MANUFACTURERS' ASSOCIATION - Dept. 5-10, Storick Bldg. - Momphis 3, Tenn.

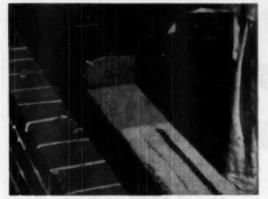




GOOD BRICKWORK = GOOD DESIGN + GOOD WORKMANSHIP + GOOD MATERIALS



When placed flat in ¼-inch of water for one minute, a brick should gain not less than 5 grams (1/5-oz.) and not more than 25 grams (1 oz.)



A good band was not secured here because the brick on which the mortar was spread had sucked the mortar dry, before the brick was laid.



A good band was secured here because the mortar was not sucked dry too fast.

# WET THE BRICK TO SECURE A WATERTIGHT BOND

Brick token from the seaffold should be furted for rate of absorption, as illutrated of top left. If the feeled brick gales more them 1 conce in weight, all brick should be thereogity wei just before they are used.

A good initial bond between brick and mortar depends (1) upon the suction rate of the brick, and (2) the water-retaining capacity of the mortar.

If the absorption rate of the brick is too high at the time they are laid, they will suck the water out of the mortar too fast, even though the mortar has high water-retaining capacity. A thorough wetting of the brick just before they are laid is the only way to be sure they will have a low enough rate of absorption.



Brixment mortar has higher water-retaining capacity and stays soft and plastic longer when spread on porous brick. This helps secure a good, watertight bond.

LOUISVILLE CEMENT COMPANY, Incorporated, LOUISVILLE, KENTUCKY

OCTOBER, 1950

BECAUSE IT'S PRICED RIGHT...BECAUSE IT'S BUILT RIGHT...BECAUSE IT'S EASIER TO INSTALL...BECAUSE IT'S LIFETIME WARRANTED



MORE FOR YOUR MONEY!

# DEXTER the lifetime lock

USE

# NATIONAL BRASS COMPANY Manufacturers of America's First Tubular Lock

RAND RAPIDS

Daxier Direct Factory Ropresentatives are located in Abilano, Boltimara, Boston, Chicago, Cleveland, Columbus, Dotrait, Fart Worth, Knanville, Las Angeles, Milwaukee, New York, Omaha, Philodolphia, St. Lauis, San Frantisca, Syracuse, Tompa.

In Canada: Dexter Lock Canada Ltd. Guelph, Ontario







The best in modern lising includes the best in modern cooking. To assure wholesome, fullflavor foods, easily prepared, every Manhattan House kitchen contains a distinctive new ROPER Gas Range. Here's proof again that ROPER is the choice of discriminating buyers who demand the finest. Shown at left is a typical Manhattan House ROPER installation.





# "America's Finest Gas Range" Used Exclusively in Unique 582-Unit New York Apartment Building

A practical new idea for modern living is Manhattan House, recently completed New York apartment building owned and operated by the New York Life Insurance Company. Twenty stories high and covering an entire block, Manhattan House comprises 582 apartments of from two to seven rooms each.

Planned from the beginning to offer the finest facilities available, Manhattan House chose ROPER Gas Ranges exclusively for its livable, workable kitchens. This fact is doubly important. First, it demonstrates forcibly the preference for gas cooking ... and second, it illustrates dramatically that Manhattan House kitchen-equipment experts recognize ROPER as one of America's foremost gas ranges.

# More Features to Talk About

No other line of ranges provides such a wide choice of exclusive features. ROPER'S "Center-Simmer" Top. Burners ... "Staggered" Cooking Top ... "Bake-Master" Oven ... "RoperGlo" Broiler ... and many other "Crowning Achievements" open the door to sure customer acceptance.

With ROPER, you offer the ultimate in fast cooking ... clean cooking ... economical cooking. You offer the carefree convenience of completely automatic oven performance, when desired. For top-of-range feasts, oven delights and taxy broiled treats, nothing can match a modern ROPER Gas Range.

# More Real Value

No other line of ranges gives you such a wide choice of models ..., so many different oven, broiler and top burner arrangements. From the magnificent 58-1/2 is. "Town and Country" to the compact 21-5/8 in."600" Series, ROPER makes a gas range to exactly meet every need and fit every pocketbook.

Decide now to investigate the advantages of ROPER. You can specify these distinctive ranges for use with any gas, including liquefied petroleum (bottled) gas.

# "Manhattan House" Homemakers Enjoy Fast, Clean, Thrifty Gas Cooking with these Modern ROPER Ranges



# Mack says ... Check the Weather

# FOR DOORS

Numeta

Conveniently packaged in sets for almost all standard doors. Available with regular brass and felt and with regular brass and feit dont bottom strips or with thresh-olds and exposed books. No spe-cial shill or tools are required. Eas-the installed with cial shill or tools are required. Eas-ily installed with only a hammar and household scissors. Comes complete with sufficient strips for size opening, back hereper strip stress, nails and instructions for because proton for some stress. counter sales! Numetal

Numetal WEATHER STRIP

This door optimped with https://www.add.com/ https://www.add.com/ horpet/ and tony lock and felt door between Numetal DOOR BOTTOM STRIPS

umeta

Just what your customers need to keep lust what your customers need to keep cold air, dust, and dirt from blowing under cold air, dust, and dirt from blowing under doors. A popular seller! Made of wool felt doors. A popular seller! Made of wool felt and extra heavy gauge brass or aluminum. Furnished in standard lengths for 28", 30", 32", 36", 42" and 48" doors. Also available in special lengths. Packed ½ dozen same briefs in each metric. length in each carton.

# FOR WINDOWS

Numetal Window Sets also come Numetal Window bers also come complete in convenient packages fits all standard 28", 30", 32" and 36" double hung windows, Cut-to-dimension sizes available. It is a practical and efficient type of permanent weather strip and can be quickly installed by anycan be quickly installed by any-one. Each set contains necessary strip for top, bottom and sides, meeting rail structures. Individu-nalls machaned or ready to hand ally packaged -- ready to hand to your customers -install!



Style and sides ting tail; sas!

Nu-WAY WEATHER STRIP Easy to sell because it's so

easy to put on! Works perfectly on any type window or door. Made of mothon any type window or door, Made of moth-proof, pre-shrunk, color-fast, wool felt and white metal. Attractive display carton con-

tains 12 individual 20-ft. rolls.





# first impressions

are mighty important in creating owner satisfaction. A Cartis entrance like this-design C-1735-adds that extra touch of quality because it is correctly styled-beautiful in its simple lines. Yet Curtis entrances-and there are many for your choice-are priced for even the most modest homes.



# the place where they linger

Nothing like a Curtis mantel to give a living room trace and appeal. This Curtis mantel, for example tesign C-6059—is suitable for several styles of archiecture, yet it does not sacrifice beauty and good tetail. Many other Curtis mantel designs are available for your choice.



# men too

appreciate the additional value of Curtis Prespine doors. Curtis Prespine—the new Curtis wood product—won't warp, shrink or mar, Its surface duplicates the natural grain of ponderosa pine—takes natural finishes beautifully. Curtis doors with Prespine panels are available in several styles for any desired finish.





especially women

respond to the charm and convenience of a wellplaced Curtis china case. This one-design C-6558 --is made either for flat wall or corner installation. Curtis cases, available in many designs, are quickly and easily installed in any room.

Curtis makes a complete line of woodwork for homes of all types and sizes. Make your next house "all Curtis."

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Addres				******	
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# For the 1951 Homes You Are Planning NOW...

# NUTONE DOOR CHIMES OFT ND OF NOISY BELLS

Home owners hate nerve-wracking door bells and buzzers. Give them the warm, peeceful tones of a NUTONE DOOR CHIME . . . It's the friendly walcome!

NuTone makes life more pleasant for the whole family. Plan now to sell your new 1951 homes easier...faster. Install a NUTONE DOOR CHIME in every one of them.



There are 14 models that range in price from \$3.95 to \$69.95 list. Some with Talechron clock mavements and hand-rubbod mohogany cabinats. Attractive designs in both long tube and short tube door chimes. Tubes are satin-brass, ternish-proof.

# NUTONE VENTILATING FANS GET RID OF KITCHEN SMELLS

Sweet, tresh air in the kitchan . . . all year long! That's what naw home owners are leaking far! Especially when kitchen and dining are combined. Give your new home this added sales attraction with a NUTONE VENTLATING FAN.

NuTone is easiest to install . . . cosiest to clean. Most NuTone models are guaranteed for 5 years.

The finest in ventilating fans. Well and ceiling models. Housewives love the ramovable center grills. Engineered for quiet, effective operation. Designed for perfect blending with any interior. Five models that range from \$26.50 to \$39.95 list.

> Write for complete details and literature.

MUTONE, INC., Dept. ANS, Classingel 27, Ohle



# -when Quality Standards are as High as This

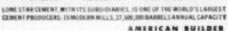
• New York City's Board of Education handles the world's greatest school problem with consummate skill...835 school buildings provide modern facilities for 866,725 children...50 new school buildings have been completed since the war... this year another 26 will be ready...with 24 more in advanced planning stage.

Typical of these well-designed, fire-safe structures is P. S. 177 in Flushing, L. I. The frame is Lone Star Cement concrete...brick-work is laid up with Lone Star Masonry Cement mortarassuring watertight walls that will protect the grandchildren of the pupils of today.

This rich, extra-fat, buttery mortar is uniform in texture, gives sustained high yield. Retains water, keeping thirsty brick or block from sucking water from the mortar. Remains plastic...assures firmly bedded units and better bond. Here, indeed, is mortar with might-the kind of mortar it is important to know about-and to use.



OMERIALBARY - BETHLEHEM, PA. - DURWINGHAM - BOSTOM CHICAGO - DALLAS - HOUSTON - INDUANFOLIS - JACKSOM, MISS. KANSAS CITY, MO. - REW ORLEAS - REW YORK - RORFOLE ST. LOUIS - PRULADELIPHIA - MASHINGZOM, D.C.



PUBLIC SCHOOL 177, Flushing, Queens, N. Y. Owner: CITY OF NEW YORK, 20ARD OF IDUCATION General Contractor: CARISTO CONSTRUCTION CORP., Brooklyn, N. Y. Architect: IRIC KIEBBON, Board of Education Ready-Mix Lone Star Concrete: MITROPOLITAN SAND & GRAVEL CORP., New York

Lone Star Masonry Coment: J. P. DUFFY CO., INC., New York



LONE STAR CEMENTS COVER THE ENTIRE CONSTRUCTION FIELD

# TRENDS in the Building Field

# **Government To Study Residential Building**

JULY was the best home building month in history. A total of 144,000 new dwelling units were started in July bringing: the total for the first seven months of 1950 to almost 839,-000. By the end of July, new housing activity was 54, per cent above last year's January-July volume. In the first four months of the year rental housing showed a gain of 32 per cent over 1949 and the 1950 volume of single family starts was greater by 68 per cent.

With this volume of starts it would be expected that there would be an increase in the cost of materials and labor, without the impact of the Korean War and increased defense preparations. As a matter of fact, the price increase has been under way since March. The price of sewer pipe advanced 17 per cent in a single month from June 15 to July 15 in Atlanta. Flooring prices rose 6 per cent, mineral wool rose 8 per cent, gypsum board 5 per cent and nails 4 per cent.

In the long run, government debt is the outstanding factor in a permanently increased price level such as the one experienced from 1941 through 1946. The Korean War and increased defense preparations have not been factors for a long enough period to cause a rise due to the monetary inflationary level. The present price rises can be attributed primarily to the unprecedented demand for building materials caused by the tremendous increase in building starts.

Several studies of interest to huilders are being undertaken by the Housing and Home Finance Agency under the provision of the Housing Act of 1949 which included an appropriation for studies of the building industry to improve efficiency and to reduce costs.

It will be interesting to see the final results of the cost study which the Housing and Home Finance Agency has employed the Massachusetts Institute of Technology to make. HHFA'S Division of Housing Research contends that "some types of organizations have demonstrated their ability to sell houses at lower prices, but not enough is known about the factors that produced the results." The Institute will therefore study the cost reduction advantages of different types

OCTOBER, 1950

of house-producing organizations from the small builder of ten houses a year to the factory-produced and dealererected system.

The study will analyze, among other factors (1) general organization pattern; (2) size of supervisory staff in relation to the number of workmen; (3) methods of ordering, scheduling and delivering materials; (4) degree of mechanization; (5) methods of financing, and (6) sales organization and promotion. HHFA states that the results will serve as a guile for present organizations in analyzing the efficiency of their operations and indicating the direction in which improvements could be made.

Another study, to be made by the University of Illinois, will gather data on what families need in houses, as a guide for builders in planning developments. HHFA contends that "we know that we are capable of producing dwellings that better meet the needs of our present manner of living with no increase in cost, but many builders are prevented from improving their houses because of a lack of knowledge of what various families need and the lack of time for developing more contemporary plans."

The Georgia Institute of Technology will study "within the city" demand for housing. This will be a study of land planning with relation to community facilities.

Harvard University will develop an

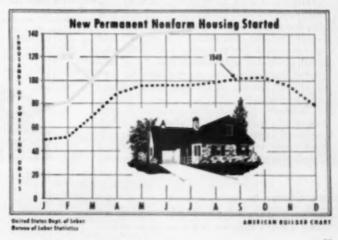
accurate basis for measuring and analyzing the costs of municipal services and for evaluating the relative locational advantages of residential developments. HHFA states "A more thorough and exact knowledge of housing costs will provide a more accurate basis for estimating the long run cost of housing to potential bayers, particularly in rapidly developing suburban areas."

The University of Michigan will develop a standardized cost accounting system for possible use by home builders. HHFA states "A standardized cost accounting system is a basic requirement of our housing research program as it is the means through which the elements of costs can be identified and defined."

Harvard University will study the concepts and methods of housing market analysis and the nature and effects of residential mobility.

Other studies under way include a contract with Tuskegee Institute to extend Tuskegee's research into production of houses in rural areas for small cost outlay. The Bureau of Labor Statistics will study cooperative housing. American University will make a survey of a potential residential area in Washington, D.C.

It would not be surprising to see develop from this multitude of studies a sort of county agent system whereby Government advice would be available to builders.



23



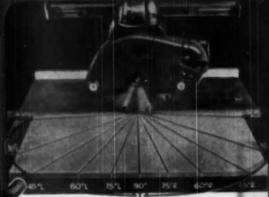
MORE AND MORE BUILDERS are cutting their costs with low-cost Kentile. They find, too, that Kentile speeds construction because it can be walked on right after installation—doesn't hold up other work. It's easily and quickly installed over any sound underfloor or directly on concrete in contact with the earth...ideal for nonbasement homes or for use with radiant heating methods.

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Reynolds Aluminum Reflective insulation gives you the most efficiency in the smallest package, ... perfect vapor barrier, tool

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- That softly gleaming edge around the house advertises you as a MODERN BUILDER—with aluminum!
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Quality

THROUGH AND THROUGH



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









# Can Supply War Housing, Builders Tell Government

The National Association of Home Builders' executive committee, meeting in Washington, D.C., August 10–11 with leading Federal housing officials, said the industry could be counted on to supply whatever housing was needed for the successful prosecution of the war effort.

"The present shortage of lumber and other major building items is a temporary condition caused by seasonal factors, the high volume of construction and a freight car shortage. Plenty of lumber will be available shortly," said Thomas P. Coogan, NAHB President.

Military purchases of lumber, estimated by Coogan at 1,500,000,000 hoard feet after talks with Department of Defense officials, will not upset the lumber market, since it is only one week's production of the industry.

NAHB's executive committee told the Federal housing officials that the recent credit curbs requested by President Truman would, in due course, bring the present record-smushing building volume into balance with defense requirements.

The officials, including Administrator Raymond Foley of the HHFA, Franklin L. Richards, FHA Commissioner, and T. B. King, Chief, Loan Guaranty Service, VA, were told that because of the momentum of the current boom the mortgage credit restrictions would not be apparent in the volume of housing starts until late Fall.

NAHB urged the officials to initiate no further controls, before the credit curb effects were known. If further controls were to shackle the industry, the NAHB cautioned, a serious breakdown in housing production would result and a very low volume of new homes would be started next winter and spring.

A survey of NAHB's 17,000 Home Builders in 140 cities revealed that the curbs in credit would eventually produce an estimated 25% to 50% less homes started. The curbs call for a minimum of 5% cash down on home bans for veterans and an increase in 5% cash payments on FHA-insured mortgage loans.

The builders pledged President Truman their whole-hearted support in the current Korean crisis. The President was told the industry was prepared to produce whatever housing, civilian or military, was needed.

Coogan pointed out that the NAHB was preparing a master plan whereby NAHB members could quickly produce prefabricated housing for use either at home of abroad in record pace.

Basic factor in the plan is the prefabrication of materials in small housing plants which could be set up quickly and economically by merchant builders.

The building industry presently is one of the major supports to the Nation's booming economy, Coogan said, using an estimated two million workers, with additional millions in allied industries such as home furnishings, banks, title companies, home equipment manufacturers and other industries.

# Doyle Top Detroit Executive Officer

Earl C. Doyle, general secretary of the Builders Association of Metropolitan Detroit and editor of its official publication, the Bildor, has assumed the post of association chief executive officer.

Doyle, a member of the Detroit staff since 1945, succeeds Wallace A. Colwell, former executive secretary. Colwell left the association to rejoin the Abstract and Title Guarantee Co., with which he was associated from 1923 to 1942.

# 'Minute Men' to Push Dealer Public Relations

A "Minute Man" committee composed of dealers in all sections of the country has been appointed by the National Retail Lumber Dealers Association is a step expanding its public relations program.

Principal function of the new group, officially called the NRLDA public affairs committee, will be issuance to local newspapers in members' own names of press releases prepared monthly by the national association. The releases will be designed to improve the industry's standing with the public and to seek public support on important matters.

More than 700 dealers have been named to the committee by NRLDA President C. B. Sweet, and the number is expected to pass 1,000 when nominations are in from all state and regional associations.

Sweet said new committee members were called "Minute Men" because of the urgeot nature of their work. They were recommended by state and regional managers on the basis of special interest in public relations and, to avoid duplication of effort, only one per community was recommended.

Pointing out the advantages of releasing news locally, Sweet commented : "Most newspapers are much more interested in statements by local people, especially well-known business men."

# **NHW Proclaimed in Michigan**



GOVERNOR G. Mennen Williams of Michigan signs proclamation for National Home Week as representatives of sponsoring organizations works with approval. They are (irran loft) Williams V. Louks, president. Detroit Boul Estate Board: Boland Fisher, executive vice president. Detroit Boal Estate Board: A. B. Saunders, esscutive vice president. Michigan Beal Estate Association: Edward Eshiman, vice president. Michigan Assocition of Home Builders: Bussel A. Pointer, president. Michigan Beal Estate Association; Hunter Gaises, socretary-manager, Michigan Beitil Lamber Desiders Association; Pauter Gaises, socretary-manager, Michigan Beitil Lamber Desiders Association; treasurer; and Hirtus E. Alies, accutive secretary, all of the Michigan Association from Home Builders. Proclamations of governors and anyors gave impetus to antional drive

# Cy Sweet Says-

C. B. SWEET. President. Nation **Beteil Lumber Deglers Association** 

# "Business as Usual"

"How is this national emergency going to affect business in the coming year ?" It is obvious that there can be no-

ready answer to auch a question and that there is no foretelling what the months ahead have in store for m, but all of the sign-posts point to a situation similar to the one in which we found ourselves one years ago. At present the Administration in Washington scens completely confused and there appears to be little likelihead of any order coming out of the chaos in the immediate future.

Of particular interest to our industry is the information that apparently the Administration is not trying to cut back private housing construction by more than 20 or 25 per cent, using credit restrictions as the means of limiting the demand. If necessary, it is prepared to stiffen housing credit still further in order to take more buyers out of the market and thus hold down demainl, in halance with materials supply.

Conditions being what they are at this writing, it looks to me to be impossible that the nation's economy can be kept in gear without all-out controls, the dangers of inflation, excessive wage demands, dislocations in supply, and selfish

The question that is uppermost in the greed for personal gain unfortunately minds of retail hundermen these days is, can be controlled only by such drastic measures. This power has been given to the President and I think he will use it when he thinks it politically expedient.

When the Budget Committee of the National Retail Lumber Dealers Association met in Chicago in mid-July the decision was made to go ahead with the present worthwhile activities of the Association until we had good reason to change or modify them, taking on additional emergency programs as new developments dictated. It should be gratilying to all of us to know that in the trying days and. I fear, years ahead we have strong, experienced trade organizations to help us by keeping us accurately and speedily informed of the new laws, orders, directives, and regulations under which we will operate.

Until that time when all-out controls are in effect, the safe and cautious course in every day retailing seems the only wise course we can follow. We should willingly assume the responsibility of doing all we can to discourage excessive prices, and of getting materials to those who need them most. If we all do our part we can avoid much grief for ourselves and simultaneously perform a real service to our country.

# **Richardson New Portland Executive Officer**

John M. Richardson, veteran Portland publicity writer and newspaperman, was recently appointed executive secretary of the Portland Home Builders Association, Inc., succeeding 1. W. Bome who resigned to enter the real estate and appraisal field.

Richardson was a member of the editorial staff of the Oregon Journal for nearly 30 years, including 14 as real estate and fundding editor. During the recent war he was affiliated with the Department of the Interior. As a free lance public relations man he served for two years with the First National Bank of Portland.

He is an alumnus of Oregon State College and a Marine veteran of World War I.

# **Onondaga** Activities

Recent activities of the Better Builders. Association of Onondaga, Inc., Syracuse, N.Y., were the annual clambake Aug. 24, and a dissor meeting Sept. 6.

# Pittsburgh Picnic Committee



MEMBERS of the picnic committee at the recent annual picnic of the Home Builders Association of Alloghony County (Pittsburgh) are, left to right, W. S. Tussey, S. E. dawach. Ir., and W. B. Dison. Their sports shirts, which had the pattern of a house blueprist in blue with white lines, were the official uniform of the committee

# **Take it Easy' and Await** More Facts, Richards, **Coogan Advise Builders**

"Take it casy" until the current housing situation has become clear. the nation's home builders were advised by Franklin D. Richards, Federal Housing Administration commissioner, and Thomas P. Coogan, president of the National Association of Home Builders, at an "Emergency Dinner" of the Chicago Metropolitan Home Builders Association in the Hotel Sherman August 24.

The two leaders, authoritative spokesmen for the government and the home building industry, were in agreement that if the limited credit restrictions made effective in July are supplemented by voluntary common sense controls on the part of builders-in respect to new starts and ourchase of materials-there is a good chance that home building can continue at a normal and substantial

Richards called on home builders to concentrate their efforts on needed housing, to finance soundly and to purchase materials only as needed. "It is up to the industry and government," he said, "to direct a large part of residential construction into the lowerpriced market where the need is greatest and so that the results will have the least possible disrupting effect.

Coogan announced that NAHE would hold meetings throughout the country to promote builder self-controls. He said that the industry's aim was to find out what housing is needed and to obviate the necessity of wide government restrictions by supplying it in an orderly manner. Emphasizing that normal operation of the construction industry was vital in supporting the national economy, he also declared that the availability of adequate housing was of first importance to "combat Communism and other 'isms." "

# Joseph L. Strong Dies; Was Lumberman 50 Years

Joseph L. Strong of Chicago, who had been actively identified with the lumber industry for more than 50 years, died Aug. 14 after a long illness. He was 81.

Mr. Strong served as secretary of the Lumber Trade Association of Cook County (III.) from 1939 until his retirement in June, 1548. He was also secretary and treasurer of the Lumbermen's Golf Association of Chicago for 17 years.

He leaves his widow Mrs. Estella Strong, and a daughter, Mrs. Dorothy Parsons

# N. Y. Builder Outing

The Home Builders Association of Schenectady Inc. was host to its members at a steak dinner and sports outing in August.

# Russell Dean Named BMEA President

Russell E. Dean, of Bermett-Ireland, Inc., Norwich, N.Y., was elected president of the Building Material Exhibitors Association at its 11th annual meeting, held recently in Chicago. He succeeds Earl F. Boyle of the Johns-Manville Sales Corp. Other seew officers are Donald M. Crooks, vice president, and Richard G. Breeden, Jr., secretary-treasurer.

A meeting highlight was a presentation by the liaison committee of suggestions for use in the 1950 convention season. Representatives of several midwest lumber dealer associations attended.



CROOKS

BREEDEN

Dean, a University of Michigan graduate, has been associated with Bennett-Ireland for 17 years and holds the post of vice president in charge of sales. Active in BMEA work since the association was organized, he served as vice president last year.

Crooks, the new vice president, has practiced architecture on the west coast, and for the past seven years served as midwestern representative of the Douglas Fir Plywood Association.

Corrently secretary-manager of the Insulating Siding Association, Breeden has been working with dealer association executive officers for several years. His prefecensor as BMEA secretary-treasurer was Maurice E. Collins of the Lawrence Selz organization.

# Executive Officers Meet in Wisconsin

Thirty-five executive officers, representing National Association of Home Builder chapters in the east, south, southwest, north central states and west coast, attended a three-day conference in Madison, Wis., in August. President Thomas P. Coogan discussed details of the recent meeting in Washington of the NAHB executive committee and high government officials.

# Named to Advisory Group

Harry Lawson, past president of the Florida Lumber and Millwork Association, Inc., has been appointed a member of the National Advisory Committee for Retail Lumber and Allied Products Distribution by Secretary of Commerce Thomas L Sawver.

OCTOBER, 1950

# **Cortright's Column**

FRANE W. CORTRIGHT. Enocutive Vice President. National Association of Hume Builders of the United States



#### New Homes for Less than Old Ones

America's Home Builders have passed a new milestone of tremendous significance. It is as great a tribute to the progress of our private building system as ever has been achieved.

Boiled down to its essentials, it is simply that we have produced and marketed a typical new home at a price less than it costs to buy a comparable existing house.

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This startling fact is revealed in figures recently released by the FHA covering its operations in 1949. In the undramatic fashion of federal statistics, FHA's annual report quietly revealed that in 1949 the median valuation of new homes was less than the median valuation of existing houses for the first time on record.

For new homes, the valuation was \$8,502. For existing houses, it was \$8,700. Thus it cost purchasers \$200 less last year to buy a typical new house than it did to buy an existing one.

. . . . . .

The private home building system has broken all world records for production. It has put more new homes into the hands of more people than the world has ever seen. Now it has proved that it is capable of adjusting its production so that average families can get a new home at less cost than they can buy a used product. And this remarkable feat has been achieved at a time of inflation and constantly rising prices.

Some other interesting facts are shown by review of the FHA figures. For one thing, the record completely explodes the claims of the critics who assert privite builders cannot provide new housing for families of middle income. With production going well beyond a million units last year, four out of every five houses built were bought by families with incomes ranging from \$2,000 to \$5,000. The bulk of these houses went to families in the \$3,000 to \$4,880 bracket. The median income of home-buying families was \$3,880.

If that ian't middle-income home buying, what is?

. . . .

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Thus, private builders have established another great record—one that compares well with any of our great industrial achievements in other fields. Now, in a time of crisis, we have a tough job on our hands to hold these great gains. What ultimately happens will be determined by the course of the war and the extent of the controls that are put on our economy.

But there is much that the Home Builder can do to ease severities that may develop. If we are calm, if we use common sense, if we avoid panic buying and stockpiling, if we discourage panic buying by our customers, we can avoid creating conditions that will encourage drastic controls.

.......

Washington experts have a habit of appealing for "statesmanship." Actually, however, this is a time for statesmanship on the part of our great industry to match our technical progress. We have made great gains undreamed of ten years ago. Let's protect those gains by using common sense in all of our operations. If we can get our suppliers, our manufacturers and our customers to work with us, the outlook will be a lot better for the Industry, the Economy and the War effort.

# Junior Home Builders Chartered in Chicago

Under the name "Junior Home Builders of Chicagoland" 35 of the younger members of the Chicago Metropolitan Home Builders Association formed the first official junior group of home builders in the nation in a meeting Aug. 10. The junior group accepted a charter from the parent organization and adopted a constitution and by-laws conforming to those of the local and national associations.

Each charter member, in addition to his junior merubership, became a member of the parent association as well as the national.

Designated as leading objective was the coordination of fresh trends in design, young and vigorious ideas and firsthand knowledge of wants and needs of the younger generation with the experience of more mature huilders. An educational program is planned where lectures and clinics will be held on essential home tuilding subjects.

A nominating committee was named at the meeting to choose seven directors, four of whom will be designated as officers.

# Selected Products Show Set for '51 A.I.A. Meet

A feature of the 1951 convention of the American Institute of Architecti will be an exhibit of selected products—the first in the group's 83-year convention history. The meeting will be held in May at Chiengo's Edgewater Beach Hotel.

The exhibit will not be a conventional trade abow, according to Paul Gerhardt, Jr., F.A.I.A., city architect of Chicago and chairman ui the display committee, but is designed to provide architects with educational information on noteworthy product developments and trends in construction techniques.

Gerhardt said space would be granted only to building products or methods recently introduced or scheduled for early commercial introduction, and capable of achieving improved construction at moderate cost. The number of exhibits will be limited to 50. Invitations to submit applications for participation will be sent to sponsors of products or methods believed to be eligible and A.I.A. hopes through publicity to bring lesser known developmentis to their attention.

# Detroit Builders Clamp Down on Vandalism

Because of a critical sbortage of building materials, John Weinhart, president of the Builders Association of Metropoltan Detroit, has advised association members to prosecute all persons apprehended in stealing construction site materials. He also recommended stern action against vandals caught damaging buildings or materials.

In urging cooperation from parents to maintain the current Detroit building record, Weinhart said that one of the

# 1951 Dealer Association Convention Dates

OCTOBER, 1	950 Association	Coy	Location
14-17 JANUARY	Okiahome Lumbarman's Association	Okieheme City	Nunicipal Auditacium
15-16-17 14-17-18 72-23-24 34-25-36	Kentucky Betail Lumber Deators Association Northwestern Lumbermen's Association Western Betail Lumbermen's Association Southwestern Lumbermen's Association	Louisville Minnespells Spokene, Wash. Kanses City,	
29-30-31 29-30-31	North-optors Estail Lumbermen's Association Ohie Estail Lumbermen's Association	Ma. New York, N.Y. Cincinnetti	Municipal Auditorium Statlor Natel Notherland Place Hatel
PRRUARY			
6-7-8	Michigan Briail Lumber Dealers Association	Grond Regids	Partiand Hatel and Civit Auditarium
7-8-9	Middle Atlantic Lumbermen's Association	Atlantic City,	Challanto-Hedden Hell
7-8	Lumber Dealers Association of Western		
7-8-9 13-14-15 15-16 20-21-22 72-73-24 27-28	Pennsylvania Meuntain Brutes Londer Dealers Association Ultimois Londer and Material Dealers Association Virginia Bellinian Material Association Wissonain Betel Lumbermen's Association Networks Londer Markanis Association Indians Lumber and Belliver Supply Association	Pittaleurgh Bestwer Chicogo Richmond Milwaukze Omoho Indianapalia	William Pone Notel Shirley-Savay Katel Natel Skorman Hotel John Marshall Mitwasken Auditerium City Auditarium Marat Templa
MARCH			
1-2-3 6-7 9-10	Intermanistic Lombor Dealers Association North Dakete Beteil Lombor Association West Virginia Lombor and Builders Swatty Dealers Association	Sett Loke City Forge Charlostee	Notel Utah City Auditorium Daniel Baane Matel
14-15-10 14-15 20-21-22 21-22-23 26-27 29-30-31	Lower Beheri Lumbermer's Association Lowisions Building Material Dealers Association Constitute Building Supply Association South Datols Betell Lumbermen's Association Tennesses Building Material Association Independent Betell Lumber Dealers Association	Des Maines New Orleans Asheeille, N.C. Sioux Falls Chattanoego Minnoopolis	tewa Eshibit Building Jung Hotel Municipal Auditarium Galicoum Municipal Auditarium Badisson Hotel
APRIL			
4-5-6 5-6 11-12-13 18-19-20 22-23-24	Southern California Brigil Lumbor Association Mississippi Brhail Lumbor Dealers Association Rew Jorey Lumber Association Florida Lumber and Millereck Association Lembermon's Association of Tores	Los Angelos Bilosi Adary Park Daytone Broch Galvesten	Ambasadar Hatel Buena Vista Natel Berkelay-Carbert Hotel Sheratan Place Matel Municipal Plac
May Lindel	Baile)		
17-18-19	Arizona Botall Lumber and Builders Supply Association Montana Rotall Lumbermon's Association		

NOTE: exhibits are scheduled at all conventions save these of the New Jersey Lumbermen's Association and the Florida Lumber and Millwork Association.

# **New Jersey Outing Planners**

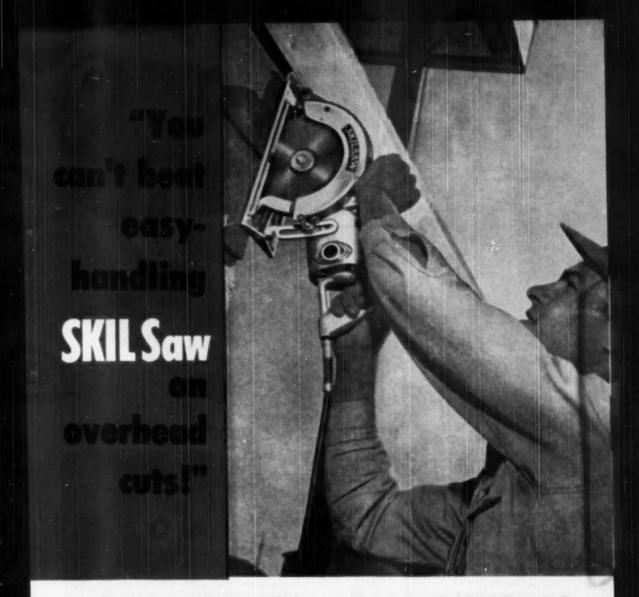


COMMITTEE which bandled the annual summer outing of the Home Builders Association of Northern New Jersey at the Aldecress Country Club in Alpine, N. J. Left to right, they are: Carl 8. Carls. Carlson, president of the association: Marold Kromer, co-chairsan of the committee; Stephen Dudiak, vice president of the association: E. M. Spiegel, president of the New Jersey Name Builders Association; Albert A. Stier, secretary of the local association; John 8. Curchiara, treesaure of the Northern Jersey group and Louis London, co-chairman of the outing committee. The affair, attended by 419 association members and queets, consisted of many sports events such as qoil, null driving, horse shoe pitchlag; candle rave and sevimming, with prisos for first and second winners in all events

major problems was damage done by children playing near construction sites.

The association is offering rewards up to \$500 for information leading to the arrest and conviction of persons who have stolen or damaged property and materials belonging to members, and has warned that stiff prison sentences can be given under the law to those convicted of these offenses.

> For additional Association News turn to page 242

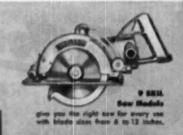


# And on every cut SKIL Saw balance and power make the job easier!

Try SKIL Saw on the tough cuts. Learn what easy-handling really means. Take SKIL Saw with you up on the job. On overhead work SKIL Saw's *two* handles mean safer, more positive control. On the simple cuts, SKIL Saw leaves one hand free for materials handling. And SKIL Saw, not you, does the work. SKII. Saw's power and durability make it tops for all construction sawing. Choose from 9 hard-working models with capacities to 41% inches. Ask your SKII. Tool Distributor to demonstrate easy-handling SKII. Saw today.



SEE products are made only by SKIS.SAW, INC. 5033 Bitms Ares, Chicago 50, 51. Factory Branches in Principal Office in Caruda Biol 2016, 107, 66 Performed Se, Taranto, Och.



# means lower costs to builder... better buy for buyer!

here's why

Home buyers get custom-designed flowrs of Texfloor... the luxurious linoleum with the textured look. You offer the extra of colorful, individualized interiors!

It means work-saving for home owners! Texfloor . . . the linoleum that wears for years . . . is easy to keep clean, spotless and sparkling.

Home buyers save money! They save the cost of room-size rugs with the wall-to-wall beauty of Texfloor.

YOU CUT COSTS! Easy-to-install Texfloor costs up to 30% less, installed, than ordinary flooring! It's your new way to offer more for less?

here's how! Put Texfloor in your model home. Let prospects

see how it makes your home more attractive ... adds the newest decorating effect of sparkling room-to-room color coordination.

Tell your prospects how Texfloor saves them work and money . . . gives them long-wearing, easier-to-keep-clean floors.

Let your home buyers custom-design their own floors, selecting colors and patterns for each room from your Texfloor samples.





SLOANE-BLASON CORPORATION

AMERICAN BUILDER

34

Right House Beautiful BETTER your home...better your LIVING

A PREVIEW OF THE SALES BUILDING OPPORTUNITIES TO BE FOUND IN THE NOVEMBER ISSUE OF HOUSE BEAUTIFUL REACHING YOUR BEST CUSTOMERS ON OR ABOUT OCTOBER 20th



The above sketch, reproduced from a November House Beautiful editorial on good lowcost house design, illustrates how a maximum of privacy can be insured even on a small development plot. No important windows face the street. The location of the gatage frees the entire funced in rear of lot for outdoor lising.



# CLIMATE CONTROL

This typical example which accompanies the November issue "guickle course", illustrates the importance of roof overhang in controlling south side glass walls. It provides protection from the high sammer sun, as shown here. In winter, the sun is low enough to shine under the overhang into the house.

OCTOBER, 1950

# A PACE - SETTING SALES-BUILDER FOR YOUR LOW-COST HOUSING

A 3-bedroom house with 1950 pacecetting features such as Climate Control and privacy—all for \$12,650! That's one of the progressive presentations in November House Beautiful, brimming over with profitable ideas for your local low-cost building problems!

Watch for it! Its up-to-the-minute principles are adaptable to your locality. It demonstrates that a merchant builder's development house can concentrate on basic values and good design. (The sketch reproduced on this page illustrates how privacy is acquired.) It proves that "Americans have a talent for making a little go a long way." It sets standards of real living value which you can offer your new-home prospects at prices they can afford ... of real extra profit for your business!

# 12 QUICK TRICKS

November House Beautiful brings you and your prospective customers a "quickie course" in Climate Control, boiled down to twelve easy-tounderstand design and building "tricks":

- 1. Best location of house on site.
- 2. Protection against wind.
- 3. Proper roof overhang.
- 4. Use of exterior shade.
- 5. Best location of windows.
- 6. Importance of roof color.
- 7. Sunken living efficiency.
- 8. Best ventilation results.
- 9. Correct protective insulation.
- 10. Efficient heating control.
- 11. Inexpensive air-conditioning.
- 12. Significance of room sizes.

More and more of your best newhome prospects will be demanding some or all of these good-sense principles because more and more are being educated to their practical significance through the pages of House Beautifal. So watch for this new "quickie" version of a tremendously important subject . . . and keep it handy as a manual! You'll find it invaluable in closing those transactions you've been hoping for!

SILENT SALESMEN are yours for the asking. Turn the page for complete details.

# RIGHT FROM HOUSE BEAUTIFUL

# ADVER-TIES

FOR EASIER, MORE PROFITABLE SALES THE IN YOUR FORTHCHMING PROMOTIONS WITH THESE FAMOUS NAMES FEATURED IN THE ADVERTISING PAGES OF NOVEMBER HOUSE REALITING.



# SURFACING MATERIALS

## a. Wall & Ceilings

#### **1. STRAHAN FINE WALLPAPERS**

#### THOMAS STRAHAN CO.

THOMAS STRAND CO. Variaty laynobes the STRANAN 1951 walipapar line ... in design, fram cuthentic reproductions of early propers to the mark Tirvebic of modern ... in calor, fram caplest shades to wortness two. This is the largest and mark complete in Strahms & years, advertised consistently in feeding meticael consumer magazines.

# 2. "TREND OF THE TIMES" WALLPAPERS

#### C. W. STOCKWELL CO.

C. W. BOCKWELL CO. "Wildflower" is the guy, California-impired wolfgaper design featured in Stackwells Nareau Backwell welfgapers, corried by leading dealers throughout the United States, are preferred by decarators because of their origg freshness, their oppending cales schemes, and Iwahie designs.

1. UNITED WALLPAPERS UNITED WALLPAPER CO.

A. VITROLITE LIBBY OWENS FORD GLASS CO.

# **b.** Floorings

#### 5. AMTICO RUBBER FLOORS

#### AMERICAN TILE & RUBBER CO.

Benef Grey is 21ed AMICO siler ... Most com-plete line of descriptorships of the sile of the sile of the sile of the sile section by AMICO -percent of specialists in tubber floating exclusively. The islead combinetion of benety, comfort, quiet, fire resistance, easy cleaning, lifetime weer, ful cafet adv mentfly in consumer magazines.

#### 6. BRUCE HARDWOOD FLOORS

E. L. BRUCE CO.

## 7. FREMONT RUBBER TILE DUCO-CUTS FREMONT RUBBER CO.

Proceedings of the second seco

34

# DOORS, WINDOWS & EQUIPMENT

# 8. BURROWES HEALTH-GUARD **COMBINATION WINDOWS**

THE BURBOWES CORPORATION

The guarantized Concrease wills more cam-mation windows because Burrawes tells more capital Content randiand anogurine odrestrillary is illing over 15,000,000 pressents the beauti-trifs, content and concentrate Al Aluminum Com-mation Starm and Scream Windows, Prese more-mation and an and the material and Televisian Prima availa

#### 9. CINCO "STO-A-WAY" COMBINATION WINDOWS

CINCINNATI FLY SCREEN DIV. F. C. BUSSELL CORP.

# 10. MODERNFOLD DOORS

NEW CASTLE PRODUCTS CO. Builder presents housewife with a counter spece ... by using "A Builder provents housevers "Mendersheld counter source . by uning "Mendersheld accordion type door instead of puinging door That's the theme of New Cestle Products Novem ber advertisement in HOUSE BEAUTIFUL In par-ber advertisement in HOUSE BEAUTIFUL In partrays only one advantage which give buyers with Medersfeld dee houses more opporting, faster to sell. Literature available. NEW CASTLE PRODUCTS, NEW CASTLE, IND.

# 11. RUSCO ALL-METAL COMBINATION WINDOWS

F. C. BUSSELL CO.

# **12. SUNAIRE VENETIAN BLINDS**

KIRSCH COMPANY

Kinch leadership is cultivated by appressive advertising and publicity ... just as it is care-fully maintained in the design and quality of Kinch products. You share in the forms of the Kinch name when you fourge with it in your advertising ... and when you mention Kinch dvertising . .

#### " WARNER WEATHER-MASTER **COMBINATION WINDOWS** WARNER MEG. CO.

# PAINTS

- 13. RAMUC ENAMEL FOR POOLS INERTOL CO., INC.
- 14. LECTRO-WELD PAINT REMOVER LECTRO-WELD, INC.
- 15. MAGIKOTER PAINT APPLICATOR THE RENWILL CORPORATION

# SANITARY EQUIPMENT

#### a. Plumbing

- 16. ELJER PLUMBING FIXTURES FURE CO.
- **17. PERMUTIT WATER SOFTENER**

PERMUTIT COMPANY

Naw even families of moderate income may onjoy the benefits of add, clear, worker at every fewcet in the hanne. Permutits amounting new antenantic verter softener costs 40% less than previous models. The periodic addition of said and the turn of a switch operates it. Choice sales

#### b. Dishwasher

# **18. G. E. AUTOMATIC DISHWASHER**

GENERAL ELECTRIC COMPANY

ew design features keep General Electric dish-sahars on top. Collead hearing elements mode maus in G-E ranges are now built into anto-atic dishwashers for higher wash-rinse tem. formania in matter dish

paratures and positive electric drying. Ets Sinks can be purchased with G-E Disposal viding for dishwoshing and effectivespecial and pro-

#### c. Food Waste Disposers

#### **19. IN-SINK-ERATOR GARBAGE** DISPOSER

IN-SINK ERATOR MEG. CO.

#### **20. YOUNGSTOWN KITCHENS FOOD** WASTE DISPOSER

#### MULLINS MPG. CO.

moulting mino, col, Three "86375" for gerthage disposers-featured in Yanugstrum Eithdyns Paul Weste Disposer First Cantinuous feed, and stage-and-gay. Second-failt-deaming, or automatic reversal changes disection of watter switch. Third Long life, or deuble suffing edges increase retary shredder life. These three Berls in Youngstown Eithdees Rood Watte Disposer.

# HEATING

## 21. CHRYSLER AIRTEMP HOME HEATING AIRTEMP DIVISION, CHRYSLER CORP.

#### 22. CONTIMENTAL GLASSHEAT

CONTINENTAL RADIANT GLASS HEATING CORP.

Of many different methods used to heat Of many different methods used to have beenes the sefect, deurest and mest efficient is Canti-mental Glaschest. Smart looking glass parel that works by electricity, inequations to taitabil and apparts. Glaschest is sefe with children about. If one ha work to keet on entire haves or a single reld town. Cantinental Budiant Glass Heating Carporation, 1 East 35th Street, New Tack, N. Y.

# 23. DUNHAM BASEBOARD HEATING

#### C. A. DUNHAM CORP.

C. A. DURINAM CORP. If crowing interest is this first step in cleaing a sale the surrent Durinam comparison an Bandbard Reading is a good one to been your area on. And by "good we mean patentially perfitable.", for you. Add offer literature-most free and not coupened. Tot response has been to heavy we're new reprinting the registria.

## 24. FIBERGLAS DUST-STOP AIR FILTERS OWENS-COENING FIBERGLAS CORP.

#### **25. HEATILATOR FIREPLACE UNIT** HEATILATOR COMPANY



Modern simplicity on a 150-year-old foundation, as pictured in November House Beautiful. The south wall of this climatewise house, built on the site of a typical old New Jersey farm house, van now he opened up to the countryside, thanks to modern controls for mastering excessive sun and glare, inserts, blowing rain and winter rold. A screened balenny protects an entire glass wall, the lower half of which slides open like a barn door.

### 26. MINNEAPOLIS-HONEYWELL THERMOSTATS

MINNEAPOLIS-HONEYWELL REGULATOR CO.

Name builders and home owners today realize that a base limit much of a home where it is conformable. That is why pera control to becoming popular. In the Neocomber issue of POUSE EADITICUI Koneyword Realmans A con. home that has five theremeters a cons. home that has five theremeters for specificit and feel economy.

### 27. WEBSTER BASEBOARD HEATING WARREN WEBSTER & CO.

### 28. WILLIAMS OIL-D-MATIC OIL BURNERS WILLIAMS OIL-D-MATIC DIV.

EUREKA WILLIAMS CORP.

### MAJOR APPLIANCES

### 29. GENERAL T-12 FLOOR CONDITIONER

GENERAL FLOORCRAFT, INC.

Develop Cancel T-12 Poice Conditioner gives --Langer, perfectly belienced procision-built mochine, corear aver 12 - party larger fame fully pecked brushes with langer fame, camplete film of attrachments for avery flame camplete film of attrachments for avery fame camp hendles for pallabing furniture, table tops, avis, Cooperative and rothenel advertising.



### 30. PHILCO HOME FREEZER PHILCO CORP.

### 31. REGINA TWIN-BRUSH POLISHER THE REGINA CORPORATION

Volue conscience applicates dealers the notion over are building profits and good will with Begins, America's 211 polisher, 19 year are a ready dealers. The polisher, 19 year are not a ready dealers as feature Begins in a big ways this fall – its in with Begins to devertising compoint in MOUSE #8AUTRUL, LIPE SATURDAY EVENING POST, and other leading home service magnatimes.

### KITCHEN CABINETS

### 32. MASONITE HARDBOARDS

### MASONITE CORPORATION

Full proge odvertising in leading magazines describes advantages of bardheards in the momefacture of kinden calibrates and alliad products Builders prefer handbaard calibratis because they do not touls or dent, there is no grain for the and check the finish, doors operate quietly, and they will not quit, splinter or stack.

### **33. MURRAY KITCHENS**

THE MURRAY CORPORATION OF

MARKELA MARKELA of America, Name Appliance Diverso Corporation of America, Name Appliance Diverson, shorts big national companion with full page frave-color ad showing ALL-NEW Merroy Natched Steel Bitchens, Murroy cohose sinks made with double or unigot human and drainbourds. Murroy Electric Banges for completely automatic coshing. Murroy gas ranges. Murroy Madern Cobinets for every need.

34. SNEDAKER GLAMOUR KITCHEN

FRANK C. SNEDAKER & CO., INC.

OCTOBER, 1950

### HOME ELEVATORS

- 35. INCLINATOR NOME ELEVATOR INCLINATOR COMPANY OF AMERICA
- 36. SHEPARD HOME ELEVATOR SHEPARD ELEVATOR CO.
- 37. SEDGWICK RESIDENCE ELEVATOR SEDGWICK MACHINE WORKS

### LIGHTING & WIRING

- 38. CUTLER-HAMMER MULTI-BREAKER CUTLER-HAMMER CO.
- 39. KIRLIN LIGHTING SYSTEM THE KIRLIN CO.
- 40. LIGHTOLIER FIXTURES LIGHTOLIER, INC.

### COMMUNICATIONS

- 41. BELL UNIT-REMOTE CONTROL FOR TV., RADIO, ETC. BELL SOUND SYSTEMS
- 42. NUTONE DOOR CHIMES NUTONE, INC.

### HARDWARE

CITY

### **43. SOSS INVISIBLE HINGES**

SOSS MANUFACTURING CO. Soss Invisible Hinges have flush, amouth, stream lined interior effects that definitely give any type

Send for your

of building an increased of all quality of medomity, of streamline, gatacions beachy to in practales promptions with Sean MCUSE BEAUTIFUL advertising and increase year profil photos. Nears a sweepin anded lease failings for every type of installation. Sean Menufacturing Co., Betweet, Michigan.

### CLOSET FIXTURES

### 44. KITCHEN K-VENIENCES

KNAPE & VOGT MFG. CO. Bare them 40 of these sames soving clathes closed factores mains up the Cronients line. K Venieses deuble the separity of any size or these closet bary clathes, next and conderly. Made of steel, they are pluted with shine dreame. A next line of approx-aning Elibhan E. Vonieses prevides o plans for everything fram pares to deat maps.

### FENCES

- 45. ANCHOR POST FENCE ANCHOR POST PRODUCTS CO.
- 46. HABITANT BUSTIC WOOD FENCES HABITANT PENCE, INC.
- 47. RUSTICRAFT WOVEN PICKET FENCES RUSTICRAFT FENCE CO.

### GARDENING EQUIPMENT

\* BRIGGS & STRATTON ENGINES BRIGGS & STRATTON CORP.

\* No Counter Cord Available.



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37



### SPECIAL FEATURES OF THIS QUICK-REFERENCE BOOK:

Lumber Checking List, Millwork Checking List. Hardware Checking List. Materials Ordering Information. Quick-Figuring Tables for estimating concrete footings and walls, concrete piers, window frames, door and window areas, sash weights, nail quantities. How to figure labor hours per unit of work. Rules for linear, area and volume measurement. Mathematical refwrence tables, including decimal equivalents, lumber reckoner, conversion of weights and measures, etc. New chapter, How to Plan a House, gives useful data for contractors and material dealers.

> ROUTING MATE TABLE TABLE THE

PER CENT DISCREAM FOR STANDARD MERS OF HARDWOOD HOURING

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TABLE SERV NAR QUANTITIES

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288 pages, 5 x 7 123 illustrations 60 tables

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### Examine 10 days Free

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Just fill in and mail coupon at right to get "Simp Carpentry Estimating" for 10 DAYS FREE TRIAL. implified If mot fully satisfied, return the hook and owe nothing. If you keep it, send only \$3.50 plus few cents postage in full pay-ment, You take no risk. Mail coupon now.

## CARPENTRY ESTIMATING ... QUICK ... EASY ... ACCURATE

### with this simplified guide!

Here is everything you need to know to "take off" a bill of materials from set of plans and specifications for a frame house. Saves you time figuring jobs, protects you against oversights or mistakes that waste materials and cost money. Nothing complicated-just use simple arithmetic to do house carpentry estimating with this easy-to-use ready reference handbook.

### SIMPLIFIED CARPENTRY ESTIMATING

Shows you, step by step, how to figure materials needed for (1) foundation, (2) framing, (3) exterior finish, (4) interior finish, (5) hardware, and (6) stairs. Gives definite "take-off" rules, with many quick-reference tables and short-cut methods that simplify the work.

TURN TO CHAPTER 8, when you receive this book, and see the "Estimating Short Cuts" you can use for quick figuring of board footage. Here are simplified ways to estimate lumber needed for floors, walls, ceilings, roof, door and window frames, inside trim for these frames, inside trim for inside doors, and drawers and cabinets. This chapter alone can be worth the entire price of the book to you!

### MAIL THIS COUPON

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Send me for 10 DAYS FREE TRIAL, "Simp mating." I will either return it in 10 days and only \$3.50 (plus shipping charges) in full p	lower	noth			
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### Letters to the Editor

### **A Vote For Color**

Sirs : About three years ago I wrote to 16 refrigerator makers, suggesting they bring out their product in colors. All replied and each had an excuse for not doing so. In the intervening years I have observed what I think is a definite swing to color in the kitchen and believe that it is here to stay and grow. To me nothing is more depressing than an all white kitchen, bath or what have you. Furthermore, I predict that hospitals will come to color. I believe that a patient would get well sooner in a room filled with cheetful and restful color, rather than a glistening white.

Hal Kohn Suburban Real Estate Newberry, S.C.

### **Kitchen Suggestions**

Sirs: Most of the houses built today have greatly improved average architecture-combined with faults that will punish the owners when better 1951 houses are built. . . . A glaring fault is the crowding of kitchen equipment under the kitchen window above the sink. This seems to be a hangover from the days of the lamps and gas fixtures which gave inadequate light ; the days when people had to have window light to see if the dishes were clean. Housewives don't want to have to stand or sit on a high stool to look out of the window. . . . Nine out of ten prefer the largest possible window. and a generous place for table and chairs, so that the kitchen becomes more than just mere cooking space. Let's put larger windows in the kitchens, and a nice plan for the table and chairs by these larger windows, and not crowd this most desirable space with the sink and other kitchen compment. Let's make the kitchen a gay and colorial room of many uses, instead of mere cooking space.

> Guyon L. C. Earle, President Earle Kitchen Unit Co., New York 21, N.Y.

EDITOR'S NOTE: Greater convenience, for the kitchen, or any other part of the home, is a prime goal for builders and designers of homes. Progress in that direction is constantly encouraged by *American Builder*, as our July Kitchen and Bathroom issue points out. That issue presents the latest kitchen planning research completed by The Small Homes Council of the University of Illi-

OCTOBER, 1950

mois, which has probably done as much practical research in kitchen planning as any other private institution in the world.

### **For Better Bookkeeping**

Sits: With reference to the story, "Charts Can Save You Money," in your September issue, we wish to commend Mr. E. T. McMurray for his well organized operation. I read the *American Builder* each month and feel that it is down-to-earth for a man in the building business. Any information that you pass on to builders which will impress upon them the importance of a good bookkeeping and cost estimating system will be of great value to them, because it is surprising how few small builders have an adequate bookkeeping aystem.

W. W. Burns Asat. Vice President Home Federal Savings and Loan Association, Des Moines, Iowa

### Liked June Issue

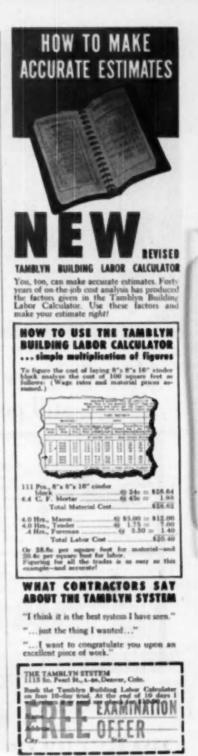
Sirs: You are to be congratulated upon your June issue, most particularly because of "Report on Cement," an interesting, detailed and complete account which, in my desk as a reference work, speeds me on my way toward my unattainable goal of knowing all the answers to the thousands of questions put to me as real estate editor of The Cleveland Press. A newspaperman is always aware that it will take all of his lifetime to begin to amass the knowledge he wishes for and needs in his job of serving the public. I am particularly grateful to the American Builder for giving me. as a part of my subscription to the magazine, this full report on cement from A to Z.

Jim Chandler Chairman of the Board National Association of Real Estate Editors

### **Popularity Grows**

(Editor's note: The following letter is from Miss Betsy Bell, Carnegie Institute of Technology architectural student who recently won First Prize in a women's architectural competition sponsored by American Builder and the National Association of Home Builders. It is some indication of the wide acceptance

(Continued on page 140)





Residence of William H. Schumacher, Wyncote, Pa. . Architect, Herbert E. Hill

HD

## **General Science States and Science Sc**



is an inexpensive angledrive operator for residential wood casements. It is precision-built, handsome of line, attractively finished.

· Operates through screeks

 Easily installed -- 2 measurgments, 6 screws
 Crank bandle and worm

shaft serrated-m. shp m play

 Operates on canoments carrying built or extension hinges (specify)

· Lubricoled for a lifetime of hard wear

 Casekardened steel worm integral with shaft
 Toethprecision machined at exact operating angle

· Housing of Zamak alloy · Heavy brass channel

gwide, cadmium - plated Stani operating arm Getty-operated casements grow up without ever seeming to grow old. Through years and years of twists and turns, they continuously render troublefree, faithful service—starting as quickly, moving as gracefully, stopping as suddenly and as securely as the day they were installed. Their original cost is reduced to a negligible minimum over their lifetime span of service.

That's why architects, builders, contractors, casement manufacturers, building material dealers, hardware jobbers and dealers specify, use and carry the Getty line. That's why Getty operators are found on more casement windows than all other operators combined.

Wrob for our descriptive brachure 0. It contains complete information on our three operators (internal gear, external gear, borizontal drive) and our specialty hardware for every type of suced and metal casement.

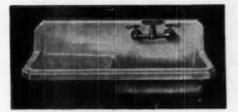
3348 NORTH 10th STREET

& CO., INC. PHILADELPHIA 40, PA.

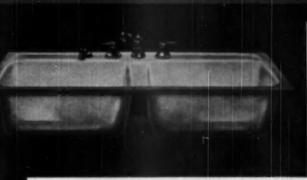
CUSTOM-BUILT HOMES for DEVELOPMENTS for MODERNIZATION



THE RECEMBOND SERVILLA Fine Ma. 1535. A double-drainboard sink for rabinet, finished in order-existing example. Defiled for dok-type supply fisture. Sizes  $54^{\circ} \times 25^{\circ}$  and  $40^{\circ} \times 23^{\circ}$ .



THE RICHMOND SAVONA Plate No. 1813-6. For economy of space this wall-hung mit is ideal. Madern, roll-rinn sink with right or left single drainbaard. Size 42" x 20",



THE RICHMOND SHERTON Plate No. 2115. A flat-tim with double compartments for coverant tap installation. Defined for upper firings. Sizes  $32^{\circ}$  =  $31^{\circ}$  and  $42^{\circ}$  =  $31^{\circ}$ 

### SINKS FOR EVERY TYPE OF INSTALLATION !

For built-in units-counter-top, flat-rim sinks with double compartments. For base cabinets-ledge-back sinks with single or double drainboards. For close quarters-special sink and tray combinations. For economy installationsroll-rim sinks with single (left or right) drainboards.

### SINKS IN RUGGED ENAMELED CAST IRON!

Durable cast-iron base with easy-to-clean, acid-resisting enamel for lasting beauty.

### SINKS IN RICH, NEW PASTEL COLORS!

Now-in addition to the famous Richmond "whiter-white" a choice of four new beautiful pastel shades. Azure Blue, Bermuda Coral, Fern Green and Oriental Ivory.

### SINKS THAT ARE SURE TO SATISFY!

Richmond's reputation for quality sinks assures castomer satisfaction, whatever type you install. Specify plumbing fixtures that carry the Richmond guarantee.



## Comparison proves NU-STYLE CABINETS

### excel in Beauty, Durability and Utility

### Here's why :-

1

Exclusive Nu-Style door with "the Famous Profile,"..., in perfect harmony with latest ranges and refrigerators.

- Nu-Style ... strongest cabinet made A. dovetailed drawers. Solid (3/4" thick) standards and mortised frames.
- Nu-Style Cabinets can be scribed or sawn to join plastered surfaces.
- Enamel any color or finish natural.
- 5 Produced by experts trained in latest scientific methods.
- Made from thoroughly seasoned, kilndried Ponderosa Pine ... the best base for a wide variety of finishes.

Nu-Style Cabinets are sectional units in graduated sizes offering the utmost in flexibility of Color, Size and Layout, BOVITAILED DRAWER FRONTS Make drawer, catro drang, The drawend care with the seaso fram the bettom-draw1 come up through



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USTPROOF ENCLOSUES

WIDOS WORK

### CARR, ADAMS & COLLIER CO. Dubuque, Iowa

Mokers of the femous BILT-WELL Line of Building Weadwork

The Bilt-Weil Line: Superior Unit Wood Winduws + Exterior & Interior Deers + Entrances & Shutters + Clauntia Casaniants - Cara-dar Garage Deers + Basement Unit Winduws + Layrers & Cable Sash + Brackfast Noots + Cambination Deers + Screens & Stores Sash + Carnet (China) Cabinats + Oli-dar Cabinets + Ironing Board Cabinesh + Alantesh & Telephane Cabinets - Multiple-Une & Licen Cabinets + Sath Presphane Cabinets - Multiple-Une & Licen Cabinets + Sath

## On and Off the Record

News, Views and Comments



X-RAY HOUSE—Elsewhere in this issue is a story dealing with an incomplete house, purposely left that way for purposes of demonstrating the construction.

NATIONAL HOME WEEK— When NHW was instituted it was urged that project builders provide a house similar to the X-Ray house along with the completed units for exhibit.

NOT DONE—As far as we have been able to determine, no one has taken the suggestion. Generally, the reason advanced is that it would look pretty bad, and probably no one would be interested.

MEN---The reasoning behind the original suggestion was that men really are interested in the structural values of a house they consider buying, and that showing them the structural qualities would speed up the sale.

IT'S TRUE—Experience with the X-Ray house indicates that there is truth in the supposition. More than that, however, the X-Ray house has demonstrated that women are equally interested. Far from being an eye sore in a project of completed and decorated houses, the X-Ray house has proven to be a focal point of interest.

**PARTICIPATION**—Wider participation in National Home Week, especially by manufacturers whose materials are structural, and usually covered by finish materials, can be expected if builders all over will adopt the cutaway principle of the X-Ray house for the next NHW.

DEALERS—The X-Ray house offers something new for the consideration of retail dealers who, with several of their builder customers, participate in NHW in communities where there may be no house for exhibit purposes. It suggests the feasibility of constructing full size or scale sections of houses to show the best in construction details.

DEMONSTRATION—Such a program would require a script to be read by someone who understands the construction. It is safe to predict, without committing anyone to a task that would not be undertaken, that officers of NAHB and NRLDA would be glad to formulate such a program and provide the script.

OCTOBER, 1950

NOTHING NEW—In principle there is nothing new about the use of the X-Ray house for small builders and/or their suppliers. Many retailers have used full structural sections or scale models in selling for years. Wherever used they have been successful.

KNOT-HOLERS—The success of the X-Ray house as detailed in this issue, or as proposed for small builders or dealers could have been presided by anyone who has ever passed a big city construction job. Usually the safety enclosure is lined with men peering in through knot holes in the enclosure boards. That there is widespread interest in construction operations and techniques has long been known. Why home builders have not capitalized on it as an asset is not easily understandable.

BIG BUILDERS—Many of these, the builders who erect the skyscrapers, have long ago gone as far as to erect grandstands on the sidewalk, thus changing the knot-hole gaugs to sidewalk superintendents.

**PROFIT?**—No such builder has ever been heard to say that he gains anything from providing comfort for the interested laymen. Oddly enough, however, several of them have been on the receiving end of some very valuable suggestions coming from the sidewalk superintendents.

ASSUMPTIONS—The people with the X-Ray house have been aniazed by some of the assumptions, all wrong, that prospective buyers have been laboring under. One of them is thentioned in the story referred to in this issue. There have been many others. If builders want to minimize sales resistance, and give the public some genuine appreciation of what is being offered, there is no better way than to take them into complete confidence, and show them what lies behind the walls, under the roof and foundation.

HIGH PRICES—These are much more readily understandable when the prospect is shown all of the work and planning that precedes the finished floors and walls. Usually, he thinks he could have done much of the finish work himself, but when he sees the hidden work, and understands what readly makes the house stand up, he hegins to see why the costs are there.





This Servel All-Year Air Candillaned hou

## THESE ECONOMIES IN DESIGN

vel All-Year Air Conditioning. you'll realize that many of the conventional features of a house no longer have any function. You can use fixed glass, dispense with fireplaces, fans, screens, etc. This way you can often save enough to make up the extra cost of installing the Servel system. Your client will be delighted, for he's exchanging comforts that he enjoys only occasionally for all-year comfort. What's more, air-conditioning adds considerably to the resale value of a house -and helps to keep it high





NO SCREENS



NO ATTIC FAN

LOWER-COST WINDOW CONSTRUCTION

INCLUDE All-Year AIR CONDITIONIN

### Of all the elements that can enter into modern home design, no single one makes such a difference as Servel All-Year Air Conditioning

When you design a home . . . or office or store . . . around Servel Air Conditioning, it's almost as though you were building it on another planet—a planet where the scorching heat of summer and the bitter cold of winter do not exist. For the amazing new Servel system automatically keeps the temperature and humidity within the building at a comfortable point the whole year round, no matter how hot or cold the weather is outside.

In summer, the Servel cools the air and removes wilting humidity. In winter, it warms the air, adds just the right amount of humidity for comfort. Year-round dirt and irritating pollen are filtered from the air, and it is circulated evenly, without drafts, through every room. Hay fever and pollen asthma sufferers enjoy blessed relief.

The whole process is completely automatic. Once the Servel Selectrol is set at the desired temperature, no other adjustment need be made all year long. The Servel switches automatically from cooling to heating—within the same day, if necessary —to maintain the desired temperature.

You can offer your clients all this year-round comfort at practically no extra cost by eliminating from your home design the details that all-year air conditioning makes obsolete. These include things like fireplaces, attic fans, screens, windows that open and close. The saving will almost cover the cost of the air conditioning.

You can adapt the Servel to any home, any fuel. Ask your Gas Company for details, or write to Servel, Inc., 1010 Morton Street, Evansville 20, Ind.





### **Efflorescence in Masonry Construction**

**C**FFLORESCENCE is the white, powdery substance, generally water soluble salts, which often appears on the surface of masonry walls.

The appearance of efforescence on a masonry wall should be a matter of concern since it is an indication that unwanted moisture is present within the wall itself. Such moisture, if permitted to continue to collect, will, under certain conditions, eventually contribute to the deterioration of the masonry.

### **Causes of Efforescence**

These water soluble salts, present in the materials used to construct walls, are dissolved in water and deposited on masonry surfaces when the water evaporates. Some of the salts frequently found in efforescence are calcium sulfate (gypsum), magnesium sulfate (epson salts), sodium chloride (table salt) sodium sulfate and potassium sulfate.

Second-hand brick, because of previous contact with mortar of plaster may be a source of efforescence. The ingredients used in mortar and plaster sometimes contain soluble salts and are frequently a cause.

### **Determining Source**

If efflorescence appears only at edges of the masonry unit, it is probably the mortar that contains the soluble salts. If the entire unit is covered it is likely that both mortar and masonry units are the source. If near the center and not near the edges, it is likely that the units themselves are responsible. While such observations are valuable guides, only through test-

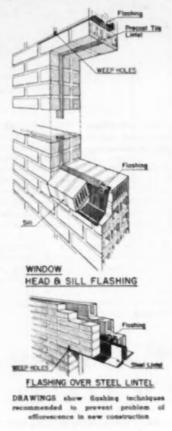


ing all materials can it be determined whether salts are present in sufficient quantity to cause efflorescence.

### **Controlling Moisture**

In the case of a uniform coating of efforescence on a newly-constructed building, an excess amount of water used in the mortar mix may have carried the salt to the surface. During the process of gradual evaporation this excess moisture will carry any soluble salts that may be present to the wall surface.

The location of efflorescence often provides a clue to the source of trouble.



For example, enerustation streaking down from the top of a wall, or patches some distance from the top would indicate defective copings, gutters, or roof flashings. Patches under windows are evidence that the sills or caulking around the window frame should be investigated. A single spot on a wall, with no apparent relation to masonry openings, copings, gutters, etc., may be the result of a defective mortar joint or a projecting course of masonry forming a water table. If it appears on the foundation wall near the ground, especially when rather porous units have been used, it could be caused by ground water drawn up by capillary suction. In every case, the general principle is that this spot of efflores. cence indicates a portion of the wall unduly wetted.

### **Correcting Construction Faults**

When causes are apparent, corrective steps to prevent recurrence should be taken before efflorescence is removed. Faulty flashings, gutters and downsponts should be repaired. If copings are at fault they should be taken up and relaid with thin but well-filled mortar joints with rodded tooling. Non-corrosive metal or bituminous flashing should be placed directly under copings, cornices, chinney caps and any projecting masonry courses.

Improperly filled mortar joints in exposed walls should be raked out and repointed with a plastic mortar of approximately the same mix as used in the original work. In order to elimi-

(Continued on page 52)



THAT BRICK, CONCRETE, OR BLOCK WALL-

## Give <u>1</u>" Space <u>2" DRY</u> Insulation Value! FOR LESS THAN \*7 ½ c SQ. FT.,

MATERIAL WITH LABOR

\*In new construction between furring strips.

## Use 2 Aluminum sheets 1/2" apart...

BRIC

Permanently separated, with 4 reflective surfaces, and 4 reflective accordion spaces; they have zero permeability, are non-condensation forming, non-moisture retaining, will force out fortuitous vapor.

Invaluable under cement floors or floor radiant heating panels—1" space is so economically created. R factor for Down-Heat Flow is 10.30, equal to 3%" dry rockwool. A must for shallow spaces around air ducts and for pre-fabricated buildings, trucks, trailers, railroad cars, ships and planes. Heat flow through air spaces in walls is 65% to 80% radiation. Two such aluminum sheets absorb only 3% of heat rays, and radiate only 3%. They are impenetrable by convection; conduction is insignificant. This construction is technically called Type 4 Jr. Infra.

> INFRA INSULATION TYPE 4 JR. Thermal Factors in 1" Space Down Heut C.097, R10.30, equals 3½" Dry Rockwool Wall Heat C.150, R 6.66 equals 2½" Dry Rockwool Up Heat C.194, R 5.15 equals 1¾" Dry Rockwool Vapor Permeability Equals ZERO

FREE: Send coupon for FREE COPY of 44-page, just-printed, Third Edition of "Simplified Physics of Thermal Insulation", a simple, clear and concise handbook on Heat Transfer, Vapor Flow, Condensation, Radiant Heating, etc., with famous complete and documented MASTER CHART of k, C, R and U factors of all insulations of all weights, thicknesses, densities, etc. Describes and tells how to install various kinds of multiple aluminum and also mass insulations. Check to get samples and price lists.

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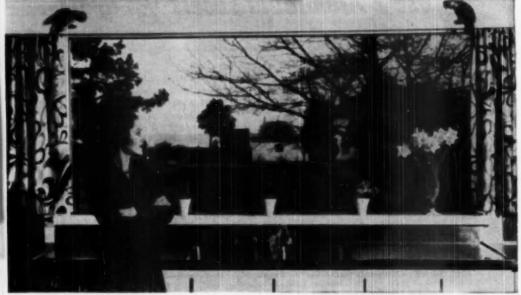
10 Murray Street, New York, N. Y.	Dept. B-10
Please send "Simplified Physics of The	rmal Insulation."
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Send Price Lists of Insulations	Send Free Sample

47

OCTOBER, 1950

# For jobs that

YOU CAN MAKE a small room look larger, a narrow one appear wider, dark corners seem brighter, with wellplaced wall mirrors. Pittsburgh Mirrors are available for every structural and decorative need. Made from genuine Pittsburgh Plate Glass, they have superior reflectivity. For unusual effects, they're obtainable made from blue, fiesh tinted or green (Soles) Plate Glass. They're available with the regular silver backing, or with gold or gummetal backing. And, where protection against moisture is required, Pittsburgh Copper-Back Mirrors are obtainable.



NOW YOU CAN OFFIR your customers all the advantages of Twindow, "the window with built-in insulation," plus a high degree of ventilation. This is made possible with the Vita Automatic Window-"the only picture window that opens electrically!" These windows are offered by Vita Automatic Windows Inc., 101 Park Avenue, New York 17, N.Y.

**IWINDOW** consists of two or more panes of Pittsburgh Polished Plate Glam. There's a layer of air trapped between them and hermetically sealed to keep out durt and moisture. This air space provides effective insulation which minimizes downdrafts, cuts heat loss through windows, reduces condensation. The entire assembly is enclosed in a stainless steel frame to protect the glass edges and seal and to simplify installation. Forty-seven standard Twindow sizes are available, adaptable either for wood or steel sash.



# look like "a lot for the money"...

SUCCESSFUL BUILDERS choose Carrara Structural Glass in the construction and decoration of homes in every price class. They know that it's the finest wall covering available for bathrooms, powder rosons and kitchens; that it's unsurpassed in quality, permanence and beauty. Carrara Glass is ideal, too, for window sills, niche linings, mantels and fiteplace surrounds. It's easily installed. Architect: Henry W. Johanson, Konlyn, N. Y.

A COMPLETE LINE of Pittsburgh Products for store modernization is at your disposal. It includes Plate Glass, Carrara Structural Glass, Mirrors, PC Glass Blocks, Doorways, Paints and Pittco Store Front Metal, The illustration shows an ingenious use of Pittsburgh Pohahed Plate Glass and a Pittsburgh Doorway to create a showroom that permits openvision in its broadest sense. Merchants know all about the quality and dependability of Pittsburgh Products. So, when you're hidding on a job, let them know that you're using these products. It's a big help in selling them. Architects: Martens & Son, Charleston, W. Va.





What are they saying about the houses

Your future as a builder depends to a great extent upon word-of-mouth advertising.

Satisfied customers become loyal, enthusiastic boosters. They spread the word that the houses you build are a solid investment in good living. They not only help you sell . . . they create an active demand for your houses.

### How WRIGHT RUBBER TILE builds goodwill for you

One of the surest ways to gain satisfied customers is to pay special attention to the "extras" you put into a home.

XX

Take floors, for example. Floors that fail to stand up under normal use — floors that quickly become shabby and worn-looking reflect unfavorably on you, influence what people say about the houses you build.

Today's builders are avoiding this pitfall by installing floors of WRIGHT RUBBER TILE in kitchens, living rooms, hallways and baths.

WRIGHT RUBBER TILE imparts a warmth and radiance to every room that makes your houses easier to sell. Still more important, WRIGHT RUBBER TILE retains its gleaming beauty after years and years of hard service. It resists stains and damage of every kind like no other floor covering made. Every feature has been proved by over 28 years of successful service.

build a

You have the assurance when you install WRIGHT RUBBER TILE that your customer will be proud of his floors long after the mortgage has been paid. He'll be grateful to you — and he'll tell others about you?

Gain the assurance of lasting customer goodwill by installing floors of WRIGHT RUBBER TILE in every house you build. Then you can be sure what people say about the houses yow build will make other people buy them!

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



FLOORS OF DISTINCTION

WRIGHTEX-Soft Rubber Tile

- WRIGHTFLOR-Hard Surface Rubber Tile
- WRIGHT-ON-TOP Compression Cove Base

# Engineered to Meet Every Heating Need! 93 MODEL

OF FURNACE-BURNER UNITS. **BOILER-BURNER UNITS and CONVERSION BURNERS from which** to SELECT the RIGHT MODELS for the HOMES YOU BUILD

No matter which style or size of home you design or build, there's a Timken Silent Automatic designed to fit your specifications-priced to fit your construction budget! Twenty-five years of heating experience - and a nation-wide reputation -- stand behind these quality-built units. Whether your plans call for oil, gas or coal heating equipment, specify Timken Silent Automatic ! -- for your satisfaction and for the owner's satisfaction.

WRITE FOR FULL DETAILS AND PERFORMANCE DATA!

KITCHEN-TYPE OIL BOILERS - the most revolutionary de-velapment in modern home heating - automatically heat the home, also supply ample domestic hot water.





OIL AND GAS LO-BOILERS, "Duty-Designed" for redient and rediener systems in all sizes of homes, have unusually high heat output for unit size. Ges model shows.

COMPACT OIL AND GAS HI. FURNACES, specifically designed for small homes, bring to avery owner the full benefits of winter air conditioning without a cost premium. Oil model shows.



QUIET COMPACT EFFICIENT COMPETITIVE PRE-ASSEMBLED

The exceptional quietness of the famous Wall-Flame Burner has proved its value in thousands of next-toliving-quarters installations.

Close attention to every detail al de-sign engineering has held required foor area to a minimum-saving space, saving cost.

For many years Timken Silent Automatic heating equipment has been "The Accepted Standard" for economy of operation.

Timken Silent Automatic heating equipment is priced to compete with other makes of comparable qualityor lesser quality in many instances.

Every feasible assembly operation, including all essential interior wiring and plumbing, is completed on most models before shipment is made from the factory.



OCTOBER, 1950

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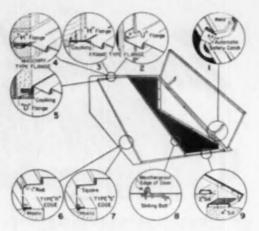
### Installation Features **Of Metal Basement Doors**

THE OUTSIDE cellar door, which has long been recog-nized as a convenience and safety feature for homes, is currently receiving increased attention from manufacturers with the result that several styles of compact, easily-installed doors are now available to builders.

One of the manufacturers, the Bilco Co. of New Haven, Conn., produces the door in 12-gauge copper-steel or aluminum. Four styles are made, with three sizes in each. Overall widths are 3 feet, 11 inches ; 4 feet, 3 inches ; and 4 feet, 7 inches.

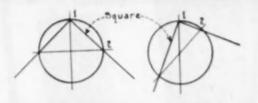
### CONSTRUCTION FEATURES

- 1. Automatic safety catch. Holds doors open so they can't be blown or knocked shut. Easily unlatched by hand or feast
- 2. Head flanges, "H" type, bolted under lintel for frame or masonry construction
- 3. Head flanges, "U" type, fastened to sheathing and siding or under shingles. 4. Head flange, "H" type, set into masonry joint and
- caulked with mastic



- 5. Head flange, "D" type, bolted to face of masonry lintel and caulked.
- 6 Rounded, "R" style, top edge with bottom set in mastic and bolted to concrete.
- 7. Square, "S" style top edge.
- 8. Flange construction and sliding bolt lock make doors weatherproof and burglarproof
- 9. Plain 2", checkered 4" steel sills. Supplied separately.

### HOW TO DO IT HOW TO DO IT " HOW TO DO IT " HOW TO DO IT " HOW TO DO IT



### **How to Make Square with Compass**

If no other tool is available, a perfect square can be made with the aid of a compass in this manner : Scribe a complete circle about a foot in diameter with the compass. Mark two intersecting straight lines through the exact center of the circle. Finally, draw two straight lines across the points where the original lines and circle meet and the result will he a perfect square .-- Submitted by Herbert E. Fey, New Braunfels, Texas.

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

### Efflorescence ....

### (Continued from page 46)

nate as much of the original shrinkage as possible, the tuck-pointing mortar should be pre-hydrated by mixing with only a portion of the mixing water one or two hours before using, after which it may be remixed with sufficient added water to produce satisfactory workability. The use of cement, lime, sand or water which might tend to cause efforescence should be avoided.

If the caulking around door or window frames was completely omitted, all such cracks should be filled with a good elastic caulking compound placed with a pressure gun. If the original caulking has become dried out, cracked, peeled or separated, it should be removed and replaced with new compound under pressure. Raking and repointing mortar joints in sills may also be necessary.

Dampness in foundation and lower parts of walls above grade may be caused by lack of, or faulty : (1) footing drains. (2) dampproofing on outside of foundation walls. and (3) dampproofing in masonry course immediately above grade. Causes (1) and (2) may be corrected after construction, although at considerable expense.

With watertight wall and good flashing installations, efflorescence which appears on the walls soon after erection or repair of a building will quite often disappear after a few rains. If not, water applied with a stiff scrubbing brush will often do the job. In case neither of these procedures compietely removes the efflorescence, the wall should be wetted. then scrubbed with water containing one part of muriatic (hydrochloric) acid to nine parts water. Immediately thereafter, the wall should be thoroughly rinsed with plain water.

It is very important that the recommendation regarding water rinsing both before and after acid washing be followed. All frames, trim, sills or other installations adjacent to the masonry should be carefully protected against contact with the acid solution. Workmen should avoid contact with the acid by wearing rubber gloves. It is also sometimes desirable to give the surface a final washing with water containing approximately 5 per cent of household ammonia.

There is as yet no standard method for the testing of mortars or mortar materials for efforescence. In an attempt to improve this situation, a subcommittee on efflorescence of ASTM Committee C-12 on Masonry Mortars was formed several years ago and has been devoting considerable study to the problem.

### TEXACO'S TIME-TESTED, TOP-PERFORMING SHINGL

THOSE ten points above tell the facts about TEX-LOS. They sell TEX-LOS to home and farm owners. These interlocking type shingles have been tested in every weather-and have weathered every test. They are designed and built to stay put in high wind areas. There's no better shingle value on the market today!

> \$1 dr \*

TEX-LOK Shingles are quailable in the areas currently served from Texaco's roofing plants at Lockport, Illinois and Port Neckes, Texas.



TEX-LATCH Available in the areas served from the Edge Moor, Delaware roofing plast-another top-performing Texaco asphalt shingle! Heavy duty, double coverage and interlocking-similar to TEX-LOE but slightly different in method of locking tabs.



HEAVY DUTY

BLE COVERAGE

INTERLOCKING

CONCEALED MAILING

TIME-TESTED DESIGN

BUILT TO RESIST

LOW COST, LONG-LIFE

FIRE-RESISTANT

GOOD LOOKING

ON THE ROOF

IT'S TEXACO - A NAME THAT LUONS KNOW AND TRUST

NO BETTER

SHINGLE VALU

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1

2

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## She Took It Out! - THEY BOUGHT THE HOUSE THAT HAD R.O.W REMOVABLE WOOD WINDOWS

She liked the architecture, the big windows, the light friendly rooms-but, she had a doubt that kept them from saying "yes." He liked the location and the looks, but knew what she meant.

Then-the salesman showed her how simple it was to remove the  $\mathbb{R} \cdot O \cdot W$  windows by pushing each window to the left. That was the convenient extra they were looking for. So-

She tried it. They both agreed. They bought.

TYPICAL CONSTRUCTION DETAILS (above). There are 27 specially Bicensed R-O-W mean-fuctorers and 48 distributors throughout the U.S. Dobails vary slightly according to the requirements of year area.

Mr. Sala

That story, multiplied over six million times, has made  $R \cdot O \cdot W$  the world's largest selling wood window.

the exclusive spring cost ion (coloway view at saly makes the romessible, it colomet a west an. Gives in d in dry w ..... travel in an an R-O-W Ra es and sales aids that who have the b mail the comp R.O.W SALES COMPANY 1334 ACADEMY . FERNDALE 30. MICHIGAN PLEASE Send more information on R.O.Wthe windows with sales appeal. Architect Bulider Daola Ch State

## Round Table

NORMAN MASON, North Chelmsford, Mass., retail lumber dealer, former president of NRLDA, and currently a delegate to the U.S. Chamber of Commerce, appeared recently on the radio program, "America United."

HIS COHORT on the program was Howard C. Cook, Ford Motor Co. Both were in agreement regarding the theory that the automotive and home building industries form the basis of our economy.

AN INTERESTING SLANT, however, was advanced by Mason. He suggested that while statistically building may seem to be in a boom period, several factors distort the statistical picture. Among these is the comparative sizes of dwelling units now and prewar. A greatly increased number of smaller families require a greatly increased number of dwelling units.

THEREFORE, Mason concluded, competitive conditions at the marketing level indicate to him that while the home building industry is enjoying a good volume of business, there is no out-of-hand boom.

THE SPECULATION makes sense, and is worth analysis on the part of someone whose business it is to analyze marketing conditions.

OF COURSE, it is known that some of the demand for new houses is based on the unavailability of rental units, due to rent controls. Nevertheless, a valuable contribution to programming future home building operations could be made through a careful study of Mason's theory.

AFTER THE FIRST reaction to the Korean war, tangible evidences of hoarding of some building materials are disappearing.

MOST SECTIONS of the country report shortages of gypsum, cement, millwork, bricks, and in some places, nails. The nail situation seemed to be clearing up in late August. Gypsum and cement shortages were seasonal. Millwork and brick shortages probably were due to the extraordinary number of starts in the late spring months, and throughout the summer.

FREIGHT CARS were hard to obtain due to heavy crop shipments, overcrowding at the terminal storage points, and military movements. (Continued on page 59)

OCTOBER, 1950



## "They attract the right buyers

... because they include Electric Water Heaters," says Mr. Roberts of his Surrey Hills homes

The homes being built by Mr. Lewis D. Roberts at Surrey Hills, Larchmont, Pa., are selling from the plans, and there's a waiting list.

Mr. Roberts installs Electric Water Hesters as standard equipment. Like successful builders everywhere, he has learned from experience what sales and survey figures also show-that there's a constantly growing demand for Electric Water Mesters.



### ... of course, It's ELECTRIC!

It pays to install Electric Water Heaters. They're completely automatic, clean, dependable in operation. They aave money for builder and customer alike. Installation can be made anywhere—no flue or vent. This shortens hot water lines, cuts piping cost, prevents water waste. Fully-insulated storage task for economy of operation. Safety assured by all electric, dependable temperature control.

### ELECTRIC WATER NEATER SECTION

tianal Electrical Manufacturars Asceclation + 155 East 44th Street, New York 17, N. Y.

ALLCRAFT - BAVER - BRADFORD - CRAND-LOR IELECTEIC - CROSLEY - DEEPPREEE - FAIRBANKS-MORSE POWLER - PSIGIDADE - GENERAL ELECTRIC - NOTOONT - NOTSYESAM - JOHN WOOD - RELYINATOR LAWSON - MERTLAND - MORACEN - NOROE - PENCO - RELY - BRESIN - SEPCO - A. O. SMITH THE BROGRAY - TOASTMASTER - UNIVERSAL - WESK - WIESTMONOUSE



Window

Nature splashes color with carefree abandon in the glorious, glamorous outdoors. Here, with her magic brush, she paints dazzling scenes—breathtaking views. And they are truly enjoyed through Ceco Picture Windows of Steel because more view gets in. Slender frames and muntins do the trick. So, bring window wonderland to the homes you build—bring nature's murals in motion right into every room. There are other reasons you'll want to provide these better-than-ever windows. They're engineered

## In construction products CECO ENGINEERING

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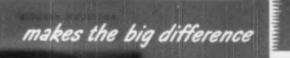
Wonderland ..

to assure tightest weatherseal. Then, too, they are extra strong with sections 11/1s" deep. Yes, when you use Ceco Steel Windows-you know you've used the very best-you're sure of economy too.

### CECO STEEL PRODUCTS CORPORATION

GENERAL OFFICES: 5401 West 26th Street, Chicago 30, Illinois Offices, worehouses and fabricating plants in principal cities





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THE QUALITY LINE OF

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SPENCE

Capacities from 290 to 45,000 square feet, steam. Precision-engineered and manufactured to give superior,

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FOR EVERY FUEL

Boilers for all types of fuel

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with ASME requirements Fully approved by Steel Builey Institute or Institute of Beiley and Radiator Manufacture



76 Dependable Models to Choose from

AMERICAN BUILDER

0100

16 ł

0



(Continued from page 53)

UNFORTUNATELY, large military movements came at a time when harvest crops were ready for shipment. That created a bad situation in itself as far as cars for lumber and building materials were concerned.

ON TOP of this the crowded condition of terminal storage facilities for new harvest crops was so had that there were many cases of reshipment back to the country. This was waste shipment and wasteful though apparently unavoidable dissipation of freight cars.

SHORTAGES of freight cars due to harvest conditions and storage conditions is temporary, but no real relief can be promised until it becomes known just what military requirements are and will be.

TO THOMAS P. COOGAN. president of NAHB, orchids or a salute or both. He has been working untiringly since the Korean war started to formulate a pattern for home building operations that would be consistent with public needs, and at the same time flexible enough to accommodate itself to possible increased military needs for men and materials.

CURTAILED building programs were among his recommendations, and he has secured the word of operative builders to cut back. He also expressed approval of tightened credit as an automatic means of decreasing starts.

WHETHER tighter credit will accomplish that end or not remains to he seen. It depends upon whether the building public becomes discouraged with the demand for higher down payments or concludes that it will sacrifice somewhere else to find the money for construction as the best hedge against inflation. The answer probably will not be known until the August figures on building starts become available.

THE ONE THING everybody hopes is that there will be no reinstitution of wartime controls like the ones that prevailed until 1946. It is to this end that Coogan is working heroically and patriotically.

IF THE WAR in Korea spreads, and develops proportions akin to the spread of World War II, some means will have to be worked out to continue (Continued on page 63)

OCTOBER, 1950

## You're out ahead when you're behind a Stanley Safety Saw

When you press the trigger of a Stanley Safety Saw, you're out ahead of schedule ... in front of your best promise. Makes a good man still better. An exclusive Stanley feature, the duplex handle with 2 independently operating trigger witches, makes the Safety Saw easy to operate in any position --- up, down, left or right. Depth of cut adjusted by one 45". Weight saving, sturdy heat treated aluminum alloy base, heavy duty sears, automatic lubrication, ealed ball bearings on motor and arbor. Salety guard on guard at all times. AC or DC.

TANLEY

Stanley W7 Satury Saw .... copulity O other 215. -316

Reg. U.S. Pet. OH. This trade mark on electric tools tells you the most , important thing you want to know about tools

When you buy an electric tool you have to take somebody's word about gears, motor, bearings, shaft, evincency a word nouse gears, motor, searings, mart, ewitches, power, etc. Whose word about tools could be more reliable than the word of "Stanley" ... tool makers for over 100 years. On electric tools the name, Stanley, means that the tools are quality built, name, stanley, means that the usols are quality own, thoroughly tested and honestly rated. Covered by a unorougnty teated and nonenty range. Any entropy of generous guarantee and serviced by a network of Stanley Service Stations. See your industrial distributor or write for complete catalog. Stanley tributor or write for complete catalog. Banley Electric Tools, 492 Myrtle St., New Britain, Coon.









### NATIONWIDE Roddiscraft WAREHOUSE SERVICE

NATION WIDE INDUSTIG: WAREFOUSE SERVICE Combridge 38, Mass. 229 Yearser 34. Charleste, N.C. 123 E. 2795 51. Charleste, N.C. 123 E. 2795 51. Charlester, N.C. 123 E. 2795 51. Descel 14. Mich. 11835 E. Jefferson 51. Mexates 00, Yearse 32. Kansen City 2. Kan. 35: 0350-cite-exit San Antene 2017 51. Sansen City 2. Kan. 35: 0350-cite-exit San Antene 1997 51. Sansen Francisco 24, Cal. 243 Williams Ave.

RODDISCRAFT Ply-Kao Dear -- Ply-wood strips, vertically spaced as shown with two Poplar cross members form the core of the Rodda-crart Ply-Kao Door, Available in Gum suby the Riddanzart Ply-Kao Door is videly used an jobs where economy is of prime importance, typic rendrations with U20° faces and UW



AMERICAN BUILDER

40

## a Variety of outstanding Values from NATIONAL LOCK

### **Builders Hardware**

**Cabinet Hardware** 

You provide more real dollar for dollar value when you provide quality NATIONAL LOCK hardware. A wide range of builders items includes butts, hinges, latches, handles, pulls, locks...everything you require. The ball tip butt hinge at right, for example, is made of wrought steel, furnished in a variety of sizes and 6 attractive finishes. Many items are individually packaged.

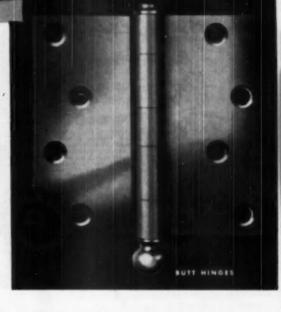
Forged brass hardware, die-cast handles, concave knobs, several attractive matched sets with push button catches, a wide choice of finishes including Bright Brass, Dull Brass, Dull Bronze, Bright Chrome and Dull Chrome. All are promptly available to please the most discriminating clientele. Ask us about NATIONAL LOCK cabinet hardware. It's distinctive...envelope packaged.



Sash Hardware

justers, lifts, locks and other sash hardware items. Sash lift shown is offered in Steel, Brass or Bronze. Finishes include Bright Brass, Dull Brass, Dull Bronze and Bright Chromium. Locks assure positive action.





National Tutch Latch

OCTOBER, 1950



great combination ...



In research where windows are opened and closed frequently or where ventilation needs are great and varied, Truston Resi-dential Secol Catements fill a attilitation need in addition to being decorative. Clean, bright, ais-controlled kitchens are possible. A slight, fagertip touch adjusts window open-ing. Side hinged casements can be so opened that they invite as retard the flow of air. High, small or unaxally placed window openings all become more useful and at-tractive when fitted with Truecon Stort Comments.



The Truscon Series 135 Double-Hung Window is so posser, so sensible, so doilar-seving that in scandard designs in may be used with a gener-ous hand in any size or rps d residential structure. The sill-yeas design is particularly adaptable for use in whoma, Sash members are of welded inbular construction. Long. adaptable for one in schools. Safe members are of wedded tubular construction. Long, quies, trouble-free action an-oared by motor-type spring balances with tapes of Republic ENDURO Sciellaw Steel. Complete factory weatherwitipping in stainless peed. Modular standards. Wide range of types and sizes.







Alexander Mitchell Residence, Natick, Mar James H. Risden, Architect; E. T. Stati

for economy and beauty

In large-scale housing, or smart individual residences, there are beautifying architectural possibilities available in the combination of Truscon Series 138 Double-Hung Steel Windows and Residential Steel Casements. Each of these windows complements the other. Each has a smart, modern flair ... each has distinctive ventilation control features that afford maximum utility. An interesting "change of pace" in architectural treatment is possible with the distinctive designs available in Truscon Series 138 Double-

Hung and Residential Steel Casements. And final low cost, equal to or more advantageous than any other type, is

a major factor not to be overlooked. Free

illustrated literature on request.



FREE Book on Truscon Stual Windows. Write for it. The Truscon Staal any Monufactures a Complete Line of Steel Windows and Methanical Operators...Soci Jaiets...Metal Lath...Sevaldack Baefs ...Reinfareing Soci ...Industrial Soci Doors ...Cool Chute Doors ...Steel Lintols...Concrete Reinforcing Bars....Weided Steel Fabric.

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TRUSCON STEEL COMPANY YOUNGSTOWN L. OHIO



Continued from page 59)

enough house building through the shooting period to avoid the critical shortages that plagued the country and its home builders in the years following VJ Day.

HOME BUILDING, in the event of another major war, will have to be considered a necessary war industry, second in importance only to the business of winning a war.

AUTOMOBILE merchandising, at least in Los Angeles, reaches some new highs. Bill Rodd, our western editor, parked his car on the street, and returning, found a card on the seat. The card said, "I believe I can get you \$1.200 for this car in trade on a new 1950 ....... today. Come in and ask for ......" Names omitted. This variation of door to door canvassing might be called curb to curb canvassing.

A LOS ANGELES dealer located several blocks from the downtown area advertises "20-minute station wagon service." You leave your car with him in the morning for servicing, he takes you to your office in the station wagon, calls for you in the alternoon, and delivers you to your serviced car.

ANOTHER DEALER writes on the anniversary of your purchase, "Today your car is one year old-come in and have it washed and lubricated at our expense—as a birthday present." Maybe nome of these items has anything to do with the building business, but they are examples of good merchandising and good customic relations.

WEIGHS

3/ LESS

ROOT-PROOF

JOINTS

SUGGESTIONS in Washington for total mobilization in case of all-out war are even more hysterical than anything contemplated up to VJ Day. The socialist planners are having a field day blueprinting procedure for complete control of everything. Some of the ideas are so funny they are actually dangerous. Utmost vigilance and a preponderance of good common sense will have to prevail in case of real trouble to avoid going into a state of regimentation at least equal to what Russia imposes as a regular diet. There certainly could be no point in fighting a war against dictatorship only to set up a bigger and better one while fighting off a foreign one,



# AND SENSE!

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

Bermico's convenient 8-toot lengths store more safely with far less breakage ... are easier to handle on the truck or job. Bermico weighs only ½ as much as other types of pipe. A cinch to kay, too. No joining compound needed. A few harmer blows and Bermico joints are tight ... and stay tight even when the ground shifts underseath!

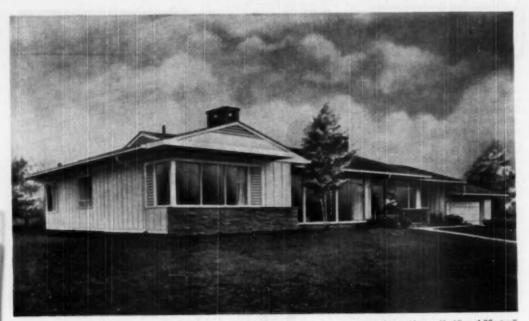
Small wonder builders find that Bermico saves money, time, effort all along the line. Bermico is a hit with customers, too. It's rootproof, leakproof, watertight... unaffected by temperature extremes... Bermico casures a emooth, dependable high capacity water flow.

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

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

Dept. A-110, Brown Co., 500 Fifth Ave., N.Y.





## Build smart, modern homes like this in less time, at less cost, with "Century" APAC Siding

Built for comfortable living-designed to meet the problems of rising construction costs-this attractive home has clean, smart siding of "Century" APAC Asbestos-Cement Board.

This versatile siding board is ideal for structures of all types-theaters, stores, and industrial buildings, as well as residences. Recommend it for all large exposed surfaces, both interior and exterior. And recommend it too, as an inexpensive material for remodeling existing structures.

"Century" APAC Asbestos-Cement Board is adaptable, easy-to-handle, and profitable for you!

· Get the APAC story-ask your

ca with siding of "Contury" APAC. Lorge 4' x 8' sheets are applied ver-Hcally; trim strips applied for decorative effect also mask application fasteners, Surface painted white.

Raymon R. Hedden, Contractor Edward Wassell, Architect

### FACTS YOU SHOULD KNOW ABOUT "CENTURY" APAC SIDING

ECONOMICAL: Initial cost is low; large-sheet application is simple, therefore, quick and inexpensive.

DURABLE: Resists fire, weather, rot, rust, rodents, termites, and other destructive insects; never needs protective painting.

ATTRACTIVE: Natural finish is eye-pleasing light gray. Although APAC does not need paint for protection, it takes decorative coatings well, if desired.

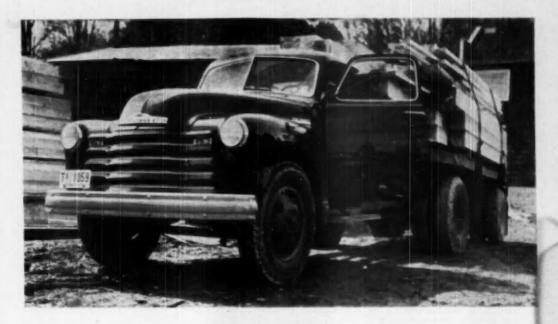
EASY TO APPLY: "Century" APAC is made in large surface sheets, 4' x 4', 4' x 8'; in thicknesses of \$5", 54", and \$5". Large areas are covered quickly using simple nail or screw fastenings. Battens for trim come in 2", 3", and 4" widths; in 16" and 14" thicknesses.

Keasbey & Mattison dealer, or write us direct. KEASBEY & MATTIS

**COMPANY · AMBLER · PENNSYLVANIA** 



ORIGINAL MANUFACTURERS OF ASBESTOS-CEMENT SHINGLES IN THIS COUNTRY AMERICAN BUILDER



Get a better day's work out of your Truck Dollar

## CHEVROLET TRUCKS



You invest money in a truck to get work done. And you can prove to your own satisfaction that a Chevrolet truck does

more work for every dollar you put into it.

You get more for your money right from the start, because your Chevrolet truck is priced at rock bottom. Chevrolet volume production-far and away the biggest in the truck field-makes possible extra features and extra engineering advantages at lowest cost.

You get more for your money every driving mile, because Chevrolet trucks are economical to operate. The top-rated efficiency of Chevrolet Valve-in-Head engine design saves money on gas and oil day in, day out.

You get more for your money right through the years, because your Chevrolet truck cuts upkeep to the bone. Hypoid rear axles, diaphragm spring clutch, ball-type steering and many other great truck features help keep your truck on the job and out of the shop.

Get the full "more-work-per-dollar" story from your Chevrolet dealer – and get America's biggest selling, best performing truck: Chevrolet.

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

### These Great Features Help Tell Why CHEVROLET TRUCKS ARE THE FIRST CHOICE OF TRUCK BUYERS EVERYWHERE

TWO GREAT VALVE-IN-HEAD ENGINES: the new Loadmaster and the improved Thriftmaster-to give you greater power per gallon, lower cast per load + THE NEW POWER-JET CARBURETOR: smoother, quicker acceleration response . DIAPHRAGM SPRING CLUTCH for easy-ection engagement + SYNCHRO-**MESH TRANSMISSIONS for fast, emooth** shifting . HYPOID REAR AXLES-S times more durable than spiral bevel type . DOUBLE-ARTICULATED BRAKES for complete driver control + WiDE-**BASE WHEELS for increased tire mileage** · ADVANCE-DESIGN STYLING with the "Cob that Broathes" + BALL-TYPE STEERING for easier handling + UNIT-**DESIGN BODIES**-precision built.



### WALL VENTS

### A8105018

Westerna Blokventy are ideal for installations in brick, stone, concrete block and gloss black ponests, where adjusteble ventilations is desired. Units are made af heavy cast aluminum with built-in screen. Titting duess on mide agen and cleas to almost 100 degrees. Exterior



lauvers of all Blokvents can be supplied for construction not requiring adjustable rentiliotion. Mode in two sections, units can be separated and extended to must required well thickness. Aluminum extension strips secure sections together. Westwood Engineering Co., Dept. A8, 3118 W. Lake Street, Chicogo 12, III.

### ACOUSTICAL TILE AB103004

Simpson Noisemater acoustical tile has a "Spiline-Lok" system designed to simplify installation. Grooves are on two edges of the tile, and the indeall, the snog-fitting wood splines are inserted in them. The splines sim-



plify application, seal the transverse joints, level the corners, permit use of two noils per tile, and mid in holding straight lines. Singran Logging Ca., Sales Dir, Dept. AB, 1065 Strunt Bidg., Seattle 1, Wash.

**EIVERSIGLE ELECTRIC DELLA AD103017** New Common standard duty 1/, inch drill with built in toggle type revening with in designed fast deep baring in heavy timbers, cronote planking, and all kinds of sappy wet fumher. Tool types in reverse at a flock of the smitch-



Die-cast ofuminum body. Weight, B%, pounds. Capacity is %-inch in metal, 1-inch in wood. Universal AC DC 115 volt motae develops 550 r.p.m. no-foad speed. Cummins Partable Taols, Dagit. AB, Cummins Business Machines. Corp., 4760 Revenuesand Ave., Chicage 40. III.

### LAVATORY-WATER HEATER AB105029

Combination levelary and water heater combines Briggs Beautyware white parcelain laxetary with Underwriter's approved heater. Laxetary is mounted an eluminum cabinet. Automatic Bewen Electric waters heater is insolated with 2 inches of Fibergios, and fully plumbed to the lavetary. Thermostetic control turus an the curent only as helt water is used. It has fast re-



covery and keeps water hat for a long period without using electricity. Handling Equipment Manufacturing Co., Dept. AB, Wisom, Mich.

WHELL TRACTOR-LOADER AB105032 Strott Line "hydraulic loader will dig at either front or near end of the tractor, dump in front, and leave operator firse to select the digging end to fit the job, to that the con do any type of loading without turning the tractor. For use exclusively on the Oliver Model '27' induct surface can lift a load of 4,100 pounds to a height af eight feet in front and can service



2,900 pounds over the top from the rear to front. Combined weight of tractor and loader is 10,200 pounds. The Oliver Corp., Industrial Dir., Dept. AB, 19200 Euclid Ave., Cleveland 17, Ohio.

### WOOB GLUE

A8105001

Wood-Tite' glue, a liquid, synthetic woodwarking adhesive can be used caid and requires no mixing as special preparation. If has excellent strange stability and is especially used for edge or joint gluing. Sets in 20 minutes and deue in a few hours. Will operate continuously in automatic glue-sprenders with out fearming. Will remain fluid when stored in temperatures on low as 34 degrees F. Midland Clue Fraducts Co., Dept. AB, 1478-88 Madison Ave., Detroit, Mich.

### ELECTRIC HAND SAW

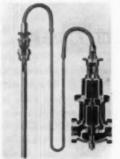
### A8105013

Zephyr Madel 625 partable electric hand sow hes universal 115-120 volt, AC-DC, fan-cooled maker. Has bronze, helical gears, self-ailing, fleare-type bearings. Two-pole trigger switch



in handla. Design of shae permits adjustment in depth of cut from 0 to 21% inches, and angular cutting adjustment from 90 degrees to 45 degrees. Telescoping safety guard protects operator. Weight, about 10% pounds: Supplied with ber-covered card and plug. Partable Electric Tools, Inc., Dept. AB, 320 W. 83rd Sr., Chicago 20, III.

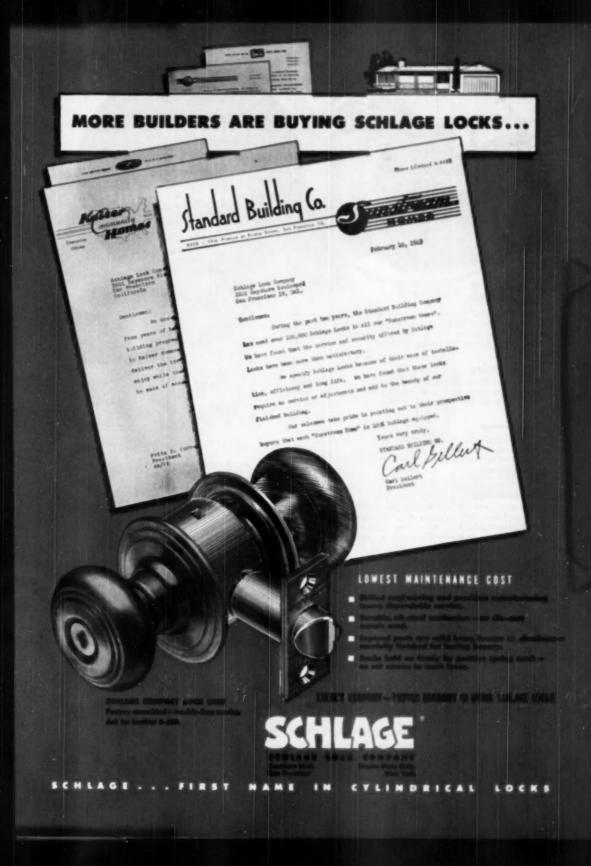
TEMPERATURE REGULATOR AB103006 Station, a self-operated, hermetically scaladtemperature regulator, is reported to give sole, reliable, travbie-free service even under the



must adverse operating conditions. Has no packing glands, inquires no maintenance and can operate immersed, in the open, under all canditions. Basic type has bronze body, stainless steel trim and bross bulb with heavy bronze capillary arma. Finger tip temperature adjustment al 60 degrees, Accurate control of temperatures up to 350 degrees F at maximum steam pressure al 150 pci, Farris Staco Carp., Dept. AB, Pollandes Park, N. J.

### LOW COST HARDSOARD AS105010 Panelwaad, a new law-cast hardboard in 1/2-

renterwood, as were towned metadourd in the inch the lenses, will not split, spliteter, cock o crumble, and can be used for dry-wall construction, remodeling walls and railings, partitions and cabinet work. Can be applied directly averstudding or furning strips. Will hake and hold studding or furning strips. Will hake and hold studies of the strips. Will hake and hold the strips of the strips. Will hake and hold (Constructed on page 70).



You can't beat this **Cost-Cutting** Team!

### **For Partability**

The Oliver "HG" Crawler Tractor and Imp Dozer can be easily transported from job to job with a *light* trailer and *light* truck. Your savings in hauling costs alone over the larger tractors will almost pay for the "HG" in a short time.

### For Backfilling

Because the HG-Imp is lighter in weight, you can backfill foundations mover with no danger of cracking green concrete. Thus, you can get the job done faster . . . do more jobs per year.

### For Leveling

The HG-Imp is the smallest crawler-dozer on the market. You can get into places you can't reach with a larger unit... you can even level garage floors. Yet it's got plenty of power to handle any leveling job.

### For Landscoping

Here again, HG-Imp power and maneuverability pay off. You can landscape right up to the edges of houses and drives . . . save costly hand labor. The drawbar hitch is left free to do the many other bauling jobs of landscaping operations.

### For Any Home-Building Job

The HG-Imp can cut your dist-moving costs. Remember, the operating costs are low, and crawler traction lets you operate in any kind of ground condition.

For all the facts, see your Oliver Industrial Distributor or write The Oliver Corporation, Industrial Division, 19300 Euclid Avenue, Cleveland 17, Ohio.

## THE OLIVER CORPORATION

A complete line of industrial wheel and crawler tractors





You speed construction and cut costs with Pittsburgh Steeltex Floor Lath

Notice how the wolded fabric ensures its proper position in the slab.

CONCERTE LLAS

Pittsburgh Steeltex Floar Lath speeds construction and cuts costs because it permits you to pour your floors while continuing complete operations on the floor below. You get a stronger slab because it is properly reinforced with welded wire mesh-properly cared because the moisture is retained by waterproof backing. For further detailed reasons for specifying Steeltex, see Sweet's or write for catalog D. S. 135, Dept. AB, Pittsburgh Steel Products Co., Grant Building, Pittsburgh 30, Penna.

### **Pittsburgh Steel Products Company**

A Subsidiary of Pittsburgh Steel Company Pittsburgh 30, Pa.



(Continued from page 66)

COMPLETE WATER SYSTEM ABIOSOII Jacuazi Aquamat, a complete water system in one unit, consists of a 10 gollon stainless gol vanized steel pressure task under which is can cented a close-coupled jet pump and motor unit. Envira unit is 27 inches high, and 16 inches in diameter. The 1/3-M.P. mater is of standard horizontal type, slow speed Pump is a standard Jacuzzi jet-type unit. Water system,



which will pump 250 gallons per hour fro depths to 22 feet, is delivered assembled and isody to plug into a wall socker. Jacuzzi Bras., Int. Dept A8. Richmand, Calif.

BLOWER TYPE UNIT HEATER ABIOSOOS Here Reznar blawer type unit heater. cation of firm's recently announced 1950 fam type unit heater, is used where architects' specifications, heating engineers, or local codes call for squirrel cage, centrifugal type as multi-blade blowers. Quiet in operation at almost any noise level. In eight different sizes, the blower heaters are practically the same as the Resnor fan type suspended henters except that propeller is replaced by a centrifugal type blawer. Resnor Manufacturing Co., Mer-Ler, Po.

EXPANSION JOINT

### A8105003

Fibergliss expansion joint, a new product for use in concrete work, is asphalt impregnated, ided plass wool board. faced on both sides with heavy asphalt saturated kraft paper. Designed for use wherever concrete povements are used in large areas, the product prevents foreign matter from entering joint and render ing ineffectual for opening and closing to relieve thermal or upheroval stresses. Will recover more than 70 per cent of its original thickness within one hour. No loss of weight after compression. Owens Corning Fiberglos Corp., Dept. AB, 16 East S6th St., New York 22, 14, Y.

GLASS OR METAL KNOBS AB105028 Shurtok line of self-aligning, glass or New metal knob units sets is now available to Tegco dealers. Line includes entry sets, passage, hed room, bothroom, exterior, communicating and claset door sets. All metal knobs and roses have 10-year finish guarantee. Surfaces are protected by hard, transporent enameled coating. Units can be installed in 30 to 60 seconds. Flaating unapion alignment black automatically adjuste for incorrect backsets and misbared holes. Technical Glass Co., Dept. AB, 2050 E. 48th St., Los Angeles 58, Calif.

New products continued page 123

20

ABJUSTABLE DADO TOOL A8105012 "Guick Set Dardo," an instantly adjustable tool for curring smooth, accurate dedas from 1/4 to



13/16-inch in width and up to 12-inch depth. can be acally set for any desired gritove width by turning a dial. Arbor need not be removed. Action is smooth, with no vibration, chatter, burning or chewing. Built of interlocking alumi num side plates, and a center disc of steel. the dada has eight cutters. Adaptable for right or left shaft rotation, and available for sha'ts 1%, 1% and 1% och in diameter. Cansol dated Machinery and Supply Ca., Dept. A8, 2029-33 Santa Fe Ave., Los Angeles, Calif.

### PNEUMATIC CONCRETE APPLICATOR AB105015

The Bondactor," Model 1000 is a dual compartment pressurized happer that is continuous in operation for applying concrete and other ials by compressed air. With few minar adjustments it handles various materials with out changing parts. Air controls are such that adjustments can be made while equipment is in operation. The A-903 and A-904 Bandactor gues utilize both a water pressure line and an availiary air line. Air and water enter a mixing chamber and the water is exhausted into m terial stream is form of atomized mist that hy-

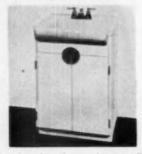


drotes the material inst Air Placement Equipment Co., Dept. A8, 2525 Southwest Blvd., isias City 8, Mo.

BATHROOM CASHITS

48101017

New line of Both Moid cobinets present on almost unlimited variety of bathroom and powder soom storage arrangements. Line un cludes eight different cabiner models plus a three-purpose vanity seat Single cabinets are available for both sizes of Dresslyn lovatories where available space is limited. Side cabinet and lines storage units are designed for pror tical storage space for towels, wash cloths, guest linens and many other both-pam articles. Linen storage unit also provides sole place to keep medicines out of reach of small children Convenient knochole vanity provides attractive bathroom dressing table. Hamper part of laws



dry unit can be easily removed to carry so clothing to loundry area. Units have perma nent plastic tops. Made of selected har in various popular colors. Bath Maid, Inc., Dept. AB. Andrews, Ind.

KITCHEN VENTILATING FAN ABIOSOST Model NF-10 NuTone kitchen ventiletter is de signed for easy and inexpensive installation The "Screwdriver Installation" feature-only a screwdriver is needed to install-cuts down installation time. Special packing eliminates dan ger of loss or damage to parts during roughing



In, final installation. Eight ounce, easily remoable grille. NuTane, Inc., Dept. AB. Madisen and Red Bank roads. Cincinnati 37, Ohio.

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When you described													

# A new lock is here...



PRESENTING NEW STANDARDS OF BEAUTY, SECURITY AND ECONOMY FOR TUBULAR LOCKS...ALL-STEEL STAMPINGS WITH WROUGHT BRASS AND BRONZE KNOBS AND TRIM



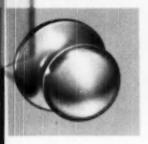


### A BRILLIANTLY STYLED LINE OF 6-FIN TUMBLER TUBULAR LOCKS

Today, in the Kwikset 600 you have a lock mechanism and assembly utterly new in concept, design and action . . . You have steel and finish metals precision-fabricated like a watch and -- you have external contour and color of exquisite, modern beauty. . . You have, in summary, a great new lock! . . . Specify, bid, sell the Kwikset 600 for life-time satisfaction and performance.



Fue RWIRSET 400 For Iront, rear, and all external done requiring key entry ... available in Polished and Satta Finish Brag, Chrome and Bronze.



THE EWIREET 420 For closet, and inside passage doors available in Polished and Satin Finish Brass, Chrome and Brunze.



Tota awards of the formation of the second s



THE RWHEET 630 For bedroom and bathroom doors, provides emergency entrance... available in Polished and Satin Finish Brass, Chrome and Bronze. BEAUTIFUL NEW FULL-COLOR BRO-CHURE OF EWIESET 400 LOCKS ... evaluates seen to erchitects, builders,

THE EWERSET 600 LOCK WITH 853 HANDLE for front door ... available in Polished and Satia Finish Brass, Chrome and Bronze.





KWIKSET LOCKS, INC., ANAHEIM, CALIF.

# PACE-SETTER in all a closet should be ...

ONE-PIECE The modern style first sponsored by Case -- with low-level integral tank .... NON-OVERFLOW In no other closet is prevention of overflow so completely developed ...

QUIET The strong centrifugal rim flush and tank filling operations are exceptionally quiet ... LOWER BOWL Another new idea-bowl is 14" high, in line with recent findings on posture ...

> SANITARY PROTECTION Water supply is safeguarded with china channel enclosing riser pipe-open atmospheric vent-and other special design features.

The New Case ONE PIECE\*

A MATCHING LAVATORY In the same design matif is the a Case Windell 9785\*.

Here is the perfect fixture for the house of today and tomorrow a completely new model of a design that has been a favorite ever since Case first introduced the One-Piece Water Closet. In redesigning this fixture, Case engineers and a nationally famous industrial designer have retained the best features of its predecessor and added important new Case developments. The result is the newest and mechanically the most advanced water closet ever offered to the architect, builder and contractor. Available in white and 26 colors. Distributed nationally-consult

your Classified Telephone Directory or write, W. A. Case & Son Mfg. Co., 31 Main Street, Buffalo 3, New York, Founded 1853.



OCTOBER, 1958

Annances 6

# Take it from these SUCCESSFUL builders!

Yes, you can accept it as a sound suggestion . . . when these five successful builders name the same equipment for kitchens in their projects. On a basis of experience over many years . . . they choose Kelvinator! They like the way Kelvinator products kindle sales . . . satisfy users on every score . . . and perform with a dependability that keeps upkeep costs practically out of the picture.

Investigate the dollar-saving advantages of using Kelvinator in year next project. For full information, write to Dept. AB, Kelvinator, Division of Nash-Kelvinator Corporation, Detroit 32. Michigan.



NUGH G. SELBY Lokewood, Ohio

> CHARLES M. RADICE hanactody, New York



HARRY MACKSEY Birminghom, Michigan

24





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



ELECTRIC REFRIGERATORS
 ELECTRIC RANGES
 ELECTRIC RANGES
 ELECTRIC AIR DRIER

#### E

### Leadership Is Missing

THERE has never been a time in the history of the United States when its people have manifested such frustration and confusion as is evident on all sides today. Young men are torn between going ahead with belated starts in business and professional careers, and going back into their old military units without delay. Established business men hesitate to make long range plans or, on the other hand, to curtail operations in anticipation of a long war and its attendant shortages. The reason is that the American public does not know where it stands, and apparently has no way of learning. The answer should come from highly placed officials in Washington, but instead of a clear cut answer all that comes is a series of conflicting statements, which accomplish nothing but to increase hewilderment.

Now, the American public is slowly coming to the conclusion that for the first time it faces some kind of crisis without leadership in any high public office that exhibits any understanding of what is happening or what should be done about it. Already the symptoms of fear are becoming apparent. It is only a step from this point to hysteria and the dissolution of morale. It is not too late, however, for the American people to do several things that will bring a definition of our position and condition, and delineate an intelligent and purposeful course.

If the highly placed elected officers in Washington know where we are, their pronouncements indicate that they are trying to do one of two thingshide from us some unpleasant and possibly tragic facts in the idle hope that somehow nothing very bad will happen, or give to a minor incident the appearance of a potential world shaking crisis. Regardless of which is true, the policy is dishonest. Its proponents should be forced into the light and made to disclose the truth. Nothing can be gained by withholding it. Certainly Russia knows, and if Americans are to act intelligently they also should know.

If, on the other hand, the men to whom the destinies of the nation have been entrusted do not know, it then becomes the duty of every voter to replace them in the autumn elections.

The American Builder has never used its editorial prerogative to engage in partisan politics. It does not do so now. It has no interest in whether elected officials are Republicans or Democrats. But it does have an interest in the kind of men who go to Washington, regardless of their party affiliations.

What is desperately needed today is a brand of leadership that is missing. It is already late, but not too late for business men to begin to make politics a matter of personal interest and attention—for them to send men to Washington who will make it their business to learn where the nation is and where it is drifting, and then courageously state the situation. Indecision or evasiveness in leadership, whatever the excuse may be, can bring nothing but disaster. If official Washington knows the facts it should be forced to state them. If it does not, the voters should send better men to the capital. The appalling lack of leadership is critical, and it is up to American business men to right it while they can.

WISTERN EDITOR	
WISTENN CONTON William C. Budd ASSISTANT EDITORS Extent Charles Extend Paul A. Brake Bithard Garry	AST EDITOR Exercise M. Class CONSF ERAFISMAN A. T. Frank COMBUSTING ABORITSCT Warter T. Analde

Every offset will be made to return material submitted for penalitie petitication or ecomposition by memper. addressed sevelapel, but the address and the corporation will not be responsible for loss or domage.

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ational Home



GROUPS sponsoring NHW issued literature and plans for builders, dealers and realtors

GAINING momentum in its third observance, National Home Week of 1950 reached a greater number of people than ever before with a demonstration of how private industry has made and kept America the besthoused nation on earth. Early estimates indicated that at least 12,000 homes throughout the country were opened to public inspection; and the event was publicized by special supplements in approximately 100 influential newspapers.

Central theme of the comprehensive building industry promotion was a dramatization of the advantages of home ownership. Heavy emphasis was placed on the fact that American home builders, working with affiliated supplying and service industries, have turned out 5,000,000 homes in the five years since the end of World War II —and that in these homes were incorporated good design, advanced construction technique and permanence.

#### Climaxes Greatest Building Year

The comprehensive participation in the 1950 Week marked a climax of the greatest home building year in history. a year in which production, prior to the war in Korea, was month by month breaking all previous records for housing starts. Taking part were representatives of virtually every business related to home building-builders, retail dealers, real estate boards, financial institutions, materials manufacturers, trade associations, utility companies, home furnishing stores and others. More cities were represented and observance went farther into the non-urban centers.

A large share of the credit for the expansion of this year's observance goes to the organizations which worked together on planning at the national level. The National Association of Home Builders, as in previous years, spearheaded the campaign. Cosponsors were the National Retail

Week

In the face of rising costs, shortages and curtailment of its record-breaking construction pace, the home building industry reports activities, consumer-interest and sales at a new high

Lumber Dealers Association, the Natimal Association of Real Estate Boards and the American Builder. Also participating were the American Gas Association and many other national trade groups. Catching on immediately when originated in 1948 by NAHB at the suggestion of American Builder Editor Edward G. Gavin, the Week in 1950 fully achieved its original objective---industry-wide, nationwide observance.

Also increased in number this year were special sections of newspapers featuring home building news and advertising. These are one of the most important phases of NHW promotion, particularly effective for reaching the consumer with both public relations and sales messages. In addition to the 100 of these special supplements published just prior to the opening of the Week, newspapers ran regular releases supplied by sponsoring associations, calling attention to the creditable work the home building industry is constantly doing.

#### Increased Dealer, Realtor Activity

With the national association acting as one of the sponsors, retail lumber dealers were especially active in the 1950 observance. In nearly all cities dealer committees met regularly with home builders in planning the Week's events. In a number of smaller localities where no demonstration homes were built, lumbermen provided the nucleus of the celebration by opening their yards to public inspection, displaying and explaining the uses of building materials. In urban centers committees from local real estate boards were also very prominent in working out detailed plans.

Advantage was taken of the growth of television to make wider use of this publicity medium; and millions beard radio programs about home building. Much of this broadcast material was prepared by national sponsors in a form adaptable to local use. IN CHICAGO and same other cities. MNW spenaces unlied the Week with a nu sail local events. Sign shown was used for Chicagoland Festival, observed at conclusion of the Week



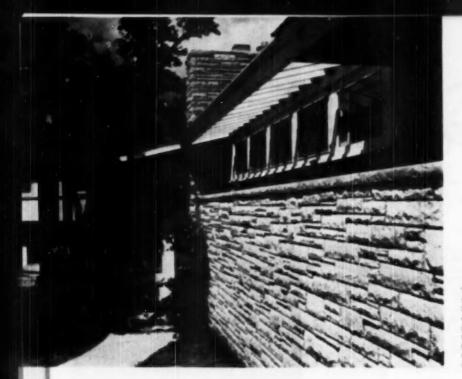
Other attention-getting devices were industry parades, beanty contests to select "Miss National Home Week," model home competitions, slogan writing and similar types of contests. NHW street banners, public vehicle cards and other types of spot promotion were used in a number of cities.

Retail store window displays came in for extensive use, as did exhibits in utility companies, banks, savings and loan institutions, and appliance shops. These were especially good supplements to other media in spreading the observance to large sections of the population.

Early reports on the success of the week indicate that it was highly acclaimed by all who participated. At the time American Builder went to press, overall statistics and data were not available. A complete, detailed report will be presented in the November issue.



CROWDS like this were typical of joins at demonstration homes during the Week



VIEW ioward entrance bay with stone wall encloaing large planting has in foreground. Open ratters of root projection admit light and air to flowers and aise form an interesting architectural pattern of light and shade oquinsi wall and windows

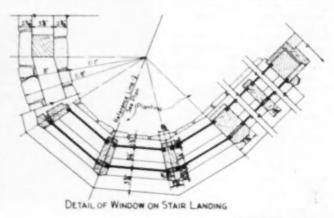
# **House Full of Ideas**

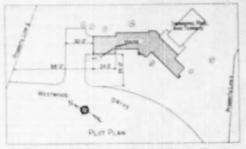
PROJECTING entrance boy at front of house, Doors are placed on each side at point of greatest width. Full glass wolls, with multions forming an actagon at extrame projection, extend from top of planting area of stone wall to underside of cool N developing the potentials of a new home for himself and family, Paul K. Enghauser, a member of the building firm of Enaco, Inc., Minneapolis, Minn., assembled and reviewed a host of ideas that would be acceptable for the needs of their varied activities. The essentials retained were given to Gerhard W. Brandhorst, Minneapolis architect, and the result is an interest-

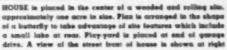
ing and unusual house in which character is achieved by adroit handling of familiar things, and not by straining for something different.

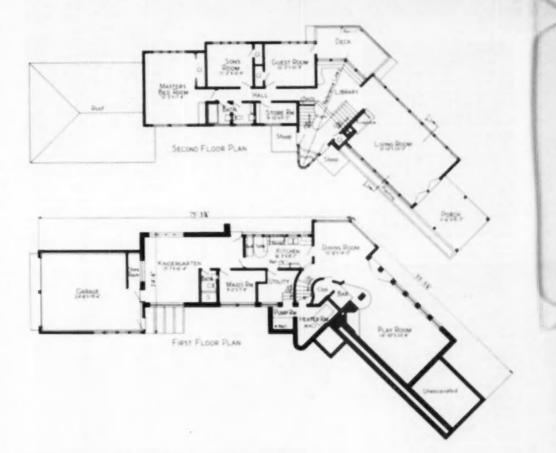
Among the features of the house is the inclusion of a nursery school unit. This school, attended by about 50 neighborhood children, is a part time project that Mrs. Enghauser has car-(Continued on page 80)







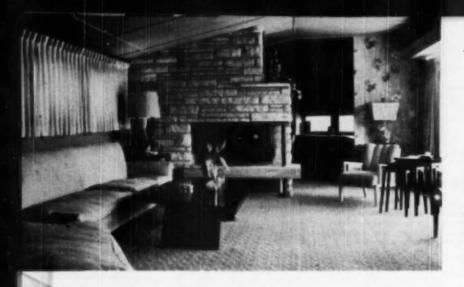




IN HIS practice. Architect Brandhorst has made a spacial study of custom-designed splitlevel houses. This was done primarily because of the large amount of rolling terroin available for residential use in this area. In this house, as well as others that he has designed, a new concept of planning has been developed. The formal living area including bedrooms is placed on the upper level of house, while the activity area, including feed preparation, diming and playroom, is placed on lower level for immediate access in the out-of-doors. Here main entry is at intermediate level with hall flight to each floor

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THE FIREPLACE, built of native stace, forms a large parties of the end wall of living room. The hearth which is related above floor level is a 6-inch thick reinforced concrete slab kalaid with firebrick. This is supported at open and with three 3-inch steel pipes astunding from floor to top of fireplace opening. The area under the slab to floor is used for wood storage

ried on for the past twelve years. In relation to the house plan, the nursery school is located adjoining the garage and kitchen. This allows cars to be parked in the forecourt. A fenced-in enclosure adjacent to this area and the school room can be used by children in mild weather; and the kitchen is convenient for use when necessary. The position of the nursery school in relation to the remainder of the house is such that no restrictions need be made in the habits of the occupants.

The house, located on a sloping site, afforded the designer opportunity for developing a split-level arrangement of rooms. Starting at the front entrance hall, which is placed six inches above the grade at that point, access is obtained to all rooms. Living room, porch, library, bedrooms and bath are placed one-half level above hall, atfording complete separation for the living activities of the family and providing complete privacy for the bedroom area.

In contrast, the lower level, one-half flight below the entrance hall and one step above the grade at rear or garden side, contains the dining room, kitchen, playroom, nursery, garage and utility rooms. The relation of the broad terrace and swimming pool, which is on an axis with the inside playroom and located on the garden side, concentrates all the recreational activities in this area. In this way the rest of the house can be kept in order.

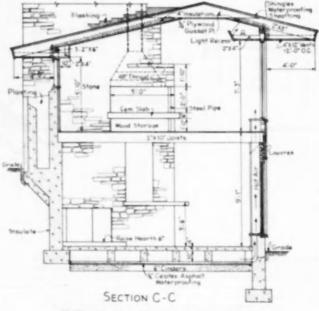
Living room has a continuous bank of windows on both side walls, with short hinged sash on one side and Thermopane set in stops for large areas overlooking swimming pool. The massive fireplace of local stone separates living room from library and entrance hall.

Design features are placed at both ends of entrance hall. Lower or grade level encloses a large indoor planting area which follows contour of glass wall around entry. At upper level the inside stair wall is built to follow the contour of grand piano, whose legs have been removed, and which is placed permanently in position on top of horizontal stair rail. This feature, with the dramatic effect gained by its location, is the high-spot, design-wise, of the house. Ceiling of living room and library follows the contour of the roof and is faced with birch veneer plywood.

Playroom in ground floor is approxi-

mately the size of living room above, and is the recreational center of house. Bar adjoins large open stone fireplace at one end of room. Dining room literally becomes a part of the playroom with no visible separation other than an open, ornamental wood screen to form passage from stair to playroom.

This house, measuring about 24 feet wide and 108 feet long, cost approximately \$38,600 to built. It is designed to meet the needs of the owner, with no thought of adhering rigidly to any design principle. It can be said that it conforms to the contemporary style



PLAN section through living room and playroom below

A FEATURE which gets instant attantion of persons entering the level entermovies by is the arrangement of gened plane at upper level of hall or library. The inside state well leading to both upper and lower lavels of house. follows the contexe of plane which has host the logs cut off, and is plane which has host the logs cut off, and is plane which has host the logs cut off, and is plane which has host the logs cut off, and is plane which has host the logs cut off. and is plane which has host the logs cut off. and plane which for the second planting area occuples the curved perfine of entremes bay. Here playees of weaser with wood bettems over joints in the finish for the celling which follows the contexer of the neef



VIEW in diming room looking into kitchen. Giess block is used in exterior well in area between the top of kitchen counter and underside of cakinets above, providing a light work area. Display of fine china is available in the built-in china case. Note light trough over windows for indirect system of lighting by finereacent tubes

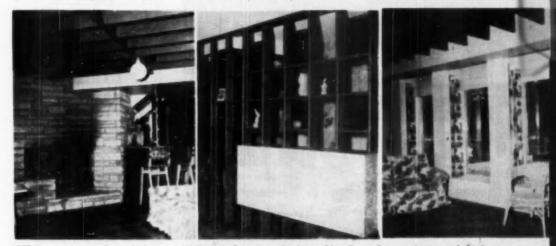


VIEW in library at right. Clear glass himqed sash in exterior wall between counter and book sholves furnishes light

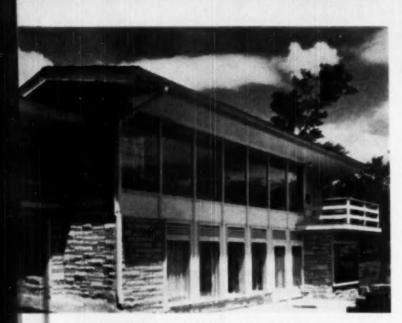
that has gained widespread acceptance throughout the middle west. A combination of local stone, horizontal redwood siding, exterior stucco, and large areas of glass have been employed on the exterior in such a manner as to produce a house of excellent design.

Materials used throughout the construction of the house, have, in most cases, been nationally advertised products. These include U. S. Gypsum Co. products; Pella windows, by the Rollscreen Co.; Armstrong rubber tile and linoleum; Kitchen Maid kitchen cabinets; American-Standard plumbing fixtures; Minneapolis Honeywell con-





LEFT: View in playeous. Exposed joints painted dark shinks. Features are firsplace and har. Canter: Open wood acress and close forms separation between dining room and stair. Right: Another view in playroom. Vertical host ducts located at window smillions



trols; Janitrol gas furnaces; Libby-Owens-Ford Thermopane glass; Modernfold doors, and U. S. Plywood.

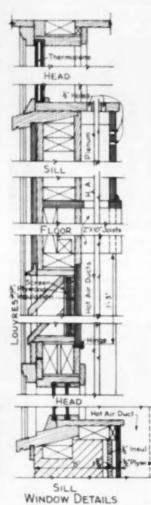
Two Janitrol gas units are employed to supply moist warm air to all rooms. One furnace supplies heat to the living room, playroom, dining room and kitchen. The other furnace supplies heat to the school, bedrooms and baths. The distribution of heat for playroom and living room is unusual. Warm air is forced through a series of concrete ducts under the playroom floor, heating the entire floor area. It is also controlled by registers in lower level for quick heat in the spring.

Heat in the living room is supplied from the lower level horizontal ducts under playroom floor and is carried through vertical ducts placed in back of piers between playroom windows. Kegisters are placed at the window sills of living room, thus bathing the entire glass surface with warm air. The air is then re-circulated back through the lower level floor area. The system has proven quite satisfactory in performance.

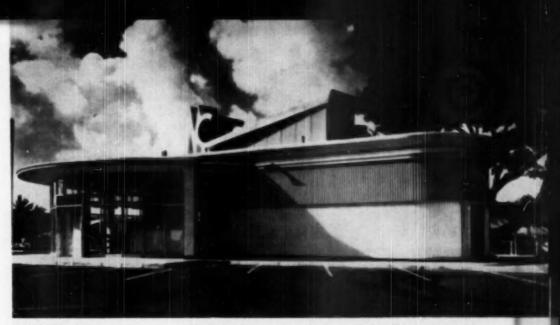


VIEW of gurden side of house with swimming pool and flagstone terrace in foreground

PARTIAL view of quoten side of house, skowing window walls is living and playroom. Ventilation of playroom areas in controlled by horizontal louvers over window openings, with hinged passis on inside. Balaony overlooks swimming pool of treat



DETAIL indicates head and sill sections through window frames for fixed scale an gorden side of living and playroom. Drawing shows construction of wood lowers and hinged panels over playroom windows, and position of grilles and the verticul heat ducts extending up to living reem



CORRUGATED asbestos-coment sheets are curved by the manufacturer to meet customor specifications. The sheets were used in the construction of this cute to meet the requirements of a unique design and, in addition, because of their economy and durability

### American Builder Presents . . .

# Asbestos-Cement Products -

Two fire resistant materials are used to make better building products in an expanding major industry

**O**F THE new building materials developed during the present century, few have met with the wide usage and public acceptance accorded the family of asbestus-cement products which, while produced in conventional sizes and thicknesses, have many of the durability characteristics of reinforced concrete.

Ashestos-cement products, in fact, are a form of reinforced concrete, with fibers of the mineral ashestos acting as the reinforcing agent. The other ingredient, of course, is portland cement.

Wartime utilization of these materials helped extend their popularity and as a result, they are being utilized at three times their prewar rate.

Mined either by open pit or tunnelling operations, asbestos is both fibrous and crystalline. Heavy, dense and dark in its natural state, it yields white, silk-like threads that can be spon into yarn. These range in length from a fraction to three or four inches. Longer fibers are used in textiles

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while the shorter ones go into asbes- cut, punched and steam eured, tos-cement and other products. In the wet process, cement and as-

Chemically termed hydrous magnesium silicate, the fibers are extremely fine. Three thousand of them side by side would measure about an ineh.

Some asbestos is mined in Vermont and Arizona, but about 90 per cent of that used in the U.S. is from Canada.

#### **Asbestos-Cemont**

Asbestos-cement building materials usnaily contain 75 to 85 per cent portland cement and 15 to 25 per cent asbestos fiber. The "discovery" of habestos-cement was made in 1899 by an Austrian, Ludwig Hatschek. In 1905, roofing shingles were made in Ambler, Pa., by the Hatschek method, now known as the "wet" process, was developed shortly thereafter.

In the dry process, ashestos and cement are mixed, spread on a belt conveyor and moved to a point where water is added. Rollers press the mixture to the proper thickness. Tremendous hydraulic pressure is then applied through a large weighted cylinder. For textured shingles, a cylinder with an embosed surface is used. After curing for 24 hours, the sheets are In the wet process, cement and asbestos are uniformly blended in water in which the fibers are completely coated by the centent. The slurry is processed through a laminating machine which builds interlocking layers. While still plastic, the sheets are corrugated (or left flat, etc.) and subjected to hydraulic pressure.

What They Are and How to Use Them

Ashestos-cement products are notably distinguished for their fire-safety since both ashestos and cement are incombustible. In addition, these products do not corrode, disintegrate or react to adverse weather.

Principal asbestos-cement products are siding shingles, flat sheets, riofing shingles and corrugated sheets, in that order of volume. Flat and corrigated sheets are made by the wet process, either built up by laminations or formed homogeneously. Siding and roofing are available in colors, made in the dry process by pressing ceramic granules into one surface and in the wet process by adding color pigment to the slurry.

The thirteen companies in the business produced goods valued at more than sixty million dollars in 1949.

Data and photos and in this project more perrared from the Asbudge Comment Products Association.



EVERY home in this development in Amhier. Pennsylvania, was sided with ashestos coment shingles—for reasons of economy in maintenance and architectural design. The shingles are available in solid and blended colors for variety. They require no protective coatings

## **Asbestos-Cement Siding Shingles**

In new building or in repair of old, these shingles add to fire safety and durability

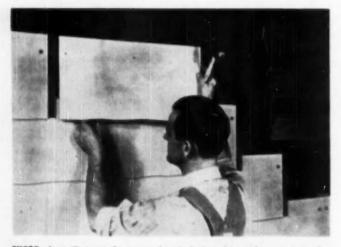


PHOTO above illustrates the approved method of applying asbestos-censes siding shingles. First, the sheathing or oid siding is covered with a felt underlayment. Shingles are then aligned and natiled in position, using non-correstve nails, with a leit backer strip at each joint. Strips inp lower courses. At least one nail penetrates each strip

**R**EQUIRING no maintenance, initial painting or other subsequent treatment for preservation, asbestoscement siding shingles are nevertheless (like all asbestos-cement products) protection against termites and rodents, adverse weather, salt laden atmosphere and other deteriorating agents. Further, they cannot be ignited, even by a blow torch.

This siding will withstand the effects of extreme climatic conditions such as dampness and alternate thawing and freezing, and it is not affected by smoke, acid fumes or other corrosive agents. In view of these attributes and its low upkeep and initial application costs, asbestos-cement siding is, for many purposes, a wise and economical investment.

Siding is produced in a variety of colors, surface textures and butt lines. White, gray, greet and buff shingles, for example, are available in solid or blended tones with wood grain, tapered line or smooth surface textures.

Butt lines are generally wavy, staggered (to reproduce a "thatched" appearance) or straight—as taste dictates.

Not until 1932 was an asbestos-cement shingle developed for specific use as siding. Prior to that year roof

ahingles also doubled as exterior wall coverings. Now, asbestos-cement siding—used in both new construction and repair work—accounts for a major portion of asbestos-cement products production.

In repair undertakings, the siding can be nailed over existing shingles, clapboards or stucco.

When used in new construction, the siding is applied directly over wood sheathing—or over gypsum or insulating boards with special fasteners.

Sold in squares, the siding ordinarily is packed in three bundles per square with about 57 pieces of 12x24inch size to the square. Backer strips, for use behind vertical joints, and corrosion-resistant face nails are provided by the manufacturer.

When applied, the shingles lap 13/2 inches at the head, leaving an exposed area of 10/5x24 inches. Some asbestos-cement plants also make asbestoscement clapboard.

#### **Siding Application**

Ashestos-cement siding should be stored carefully on edge, in a dry place or on planks four inches off the ground, and covered with waterproofed paper or tarpaulins to protect it from moisture and dampness. It should also be protected from water drainages likely to carry discolorations.

In order to prevent staining, wood trim is given at least a prime coat before installing siding, and all metal, particularly copper used for flashing, is initially and periodically painted with dilute spar variash or other protective coating.

Applied in dry weather as quickly as possible, asbestos-cement siding is installed over a layer of waterproof felt or waterproof backing board. Asphalt saturated felt is recommended as an underlayment since others (e.g., tar-saturated) may cause staining. Joints in the siding are protected by using the furnished felt backer strips.

#### **Starting Work**

The work is started by nailing a 1/4 by 1-inch cant strip to the bottom of the walls to be sided. This gives the siding a slight cant and adds to the finished appearance. Chalkline marks for the top of each course all around the building help assure an accurate meeting and mitering of courses and are an aid in avoiding wedge-shaped courses at the eave lines.

The first course, which extends <sup>36</sup>/<sub>4</sub>inch below the cant strip to form a drip edge, is started with a whole shingle. After backer strips are in place, the head nails are driven in, as are the specially-coated face nails. At least one nail should penetrate each

hacker strip. A half-shingle is used for starting the second course, etc.

Asbestos caulking should be applied at all mitered corners, wherever siding butts against trim, masoury or other materials before siding is applied to avoid smearing the face of the siding.

All inside and outside corners are protected with vertical 12-inch strips of asphalt felt behind the siding. Adequate flashing over all windows and door openings must be provided as well as suitable drip edges under all openings. Corner hoards are advised for corners likely to be subjected to hard knocks. Prefinished metal corters (installed before shingles) and alternate shingle construction or mitered shingles are also used at corners.

#### Needle Point Nails Recommended

For remodeling work, approximately one pound of two-inch galvanized needle point nails per square are required for head nailing over old siding; for new work, three-fourths pound of 1½-inch galvanized needle point nails are needed. During the coarse of the work, no more felt should be applied than can be covered with siding during the work period.

In re-siding work, care must be taken to insure that existing wall surfaces are smooth, plumb and as true as possible. All loose shingles, boards and trim are securely nailed before the residing is done. Beveled strips are used to level-up wall surfaces. Older buildings frequently require bracing and replacement of faulty boards. Siding applied over old work may bring the finished wall surface out beyond door and window frames: in this case, staff molding is installed on the existing framework.

#### Use Over Stucco

When the siding is applied over stucco in good condition, nailing strips (1x2 or 1x3 inches) are used over the stucco. However, when the stucco is not in good condition, it must be removed. Nails, wires and other portions of the stucco work must also be cleaned from the sheathing before the felt underlayment is applied.

Nailing strips, whenever used, should be installed only as the job progresses to insure proper spacing. When asbeston-cement siding is installed over gypsum or insulating board sheathing, nailing strips are first applied to the sheathing.

#### **Painting and Cleaning**

While asbestos-cement siding does not require-painting for protection against weathering, it may be so treated if desired. Before painting, shingles should be wire-brushed to re-



ASBESTOS-CEMENT shingles with a stappared but line simulate thatching

move dirt and loose surface fibers. Paint is applied only over dry shingles.

Chlorinated rubber paint gives excellent service. It is put on by brush, without special primer or undercoater, following the manufacturer's specifications. Two or three coats are required, depending on the color.

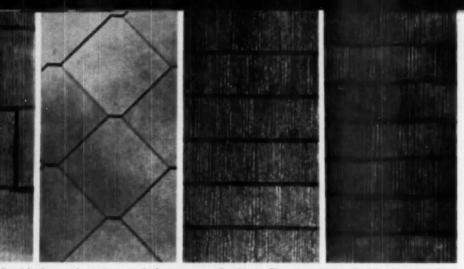
Brick and stucco paints also are satisfactory. They dry to a flat or semi-gloss surface.

Regular exterior house paints may be used. One method is to use the regular three-coat system, self-primed according to the directions of the manufacturer. Another system consists of an oleo-resinous or chlorinated rubber primer, followed by one or two coats of regular exterior oil paint.

Soiled spots caused by finger prints or smearing during application usually can be removed by dry-brushing or with a clean cloth. Soap and water also may be used. For the removal of dirt and stains accumulated over a long period, it is advisable to consult the shingle manufacturer's representative for specific instructions.

ORE of four types of shingle butts in the wavy line-used on gable and below





FROM left to right above are four major types of asbestos.coment realing shizajee. Those photos illustrate Dutch lop, hexagenal. American method and multiple unit installations. They all have in common general traits such as weather and fire realatance

## **Asbestos-Cement** Roofing Shingles

Proof against chimney sparks, these shingles also defy heat, sun and a salt-laden atmosphere

N ADDITION to their ability to withstand the effects of sun, salt, wind, rain, snow and fire, ashestoscensent ahungles have other desirable qualities; for example, they contribute to structural savings by making possible the use of lighter roof decks and supporting rafters than are required for heavier types of rigid shingles. Their rooproof characteristics and trashem from maintenance are noteworthy.

Made in four types—American method, multiple unit, Dutch lap and hexagonal, equally adaptable for use on new or old buildings-these shingles present a variety of designs for architectural needs.

The American method (the designation refers to the shape and finish) is haid in rectangular patterns as, are wood or slate shingles. Made in colors such as gray, red, black and brown, this shingle has a but thickness that produces a deep shadow line.

Although appearing to be the size of standard shingles, individually laid, the multiple-unit asbestos-cement shingle is made in large sizes that cover the area of two to five ordinary shingles. These, too, are available in colors and are generally self-aligning —which simplifies their application.

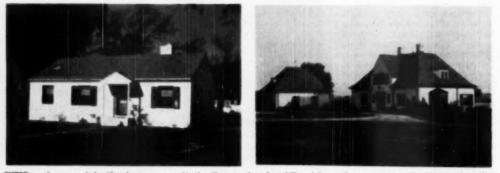
The Dutch lap (sometimes called Scotch type) shingle, larger than conventional shingles and lapped at top and at one side, saves material and labor in application. Also in colors, this unit can be laid with one-fourth or one-third side lap with a three-inch head lap. The one-fourth lap requires fewer shingles per square and less labor, but the one-third lap technique is recommended on roofs of low pitch or in areas of severe winds.

Hexagonally shapod (French type) shingles are applied in a diamond pattern. Overlapping of the top and bottom points' gives a hexagonal or bonevcomb appearance.

Accessories such as eave starters, hip and ridge singles and ridge rolls, purchased separately, are available for all types of asbestos-cement shingle roofs.

#### Storing

In storing, asbestos-cement shingles are kept dry since moisture trapped between bundles might cause efflorescent discoloration. The bundles should



THESE two houses rooted with asbeeton-cement shingles illustrate the adaptability of the product to a variety of architectural designs

be stacked on edge on planks at least four inches off ground under waterproof coverings. Shingles should not be laid up on a wet or damp roof deck hut are properly installed in dry weather. New buildings are vented if plaster is drying in them to remove damp air which might cause roof decks to warp. When a job is left partially completed, felt should be placed over the upper courses to prevent rain from running underneath the shingles installed.

The minimum roof pitch usually specified is five inches per foot. Lumber used in the roof deck should be well-seasoned, of uniform thickness, tightly laid and—preferably—tongue and groove boards not over eight inches wide. A clean, level roof deck is a prerequisite to maximum serviceability.

On new jobs, or on re-roofing jobs where old roofing has been removed and sheathing made solid, roof boards are covered with one layer of asphaltsaturated felt (not less than 15 pounds weight), with a 2-inch horizontal lap, a 6-inch end lap and a 12-inch lap at hips and ridges.

In localities subject to extreme winter weather, eave flashing is recommended. This extends back at least 12 inches up under roof beyond the inside wall surface and downward to the edge of the deck.

#### **Use Cant Strip**

A wood cant strip applied along the eaves, flush with the lower edge, gives a proper pitch to the shingles. Starter courses are placed *under* the felt; the first course is laid on the felt. Chalk line marks for each course are assurances of workmanible jobs.

Nail holes are punched in the shingles by the manufacturers. Approximately &-inch thick, the shingles are held in place with galvanized needlepoint nails-11/4 inches long for new work, 2 inches long for re-roofing over old shingles. Portable shingle cutters that can be used on the roof are generally at dealers' offices for the use of customers. When mechanical cutters are not available, shingles can be scored and broken (see section on cutting ashestos-cement flat boards). Shingles can also be cut with a crosscut saw or with a coarse hack saw. Irregular holes may be made by punching out an outline and breaking out the piece to be discarded. A drift punch is recommended since it is less likely to split the ashestos-cement marevial

Nails are not given a "last lick" when the shingles are laid up since tight nailing may cause cracks or cocking; loose nailing must also be avoided since it causes rattling. To provide for thermal dimensional changes, shingles are spaced not less than th-inch apart at end joints. The installing mechanic must not leave exposed pieces of metal protruding between shingles if corrosion streaks are to be avoided.

#### **Over Old Roofs**

Removal of old shingles and installation of underlayment (except at hips, ridges and valleys, etc.) is not required when re-roofing unless the old shingles are in bad condition. In re-roofing over wood shingle roof, missing and decayed shingles are replaced and the surface is "trued up" with wood beveled strips or with lath. Old boards at hips and ridges should be removed and replaced with two-inch strip to which hip and ridge shingles are nailed.

Old valleys are filled in with wood strips to bring them flush with the old wood shingles. At eaves and gables old shingles may be cut away for a width of three to four inches and a wood strip of the same width as the cut-out inserted and securely nailed. Asphalt felt is laid over hips, ridges and in valleys before roofing.

#### **Point-Up Valleys, Ridges**

In new or old roofing work, it is necessary to point up valleys, flashings, hips and ridges with plastic cement, Valleys, gutters and crickets are leveled out with lath and roof cement to eliminate sharp corners and to provide a smooth even base for the underlayment of felt. Continuous felt strips should be used for this work whenever possible, laid so that the water runs over laps, never against exposed edges.

The use of copper or other non-corrodible metal for the living of valleys and for flashing is recommended.

Copper for valley sheets should be not less than 16 ounces in weight and not more than eight feet in length. They should extend out on the roof deck well beyond the edge of the overlapping shingles and well up under shingles on both sides. Sheets are nailed at the top edge only. Succeeding sheets are lapped six inches, leaving laps unsoldered. Closed valleys are recommended only for slopes of 45 degrees or more. The separate flashing pieces to lap each other three inches are woven into each shingle course. placed just short of the overlaying shingle butt and nailed through the upper end.

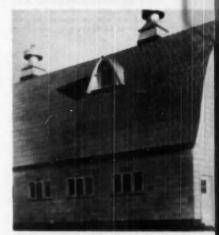
Specially made hip and ridge shingles, cut to a taper or flair, are available. Their use saves much time. It is necessary to nail a furring strip along each side of hips and ridges, butting the strips at the apex of the ridge, to provide a nailing base.



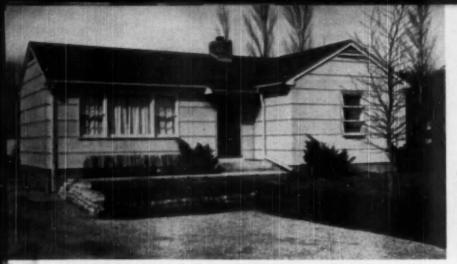
WHEN covering new work or existing roots, on seen in photo above, the surface is first sheathed with a fail underlayment. Solf-aligning, multiple unit shingles apool antiling work, reducting installation costs



PARTICULARLY for integer buildings such as this barn, corrugated sheets are an excellent roofing. Specially formed units are used to protect the hips and ridges



ABBESTOS-CEMENT shingles protect all surfaces of this turn building from fire



HOUSE at left, constructed at University of Illinois, is nided with standard fath income and the standard fath income and the standard similar to clap-board. Wood isth was inserted in each kap joint to previde despar shadow line

# **Asbestos-Cement Flat Boards**



SINCE lead-headed bolts were used in this suitable wall, use of compound or putty on each bolt was not required. Note use of batten at horizontal joint, upper right



FOR interior use, asbesto-comont board provides a fireastic, castly installed and easily cleaned surface as seen in this office, Beards can also be pointed

#### Simple installation and low upkeep costs are features of this versatile building material

IKE OTHER asbestos-cement products, the flat sheets are incombustibile. They are rated "0" in combustibility, "0" in flame spread and "0" in smoke production by Underwriters' Laboratories. In addition, they are weatherproof, rodent proof, and free from corrosion and rot.

An attractive stone gray in color, asbestos boards are hard and smooth on one side and slightly textured on the other. They are a practical material for structural wallboard use and are highly serviceable for exterior surfaces as well as interior walls. They are well adapted for many interior uses such as wall and ceiling finishes in laundries, storage rooms, furnace rooms or wherever any possibilities of fire haaards exist.

In commercial building boards serve such diverse purposes as dance Boors, outdoor movie screens, billboards and store fronts. Ease of cleaning and fire safety make them a favored material for milk house interiors and other farm building jobs.

#### **Boards are Easily Handled**

Made in sheets 3/4 to 3/6 inches thick, four feet wide and eight feet long, the boards are light enough to be handled easily. Nailing is the usual method of application, although they can be put on with a special adhesive, supplemented by nails, mouldings or other overlapping devices. As an alternate to nails, polished, round-head wood screws may be used.

Asbestos boards should be protected against impact shocks. It is recommended that sheets be unpacked and allowed to stand separated at the job for 24 hours prior to application. When stored, they should not be stacked on edge but on flat platforms under waterproof covering in piles not exceeding four feet. The platform should be at least an inch wider and longer than the sheets to protect the edges.

The boards may be cut by sawing, shearing or by scoring and breaking. Special cutting jigs also are available. When cutting the finish side is placed up so that any roughness will be on the underside. A carpenter's 10-point saw with little set will cut satisfactorily. Mechanical saws with abrasive blades also are used effectively.

#### **Scoring and Breaking Boards**

Scoring and breaking is one of the simplest ways to cut the thinner boards. The sheet is scored against a straight edge, deeply on both sides, with a tool such as a knife, ice pick or awl. A scoring tool can be made from a 12-to-14-inch flat smooth file set into a heavy wood handle. Shape it like a wood chisel, then "relieve" the back of the point by grinding the long face edge of the file at about 30 degrees to that a face about  $\frac{3}{24}$  a "inch wide is

produced across the back of the catting edge. Improvised "C" clamps hold the sheet in place on a cutting table while it is snapped across the scored line.

All 1/2-inch thick boards may be nailed directly. Other thicknesses may require drilling or punching of holes to receive nails. Manufacturers vary in their recommendations as to the maximum thicknesses that can be nailed directly. Nails are driven in straight, snug against the board but are not sunk into the surfaces. Nail spacing recommendations vary somewhat with different makes of boards and manufacturers' instructions should be obtained on that point. The same applies to spacing of nails away from the edges. Nails first are driven near the starting edges of the sheets, working toward the opposite edges.

#### **Barbed Nails Recommended**

Barbed or ring shanked nails laving sharp needle points are recommended. They should be long enough to penetrate well into good, sound wood. For inconspicuous interior work, small countersumk head nuils may be used. For ordinary interior work, and for nailing against wood sheathing or studding, use a hot dipped galvanized asbestos shingle nail. Galvanized lead-headed nails are employed for exterior work. Large headed nails should be used for ceiling work.

Any punch used for steel or metal work having a female die and male punching bit will work with ashestoscement sheets provided the "holddown" is not tight. Cold or drift punches that do not taper at the end are satisfactory. Holes also can be drilled with standard twist bits in hand or electrical drills. The holes are formed slightly larger (1/22-inch) than the nail or screw to allow for expansion, except when using countersunk fasteners, in which case the hole is countersunk slightly smaller than the head of the fastener to assure a neat, tight job.

#### **Three Kinds of Joints**

Asbestos-cement sheets are used as an exterior covering with three kinds of joints : vertical battened, horizontal lapped and butted vertical and horizontal joints.

When using the horizontal lap joint, asphalt felt is applied to the sheathing before each individual sheet is applied. The felt for upper courses should overlap the asbestos sheet below by about an inch. The asbestos sheets themselves are then overlapped 1½ to 3 inches at the horizontal joints and are nailed, not through the lap, but immediately above the top edge of the under sheet.

Vertical battened joints may be made by using two- or three-inch strips cut from asbestos-cement sheets. Waterproofing felt gaskets are placed under the hattens. Battens on upper courses overlap the battens below.

For horizontal butted joints, metal flashing is used at the joint. The flashing (non-corrodible and non-staining) extends up under the top sheet at least 1½ inches and down over the exterior of the sheet below for about ½-inch. Backer istrips are used behind the vertical butted joints, extending over the interior lip of the flashing.

An alternate method to the use of asphalt felt underlayments or backer strips for exterior work is to apply asphalt plastic cement under the edges of sheets and under hattens and between lapped joints. Gray asbestos putty or high grade caulking compound should be used over exposed nail heads or in visible places. Either material must be applied in continuous strips—not dabs here and there. On lapped joints apply the plastic cement near the top of the under sheet.

In applying battens, the nails are driven through the batten and into the joints between the sheets—not through battens and *both* undersheets.

#### **Co-ordinate Studding**

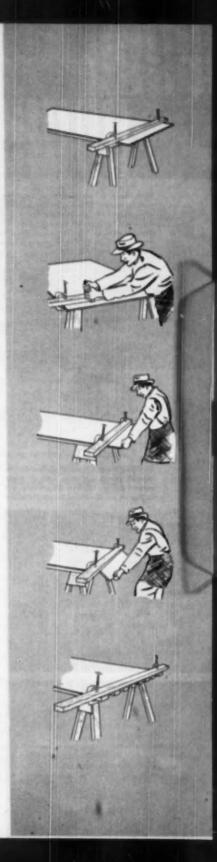
Studding to receive asbestos-cement sheets should be on not more than 16inch centers. All nails must penetrate into solid wood. If the framing or type of sheathing used does not provide such nailing bases, headers must be installed.

Sheets are not placed tightly together when installing since allowance must be made for expansion and contraction.

Asbestos-cement sheets on exteriors may be painted in the manner described under "Painting and Cleaning" in the section on asbestos-cement siding shingles.

For interior work, painting systems which are suitable for application over plaster walls are satisfactory for painting asbestos-cement sheets. These systems call for a special primer, followed by a flat, semi-gloss or gloss finish. The primer should be applied according to the paint manufacturer's directions for thinning, drying time, etc. For interior work where severe moisture conditions prevail, the recommendations for exterior painting should be followed.

IN THE column at right are shown five steps of acoring and breaking aubentorement board. Hold in place on a flat working table with "C" clamps, the board is accred deeply aquinsi a straight adque with a chisel, awl, ice pick or specially "ground dows" file. Grouped firmly at its extremities, the protruding section is broken off with a quick, strong, downward thrust. I desired, the adque can be finished with a file or with sendproper



### Asbestos-Cement

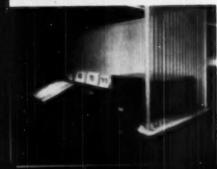
# **Corrugated Sheets**

One of the strongest asbestos-coment products, corrugated sheets are also widely used for architectural effect

TOP photo shows mathed at installing clipped corner shows. Applied in their sumhered order, corners of shaets two and three are clipped so that they will not overlap at their joint. Square corner of sumher four protects their shutting joint from ratio. Respond joint method with square corner correspond shaets in tilanturied in photo of upths and balow

SABICALLY a structural material, correquired sheets are also used in arthiisctural designs for their distinct form and tacture as demonstrated in photon below





FOR MANY years ashestos-cement corrugated sheets, light cement-gray in color and of uniform texture, have been used as roofing and siding over skeleton frames. The light-reflecting and diffusing properties of this material are an aid to vision in interiors : on exteriors, corrugated sheets help reflect solar heat.

These sheets have many attributes: they are incombastible, non-corrodible, weatherproof, economical and good looking. Their uses are many. On the farm, narrow strips are used in corti cribs. They serve on garages and hangers, fair and exposition buildings, railroad buildings, chemical buildings and for decorating the interiors or airline terminals, hotels, display rooms and art studios.

Stronger than flat hoard, corrugated sheets are adaptable to quick and easy methods of construction. The material is drilled with twist drills and fastened with screws or bolts, sawed with a hand saw or a portable power saw with an abrasive wheel. Special fasteners are supplied for uses over various types of frameworks, and manufacturers always stand ready to furnish detailed application information.

#### **Variety of Lengths**

Corrugated sheets are 42 inches wide and made in lengths ranging from 3 to 12 feet long, in 6-inch multiples. The average thickness is about by inch. As made by some manufacturers, the corrugations have an overall depth of 1% inches and a 4.2 pitch (center to center), with 10 corrugations to the sheet. Sheets also are made with 2% inch pitch, with 16 corrugations to the sheet.

Sheets are made in three types : (1) square corners, (2) one clipped corner, (3) two diagonally opposite clipped corners. These sheets with clipped corners are used in certain construction techniques discussed below.

A variety of fasteners are used with the sheets—such as hulldog clups, drive screws. "S" clips, hook clips, seam bolts, pipe clips and ridge toggles, all galvanized and complete with washers. Although lead-head bolts need no putty, round head holts or drive screws should be covered with putty or with a heavy coat of white lead when used on exteriors. On wood construction, four-inchlead headed drive screws are used. Two drive screws are used per sheet per purlin or gitt or at approximately 18 inches O.C. Three drive screws per sheet are becommended for use on eave purlins at approximately 12 inches O.C.

#### **Methods of Applying**

Two methods are used in applying corrugated sheets: (1) clipped corner method, and (2) staggered edge method.

In the clipped corner method, the cut corners butt together and are overlapped by the uncut corner of the next sheet. This system produces straight vertical lines and is preferred by many builders for appsarance reasons.

In the staggered joint method, using the 4.2-inch pitch material, several sheets of the first course are fastened in place, with a one-corrugation lap at the side. The second course is started with a sheet from which one corrugation has been clipped. It is laid with a six-inch end lap. Two corrugations are trimmed from the first sheet of the third course. Subsequent courses are applied in the same manner, offsetting the first sheet of each course one corrugation from the preceding course.

The procedure is the same for 23%inch pitch sheets, except the sides are lapped two corrugations.

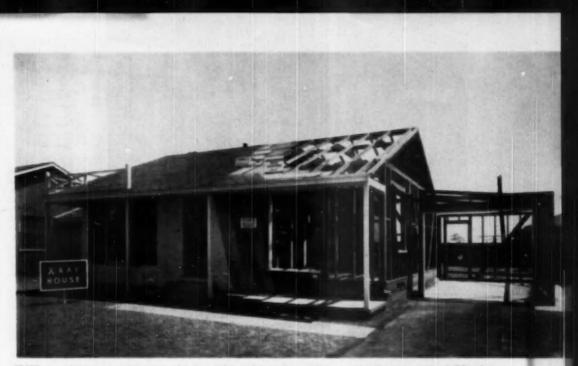
#### **Preformed Rolls for Ridges**

Preformed enclosure strips for use on top of or under the corrugated sheets may be obtained from manufacturers. Special ridge rolls and corner rolls also are made to simplify construction work.

For the standard 4.2-inch pitch corrugated sheet the maximum purlin spacing is 43% feet and the maximum girt spacing is 5% feet. For 2%-inch pitch sheets the corresponding maxinums are four feet and five feet.

The minimum pitch advised for corrugated ashestos-cement roofs is three inches to the foot. An overhang at the caves of six to nine inches from the outside of the lower roof purlin usually is sufficient. At the gables, sheets should not overhang ends of purlins more than two corrugations.

The weight of the sheets in place is approximately five pounds per square foot.



FRONT view showing exposed framing and both complete and incomplete sections of rool and exterior walls of X-Ray house

## **Cutaway Demonstration Sells Houses**



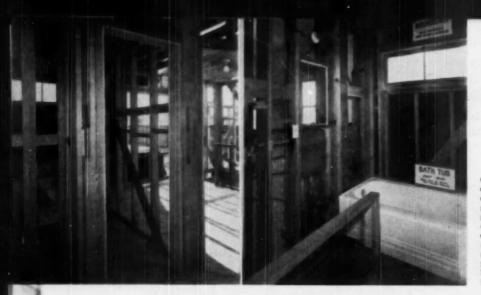
EXPOSED foundation and lostings of end of pit extending below footings shows how ground in compressed to provide firm bests for house. Subsemme explains how builder prepares lend, digs trenches for footings then pours ready mix concrets in forms Builder exhibits incomplete house to permit explanation of all structural features to home sockers

ON THE THEORY that most prospective buyers are as much interested in how a house is built as in how it looks. Milton Kaufman, Inc., Los Angeles builders, include an X-Ray house with the fully furnished demonstration homes in their new Foster Park development.

The X-Ray house is simply an uncompleted structure which enables the prospect to see every material used everywhere in the house. It includes cutaways of the appliances, and even permits a study of the ground on which the house rests. The idea was conceived by Norman C. Corkhill, sales manager, as the best means of answering questions as well as stimulating interest in the quality of construction. It was thought that the X-Ray house would interest men only, but after 30 days experience. Corkhill has found somewhat to his surprise that women visitors evince a profound and intelligent interest. Corkhill's complete story on construction details is told in language easily understandable by the layman. It begins with the ground on which the house is built. and ends with an exposition of roof framing details and roof covering. As Corkhill tells the story it is extremely informative and interesting. His regular salesmen are equally good. but the 15 or 20 extra, part time salesmen who work on Sunday have been unable to learn all of the details and master the technique of delivering the story. He is considering the employment of an experienced lecturer to tell the story on Sunday afternoons when the crowds are at peak.

At one side of the X-Ray house there is a pit about 12 feet

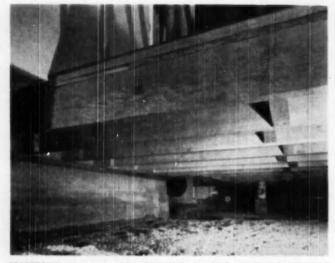
OCTOBER, 1950



C UTAWAY at 1 sit shows doser framing and constructions of interior partitions. At right plambing tree, window and door headness and electrical wiring and soll pipe are all explementen by solesman. Note railing where floring ends short of wall

square, extending several inches below the foundation. It is here that the story begins, with an account of how ground is prepared to receive foundations so there will be no settlement. Nature, Corkhill explains, never made ground level and uniform in density. so modern developers have to begin by actually manufacturing or fabricating the lots. The first step is to establish slopes for drainage. When the audience has that point fixed firmly in mind, Corkhill explains how the ground is then compacted with a heavy tractor, a sheepsfoot with rugged iron fists, to prevent settlement. In this compacted earth trenches for the foundation walls are dug with machines. It is then explained that the

exposed footings are 14 inches thick, and that the foundation walls, also exposed, are a full six inches. Here the narrator digresses to explain briefly why ready mixed concrete is used. If the narrator is doing his job well he notes at this point that he has succeeded in dramatizing what is ordinarily the least dramatic feature of home building, and from that point on he has an avid, interested audience. He hears comments such as, "Never knew there was so much to this," and, "Say, these fellows really know how to build, don't they?" Comments such as these, and the expressions on the faces of those in the audience tell him that he is converting prospects into customers.



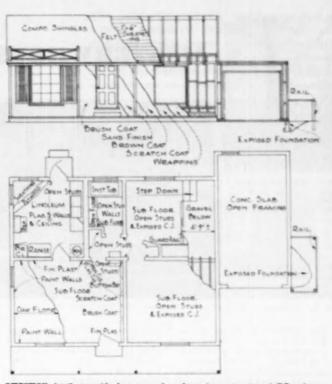
STADIWAY leads from opening in floor to space under house. Spotlights illuminate space, permit visitors to observe vents and natiling and heacing of floor joints

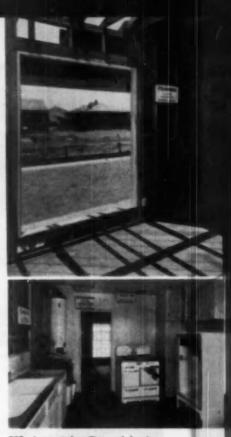
fir roof rafters are pointed out, and their bracing with 2x4 purlins and 1x6 collar ties is explained. These are easily shown from the ground, and the cutaway construction permits a demonstration of how 210-lh. asphalt shingles are applied over 15-lb. asphalt felt laid over solid sheathing. From the same position the visitors are shown how 15-lb. asphalt felt waterproofing is applied to the study, followed by wire mesh, then the stucco in scratch, brown and finish coats, completed with a fourth brush coat of color. Attractive signs indicate every step explained in case no salesman is present when a visitor arrives, and to enable others to check the points that were made.

Next, 2x4 No. 1 common Douglas

A wall in the living room is left without lath or plaster to show the studs, their spacing and their bracing. In another part of the living room several floor joists are exposed. Again, the cutaway principle shows Douglas fir sub-floor nailed diagonally at each bearing, and the application of 1/2x2 oak finish floor. Another wall of the living room shows Griplath nailed to the study. The narrator now explains how the plaster keys through the openings in the lath. The cutaway shows the application of two coats of plaster and two coats of oil paint for the final wall finish. Here, the Holly Stubby heater installation is explained along with the principle of its operation.

In the kitchen the cutaway principle is applied to the range, refrigerator and washing machine to show how they are constructed. Part of the G.E. Textolite sink is cut away. Transite flues, metal corner beads and the exhaust fan are explained, and kitchen cabinets are cut away. Another exposed section shows how plywood is laid over the sub-floor and finished





DIRECTION details to quide foreman and workmen in construction of X-flay house shown above. Note only approximate positions for cuthacks and underlaps are shown

TOP shows stad natiling and bearing, disquest subfloor and framing for celling and window. Above, parts al selfigcenter, range and wather are cut aways

with linoleum laid in mastic. Many people, Corkhill says, thought that the linoleum was just laid over the plywood with no binder. Interlocking thresholds and weatherstripping for the front and reat doors are shown.

In the bathroom wiring and plumbing details are fully exposed. The prefabricated plumbing tree is explained, and the salesman points out why the kitchen and bathroom are back to back for economy purposes.

The cast iron bathtub and its advantages are explained. Here, too, the 4x6 headers over windows and doors on exterior walls are pointed out. Firesafe wiring and the reasons for it are explored, and questions are invited.

Part of the floor in one bedroom is entirely omitted, and steps lead to the ground under the house. This is to demonstrate how the house is raised 18 inches above the ground to protect the living area from dampness. It shows the nailing and blocking of 2x6 Douglas fir floor joists. The vents are pointed out, and attention is called to the presence of light and air as protection against dry rot and termites. Two

(Continued on page 132)

OCTOBER, 1930



PROGRESSIVE stops in construction of wall are shown by Juth attached to study and underlapping of two coats of plastor and two coats of paint. Note heating unit



A 12-FOOT-MIGH fence was built around a new model house, being introduced in this community, to atimalate public interest and curiosity. It is shown here with gate open as power roller finishes the driveway

AT AN announced date and time the 12 foot fence was removed to reveal the completed house. July equipped and furnished. The first week it was open more than 11.000 persons visited the highly publicited home



MYSTERY HOUSE



LOUIB BECKENSTEIN, president of Green Acres. Inc., looks on as Henry Bockenstein, treasurer and Harry P. Homers. sales manager. study a plan for a new house

All photos couriess The Hartford Times.

TO CAPITALIZE on the inherent curiosity people have for any construction job, a builder in the Hartford. Conn., area succeeded in developing an inestimable amount of interest in his development by building a model house behind a 12-foot-high board fence. Tagged the "Mystery House," the idea was picked up by the Hartford Times; and after Real Estate Editor Richard Henderson saw the plans for the low-priced ranch-type home, he decided to sponsor it as part of the newspaper's real estate promotion.

The builders, Green Acres, Inc. of which Louis Beckenstein is president, had already completed about 250 dwellings of conventional New England Cape Cod and Colonial De-



THIS is the simple truns, mode up of 2x6's. 2x4's and plywood gusset plates, which was used in the 70 ranch houses in Green Acres. Trusses were assembled on a jig at the site

sign in the architecturally conservative Hartford area when it was decided to introduce the ranch type. Land was acquired and plans prepared for about 70 of the houses. There was some doubt, however, about what acceptance the new house would receive from prospective purchasers. Recause of the traditional reluctance of New Englanders to adopt modern design in housing. Beckenstein decided to build up some public curiosity and interest while he was constructing the first model house by screening if from public view with the high board fence. A large gate, through which equipment was moved and deliveries were made, was kept closed to emphasize secrecy surrounding the structure.

As soon as it could be determined. a completion date was set and the time when the public would be able to visit the Mystery House publicized in newspaper advertising and in news stories. The morning of the opening day, the Hartford Times published a six-page special section of tie-in advertising and publicity on the house, which was completely equipped and furnished. The first day of the showing, at the announced time, the 12-foot-high board fence was removed by workmen and the public admitted. Crowds were so great that it took all the personnel available from Green Acres, Inc., plus extra persons to properly route visitors through the house and to answer their questions.

This promotion-minded builder erected a high board tence to completely screen from public view a new and different model house erected to open a 70-house devolopment. By cooperating with his local daily newspaper, the builder staged an outstandingly successful model-home showing which puid handsomely in sales



THE BASIC two-bedroom unit, built on a radiant-heated concrete elab on a large lat, which cold for \$11,900

and

real

The house was open to the public for two weeks from 2 to 9 p.m. daily except Sunday when it was open from 10 a.m. to 9 p.m. The first week more than 11,000 persons went through it and the second week the average was about 1,000 a day. As many visitors as possible signed a guest book with their addresses. This became the best prospect list the Green Acres firm ever had. Needless to say the 70 houses of this model were sold in a few days.

When Beckenstein decided to deviate from traditional house design in his project, he made an extensive trip throughout the United States to study first hand what other operative builders were doing with ranch type and modern designs in the low price market. He returned with a host of ideas which he laid before Architect Irving W. Rutherford in Hartford, who was requested to hold the price of the completed house with lot under \$12,000.

Rutherford first designed a basic house as the minimum and then prepared several alternate plans incorporating more space and more refinements which provided Beckenstein with a good variety to offer home buyers in a price range between \$11,900 and \$15,500. All the designs were for one-story frame houses with trussed roofs. The houses were built on radiant heated slabs without basements.

The basic plan offered two bed-(Continued on page 158)





FLOOR PLAN





PREDEVIRE helps hold have erect while shooting. Sings in process any: (1) air on. (2) blow off area to be shot, (3) wet area. (4) water off. (5) dry-mix materials on at pamp. (6) materials and water on at neasis. (7) shooting. (8) materials off. (8) water off. (10) air off. Neasis is held at right angle to reduce rehound. Workman. above, is shooting Duiry Congress Fair Building

# 55-Year Building Success Formula



CONCRETE reinforced with steel mash, was shot against Masonite shouthing to form



AFTER being "shat" with concrete, exterior surfaces of housing project were left with rough testare although concrete applied thus can be floated or trawelled

EXPERIMENTATION in search of better building methods is a regular activity of one of the oldest construction companies in Iowa in terms of age, and one of the youngest in terms of ideas. Founded in 1895 by John G. Miller, Sr., the John G. Miller Construction Company of Waterloo is one of the country's leading pioneers in the field of pneumatically applied concrete by which dry-mixed concrete, with water added at the nozzle is carried at high velocity through hoses to be "shot" into place.

Although Mr. Miller, Sr., is still an active supervisor in the company, four additional partners have been acquired —sons of the founder (Robert, Ruben, John and Aaron), all of whom attended an engineering college and are interested in the engineering and mechanical aspects of construction work.

The Company owns shops in which all of its equipment is repaired—equipment that includes two power shovels, tractors, concrete mixers, as well as smaller items such as pumps and portable saws. In these shops, mechanics are employed to fabricate jigs to speed work of particular undertakings. Currently, the company is perfecting an impact cutting tool for cutting stones used on stone veneer work. More important experiments and innovations, however, have been made in conjunction with pneumatically applied concrete.

#### **For Building Rejuvenation**

Employing the "Jetcrete" gun that is manufactured by the Construction Machinery Company, the Miller Construction Company, for the past four years, has engaged in the repair and rejuvenation of old buildings and in the construction of new work.

A local church, a local savings bank and numerous other commercial and industrial buildings have been rehabilitated with this system. New work has included school construction, the Waterloo airport administration building, an exposition building and groups of Waterloo housing projects. Currently, the firm is using pneumatically applied concrete in repairing the Iowa State College stadium and in construction of nine housing projects located in Waterloo (3), Mason City (1), Dubnque (1), Fort Dodge (1), Davenport (2) and Celar Falls (1).

In these housing units, the Miller Construction Company is using pneumatically applied concrete to "stucco finish" the wood-framed buildings.

Iowa building firm features uses of pnoumatically applied concrete for repair, new construction work





sterior finish of this wood-framed apartment

REPAIR of State College Studium was simplified with pneumotically applied concrete

The concrete is applied in three coats against a Masonite sheathing and is reinforced with steel mesh. The first coats are screeded and scratched for following coats, the last one being a thin "flash" finish. This last coating is floated but not steel-trowelled since the rougher texture is preferred.

Generally the company uses only one coat in the rejuvenation of the walls of old buildings, especially industrial units. For this purpose, it has been shot over concrete and brick masonry walls in need of repair, producing a stronger section than the original. Such walls are first thoroughly cleaned, dampened and then "shot." One problem encountered, however, in rejuvenation work has been that of variations of thermal expansion between the old and new concrete, although the experience of the Miller



CONVEYOR, powered by small quasiline motor, was specially developed by the Miller company to entry dry-min from the 31/25 miluor to the hopper of Jeterate qua-OCTOBER, 1950

Construction Company has been that the bond formed with pneumatically applied concrete is stronger than the old concrete or masonry units over which it is applied.

Another use to which this technique has been put by the company is the repair and leveling of old sidewalks. Since it can be shot to a feather edge, it has been found infinitely superior to any other method of repair work for walks, except replacement.

#### **Need for Clean, Sharp Sand**

John Miller, Jr., a general superintendent for the firm, has pointed out that a clean, sharp, well-graded sand is essential to the operation. The gradings are generally as follows, although minor variations are utilized to achieve varied textured finishes :

Passing	No.	4	sieve	98	to	100%
Passing	No.	8	sieve	70	to	95%
Passing	No.	16	sieve	-60	to	85%
Passing	No.	30	sieve	45	to	65%
Passing	No.	-50	sieve	15	80	35%
Passing	No.	100	sieve	0	to	\$16

This sand with its normal moisture content of five to eight per cent is mixed in a semi-dry state with portland cement. Manufactured aggregates must be slightly dampened since this

(Continued on page 208)

### **Department Store of Building Supplies**

Material dealers who want to make it easy for customers to buy, and want to render as many services as possible, are turning to more modern ideas in store layout. The new Grossman store is a good example of the trend

ARRANGEMENT of materials in a new building supply store in Malden, Mass., makes it easy for builders to buy.

The store, one of 16 in a chain owned in the New England states by L. Grossman Sons, Inc., is completely departmentalized. Building materials are displayed like merchandise in a department store, but as a whole, to more advantage.

Front part of the two-story building is a customer showroom with typical store items which may easily be seen from the street through wide glass areas. Items such as kitchen cabinets, appliances and paints, are displayed in special departments. Cabinets are integrated into full-size kitchen walls, with sinks, plumbing fixtures, draun boards, hardware and back splashes set off against attractive kitchen wall treatments. Bathroom fixtures are displayed in a like manner, in complete bathroom units.

"Ashes of Roses" plaster board extends down about three feet from the ceiling in the main showroom, Customers can see that proper handling of this material makes it satisfactory for decorative purposes. No joints or patches show, and the surface is smooth.

All the interior shows paint and finishing materials offered by the store to good advantage. Below the plasterboard there is a band of bleached mahogany plywood as a border. This is in contrast to the walls of knotty pine, finished in a semi-gluss platinum blond stain. Wall racks, display counters and cabinets are made of fr plywood to show uses of this material. All interior materials used in the construction of the store are available from the store, and Grossman salesmen are on hand to explain methods, used in applying paints and materials.

Display counters for power tools are mounted on roller casters, and roller platforms are used for heavy items such as refrigerators and hot water heaters. This allows great flexibility in display arrangements.

(Continued on page 140)



FRONT of new Grossman store in Mulden. Muss. It is one of 16 in company's chain



BATHROOM flatures in Grossman store are integrated in complete bathroom, as shown in corner of display room, right. Each department is plainly marked



CABINETS, sink, hardware and plumbing Extures are displayed as kitchen unit AMERICAN BUILDER

# **Building Industry Gets A New Material**

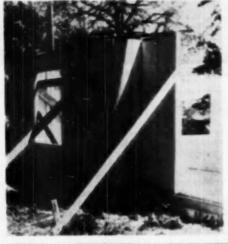
Lightweight aggregate panel that can be source, nailed and drilled with woodworking tools, is made for a wide variety of uses

NEW building material manufac-A turing concern in Chicago, the American Bildrok Company, will produce lightweight aggregates, principally perlite, for plaster and concrete. and manufacture them into a variety of insulating, acoustical and structural building panels. Important among the products is a lightweight, insulating wall panel for residential, farm and commercial buildings. This panel incorporates the structural and insulating requirements for a wall in one naterial. The company claims great savings in cost for materials and erection time.

The basically new type building material to be manufactured by the company resists fire and rot, and provides great flexibility in use. It can be cut, sawed, nailed, drilled and handled with woodworking tools. It can also be manufactured in a wide variety of shapes, sizes, designs, colors and finishes. A similar material will be used to make precast floor and roof panels so that the company will be able to provide the complete shell for a building. It is expected that the panels will be used extensively for farm structures because of their case (Continued on page 136)



BILDBOE ponel is cut with hand sow



BILDHOE pemols. 8 feet long and 16 inches wide, are set on end in sisel channel secured to concrete sich floor in this residential side wall. Notice fluted surlaces of panels used on corner. Several variotions in sizes, shapes and colors will be available in various motorials manufactured by American Bidfrek Co.



TTPICAL example of a home completed with Bildrak used for exterior walks. This home, in Fowierville. Mich... is 38x54 feet, and was built at comparatively low cost





DRILLING into the punel is on easy task, with ordinary brace and bit, as shown

OCTOBER, 1950

# Homes Make A Difference

### by R. E. Saberson

Before you feel sorry for the G.I. in today's low cost housing projects, have a talk with him. He may be much happier than you think

FOR several years on my way down town I had been driving past two or three blocks of vacant lots and had never regarded them as especially desirable home-building sites. Then shortly after V-J Day somebody took over and within a year the first house began to take form.

At first it seemed like rather a poor excuse of a home. Too small. Poor lumber. Shoddy construction. And, of course, the price was exorbitant. At least these were the appraisals that were most frequently heard, not only about this particular house but practically all postwar homes . . . at least at that time.

However I was favorably impressed by the fact that the contractor didn't go in for speed. He never had more than two or three houses under construction at one time and the "SOLD" signs invariably went up before any of the homes were actually completed. By the end of the year, a dozen or more had been finished and sold. In the spring the contractor was on the job early and did the same thing on the opposite side of the street.

The thing that interests me most about this unspectacular undertaking is the extent to which my thinking has changed about the whole project. It isn't at all what I thought it was going to be. Whereas I once was inclined to regard it as a bright and shining example of what was being done to the helpless vets. I now am looking at it in an entirely different light. I missed my hasty appraisals in a dozen different ways and I now find myself wrong on practically every count.

Remember I am referring specifically to a certain group of houses that as far as I was concerned had three strikes against them before they were even sold. I didn't like the location or the houses or the price.

Fortunately for the builder and his customers, they all felt differently about the whole thing. That much was proved by the rapidity with which the houses were sold. Nevertheless I continued to feel more or less sorry for the purchasers until just recently when I began to realize that the whole set up had turned out to be exceedingly worthwhile for all parties concerned.

The location which had failed to interest me favorably now commands my



respect. The vacant lots in adjacent blocks are filled with neat little homes. The unsightly hump that stood in the middle of the area was bull-dozed into the depression which once doubled as a swamp and a dump of minor proportions. This leveling off process worked wonders.

But it was the houses themselves and the carpet-like yards that contributed most to the remarkable change which has taken place. Naturally the houses are no larger than when they were built, but they no longer seem small since they conform to the postwar pattern as to size. Awnings, shutters, backyard fences, flowers, fast-growing young trees have helped to erase the once-drab picture.

Saturday afternoon I stopped in front of House Number One. The owner was mowing the lawn. I explained my interest in his home and in the others up and down the street.

"Homes make a big difference in an area" I concluded after telling him my earlier impression, not only of the location but of my doubts concerning the wisdom of his purchase and how I had gradually changed my mind.

"Several of my friends felt the same way about it," he replied. "As a matter of fact they came pretty close to talking me out of it after I had agreed to buy the place. Think we might have followed their advice if we had been able to find some place to live. They pointed out how much more I was paying for a smaller house than theirs and insisted that within three or four years I would be able to buy a better house for less money than I owed on this. They insisted that materials would get better and cheaper. It all sounded very plausible but there wasn't much I could do about it. So I took the plunge. Like to take a look at the backyard?"

We sat in the shade and visited. A friendly cocker slept at our feet in the cool grass. Colorful flowers in an oldfashioned garden nodded their heads in the gentle summer breeze.

"You said something about houses making a big difference in an area," the home owner said after we had talked awhile. "That's true but they do far more than that. . . . They make a big difference in practically every phase of the life of the families who live in them . . . or at least ours did."

Then he went on to tell how they had decided to find out in advance how they would come out if they hought a home

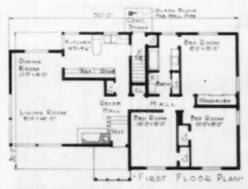
"That called for far more figuring than you would expect," he explained. "We took no chances, especially after our friends told us how foolish we were for taking on such a large obligation. We studied every angle of the situation and measured the cost (Continued on page 192)



MODERN Design as expressed in this house provides economy construction to meet the needs of owner with a limited budget



# Three Bedrooms and Split Bath in Economy House



THIS house while planned to conterm to a sloping site, can be placed on a perfectly level lot and still retain the over-all effect. This will neccessitate eliminating the garcup under the living room. This house has the advantage of a side and end elevation that can be used as potential street fronts, depending antirely upon the size of the lot available. The plan of the house is well laid out with respect to sames of living. The quist area in entirely away from the living and service perion and yet readily accessible to excit. Circuitation from the entrance is available to excit. **G**ETTING three bedrooms and a "decent size" living room in a house built on a very limited budget was the problem posed to Norman R. Johnson, St. Paul architect, in the design of this selected home. The family consists of the parents and two teen-age daughters, and the budget, in addition to other limitations, did not provide for two complete bathrooms. It was necessary, therefore, to design and locate a split-type bath. The bath is divided into two sections separated by a louvered door. Each section has a lavatory, with the tub in one and stool in the other. Entry is from the hall and from the dressing closet off one bedroom.

Over-all dimensions of the house are 50x30, including the double garage under the living room. Actually the living room is 14 feet, by about 21 feet. The diming area, however, not partitioned from the living room, adds an L, increasing the width of the living room to 20 feet. Closet space is well planned with  $8\frac{1}{2}$  feet in one bedroom and  $4\frac{1}{2}$  feet in each of the others. In addition there are two guest closets and another at the rear entryway.

The exterior is 34-inch weatherproof plywood with vertical 1x3 hatten boards spaced 16 inches O.C. The roof is one plane with a bip pitch. Finish is pitch and gravel. The main view is southwest, and the living room and dining area face that way. Since the house is built on a knoll, the sidewalk is pitched up to the front entrance to minimize the declining slope of the ramp to the garage space. Windows are all Andersen Corp. borizontal gliding type, and the house in insulated with Balsam Wool. The garage ceiling is insulated with double thick Balsam Wool and plastered on metal lath. The price in St. Paul not including the lot, was \$17,500 early in 1950, but would be considerably more today.

100









DESIGNED as an outdoor extension of the living and dining space, this terrace is sheltered by its enclosing glass wall. Douglas fir cover



WALLS of colid brick wave used at the north and routh and of home. The satur length of Research will brick accentaries horizontal lines. The shell roof hem a builting covering tupped with crushed the

# A Beach House for Year-Round Living

Solid brick and glass walls help protoct this "shadow box house" from prevailing sea wind and sun

IN HIS intriguing beach house at Malibu Beach, California, Welton Becket has found a way to tame the tormenting elements of the sand and ocean winds without depriving himself and his guests of the delights of oceanside living.

The projecting arm of wood and glass that extends 43 feet from the north side of the home protects the enclosed terrace from the prevailing north winds without cutting off the view or infringing upon the feeling of outdoor living, for this is a house designed to complement and to meet the impositions of its setting. This is not a house that requires "tailoring" of the surrounding landscape to fit its architecture.

The entire west wall of the house proper is also glass, although the enclosed rooms are sheltered by the extended walls and overhanging roof. The end walls are of solid Roman ruffle brick construction. The house itself is built on a concrete slab with conventionally framed interior partitions and a shed-type roof with a built-up covering topped with crushed tile. Redwood is used for exterior trimming.

Throughout the house, Weldtex (United States Plywood Corporation) is used for wall finishes with birch doors and trim under ceilings of exposed Douglas fir beams and rafters. The floors are finished with rubber tile.

Birch was also employed in the construction of the kitchen cabinets, although the counter has panels of Weldtex. This counter, topped with Formica, separates the kitchen from the living-dining area. However, the brick barbecue pit of the kitchen makes it one of the chief points of interest in the house. Kitchen equipment includes a GE dishwasher and a GE Disposall. There is also an automatic washer located in the combination bath-laundry. The bathroom is located adjacent to an outside door in the bedroom area, and, in addition, an exterior shower has been installed next to this door for the convenience of swimmers so that they can wash off sand before entering the house.

Two of the three bedrooms have doors opening on the beach; one is equipped with built-in bunks for four children.

The architect-owner, Welton Hecket, associated with the West Coast architectural firm of Wurdeman and Becket, calls this his "shadow bon house" because of the unique front elevation with the projecting eaves and side wings. The home was constructed by Frank Sheldon, builder. The main portion contains 1,275 square feet.



THIS corner barbocuo pit makes the "open kitchen" a center of usigue attention. Counters and her have Forming tops



IN INTERIOR, mosonry of both Roman ruffle brick walls in aspased. Firepiace, as shown in phote, is integral part of wall



TWO of the three bedrooms of the beach house here flaor-tocatiling windows, focing the ocean, placeod by double doors

OCTOBER, 1950



REVISED design of first prize home in American Pullder competition among women students of architecture

### **Prize Home Modern and Easy to Build**

THIS MODIFIED modern house was designed by Elizabeth Graham Bell, architectural student at Carnegie Institute of Technology. It was awarded first place in the competition among women architectural students in the contest sponsored jointly by *American Builder* and National Association of Home Builders in February 1950.

Victor Civkin, A.I.A., collaborating with Miss Bell, made some minor changes in the fenestration and kitchen layout, and produced full working drawings. Complete details of the revised kitchen layout were presented in the July issue of *American Builder*.

Despite the low roof line of the house, an appearance of squatness is dispelled by the use of random width vertical siding. A continuous line of windows along the front elevation, which might have been monotonous, has been separated into three batteries of three, two and three sash, respectively, with weatherproof plywood between the batteries. Roof projection over and beyond the monitor sash above the living room is four feet. This minimizes the time that



drapes must be drawn to eliminate direct sunlight in the room. Roof overhang of the flat roof parts of the house is three feet. Note the glass wall of the exposed side of the living room.

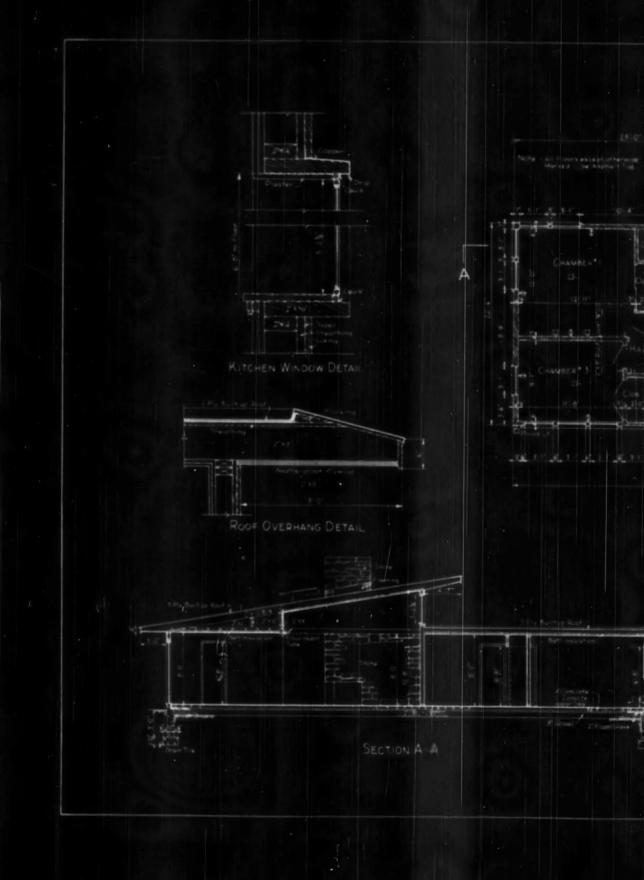
A particularly desirable feature of the layout is the location and size of the utility room, and the spacious storage cabinet for garden tools and miscellaneous items.

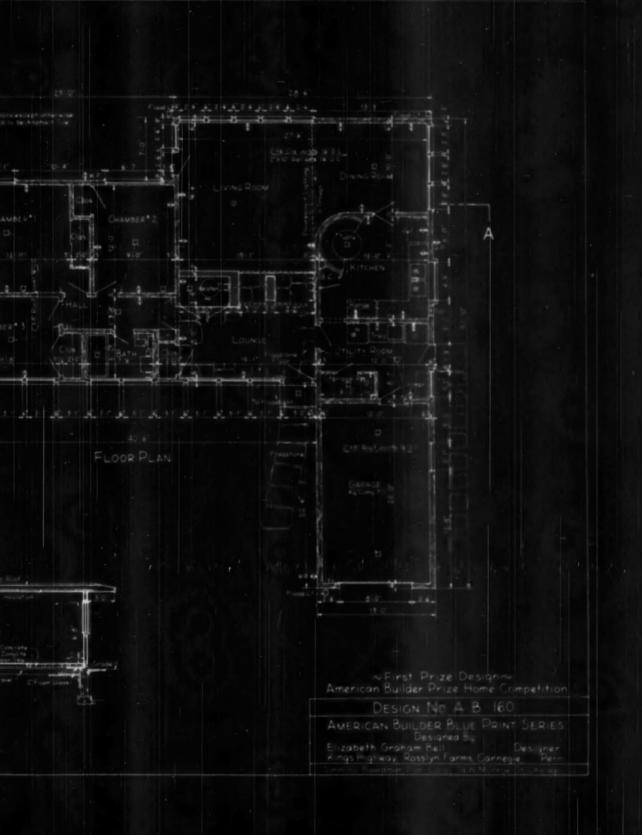
The treatment of the approximately square kitchen is especially interesting. The working section of the kitchen is actually a well proportioned L. This was accomplished efficiently and economically with the use of a 210-degree circular arc breakfast settee and circular table in the far corner. Note the efficient use of space for a convenient broom closet.

The plate glass wall on the side of the dining room, with the living room glass wall, provides excellent opportunity for beautiful views with effective landscaping.

Note that while the plan calls for three bedrooms of moderate size, chambers one and two or one and three could be easily combined to provide one large master bedroom, and a small second room. With this suggested layout, restoration to three bedrooms could be done at any time, and at small cost. Location of the heating plant at the approximate center of the house provides desirable economies.

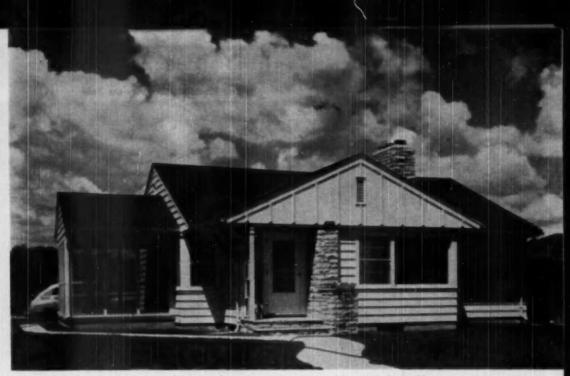
For complete one-quarter inch scale working plans of this house write American Builder Home Plan Service, 30 Church Street, New York 7, N. Y.







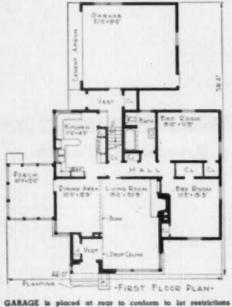




THIS house characterizes the trend in the use of several types of extorior materials to emphasize detail features

### **Blending Materials for Effect**





OCTOBER, 1950

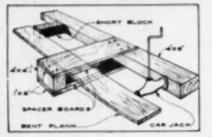
COMBINING some of the best features of the traditional Cape Cod and current mid-century ranch type houses, Fritz Bros., Inc., home builders of Minneapolis, produced this house for a relatively small lot. It could be made to accommodate itself to an even narrower lot by taking the porch from the side, and including it as a breezeway between the house and the garage. Actually the house is only 36 feet wide, but the roof design and the wide overhang give it the appearance of greater spread.

An oversize chimney lends the illusion of mass. The chimney is laid up with native stone. Judicious use of the same kind of stone in front of and surrounding the front entrance adds an appearance of solidarity. The vertical lines of the front gable end accentuate the stone and give character to the entire front.

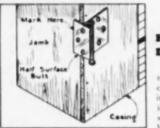
Omission of a partition between the dining area and the living room provides a clear L-shape space approximately 20x23 feet. There is an access panel for storage of off-season items between the roof and the ceiling. This, plus supplementary storage space in the basement, offsets what otherwise would have been a disadvantage resulting from the small closet in the rear bedroom. Note the large guest closet off the vestibule, adequate for the family's outside wraps, plus those of as many guests as would likely to be present at any one time. Note the closed vestibule at the rear, providing entry to the garage and the kitchen, and including another closet for work clothes. An interesting feature of many of the garages built by the Fritz organization is the provision of only six feet of headroom under the double garage doors. The low cars of today, says Bob Fritz, require no more headroom.



New to Make a Jig to Straighton Planks



This simple jig is constructed in the following manner: Two 1x8's are securely nailed at right angles to a 4x6 about ten feet long. The 1x8's, about four feet in length, are held together at eads with a 4x4 block. In use, the crooked plank is passed between the 1x8's with its curve outward; two apacer blocks are then placed on opposite sides to prevent plank from slipping to side when under pressure. A short block is placed between plank and 4x6. A car jack is then operated to remove curve. Straightened plank is left in jig overnight.—Submitted by Herbert E. Fey, New Braunfels, Texas.



How to Mark Door Hinges

For precise alignment of door and casing, the following method of marking location of halfsurface butts or binges is recom-

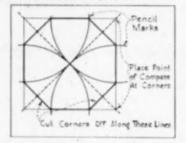
mended: Bring two halves of hinges together at right angles to each other. Invert butt and hold it firmly against casing with one hand while marking around narrow half with pencil.—Submitted by Herbert E. Fey, New Braunfels, Texas.

Now to Make a Handy Device For Holding Boards on Job

Part and the second a

The simple wedge-vice illustrated holds hoards from 1/4inch thick to thickness equal to width of cut-out in block or stop.—Submitted by W. S. Dollar, Colorado Springs, Colo.

### **How to Lay Out an Octagon**



Mark a perfect square size of desired octagon. Locate center at intersection of lines from corner to corner. Set point of compass at corner of square and mark four identical arcs. Draw straight lines from one arc to another at point where they meet square. Result will be a perfect octagon.—Submitted by Herbert E. Fey, New Braunfels, Texas.

HOW TO DO IT . HOW TO DO IT

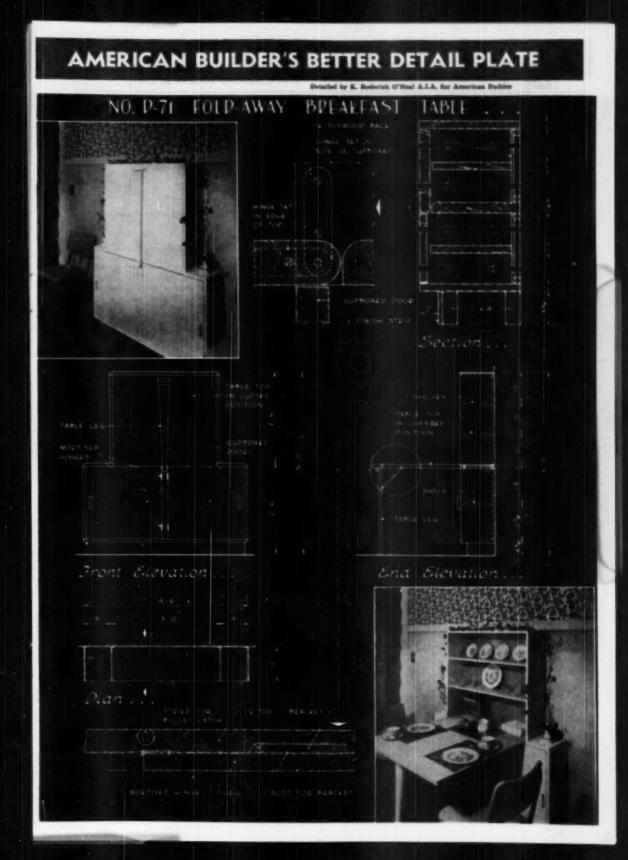
### No. D-71 ... Fold-away Breakfast Table

SPECIAL features such as the fold-away breakfast table, detailed and illustrated on the opposite page, provide opportunity for reduction of space required for dining in the kitchen. This compact unit, shown in both closed and open position, can be built as an integral part of the room arrangement, or as an independent fixture placed in a convenient area of the room.

The fixture is sturdily built of one inch boards including shelves, with  $\frac{1}{26}$  inch fir plywood for backing. Exterior corners at ends are carefully rounded for an effect of simplicity. When fixture is in either open or closed position the cupboard doors below the table top can easily be opened for access to storage area. The storage area above table top can be arranged in an ornamental display or for storage of breakfast dishes, etc. The supporting leg for table top becomes an integral part of the fixture design when in a closed position. When table top is in position for use the supporting leg-automatically drops into a vertical position and is held rigidly in place by a metal angle bracket. Table top is made of 1-1/4 inch thick members with concealed hinge for operating, placed flush with face of jamb and end of table top.

Finish of kitchen unit is optional. It should take the same finish as balance of fixtures in kitchen, or if contrast is desired a blond stained finish can be applied.





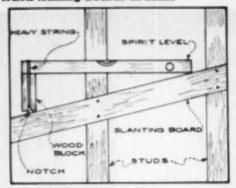


When roof is ready to shingle, start at gutter line with one course of 16-inch red cedar shingles, projecting shingle 1 to 155 inches beyond edge of roof sheathing. Then start double course of ashalt shingles about his-inch beyond edge of red cedar shingle. This provides a stiff edge which will not sag or break.—Submitted by C. D. Robb, Frankfort, Ohio.

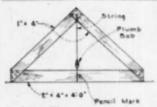
#### **How to Prepare Gray Creosote Paint**

Creosote may be blended to a limited extent with white pacte paint, including white lead, ainc oxide or a mixture of white lead, zinc oxide and titanium oxide. A suggested blend to produce a gray creosote paint for outside use 1 gallon white paste; linseed oil and drier, as directed on label; creosote, as replacement for thinner. Any blend made will be slow drying. It is recommended that a non-creosote woosd preservative also be used. This can be brushed on the lumber or used as a dip. Before applying paint the treated wood should be allowed to dry for a few days.—Data furnished by National Paint, Varnish and Laopuer Association. Inc.

### How to Maintain Same Angle When Nailing Boards at Slant



Nail first board at desired angle. Place spirit level on board in perfectly level position. Measure distance between bottom of level and top of board and cut a wood block to same thickness. Notch block and lash to tool with heavy string. To assure correct angle for remaining boards, rest level on top edges of boards and raise or lower level until bubble is in exact center.—Submitted by Herbert E. Fey. New Brannfels, Texas.



### How to Make a Simple Level

Only materials required to build this simple level are a 2x4 four feet long, two threefoot 1x4's and a

plumb bob. The center of the 2x4 is marked with a pencil. The 1x4's are then nailed to the 2x4 and trimmed, as shown in drawing. Plumb bob is affixed to exact center of crossed pieces with a small nail. Care must be taken that 1x4's are of identical length and accurately crossed.—Submitted by Herbert E. Fey, New Braunfels, Texas.

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

G-12... Cantilever Balcony Framing N THE remodeling of the store interior shown on the An unusual feature of the balcony framing is the

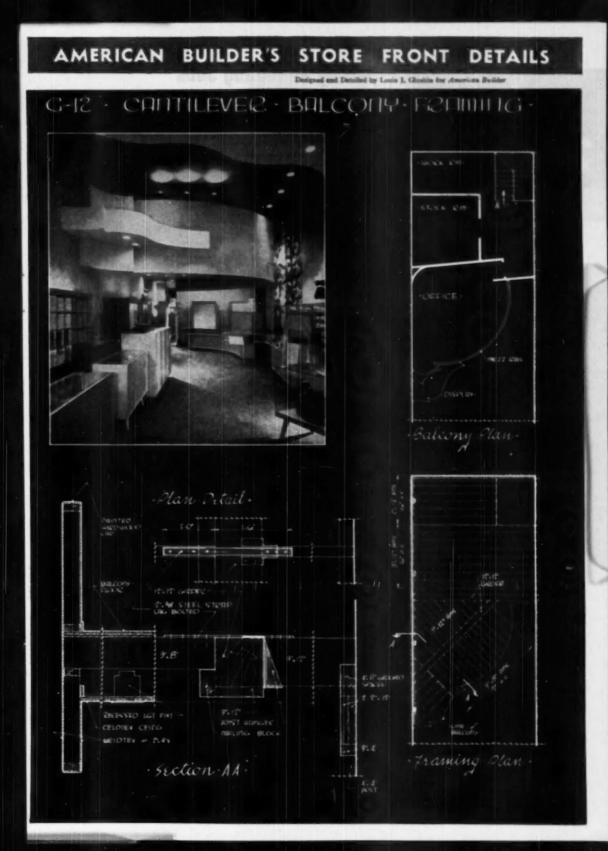
opposite page, the designer had a number of problems to contend with to satisfy the requirements of the owner. These were as follows:

- To provide a balcony within a limited area; one which would in effect appear to be iree floating and become a part of the actual sales area.
- To select materials that would assure completion of all work within the shortest possible time.
- To construct the halcony in the most economical manner, consistent with the purpose and function of the business carried on by the store.

The framing of the balcony is made entirely of wood beams. This method was used to speed construction work due to a time limit placed upon the builder. The 3x12 and 3x8 inch beams frame into and are flush with the top of diagonal 12x12 inch wood girder. The beams are held in position at girder with nating blocks and joint hangers. An unusual feature of the balcony framing is the fact that each of the extended 3x8 inch beams are secured to 3x12inch beams by means of a  $2x\beta_{\rm B}$  inch steel strap placed across top of beams as indicated in detail and securely lag screwed into position. This method has proven successful in supporting an extended free standing area.

Weldtex facing is used to form the halcony rail. The use of this material gives texture to an otherwise plain surface. The projections extending beyond the halcony face on one end is used for a display platform.

Materials used are as follows: floor covering, rubber tile; ceiling of Celoles squares; left wall covered in La Verne "Teachest" pattern wallpaper; fixtures of pickled oak; showcases and counters, striated plywood, Color scheme is as follows: floor a chinese red, walls in tones of chartreuse, aqua and orchid. Showcase fronts are pale grey-green torquoise. All, lighting is incandescent with the exception af wall case lighting which is fluorescent.





### Selling Re-roofing Jobs to Consumer Is Profitable



ABOVE: Tod Falin checks his crew while they apply new root to a home in Cedar Rapids

RIGHT: Headquarters of Hatch and Brookwan, Cedar Rapids, lows, building material dealers

SEVERE competition in the trading area is one reason why the Hatch and Brookman Company, retail lumber dealers of Cedar Rapids, lowa, are focusing selling efforts on the consumer, and particularly the farm trade. In Cedar Rapids itself, a city of 80,000 people, twelve dealers compete for business, Charles E. Sovern, general manager of the company, maintains there are more dealers per 1,000 of population in the trading area than in any other section of the country.

The first effort to increase farm trade was launched September 1949, with instant success. It was the institution of a roofing application department. Ted Foltz, an experienced roofing and siding salesman, conversant with the farm trade, was employed as a commission salesman and as manager of the roofing and siding department. A thoroughly trained and competent roofing and siding crew was put on the payroll.

From a standing start in September, Ted Foltz sold enough roofing and siding to keep not one, but two roofing and siding crews basy throughout the winter. By February, the backlog of orders was so large that Hatch & Brookman already had planumed to increase the number of crews from two to five when spring weather permitted an uninterrupted construction schedule.

This record looks even more imposing. Mr. Sovern said, when it is remembered that most salesmen think there is little use in trying to sell roofing and siding jobs around Cedar Rapids after the first of November. Many stay home and "toast their tootsies." But not Ted Foltz. He worked continuously during these "dead nomths," and averaged more than \$800 per month in commissions during September, October, November, and December. And he is paid only upon completion of a job and not when the farmer signs the contract.

In February, the time of the year when "you just can't sell roofing and siding," Ted Foltz was averaging an order every three days, according to Mr. Sovern. And the average of these orders was about \$900.

It's apparent roofing and siding is the leader to other farm business. These are the lines, Mr. Sovern asserts, that enable a dealer to get his foot in the door. And he offers as convincing proof the fact once his crew gets on the job, and the farmer can see that they are skilled workmen who really know construction, the farmer almost invariably finds other work to be done on his buildings. On the average, the \$900 or \$1,000 order builds into a \$2,000 job before the



FOLTZ poses with customers. Farmer Shrader and daughter, The Shraders, from near Van Horne, lowa, gave ro-rooling contract for home, bars, other buildings

crew completes its work. And in several cases, Mr. Sovern reports the farmer has pushed a \$1,000 order into a \$5,000 or \$6,000 order calling for humber, nails, insulation and other materials, plus actual construction work. And, he says, the farmer has the momey to pay for it.

Mr. Sovern says there is no magic formula. In the first place, there's Ted Foltz. He knows the building basiness. He knows the farmer. He understands his problems and talks his language. Within a radius of 60 miles of Cedar Rapids, Foltz, says Sovern, has every farm lined up on routes, and sticks to a pre-determined call schedule. He knows where he will be days ahead. He wants to know personally every farmer in the territory. He never passes by a farm without stopping in for a few minutes to talk.

Another and equally important cue to farm sales is selling proper application, according to Mr. Sovern. "Tell the farmer exactly how you will apply the materials and why. Then live up to your promises. This is the only way to earn the farmer's confidence and to keep it."

In reply to further questioning, Mr. Sovern said that in the towns his company is recommending 3-tab strip shingles almost exclusively. They are always applied with 6 nails, and in highly exposed locations where high winds subject roofs to heavy battering, the tabs are cemented down. On farms, Ted Foltz sells mostly individual shingles applied by the Dutch Lap method, fastened down with staples. To date, it hasn't been necessary to make a call back on a roofing job. **Owner Satisfaction** 

### ... part of every Rö-Way Overbead Type Door

Yes . . . owner satisfaction. Built right into every Ro-Way Overhead Type Door. Whether for commercial, industrial or residential installation.

It's like this. Only carefully selected west coast lumber is used. Mortise and tenon joints are not only glued, but steel doweled as well. Muntins, rails and stiles are squared up with precision. Sections are rabbeted to assure weather-tight joints. Millwork is drum sanded for uniformity, with extra hand sanding for real smoothness of finish.

All Ro-Way hardware is heavy gauge steel-fabricated in Rowe's own plant with special Rowe-designed machines. And it's both Parkerized and painted, after fabrication, to assure freedom from rusting and discoloration.

And-outstanding features for smooth, easy operation. Like Ro-Way's exclusive friction-reducing track. Ball-bearing rollers with double-thick tread. Springs power-metered to the weight of each door.

Owner satisfaction? It's practically guaranteed! That's why you can't go wrong when you specify---Ro-Way Overhead Type Doors.

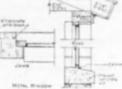


There's a Rollay for every Doorway! NBUSTRIAL · .... COMMERCI ROWE MANUFACTURING COMPANY 773 Holton Street Golesburg, Minels





Not Brack



Garages of concrete masonry units

are firesafe, economic and adaptable

to innumerable architectural types

since masonry units are inherently

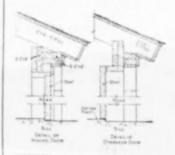
versatile, Of course, any garage can

he made more useful if it is con-

structed to include other features such

as storage spaces and work areas, but

12



#### SECTIONAL details for maistary unit garage construction

with masonry unit construction, more elaborate designs may be planned that include attached fireplaces, barbecue grilles and porches with concrete flours.

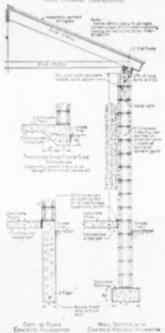
Since concrete block and other masoury units are modular in size, construction from a basic plan is simplified by adapting dimensions to modular half-sizes of the units—a system which also eliminates much cutting and waste.

The exterior finish of a garage can be enhanced by variations in striking or tooling the joints in the masonry unit walls. For example, tooling the horizontal joints only while striking the vertical joints flush accentuates the long dimensions of the building and adds shaduw lines Various patterns employed in laying the masonry units, such as the random pattern, and the odd-shaped, patential unit sizes are additional inexpensive contributions in garage exterior treatment techtrast crease material material all Port techt creases and another and the states of th

TECHNICAL GUIDE

for Builders and Craftsmen

How to Build Garages with Modular Masonry Units



PARTICULAR details must comply with local building codes. Dimensions of lootings depend on winter frost conditions and soil types

nique. Portland cement hase paint, available in colors, gives a decorative finish that increases the value of the property.

Long-term economy possible with masonry unit construction is achieved only when the units and the structure itself comply with the requirements of the local building codes or, in the absence of such codes, when the units comply with the applicable specifications of the American Society for Testing Materials.

Fourings 'should be of concrete twice as wide as the width of the wall (Continued on page 158)

AMERICAN BUILDER

110

### A house is often sold before it's finished

The way a house looks when it's under construction is important to both the lumber dealer and the contractor. It's then that prospective buyers can judge the important structural qualities of the house. A workmanlike appearance builds public confidence in the builder, which can mean faster sales. It also means more business for the lumber dealer who supplies him.

Armstrong's Temlok<sup>®</sup> Sheathing looks like the quality material it is. Every bundle of Temlok Sheathing is neatly wrapped in kraft paper. This not only makes it easier to handle in the yard and on the job but also helps to keep dents and scratches from marring its appearance. There's no extra charge for this protective wrapping.

On the end of each bundle is an attractive red and white label that makes the stacks of sheathing look neat and orderly on the job. The trade-marking on the face of Temlok Sheathing is carefully applied at the factory to make sure that it is clear, clean, and legible. This trade-mark is a sign of quality to the many people who have learned about Armstrong's Temlok on television and in national magazine advertisements.

The extra care that's taken to make Armstrong's Temlok look like a fine material really means something to the builder and the lumber dealer. During those days or weeks when the sheathing is exposed, the house is a huge billboard, inviting all who pass by to stop to see what materials and workmanship are going into it. It's smart to have a silent salesman like Armstrong's Temlok Sheathing on the job. Get full details from your near-

est Armstrong lumber dealer or write direct to the Armstrong Cork Company, 1610 Ross Street, Lancaster, Pennsylvania.





When you build with fine materials like Armstrong's Temlok Sheething, your house may sell itself. Most prospects for homes do a lot of hooking before they buy, and Temioh is one name that's well known, widely recognized for quality.



Yemick's near packaging doesn't add to the strength or insulation value of the material, of course, but it does make the good impression that's important to prospective buyers. Also, it prevents demage, makes handling easier on the job.

Armstrong's Temlok

SCTOBER, 1950



### **Catalogs** and

### HOW-TO-DO-IT INFORMATION

806—METAL WINDOWS, VENTILATORS— Metal ventilators of extruded aluminum, mild steel and stainless steel for glass block construction are described and illustrated in one catalog, and metal windows of extruded aluminum for glass block construction are presented in another offered by the Marmer Corp., Wausau, Wis, Sizes and specifications are given in both.

807—SCAFFOLDING SPECIFICATIONS—Typi-...<sup>1</sup> cal scaffold assemblies, safety rules, load tests of equipment, methods of assembly and other valuable information for users of sectional scaffolding are incorporated in a new 8page catalog released by Wilson-Albrecht Co., Inc., 3565 Wooddale Ave., Minneapolis 16, Minn.

808—LAMINATED PANELS—An illustrated 12-page booklet giving complete details of a new laminated panel designed to provide permanent curtain walls or interior partitions is being offered by the Kaylo Division, Owens-Illinois Glass Co., Ohio Bldg., Toledo I, Ohio.

809—FLOOR FINISHING SPECIFICATIONS —A complete new file of data and specifications on the preparation, finishing and maintenance of every type of floor has been prepared by the American Floor Surfacing Machine Co., 508-600 South St. Clair St., Toledo, Ohio, Data is in handy loose-sheet form, suitable for the architect's or builder's A.I.A. file.

810—SPECIAL PRODUCTS—A pocket catalog showing a complete line of window awnings, door canopies, ventilators, dust clustes, ornamental shutters, clothes chute doors, milk and package receivers and flower boxes, all Leigh building products, is available from Air Control Products, Inc., Coopersville, Mich.

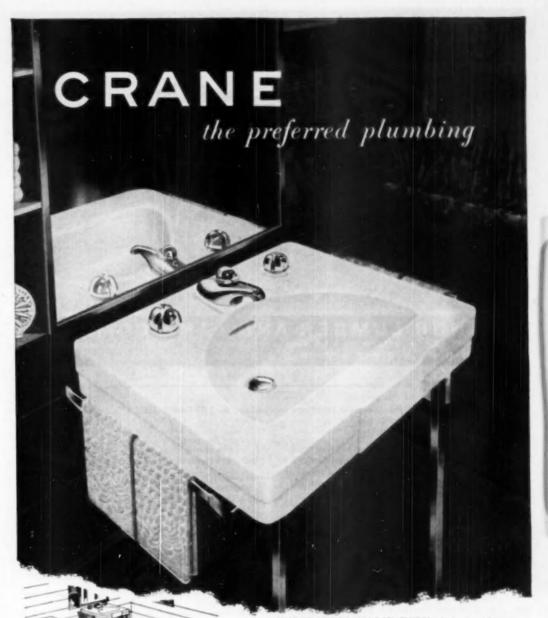
811—FLOOR LAYING PROCEDURE—The Maple Flooring Manufacturers Association, 46 Washington Blvd., Oshkosh, Wis., has announced publication of six folders describing grading characteristics and including information pertaining to proper floor laying procedure, outline specification data, and recommended uses of Northern hardwood floorings.

81a—"ACTION PLAN FOR PLASTERING CON-TRACTORS"—is the title of a sales promotion kit offered by Keystone Steel & Wire Co., Peoria 7, III, Information about reinforced concrete stucco, advertisements and displays used by successful contractors, and other sales hints are presented.

8r3—ENGINEERED HOUSES—Erection procedure used by the Texas Housing Co., 9061 Denton Drive, Dallas 9; Tex., is illustrated in their new brochure which outlines features of the Town and Country Engineered houses.

814—PAINT SAVINGS CALCULATOR—For calculating annual savings on various painting cycles, the Paint Sales Division of the Joseph Dison Crucible Co., Jersey City 3, N. J., offers a chart which gives at a glance the savings in terms of per cent of different protective painting cycles.

(Continued on page 120)



Styled to match the Diana Lavatory: Criterion Closet, Criterion Bathtub.

OCTOBER, 1950

RANE

THE CRANE DIANA LAVATORY, of vitreous china, in white and eight Crane colors. Chromium-plated trim includes easy-to-operate *Dial-ese* controls. Towel bars optional. Sizes: 24, 27, 33 inches. Consult your Crane Branch or Crane Wholesaler.

> CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO S PLUBBING AND HEATING VALVES • FITTINGS • FIPE 319

### CONNOR LAYTITE MAPLE FIRST AGAIN

Laytite 25 12x21;" Maple as laid in the new Elizabeth Waters Crude School, Fund du Lar, Wiscons

Levisite is made under Maple Finitring Manufacturers Assemiation specifications and is famous for uniform quality. Write for prices,



### CONNOR LUMBER AND LAND COMPANY P. 0. BOX 112 • TELEPHONE 3 DR 418 • TELETYPE 26 • MARSHFIELD, WISCONSIN CONNOR FOREST PRODUCTS SINCE 1872

### Catalogs

(1 metimized from page 118)

815—CABINET SHOWERS—Roughing-in dimensions, installation drawings, and suggested bathroom planning are included in a new 23-page catalog offerred by Henry Weis Manufacturing Co., Inc. Eldoart, Ind. This catalog. No. 450, shows styles and colors of cabinets available from the firm, as well as specifications, illustrations and data.

8.6—GLASS FIREPLACE SCREENS—Illustrations of the Therms-Rite glass freeplace screen, directions for its installation, and available sizes are included in literature available from The Therms-Rite Manufacturing Co., Akron 4, Ohio, Complete details of how the unit works are given.

817—CARE OF ASPHALT TILE FLOORS—A folder containing complete instructions and recommendations on the proper care and maintenance of asphalt tile 'oors has been released by the Asphalt Tile Institute, 101 'ark Ave., New York 17, N. Y.

818—PROMOTION BOOKLET FOR DEALERS —Illustrated 12-page promotion blocklet in help electric range dealers plan full scale advertising and promotion programs is now being offered by Westinghuase Electric Appliance Div., Mansfield, Ohio. Selling helps include four 6-page folder that give a quick, visual presentation of the full time of ranges.

819—BUDGET BATHROOM—Plans, specifications and a photograph of an architecturally designed "Budget Bathroom" all assembled on an attractive four-color brochure are being officied to members of the building trades by the Universal-Rumlle Corporation, New Castle, Pa. 820—BASEBOARD HEATING—The United States Radiator Corp. Detroit 20, Mich., has published a new 33-page booklet titled "Baseboard Heating with U.S. Radiant Baseboard" which, in addition to discussing the principles of radiant baseboard heating, is illustrated with pictures of installations, charts and foor plans. Method

8at—AIR COOLERS—Latest Artic Circle evaporative cooler catalog is available to building supply dealers and building contractors from International Metal Products Company, P.O. Box 1712, Phoenix, Ariz, Amply illustrated 20-page booklet contains engineering data, specifications and information on how to determine proper size of air cooler for specific requirements.

### SERVICE COUPON-CLIP and MAIL to CHICAGO

Readers Service Department	October, 19501
American Builder	
79 W. Monroe St., Chicage 3, III.	
Please send me additional information on	the following product
items, or ratalogs, listed in this department:	
Numbers	
Name	
Street	
City State	
OCCUPATION*	
"Please note that accupation must be stated if a	
AM	RICAN BUILDER

Everybody is getting <u>more</u> business with

### MICARTA' PRE-BONDED TO PLYWOOD PANELS

48"×96

now made in more sizes

Now-you can get more and more of those profitable kitchen, bathroom and playroom remodeling jobs with Micarta – because the Pre-bonded Panels are made in FOUR convenient, economical sizes.

30"×60

Micarta, you know, is the plastic surfacing material made by Westinghouse and advertised in such great magazines as Sat. Eve. Post and Good Housekeeping. All your customers know it is the ideal work surfacebeautiful, lustrous colors, ultra-durable (practically proof against chipping, scratching or staining) and so easy to clean with just the swish of a cloth.

Best news of all for YOU is the fact that Micarta is now supplied in a perfect panel – permanently bonded to waterproof 3/4" Weldwood plywood. Now you can cut, trim and install it just like plywood. And the new sizes cut down waste. YOU can use Micarta to get those better jobs.

Find out how. Mail the coupon for a free sample you can give the "third, degree" and a complete Installation Guide.

### MAIL THE COUPON

UNITED STATES PLYWOOD CORPORATION + and U. S. - MENGEL PLYWOODS, INC.

for a Free "Test Sample" and the Installation Guide.

	WOOD CORPORATION	AB-10-50
Mease send free Mic	corts Sample and Install	otion Guide.
Nome	·	
Company		
Address		
City	State	

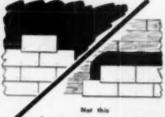
OCTOBIR, 1930

WESTINGHOUSE and sold for decorative purposes only by

### Here's how you can save \$85.87 on every 10 squares...

### Bo this-was \$5-noils

Low cost gypsum sheathing -asbustas shingles lestened with last, easy-to-use 25-noils. (Similar savings with wood shingles.)



Expensive, slow to arect wood shout's ing and building paper method - asbostos shingles fastaned with ardinary shingle nails.

### And here's why!

Old-fashioned wood-sheathed, buildingpaper-protected construction is expensive, Initial material costs are higher, and use of wood sheathing means ½ waste and double the application costs.

There's no need to put up with the higher costs of these slow, ald fashioned building methods. By using ES oails and fastening shingles directly to gypsum or involation sheathing, you can take full advantage of non-wood sheathing's lower unit cost, faster application, weathertightness, and reduced waste. Wood stripping costs are eliminated.

ES nails are easy to use. No special tools, no special skills are needed. Simply nail abingles with ES nails, You can drive them at any point—no need to locate studs or fur the walk. ES nails are self, locking. They automatically clinch in back of the sheathing and hold fast.

For full information on the savings you can make by using ES-nails, call your supplier, or serier. Elastic Stop Nar Corporation of America. 2330 Vauxhail Road, Union, New Jersey.



Approved by the Bod Coder Shingle Bureau, South, Washington, representing namedacbures of Contiguous Shingles, & Ivade Mark Kag, U. S. Pat. Off. (Continued from page 70)

LOW-PRICED SAW AB105033 New addition to Skill Home Shop Tool line is an  $\delta^{\prime}/_{s}$  -inch portable saw, Model 565, which has



a depth adjustment from 1/16 to 2% inches and basel adjustment from 0 to 45 degrees. Builtadjustments permit has werk on such jobs as Making phyward and basel outring 2 inch lumber ofts on DC and C current oft 16 0 cycles. Pretraine helical gears. Annihable with heavy duty steel carrying case. Skihow, Inc., Dept. AB, 5023 fitten Ave., Chicago 20, III.

#### POWIR DRIVER BITS AB105035 New line of Crute-2 Phillips power drive hits are mode of chrome-trageten chical-grade tool steel, heat treated to produce a wear-resistant skin over a sheck resistant care. Stocked in four tempers, to meet vorying conditions of scree-



driving. Bits may be repeatedly renewed at lowcost, without not-reable lass of effective length, Available in all standard shoek types to fit avslectiv and hand drivers, and hexagon and spanie female adaptars, or can be supplied to spanie shoet and length dimensions. Zephyr Manufacturing Ca., Dept AB, 301 Hindry Ave., Inglewood, Colif.

New STYLE LAVATORY AS103014 The Criterion lavatory is of solid plab elterous plinar, and has tenanth sweeping lines and solided fraint that blands with modern tiling techniques large 30x22-rich top is flat, and solid and solid stream on which tople ancevparies can be plated frames, and handles is crystal clear flated locid. Cantrals are Crans Datase. Overfine is conceiled in frant of boars, in white, and any of eight Cane colors.

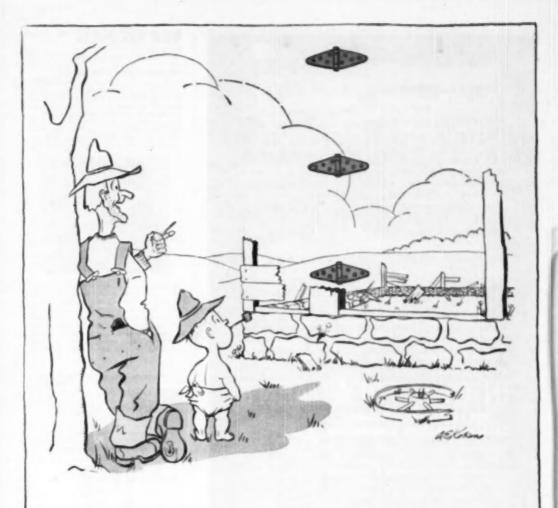


Crane Co., Dept. AB, E16 S. Michigan Ave., Chicago, III. (Continued on page 124)



AMERICAN BUILDER

MYR & NEW



"They sure last ... even in '76 when Granpap built that barn, he knew ...

EVERYTHING HINGES ON HAGER!"

C. Hager & Sons Hinge Mfg. Co. + St. Lawis, Ma. Founded 1849-Every Hager Hinge Swings on 100 Years of Experience



and decorates all types of masonry walls. Comes in white and 12 colors—all sunfast and non-fading. Mix BONDEX with water and it's ready for use. If adds beauty and salability to any building.



against moisture, erosion and disintegration. Due to unusual surface-sealing and long-wearing qualities, BONDEX adds years to the life of any structure---pays for itself in protection.

## IN ONE TREATMENT

### CEMENT PAINTS COMBINED

BONDEX users are BONDEX boosters! That's why it's the best-known, bestaccepted brand on the market. When you specify BONDEX, your clients know you're using the best. Try it, soon!

Bondex is Best for All Types of Masonry, Indoors and Out





### **NEW PRODUCTS**

(Continued from page 122)

### WASHABLE INSULATION BLOCKS

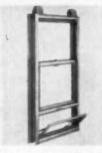
"Wanderwell" 12 inch square insulating blacks have bevelled edges and are tongued and granzed for period fit. Made of high square realizing board, permanently cavend with Velon plantic sheating with an antique leather faith in a variety of wood fance and imart calars. The Velon plantic, made by Frestone cannet be dented or tone, and result, ablactone



so that there is no possibility of marks from maxing all luminume or other rough usage. Domp cloth is only care the wall needs. Blocks injulate as well as describe. Fiberboard backing is all standard thickness, available in both regular and waterprival types to bacements and bathroams. Applied directly are cancered, ander black, brick, wood ar plaster. Page Panel Co., Dept. AS, 261 Rollwad Are., Clessill, N. J.

#### DOUBLE-HUNG ALUMINUM WINDOWS AB105008

New design in double hung pluminum windows factures a builton hupper vent for commiled ventilation. Inexinging vent is integral part of forme, and is equipped with white branes some fauth bigger anchored in reinforced iomb block. and with concepted sliding friction orms of vtonless teel. Can be provided with munitin bors matching have specified in double-hung with



Excommended for school and keepital initiality form. Sterling Windows, loc., 369 Lexington Are., Dept. A8, New York City 17, N. Y.

#### NEW GLASS SURFACE AB105009

Testured Linex and Testured Flatex are two new surfaces for Base Rodge patterned glass. Sightly rippled finals on flat side of the glass will provide a decorative glass with medium ampart of abusuity, and provide desaustion for both sides of a wall while alignwing light to pass between reachs. Both Linex and Flatex patterns have found wide use is modern homes for thaidecisistive effect. Previously they were mode with clear or Scinosi Einstea, the latter providing a high degree al obscurity. Libber Owens Ford Glass Ca., Dept. A5, Nicholas Bidg., Toleto 3, China.

HEAVY BUTY SAW A8105027 Putable, heavy duty 'Lectro-Saw' has feat operaning adjustments that control depth of cut hum 0 to 211/16 inches an ripping and crosscutting operations, Clearly collocated ausdrams



an front of sow plus fast operating clamps make is easy to bereal cut any angle from 45 to 90 degrees and up to 2 inch depth of cut. The 6inch saw is ruggedly built for heavy duty operations. Universal motor for us on 115 with AC or OC current. No load spindle speed of 4600 r.p.m. Length, 14's inches. Width, 9's wohes, Height, 11 inches. The Black & Decker Ally. Co., dds Formgrunna Are., Towston 4, Md.

### POWER DRILL

A8105024

Clean "Hend-Drill" is especially adaptable to working in close quarters and for all types of messary wark. It has add outsites at the same time. Can be operated with one hand, leaving the other lives to product the operator when working an ladders, etc. Weight, If pounds. Operates at speed al 1800-2000 R.P.M., and has a 1<sub>2</sub> to 1<sub>2</sub> such drill capacity. Length, without



retainer, 13 inches. Cleca Div., Read Roller Bit Co., P. O. Box 2119, Houston, Texas

WATER STABILIZER, FEEDER A8103002 New Clearstream water feeder, to be used in conjunction with Clearstream stabilizer, preweak correlation and accumulation of scale and iron deposits in ony water supply system. Proper usount of water can be directed



through leader with adjustable forsed lead. Feeders built with troop to prevent or loading. Engineered to fit every installation. Supplied in % to 1% with pipe sizes. Reynolds Shafer Cei, Dept. T-26, 17100 Cloverdate Ave., Detroot 4. Math. (Continued on page 126)

### NOW! Save 2 whole steps on Dry-Wall\_jobs

Saves Time! Saves Work! Saves Money!



with

# 217

INTERIOR

FINISH

### 1. NO MORE SANDING!

With amozing new DRAMEX you don't have to send comented joints before applying the final service costs DRAMEX hides unaven spots and blemishes..., gives NEW, becutfully solared walls in one easy cost.

### 2. NO SECOND COAT

Just one cost of DRAMEX does the complete decorating job and gives you beautiful walls that leak like levely plaster. DRAMEX is available in 8 attractive decorator colors and while.

### **DRAMEX** Resurfaces Cracked Plaster Walls, Too!

Fills cracks, mends small breaks, gives "living room" wells to any room, all in one coat. Comes in 8 popular shades and white. Many decorative finishes possible. Use DRAMEX on your next house. On sale most everywhere BONDEX is sold.



For Bost Results in "Dry-Wall" USE REARDON'S JOINT CEMENT and REARDON'S JOINT TAPE Reardan's Joint Coment mixes and spreads easily, won't burn through or discolor fields contaffings. Reardan's Joint Tape guides smoothly, sols firm, wan't wrinkle ander the kells. For smooth, firm joints in plasterboard ar wallboard aus balld

IN 25-LS. BAOS AND 5-LS. PACKAGES plus combination package containing a 250-ft roll of perforeted paper tope and enough joint cemant to run and bed this tope. Order now,

THE REARDON COMPANY St. Louis 6, Chicago 9, Los Angeles 21, Bayonne N. J., Montreal 1 s'



SISALKRAFT PRODUCTS



A — Vapar-Sealed from the Inside: SISALATION provides BOTH insulation and vaparbarier, , repek the greatest personage of radiant heat, , helps prevent passage of harmful maintene-waper through sidewalls.

8 — Weather-Sealed from the Outside: Rupped, waterproof SISALRAFT over exterior sheathing prevents passage of wind-driven rain or maistore and dust into walls.

For best insulation results, dry walls are essential. SISALATION and SISAL-KRAFT, together, provide the advantages of insulation, vapor-barrier and weather-barrier . . . assuring ideally dry insulated walls. This high quality construction is very low in cost . . . and dependable, for the life of the home. Keeps homes warmer in winter, cooler in summer, protected all year round from damaging weather and moisture-vapor. Write for full details and samples.



FOR QUALITY CONSTRUCTION AT LOW COST



134

### **NEW PRODUCTS**

(Continued from page 125)

#### WTILITY TOOL

Minisow utility tool can emeathly cut all types of soft metal, plastic and wood. Blade is 3 inches in diameter and mode of high speed

A6105030



steel with a suffing depth of one-inch. Titting table allows cutting at any angle up to 45 degrees. Taujoped with a softery protecting guard rail, and mitre attachment which also allows suffing yet of 5 degrees. Has additional 4 inch landing disc and a litting table for sonding. Clapton Datributers, Inc., Dept. AB, 12548 Yentura Bird, Neith Hallywood, Calif.

AUTOMATIC DISPOSE AB105016 Fost dehydration and ignition is leatured in the new Cationater automatic disposed on which has a sturdy, self-leveling, four-point suppotion bare. Built-in automatic draft and tack temperature control assures efficient disposed of all types of garbage and burnable trash. Gas



models have "Hi-Lo" burner principle which gives choice of moderate calcination for normal loads of, with a twirt of the dial, a higher rate of calcination when needed. Calcinator Division, Dept. AB, Valley Weiding and Bauler Co., 1601 Wate S & Boy Cary, Mich.



rutting blade breakage. For dry cutting, inexsensive abraive bindler are provided. All working parts are shealded by sheat steal wealded into a single unit. Use of unit is a one-man job-Marine Frequencing Carp., Dept. AB, 2000 Militury Rd., Gefala, N. Y.

(Continued on page 128)



### Turnout High at Cleveland, Detroit 'Good American Homes'

**M**ORE, than 65,000 persons inspected 15 demonstration houses as the Cleveland "Good American Home" program opened Sunday, July 9, according to Jerry Madigan, executive secretary of the Home Builders Association of Greater Cleveland, local sponsor of the event along with the Cleveland Lumber Institute and the Cuyaboga Savings and Loan League.

Sponsored nationally by the National Retail Lumber Dealers Association and the United States Savings and Loan League, the program is designed to show prospects, by actual budget figures, how they can afford to purchase homes on their income. Cleveland homes are in the 88,400 to \$12,000 range and are intended to demonstrate that they





\$8.400 "Good American Home" withibted by Marvin Roll. Cleveland Builder-Bealtor. More than 100 were sold in one week. Hell ran fullpage ads in two big dailies, one opening day, ose on prior day. Hail of ad space credited suppliers

can be easily bought by families with \$3,000 to \$4,800 (take home) incomes. Developer and co-ordinator of the plan is Ted Baldwin of Ted Baldwin, Inc., New York public relations firm.

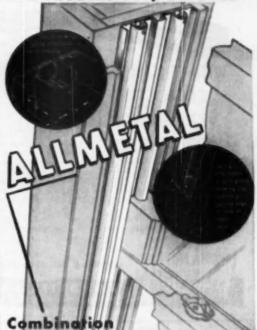
Just prior to the opening, approximately 50 pages of advertising and editorial material were devoted to the project in special sections of three Cleveland dailies. Advance publicity covered a period of about three months. This was supplemented with radio and television spots, movie trailers, window displays, a budget worked out by Western Reserve University and a "Typical American Family Contest."

### Phase "B" in Detroit

Detroit's second phase of the program was opened Sept. 1. The first part ran during January and February when 200.000 persons visited eight homes. A larger number of inspection houses are now available and higher attendance is expected, according to the sponsor, the Builders Association of Metropolitan Detroit.

As in phase "A," both the United Cerebral Palsy Association and its local affiliate, the Cerebral Palsy Society of Michigan, Inc., were invited to work with participating builders.

James Rossin of the Builders Association is chairman of the program and John D. Harrison co-chairman. This is the way to balance windows . . . and weatherstrip them too!



### SASH BALANCE AND WEATHERSTRIP UNIT

Do two jobs at ance an any double hung window. Here is an installation on an economy frame giving an all metal sash run. Or simply "cap" old or new wood parting boads. Allmetal Sash Balance give stable sash – provides fingeritip control – cuts labor and material costs and provides better windows by weatherstripping as well as balancing. Send for complete information new.



OCTOBER, 1950



17

PAPER BACKED MESH

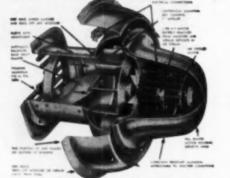


On your next roof, plan to build insulation right in with the roof itself. Short-span roof decks of Zonolite vermiculite concrete combine insulation and structural strength in one material, one application, no other insulation needed. Zonolite mixed with Portland comsent and water in place of sand or gravel weighs only <sup>34</sup>, as much as ordinary concrete, frequently permitting great economies in structural steel. Saves time and extra materials on any job.

Consult us now, or send for details on the use of Zonolite concrete, or send for catalog, "Zonolite Vermiculite Insulation and Lightweight Aggregates."







Decrease it is FIBL-LAPE, procee lades air is NOT drawn over mater: because antike grill may be meented abave tasking renner over an inside wall, because antike grill may be meented abave too making rennertion between intake gr and scheart fan, because it is QUIFE, operating mechanism is meanted QUISIDE the wall, because it is QUIFE, operating mechanism is meanted QUISIDE the wall, because it is benefitspreat back dealt demper protects against heat less, operating because it is beautherpreat back dealt demper protects against heat less, operating Or Record. Silles and

mechanism is bound in concerns free pluminum

the Kötchen-Aire is different Electrically operated, easily installed, the Kitchen-Aire adds plus-takine which makes new homes michile. It is the last word in Kitchen ventilation, a new yout hysters will like. Underworkers Approved, Advertised in Better Homes and Cardens. STEWART MANUFACTURING CO.

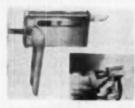
Indianapolis, Indiana

3204 E. Washington Street,

**NEW PRODUCTS** 

(Continued from page 12h)

NACK SAW ATTACHMENT A8105019 8-7 hock sow physioment fits any 12 ch elect shill at shill press. With handle lolded up to protect sow block, it occupies a spice of Tell/jed inches. Weight, 11 sunces. Ratis of drill speed to saw speed is 2-10-1. Since there



m, it is easy to cut a straight line with the 8-7 hack sow. Cuts through any wood, metal or plastic stock up to 3/,-incli thickness. Civity exposed moving part is the kdck sow blade. No gears or bearings. Bertram Engineering & Supply Co., Dept. AB, 3121 Main St., Konses City, Ma.

#### A8105022 JOINT RAKING TOOL A handy tool intended primarily for raking out

ald marter laints when turknainting uses an ordinary common noil clamped between rollers with a thumb screw. It is set to the proper depth and the tool is rolled along over the joint,



the nail doing the raking out. Tool with a some what different injart could probably be adopted to use in roking out fresh morter joints. Gold blatt Tool Co. Dept. AB. 1912 Walnut St. Kansas City 8, Ma.

#### WOOD FIEL DOOR A8105034

he Fox Wood Fire Door, with a bris-hour fire risting label from Underwriters. Laboratories, Inc., permits wichitech to take solvariage of decorative effects of wood and offers fire safety in the same time. Protecol Impregnation process



used in all Fax wood fire doors, no well as in Fox mode Gate City owning window, interior paneling, custom-built millwork, and other Fox Bres, products. Fox Brothers Monufacturing Co., Dept. A8, 2731 Sidney St., St. Louis, Me. (Continued on page 130)

# "Westinghouse Appliances Throughout? I LIKE THAT!"

### The BUY line is Westinghouse

When house hunters find Westinghouse Appliances throughout the houses you have for sale, they know you are giving them the best in everything.

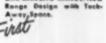
You benefit, too! Your houses sell faster. And, with only one purchase source, one salesman to interview, one order to write, you save hours of time and bookkeeping.

Your Westinghouse Distributor handles a complete line of Appliances in models and sizes for the small, medium or large dwelling. Contact him, or us, during the planning stage. You'll find a co-operation that is most helpful.

WESTINGHOUSE ELECTRIC CORPORATION Appliance Division Mansfield, Ohio

### YOU CAN BE SURE ... IF IT'S Westinghouse

10



with RANCHO RANGE New

Westinghouse

is FIRST with New Sales Features

> with a DISHWASHER with Roll-Out WashWell.

Irst

First

th New PROST-FREE\*

with Automatic Washer with Weigh-To-Save Door.

inst

with 115-Volt CLOTHES DEVER.





here's

SELL

"You bell I'm putting Master No-Draft Sash Balances like this in every window. They give the windows amouth metal tracks to run os, and their counter-balancing springs make windows easy to raise and lower. Think what a celling point this gives me, Joce windows that always user's right... windows with noropes to break, no palleys to rust. But that isn't all! These Master No-Draft Sash Balances usufferentia the windows, too. That means they keep out dust, dirt, wind and water... and cold, besides. What's more, they cost *less* to install, because they don't need palleys, cords, weights or box-frames. And MAN ..., you ought to see how easy they are to put in!"

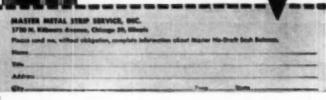
MASTER NO-DRAFT SASH BALANCES ARE PRE-CISION-MADE of the finest, highly-tempered son-corrosive metal. They can't rust. Springs are correctly-tensioned to give perfect balance of the upper and lower mash ... and cosy, fingertip operation. These sash balances are made in a factory that's recognized by the industry as outstanding for its efficiency and the craftsmanship of its workers.

SMOOTH OPERATION IS ASSURED by Master No-Draft Sash Balances, because they automatically adjust for shrinkage and expansion in the wood. Runways are completely metalcovered and require no painting. (Of course, cross-members should be installed). Double contact prevents rattle when windows are open.

NOTE

USED BY THE U.S. GOVERN-MENT AND PROMINENT BUILDERS all over the country, Master No-Draft Saah Balances are tested to mechanical perfection. They make windows neat and weathertight —and there's nothing to cause trouble, You can forget maintenance!

See Our Catalog in Secol o Va



### **NEW PRODUCTS**

(Continued from page 128)

NORIZONTAL FLOW CHECKS AB105023 Texts herizontal flow checks prevent hat believe water from flowing to heating system when circulator is not running, thereby permitting believe to be used for domestic hor water pummer and winter. Features include bronze spring



cushian, branza warking parts, and visible three position adjustment. Sent is easily cleaned by maxing adjusting lever up and down wig? ciculater running. Sizes available from Linch to Jinch. Tace Heaters, Inc., Dept. AB, 127 South SL, Providence J. R. L.

PLASTIC WALL TILE AB105026 Naw Hoko line of Coronet plostic wall tile has precision matched edges where hitse built that allow each tile to directly contact the neat without the soul seal of meatic, Broad Bevelad area at each side of a joint is easily wised



clean of mastic by the applicator. Walls of Coronet are free of gravited joints. Fillowed appearance of tile gives illusion of great thickness. Line includes insteam colors. Hachmeister, Inc., Dept. AB, 2332 Forbes St., Pittsburgh, Pa.

A8103034

#### BUILT-IN GRIDDLE

Thermodor Biltin griddle, like other cooking units offered by this firm, can be built in to suit the design demands of architect, builder or home owner. Lorge size fine groined eluminum grid provides quick and adequinte service. Flush handles facilitate removal for cleaning, and receised greese cup is easy to remove and



clean. Thermader Electrical Manufacturing Co., Dept. AB, 5119 District Bivd., Los Angeles 22, Calif.

#### ASPHALT TILE AB105007

De Late Special Kentile line of greatesproof mphait tile features four new tight colors: Genog green, light great with white and dark green marbleizing; Napoleon gray, gray with block and white marbleizing; litrion, cream with yellow and red marbleizing, and Rouge Acajour, bright red with white marbleizing Tile can be easily cleaned with mild soap and water. David E. Kennedy, Inc., 58 Second Are., Dept. AB, Boosiyn IS, N. Y.

(Continued on page 132)

# THIS WIRE TAKES

Wherever chemicals abound, as in chemical plants, dairies, breweries, seaside areas, mines, well holes, the new Type AZ Cable insulated and sheathed with VINYLITE Brand Plastics is winning top-of-the-class honors!

This non-metallic sheathed cable, reinforced with glass fiber, not only resists alkalies and most strong acids, but has a phenomenal ability to withstand moisture, fungus and aging. VINYLITE Plastic has remained unharmed after seven years' immersion in water—and twelve years' burial in the ground.

In addition, it provides utmost resistance to flame, sunlight, extreme heat, cold, and abrasion.

Non-metallic sheathed cables using VINYLITE Plastic materials are smooth, small in diameter, clean to handle, easy to install, mar- and impact-resistant, and highly flexible. They slip easily through narrow spaces and around sharp corners without damage.

Combining low cost with long life and dependability, these highly chemical resistant cables represent a big advance in general-purpose electric wiring. It will pay you to investigate further. For full information, write Dept. IK-64.

Data courtry The Plastic Wire & Cable Gorp. Jewett City, Connecticut

BAKELITE DIVISION, Union Carbide and Carbon Corporation, 30 East 42nd Street, New York 17, N. Y.

OCTOBER, 1950



When you build with Ualco Lifetime Aluminum Casement Windows .. Basement Windows .. Hopper Windows .. . or Twinsul Windows .. you're building with the finest-the windows that give your clients full ealue.

Those discriminating prospects of yours want the full value offered them by Ualco too! They realize that Ualco Lifetime Aluminum Windows, though they cost a listle more at first, cast a lot less within a few gener.

There's no maintenance or upkeep cost on Ualco. Your sales will catapait... your profits will multiply. Sell the Ualco Lifetime modular stard aluminum screen and storm sash. It will be worth a few minutes of your time to get complete details ... Now? See our Catalog in Sweet's Files.



NEW PRODUCTS (Continued from page 130)

CHIMNEY BAIN CAP A0105021 A new rain cop and shield for the prebuilt, all-matel Thulman chimney, is ottached to the ventilating chimney top, and is sold to proved



water from entering the Bue even during hard downpoors. Tappide loovers along each edge of metal fitting allow unoks to ecope from vitroos enomel-costed, steel inner flue. Air runners can circulate freely between the two durinium ducts that jucket the flue. The chimrey is self-cooling, non-condensing. The Masatic Ca. 300-A for 52, Maximpton, Ind.

#### **Cutaway Demonstration**

(Continued from page 93)

spotlights enable the visitors to see these features clearly.

Where there is any possibility of anyone falling, openings are protected by railings. The foregoing, of course, are merely the high points of the lecture. The salesmen elaborate on all of them according to the expressed interest of the autience, and with special reference to the competition offered by other builders. A folder with a resume of all the features discussed is given to every visitor. It points out minimum standards, states that over 20 individual types of skilled craftsmen are required to construct a single home. and concludes with the statement that the home of 1950 is just as superior in every way to the home of 1920 as the automobile of today is compared with its prototype of 30 years ago. Unfortunately, says the folder, most of the workmanship in a house is comcealed. The purpose of the X-Ray house is to acquaint the public with quality construction, "and serve as a guide in judging our homes or any others."

Posters at strategic points indicate the way to the X-Ray house in Foster Park, and invite everyone to inspect it. Regular new-paper advertising brings throngs on week ends, and the X-Ray house immediately began to demonstrate its usefulness as a sales tool. Corkhill has stated that the house, combined with several fully furnished houses adjacent to it, give him the best selling aminimition he has ever had.



### SEAL-ALL CLIPS



A simple sturdy clip designed to interlock shingle rections and prevent raising of asphalt shingle tals. The perfect clip for hexagonals, 3 in 1 strips and individuals laidup d

Dutch Lap method.

- Made of solid copper wire pliable yet strong enough to anchor single sections.
- · Cannot rust out.
- Hammer is only tool necessary.
- · Easy to handle.

BOX 3025

- Beauty of roof unmarred.
- Perfect on repair jobs to correct leaky, unsightly roofs
- · Millions in use since 1935.

BUILDERS AND DEALERS! For complete information and free samples, erite today

SEAL-ALL CLIP COMPANY

FLINT 1, MICH.

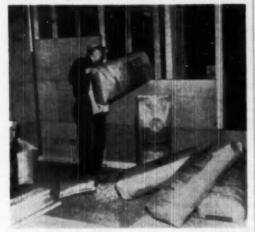
### Carpenter-Contractor Solves & Storage Problem

When E. H. Smith, Gurnee, Ill., fruit grower, lost most of his 1949 fruit crop because he lacked adequate and effective storage facilities, he decided to do something about it.

The high cost of creeting a new storage structure on his 110-acre Lone Pine Orchards had him stumped, however, until he called on Walter E. Schrade, a carpenter-contractor in nearby Mundelein. Schrade suggested that a cattle baru on the orchard property be converted into the needed cooler. Used merely as a part-time sorting house, the 32x56 foot harn, although structurally sound, was not being utilized to its full value.

This was not the first time that Schrade had helped fruit growers convert apparently useless farm buildings into profitable cold storage space. He immediately went to work on the Smith project.

First, the hay loft floor was braced to provide additional



OLD cattle barn is converted into modern fruit cooler by Contractor Walter E. Schrade. Vermiculite insulation is poured between sheathing and exterior walls to insulate the new structure

loadbearing support. Then a 30-pound tarred felt was applied directly on the old exterior vertical siding, with the edges lapped and scaled with bot pitch to provide a vapor scal, essential in cold storage installations. Insulated siding with mastic-scaled joints was laid over the felt to modernize the exterior.

With the exterior completed, Schrade went inside to apply another 30-pound felt vapor barrier to the walls. A six-inch air space was formed by milling two-by-eight-foot insulated fiber board sheathing to two-by-four-foot furring strips, laid flat and attached to the old horizontal beams in the sidewalls.

Into the six-inch wall void thus created. Schrade poured from bags loose fill granular Zonolite insulation. This filled the void with six inches of effective insulation essential to maintain the low temperatures required for cold storage.

The floor of the loft was insulated with eight inches of verniculite, pouried right from the bags and leveled off to the proper thickness. Sheathing was installed in the loft certing and eight inches of verniculite poured into place.

Partitions were erected in the loft to form compartments with a storage capacity of 5,000 bushels each. Compressors serve to maintain low temperatures in these compartments where the actual storing is done. Thermostatic, as well as manual controls, operate the compressors and fams, while exhaust gases are discharged through roof vents.

### When Royal Oak Flooring goes to college ...



## ... it "stands the gaff" in dining room or dormitory.

### **Reasons:**

Tongue and groove are designed to fit without forcing.

Thorough seasoning prevents cupping, buckling or opening up.

This seasoning protects oak's natural strength and texture, promoting adequate absorption of wear-resisting finishes.

CROSSETT LUMBER CO. ARKANSA



You can depend on these essentials of fine floors when you install Royal Oak Plooring. Look for the trade-mark at your local dealer's or warehouse. Write far specifications.

OCTOBER, 1950



\*Important price reduction has just been made on Madel 2501.

MAIL THE COUPON TODAY

	B. Los Angeles 37, Colif.
	nd me the complete story on the Ceiling Vantilater.
Numa	

134

#### New Material ....

(Continued from page 99)

of erection, low cost, fire resistance and high insulating value.

President of the American Bildrok Company is Thomas H. Coulter, formerly vice president of Universal Zonolite Insulation Company, who for the past five years has been associated with Booz, Allen & Hamilton, management consultants, as a partner. William Wood Prince, president of Union Stock Yards & Transit Company, is chairman of the Board, William Wadsworth Wood, publisher of Small Homes Guide magazine, is a director and will act as consultant for the company on new products that will further the company's objective of producing better homes for more people within their ability to pay.

In stating the objectives of the American Bildrok Company, Mr. Coulter outlined the company's plan to use locally produced raw materials in a decentralized manufacturing program that will greatly reduce shipping and handling costs. He stated that the cost of distributing, shipping and handling building materials currently amounted to more than double the actual cost of materials, due to the long distances they had to be shipped, and the number of times they were handled before reaching the construction site. Through a system of licensee manufacturers operating plants in every major trading area in the United States the American Bildrok Company plans to manufacture its products so close to the point of consumption that shipping and bandling costs will be reduced.

Through a new process, the company is able to combine two low-cost materials, namely, insulating aggregate and portland cement, into a wall panel that can replace from four to six separate materials ordinarily used. Inasmuch as insulating aggregates and portland cement are produced locally in almost every state, it is expected that great savings in material cost will result. The job crection time should also be greatly reduced because the panels are made in large sections measuring 8 feet long, 16 inches wide and about 4 inches thick, and light enough for one man to handle. Two men can erect the complete walls for an average size five-room house in two days. Mr. Coulter stated that the use of insulating aggregates was expanding at a rapid rate and that a great new industry was developing as a result.

The company is building a plant to

(Continued on page 136)





Ford F-1 Pickup shown available with 95-h.p. Six or 100-h.p. V-8. Over 175 other models available, up to 145-h.p. Big John

## "The time my Ford Truck saves me means money in my pocket!"-says ROBERT P. UETZ

"THE FINE PERFORMANCE and efficiency of my Ford Pickup in construction work has saved me many dollars," says Robert P. Uetz.

"Previously, I drove a car from job to job. Now, because of the fine performance of my Ford Truck, I leave the car home. One of the many reasons why I'm pleased with my Ford is that I don't waste time with it being repaired. Any time I save means money in my pocket."

This is the kind of truck-worthy performance and economy that is switching more truck users to Ford than to any other make. Join the Big Switch to Ford economy. Choose from over 175 models-95-h.p. Pickups to 145-h.p. Big Jobs. Get your choice of V-8 or 6-cylinder power. See your Ford Dealer today.



Using latest registration data on 6,592,000 trucks, Rfs insurance experts prove ford Trucks last langer?

### SAVE WITH FORD ! AMERICA'S NO.1 TRUCK VALUE !

- \*SAVE GAS with Ford Loadomatic lightium and High Turbulence combustion chambers.
- **SAVE OIL** with Ford Flightlight aluminum alloy platons, cam ground for all-saving fit at operating temperatures.
- SAVE WEAR with pressure-lubricated main and crankpin bearings, Dauble Channel frame on F-5 and up, extra heavy-duty axles, big brakes (up to 16 in, by 5 in.).
- SAVE ON REPAIRS with demountable broke drums, broke impection hole, engine-top setting of accessories, plus nationwide service from over 6,400 Ford Dealers.
- \* SAVE TIME with Ford reliability and performance. Only Ford gives you a choice of economy-proved V-8 or 6-cylinder truck engines.

3269 Send me with	m af FOED MOTOR COMPANY anfer Rd., Dearbarn, Mish. our charge or obligation, detail on Ford Trucks for 1950.
	HEAVY BUTY MOBILS
FIGHL WODEFE	EXTER MERAT DOLL MODELS (
Neme	EXTRA MEANY DUTY MODELS ( (Please print plainly)
Name Address	

MAIL THIS COURON TODAY!

## It's the **RIGHT ANGLE** for Tough Spots...Faster Jobs

OU'LL be amazed at the cost-cutting,

Y time-saving and accurate performance

- in both construction, and plant main-

tenance - of this remarkable new Tri-

Speed HOLE-SHOOTER with its 2-speed

Right-Angle-Drive" attachment. See

This tool not only speeds up work in

the tightest corners, but also provides the

right speeds for boring with bits of every size, including expansive bits and hole-

saws. Pays for itself on a couple of jobs.

Also suitable for drilling in steel, and con-

See Your Distributor

mention his name. Immediate delivery,

MILWAUKEE ELECTRIC TOOL CORP.

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If he cannot supply you, write us and

crete with carbide-tip drills.

You'll buy if You'll Try

complete kit below.

CUTTING COSTS



Milwaukee TRI-SPEED Kit for Contractors . . .

\$412 15" HOLE SHOOTER. Hell and raller bearing equipped ." Jarob's seared Chuck ... 450 R.P.M.

2 "Iwa Sneed "Right Angle Drive" attachment law side 300 R.P.M. high side 675 R.P.M.

3 3 special bits for bar ing in wood-1s". I and 2%s". 136"

Special wrench for att "I into and adjusting "Right. Angle Drive" and Chuck.

134



Adjustable "Long Arm \$24.50 EXTRA

Milwaukee QUALITY TOOLS

### **Heat Waste-// Quiz** for Building Owners

Some building owners are losing money through heat losses from insulation faults in their heating systems which, if eliminated, can bring substantial returns on comparatively small investments. The Magnesia Insulation Manufacturers Association offers the following quiz to check on the efficiency of insulation methods of heating equipment in buildings,

1. Are all major pieces of equipment and piping insulated?

2. Are flanges, fittings and valves insulated ?

3. Are condensate or hot water return lines insulated?

4. Has damaged insulation been repaired or replaced?

5. If insulation has shrunk excessively, exposing bare pipe at insulation joints, has it been repaired or replaced?

6. If insulation has deteriorated so as to impair its insulating value, has it been replaced?

7. Are insulation thicknesses economical based on today's fuel costs, insulation costs, operating temperatures, hours of operation, conductivity of insulation and rate of deterioration of insulation?

8. Have special protective tinishes been applied at points where mechanical abuse, excessive moisture or other hazard to insulation is likely?

9. Have repairs been made to torn, broken or otherwise damaged finishes?

10. Have loosened tire sires or bands been tightened and corroded tie wires or bands replaced?

Each "yes" answer rates 10 points. "No" answers are zero. A score of 90-100 indicates a well insulated system; 80.90-minor improvements are required; 70-80-major insulation changes needed; below 70-need for thorough survey by engineer.

### New Material . . .

(Continued from page 134) mass produce its new materials in the Central Manufacturing district in Chicago. This model plant will be duplicated in principal cities and culminates a research and development program carried on for the past five years. During this time, several hundred homes have been crected in various cities to test the material under a wide variety of climates from Florida to Canada. The material and construction is FHA approved.

The new A.B.C. materials will also have wide application in commercial structures and industrial plants as fireprosting and soundproofing plasters, acoustical tile, and high-temperature insulating materials such as cements, pipe covering and bricks.

Add up the Advantages of *BILDRITE*<sup>\*</sup> over Wood Sheathing

### TWICE THE INSULATING VALUE OF WOOD

In fact, more than twice the insulating value. By actual tests in a laboratory "cold room," BILD-RITE Sheathing proved to have 122% more insulating value than ordinary wood sheathing. That saves on fuel bills.

### 4 FT. WIDTHS OFFER TWICE THE BRACING STRENGTH OF WOOD

Here again, laboratory experiments with a MILLION pound testing machine proved that BILDRITE had more than twice the bracing strength of wood sheathing horizontally applied. Wood sheathed walls showed a  $\frac{1}{2}$ <sup>or</sup> distortion at 1,021 lbs., but it took 2,179 lbs. to cause the same deflection in walls sheathed with 4 ft. widths of BILDRITE.



### VAPOR PERMEABILITY HELPS CONTROL MOISTURE CONDENSATION AND FROST IN WALLS

Better Wall Construction at Lower Cost

In a laboratory "ice box" big enough to hold a house, tests proved condensation in walls can be controlled by sealing the warm side and venting the cold side. This is the principle of the INSULITE "Wall of Protection"—recommended and used for ten years. Sealed Lok-Joint Lath seals the warm side. Vapor-permeable Bildrite on the cold side properly "breathes" vapor towards the outside.

### WATERPROOFED ... EVERY FIBER PROTECTED

INSULITE is the original wood fiber structural insulating board—first made 36 years ago. It is waterproofed throughout—not merely a surface coating. Every fiber inside and outside is thoroughly—safely—adequately protected.

#### LOWER APPLIED COSTS

To get the real story on sheathing costs, you have to figure the total applied costs. BILDRITE takes only half the time to apply (compared with wood), eliminates waste material and building paper, reduces labor insurance costs. When you add it all up and compare, your best bay is BILDRITE.

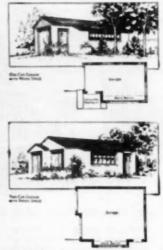
See Scent's His, for Builders-20/5



### New to Build Garages

### (Continued from page 116)

supported; footings should be at least half as deep as they are wide. If, for example, standard 8 by 8 by 16-inch concrete block are used for the garage supporting walls, the footings (which must, of course, he below the frost line and on firm soil) should measure eight inches deep and 16 inches wide. Concrete for these footings should be machine-mixed in the proportions of one sack of portland cement to 2½ cubic feet of ordisary damp sand an four cubic feet of course aggregat Not more than 5½ gallons of wat-



GARAGE work, storage spaces are good sales points, with basementiess homes

should be used per sack of cement. As much attention should be given masonry walls for a garage as would be given such walls in a residence, especially if economy and durability are to be attained; that is, these walls should be laid up plumb with straight, uniform courses and aligned joints. Construction of walls is facilitated by the use of special masonry units such as corner block, jamb block and precast lintels and sills.

A recommended mortar mixture should be made in the proportion of one sack of masonry cement and between two and three cubic feet of damp, loose mortar sand. Although other courses in the garage wall have face shell bedding only, the initial course on the footing should be laid in a full bed of mortar. All mortar joints should be  $\frac{1}{26}$ -inch thick and firmly compacted. The standard modular concrete masonry unit is designed for use with a  $\frac{1}{26}$ -inch-thick mortar

(Continued on page 144)

### Use of Steel Floor Joists Speeds Project Construction

N CONSTRUCTION of 40 new residences in the Newton Grove section of East Memphis, Tenn., Leightman-Petterson Builders are using Junior Beam floor joists in ranch-type homes. The first 22 two-bedroom houses selling for \$9,850 and three-bedroom houses for \$10,900 were sold before completed, within 60 days after the first shovel of dirt was turned in the development.

These homes, styled in combinations of brick and cedar shingles and brick and wood siding, are the first with steel floor frame construction in the medium-priced bracket in Memphis. Large picture windows at the rear in living rooms take advantage of the depth of the 74x180-



THE entire steel framework for the floor of this ranch-type home was assembled in less than half a day. Wood nutling strips on top of Junior Beams will hold two-inch subflooring and hardwood floors.

foot lots on which the homes are situated. Plans were designed by Fares and Sanford, architects; Charles E. Williams, associate.

Supported by concrete wall foundation and by concrete piers, Junior Beam joists for an entire home containing 965 to 1.050 square feet were assembled on the job in less than half a day. Wood nailing strips, 2x2 inches, were clipped to the tops of the beams. Over them a two-inch tongue and groove subfloaring was applied, and hardwoof floors installed. These thick floors have higher insulation values than those of conventional construction. Steel, given a red lead protective coat, is not subject to rapid deterioration. With its use, the possibility of insect infestation is lessened.

The cost differentials of using Junior Beams are nominal, Herman Leightman said. The steel beams can be bolted securely together and assembled in the job quickly, and fewer concrete piers are required for support. The saving from these two sources offset the slight increased cost.

Junior Beams, an exclusive product of Jones and Laughlin Steel Corporation, are the lightest weight hot rolled structural members manufactured. In the first 22 homes completed, a total of more than 26,000 pounds of beams with six-inch and eight-inch web depth were fabricated and erected by the Toma Machine and Supply Company, Memphis.

All of these homes have steel kitchens; some have dishwashers. Central heat is controlled by room thermostats. Financing the development and sales handled by the Guaranty Realty Company, is the Guaranty Mortgage and Trust Company. The houses are FHA and VA approved. EASIER TO INSTALL





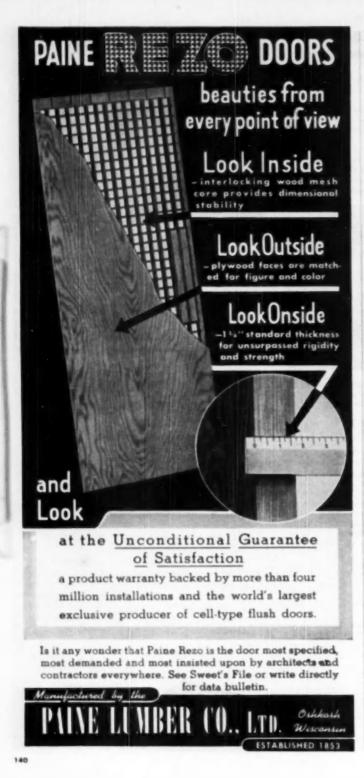
Sponsored by: Holiday Magasian at Quaque, L. S. Architect: Comps Nolam, New York City Contractor: Fred Porty a Seas, Long Island Locks: Io Surgeon

### INTEGRALOCK - the lock of today

Sargent Integralocks are the perfect complement to modern construction—chosen by ever increasing number of builders because of their ease of installation, their beauty and their moderate cost for a lock of such high quality. Sargent and Company, in designing the now famous Integralock, successfully combined all the advantages of the conventional mortise lock together with those of the heavy duty deluxe unit type lock. The result is the newest and most useful lock available for all types of construction.

Attractive modern exterior design with key in the knob action, precision parts permanently sealed in a compact, tamperproof case, all required functions from one size of lock case, permitting precutting of mortises, the Integralock is the answer to the builder's wish for an efficient, modern lock, quick and easy to install.





Letters .

(Continued from page 39)

of her prizewinning design.) Sir: . . . Several people have written to me asking for the plans to my house, and I have referred them to you. The most interesting request came from a group of Latvian displaced persons sponsored by John W. Brahner-Smith who want to build the house in Washington, D. C. . . .

From the mail I have been receiving I suppose I shall never heat the end of this contest, at least I hope not ! Betsy Bell

Sirs: As we are planning on building a tourist court in the near future, we are inquiring for information. Will you kindly send us the following tear wheets . . .

May 1940, pp. 50-51 June 1940, pp. 68-69 August 1940, pp. 68-69 August 1940, pp. 58-59 May 1941, pp. 76-77 July 1941, pp. 48-49 March 1942, pp. 45-47 May 1944, pp. 54-58 June 1946, pp. 106-107 August 1946, pp. 90 May 1948, pp. 108-107 Sept. 1948, pp. 108-109 March 1949, pp. 84-85

Ernest W. Drackett Drackett & Kellett Real Estate New Orleans 12, La

Editor's Note: Yes, American Builder is and has long been a reference book. It is not unusual to receive requests for material that appeared in issues twenty years ago. We are always happy to honor these requests whenever possible, although in many cases our supply of certain issues is depleted.

The Editors.

### Department Store ....

(Continued from page 98)

Buying power of women is recognized in the Grossman paint departments. Household items with a distinct feminine appeal are stocked and displayed invitingly. These inclusic waxes, steel wool, and other household equipment. The paint departments include several varieties of floor coverings. These are supplied with complete instructions for their use and with necessary materials for their installation. Colorful materials of this type have a special appeal to women. says the Grossman management, and this is emphasized in their paint department advertising.

Present manager of the new Grossman store in Malden is Dan Seigal. His brother, Charlie, is general supervisor of all Grossman branches.

IT'S TIME TO TAKE A FRESH LOOK AT DECORATIVE SURFACING ....

Here's the biggest news in decorative surfacing! It's Panelyte ... St. Regis' new, beautiful, high-pressure laminated plastic for all working surfaces. See Panelyte's glowing, true-as-life colors ... striking patterns ... visualine their countless decorative possibilities in the design and creation of beautiful necessities. Then look below the surface, at the technical advantages Panelyte offers. ... Panelyte is hard, donse, strong and tough. It is harder to mar... withstands heavy impacts, resists abrasion as no other plastic surface does. (We've tested ... we know.) Panelyte won't swell or shrink ... is easy to work. Its big sheet size (up to 48" x 120") makes for easier, more economical installation with fewer seams.

Whether you're specifying surfacing materials for interior use ... manufacturing a product that calls for such materials ... using plastic surfacing in any way ... it will pay you to find out all about new, beautiful Panelyte. Just use the coupon below.

## See what **PANELYTE** can do



2. CLEAN AS A WHISTLE - Panelyte cleans easily, instantly just a damp cloth keeps it gleaming. Maintenance? At a minimum?

3. CIGARETTE. PROOF Panelyte offers extra protection against forgetful smokers .... may be specified in any installation

4. VERTICAL SURFACES Versatile Panelyte brings new beauty to walls, cabinet facings, interiors, all "up and down" surfaces Panelyte won't scuff, chip, crack, dent or discolor ... is non-absorbent, won't pick up stains or odors.

5. BIG SHEET SIZE (48" a 130") means easy, economical installation ... fewer "joints" greater beauty.



A few Panelyte distributorships are still available in certain territories

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---- MAIL THIS COUPON TODAY ----

PANELYTE DIVISION, St. Regis Sales Corporation 230 Park Avenue, New York 17, N. Y.

- Pinner send me Panetyte anople, color chast, specifications and full information.
- I am intermeted in a Panelyte Distributorship in \_\_\_\_

Please send complete datails.

NAME

STREET AND NUMBER ......



Readers by the million will

be seeing the Panelyte story in striking, full page, full color ads in such far-reaching magazines as GOOD HOUSEKEEPING and BETTER HOMES & GARDENS. You'll be using a known and accepted product, backed by the St. Regis name.



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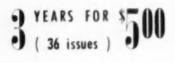
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142

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DOUBLE ROW grease-sealedfor-life BEARINGS Double row bearings on carriage head mean more rigidityand greater ease of operation.

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2 ARM LENGTHS You can cross-cut 1" stock in 16" and 24" widths, and rip a maximum of 36".

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DE WALT, INC., 110 Fountain Avanue, Lancaster, Pa.

Please send me literature and complete specifications on the new DE WALT GR and GW.

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Wherever a corner type shower is specified the Fiat Cader Model 21 is a perfect natural for the job, much lower in cost than any built-up type corner shower. The graceful lines of the Corner Cadet blend smoothly into the bathroom walls to give the effect of a custom built installation. Its beauty is in harmony with the finest bathroom fixtures.

The Fiat Dolphin or Zephyr glass door is available for the corner Cadet and adds materially to the appearance and utility of the shower installation.

The usual Fiat high quality of construction and materials are used throughout. Bonderized galvanized steel walls finisfied in white baked-on synthetic enamel. Special colors available on order. No exposed screws give a smooth sanitary interior. Overall size 36" x 36" x 80".

The corner Cadet is one of our most popular shower models. Use compon for catalog of complete line of Fiat showers.

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144

### USDA Handbook Discusses Hardwood Timber Detects

To make the best use of southern hardwoods, operators must recognize indications of internal defects which appear on the bark of standing timber and on the ends of cut logs, according to United States Department of Agriculture Handbook Number Four, entitles, "Log Defects in Southern Hardwoods," written by C. R. Lockard, forest products technologist, John A. Putman and R. D. Carpenter, foresters.

Written to help individuals recognize defects in hardwood trees, the booklet gives a detailed description of tree abnormalities with each defect clearly illustrated.

The authors discuss the three general uses of hardwood timber, high grade logs used for cuttings which have one side free from defact, secoud grade logs for structural or weight-hearing purposes, and low grade logs for secondary farm buildings, ties and crating.

Although low grade logs cannot be substituted for higher grades, the authors point out that high grade logs are often used when lower grade logs would serve as well. This results in a loss of good wood and in less profit to the operator. The important thing in studying defects in timber, the authors conclude, is to realize the use for logs with specific defects.

A copy of the booklet may be obtained for 25 cents from the Superintendent of Documents, Washington, D.C.

### **How to Build Garages**

(Continued from page 138) joint since the unit is slightly undersized so that the thickness of the joint completes the module.

Two coats of portland cement base paint scrubbed into the exterior surface of the masoury wall with a stiff brush will add weather-resistant qualities to the wall, but the first coat of paint should be moist-curred for 48 hours before applying the second coat which is similarly curred.

Firmly compacted subsoil to receive the concrete slab garage floor is essential to avoid unequal settlements. One course concrete floors four inches thick are adequate and recommended for most garages. The proportions for this machine-mixed concrete for the floors are; one cubic foot portland cement (one sack), 214 cubic feet of sand, three cubic feet of coarse aggregate and not more than five gallons of water per sack of cement. Floors should be sloped about two inches per 22 lineal feet for drainage, generally to the front entrance or to a floor drain.





Some Observations on Liability for Negligence

By John S. Mason

**General Counsel. Drave Corporation** 

THE LAW is nothing but common Tsense and good grammar. The latter involves principles of good and complete language, written or spoken. Oral arrangements should be definite and complete. The writer must say exactly what he means—no more and no less in legislation, deeds, mortgage, leases, wilh, trusts, insurance policies, contracts, specifications, proposals, purchase orders and everything else. The fine print is an essential part of modern business transactions.

Today I emphasize common sensethe common sense aspects of negligence. The definition of negligence is doubtful. It means the opposite or lack of due diligence or care. The lawyer regards it as a violation of a duty to use care. Generally it means fault. As applied to our activities it might mean faulty or improper design; selection of inadequate materials; poor or inimpufficient inspection or testing; faulty planning of the sequence of work and operations, or shoddy construction itself. As a practical matter it can mean almost anything.

Negligence and care include acts of omission as well as commission and run through all the activities of life. Let me just single out a few typical situations and make some observations.

The law deals with relationships and the duties and responsibilities which follow those relationships. The their who breaks unto a grocery store and falls into an open trap door has no claim against the proprietor; it is a different picture if a customer has a similar fall.

We have the problem of trespassers on construction jobs. Our only obligation to adult trespassers is to refrain from intentionally causing them injury. In other words, they take the premises as they find them. It is not so with trespassing young children. Everyone knows that children are attracted to construction sites, aban-doned structures and idle machinery. If children are in the locality the law takes the position the owner or contractor knows or should know they will come there to play and it can be reasonably expected they may be injured. In such case the law imposes an affirmative obligation to take all reasonable precautions to prevent access or otherwise eliminate the bazard. Just the other day our underwriters settled a claim in hebalf of a young boy who, (Continued on page 148)

BUILDING MATERIAL DEALERS FROM COAST TO COAST ARE FEATURING IT!

# the Thomason flush door (All-Wood Throughout)



It is one of the fastest selling Flush Doors on the market today. That's why practically the entire production facilities of one of the two plants of the THOMASON PLYWOOD CORPORATION in Fayetteville, N. C., are now devoted to the manufacture of the THOMASON Flush Door.

If you are not stocking this fast seller, it will be definitely to your advantage to investigate the sales possibilities in your territory.

# note



The interior or core of the THOMASON Flush Door is constructed from plywood strips, placed in a vertical position, spaced approximately 1" apart; the cross members (of poplar) and rails are securely butt-jointed to permit normal expansion and contraction; lack blocks on both sides measuring 3" wide and 23" long, plus the  $1\frac{1}{2}$ " stile, provide a lock area  $4\frac{1}{2}$ " x 23" on both sides; all face veneers, produced from finest quality foreign and domestic woods, are carefully matched for color of wood, figure of grain and for similarity of color and figure on both sides of the door.

#### AVAILABLE WITH THESE FACE VENEERS

In addition to the Gumwood-faced door that provides a satin-smooth serface for easy staining ar pointing, the THOMASON Flush Door comes faced with vencers of Makagany, Walnut, Oak and Birch.

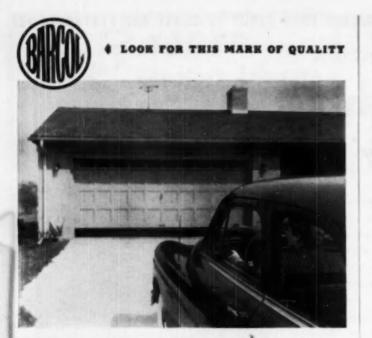


#### THERE IS ALSO A THOMASON FLUSH DOOR FOR EXTERIOR USE

Available either plain or with any one of the three standard patterns of light opening. Or you may have the THOMASON Flush Door with a solid all-wood core, faced with all types of veneers.

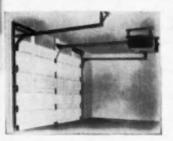
### DON'T DELAY

If you do not know him, write today for the name and address of your distributor.



# Touch a Button ... to Open the Door

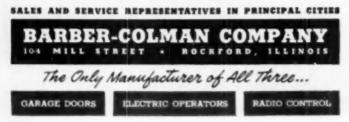
The magic of radio brings you this modern convenience! With BARBER-COLMAN RADIO CONTROL, you can open or close your garage doors by simply touching a button in your car: The car can be moving, or standing still, anywhere (and in any position) within approximately 75 leet of the garage. The equipment operates on



FCC-assigned frequencies, hence can use maximum power in the transmitter and a minimum of tubes in the receiver. Barber-Colman, a pioneer in the radio control field, is a reliable source for practical equipment, with over 20 years of experience in this specialized field. Ask your Barcol representative for a uverking demonstration of the amazing Radio Control.

### ELECTRIC DOOR OPERATORS

Soundly engineered and ruggedly built for dependable and durable performance—Barcol Electric Door Operators are made in a variety of models for swinging, sliding, overhead, and steel rolling doors, and for sliding gates. They can be actuated by any of various switches, by electric eye, or by Radio Control, *Get a demonstration!* 



#### Liability for Negligence

(Continued from page 146)

no one knows how, climbed up and into heavily fenced outside electrical equipment and while not electrocuted was seriously hurned.

A minimum of daty and a minimum of care is required toward the adult trespasser. A maximum is due the business visitor on the premises or the general public off the premises. In hetween are persons who have no husiness thereon but who, for example, have been taking a short cut across the property and have been doing so for some time with the acquiescence of the owner. Such persons probably started out as trespassers but through time and acquiescence have graduated into one of those in-between classes of licensees and to them there is owing some in-between degree of care. For negligence is a question of care or neglect under all the circumstances and background of the particular oc-CIEFFETICE

In especially hazardous situations such as those involving use of explosives or installations of an experimental nature inherently dangerous, the law passes from liability based on negligence to absolute liability. In other words, liability for injury or loss regardless of the maximum of care used and the absence of any fault. In this connection bear in mind the law's point of view is hindsight. The accident often speaks for itself. Less powder should have been used in the charge or the tank which exploded should have had heavier plate.

Negligence usually results only in civil liability for damages, but if the conduct is particularly reckless or equivalent to willful disregard of all consequences, there will be criminal liability. Construction superintendents have been charged with manslaughter

Liability attaches to all negligent action. I have noticed particularly among engineers a belief an engineer is not liable for loss resulting from hisnegligent design of a structure and itconsequent failure-or any other fault resulting in injury. This is completely erroneous. The doctor who performs an operation, the lawyer who searches a title and the engineer who designs a bridge are all liable for losses resulting from mistakes they should not have made. Everyone is liable for injuries naturally resulting from his actionsor inactions when there is a duty to act. If the individual is working for another the employer is also liable. When our truck driver is involved in an accident as a result of his negligence the corporation is liable to the persons injured, but so is the driver.

I often hear the remark the risk involved in the sale and installation of (Continued on page 150)



### **IT'S BALANCED**

### DUSTPROOF

Speedmatir

MODEL 500

New, powerful, busing -- and perfectly balanced to make sanding jobs easy and upsety. Jobs like surfacing large area period. Invelting joints in cabinet work and trim -- talking all most from ask, doors and milliwork -- doing various prefab operations in the mill as in the site -- and finany other heavy dury applications. Makes quick work of burring, chamfering and counting corners. You'll be amand how easily this powerful sender handles -- doing a super-smeeth job is only a frection of the time required by hand methods.

### Super-Features Make the Speedmatic 500 an Outstanding Buy

Grader Handwarddiny through perfectly balanced weight distribution — how enter of gravity firm rest on broad beit, therwood Dan Gellecing System with a low position beg that knows out of way and can be moved to right or left of handle. As Caded Beter with a ellent chain transmission. 25 m is of Westing Ares for uniform, gouge-free, farge area sanding. Finite Freef and Beer Orige that won't chip or geel — will know cool.

> B's the last word in beir sonders for big john. Son the pass-stilling new Speedmetic SSO at your declor's teslay.

> > The BALANCED Line

PORTER-CABLE Machine Co. 3010 N. Salina St. Syracuse 8, N.Y. Manufacturers of SPEEDMATIC and GUILD Electric Tools In Canada write: Strongridge Ltd., St. Catharines, Ont



#### **KEY TO ILLUSTRATION:**

**1-FURNACE** is 80" high, 20" deep, 30" wide. 2-PARTITION wall cut away shows how furnace is set in wall to extend out equally each side (7" for a 6" wall) 3-FURRED OUT wall above furnace both sides provides ample room (20" x 30") for a 4-PATENT FLUE, which comes down from above. (Or brick chimney constructed at side may be used) 5-WARM AIR discharge grilles, 8" x 27", both sides. 6-RADIANT PANEL, 12" x 49", one side. 7-COLD AIR intake grilles, 10" x 27", both sides.

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Perfect for Sroull Hermin Without Beservents---Serves Velashie Fleer Space--Automationity Lights Itali--Burns Low Cost Furners Oil

For full information, write Dupt. A-10 Baltimore, Md. Belmost, Mans. Soise, Idaha Chicego, III. Cohumbus, Go. N Datroit Lakas, Minn. P Des Maines, Iowa P Fayetherille, N. Cor. B

#### **Important Home Selling Features**

Fully automatic operation, electric ignition and controls (manual control also available)...burns low cost furnace oil...occupies minimum space, permits wall to wall carpeting radiant panel one side and large grilles both sides assure excellent heating job...ample capacity—over 60,000 BTU output per hour.



Salt Loke City, Utah Seattle, Wash. St. Louis, Ma. St. Petersburg, Pla.

### Liability for Negligence

(Continued frim page 143) a \$1.000 job is not important—on the theory our maximum liability is the purchase or contrict price. This is without foundation, A catastrophe may result from our furnishing a small defective part just as the same as from our engineering and construction of a complete power plant, and we are liable for the consequent injuries. The price we received is not relevant. If we volunteer to do work for nothing, and do it negligently—we are liable for the consequences. The law says that if you do you must do it right.

Assuming negligence-what is the extent of the liability? The answer is: all the loss or injury which can be reasonably anticipated to follow. If waste fuel oil is discharged into a river in an industrial area and it is reasonably foreseeable it might become ignited, it is no answer that you did not think you would set the river on fire and destroy docks and piers several hundred feet down the river. Similarly the barge which is not properly tied up. get loose, drifts and collides with other craft or moorings below. This could readily have been foreseen. The lawyers call it proximate causation-liability attaches to all the proximate consequences of the negligent action or inaction. Sometimes this may be a chain reaction set off by the negligent act but all the subsequent events normally can be expected to follow from the action and so the law attaches liahility.

I have not mentioned contributory negligence. Contributory negligence bars recovery, the theory of the law being if both parties together negligently caused the loss neither may recover from the other regardless of the respective degrees of fault. An exception is the marine rule of dividing damages. If two automobiles collide. each suffering the same amount of damage, and one was 10% responsible and the other 90%, or both were equally at fault but one incurred 10% and the other 90% of the damage. neither may recover from the other. If the automobiles were towboats the total damages in both cases would be borne on the basis of the relative negligence of each.

One cannot contract himself out of liability for his future negligence. At one time or another you have all signed releases prior to entrance into plants or factories. The releases purport to waive and release all claims for injuries which may be sustained while on the premises. These releases are of no effect legally if the injuries are the result of negligence. The policy of the law is that no one is to be permitted to be negligent, even with the permission (Continued on page 152)

outinance on page 1323







### MODERN, SPACE-SAVING

# STANLEY SLIDING DOOR HARDWARE

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Builders and home owners everywhere are using more and more modern sliding doors. Why? They save precious space! And their smart lines, smooth, quiet operation, and compact design add up to greater comfort and convenience.

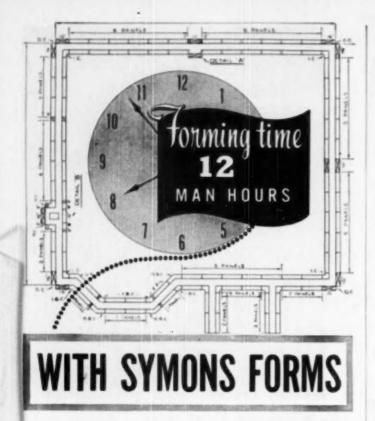
Get the most from this big new market by handling "Stanley" hardware. Modern design includes Vshaped track, simple screw driver adjustment after installation without removing trim. Every detail conforms to famous Stanley standards. Complete plans packed with each set.

#### THE STANLEY WORKS, NEW BRITAIN, CONN.



HARDWARE + TOOLS + ELECTRIC TOOLS + STEEL STRAPPING + STEEL OCTOBER, 1950 There's exactly the right Stanley Hardware for all these installations—and many mare!





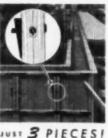
Here you see a typical blues foundation form layout that can be set up by 3 men in 4 hours. There are 1734 invariant effect of forms. Cost of error(front of \$2.00 per man hour is \$24,00 or 1 ½ c per square fact. Stripping can be completed within 2 hours at a cost of \$6.00 or ½ c per square fact.

#### TOTAL COSTS PER SQUARE FOOT OF FORMS

Setting up	1540
Stripping	1/28
Form Cost (per use)	116e
Tie Cost	. Not.

Forms average 75c per square fast. With 50 uses (100 uses is comman) the per-use cost is 11%c. Ties hold 8 square fast of forms. At 6c each the tie cost is %c per square fast.

Symons Parms are available completely made up ready for use or you may purchase the hardware for building your own farms, forms can also be rented with 60-day perthase optim. Poid rentals apply an purchase price.



1. Connecting Ball 2. Farm Tie 3. Wedge farm ties break back into concrete conversing bats and wedges can be used again and again.



#### Liability for Negligence

(Continued from page 150)

in advance of the injured person.

How is negligence determined? If the parties cannot agree the law settles the questions, usually through a jury. Negligence is ordinarily a question of fact under all the evidence. The evidence consists of testimony of witnesses, interested and disinterested, eye-witnesses and expert. accurate and inaccurate, good and had. Much too often the lawyers and witnesses become involved in technicalities, details and fine points. The jury gets only an over-all impression from the passing parade of witnesses. Lawyers will tell you you lose cases you should win and win cases you should lose.

I said negligence is ordinarily a question of fact and therefore determined by the jury. There are exceptions. The courts have determined certain acts are negligent regardless of the circumstances. For example in Pennsylvania we have the "stop, loak and losten rule" at railroad grade crossings and the failure to come to a complete stop is fatal to any recovery regardless of the care the motorist otherwise used and regardless of the negligence of the railroad.

A jury trial is not essential, but under our legal system those injured the plaintifs—are entitled to a jury trial if they so desire. The defendants in most negligence trials are numicipalities, public utilities, industrial corporations or defendants represented by insurance companies. Most plaintiffs in negligence cases believe juries award more damages than judges. I an becoming more and more uncertain this is true.

A word about the jury system. I am not sure there is any better substitute. Several years ago there was a long celebrated jury trial in Chicago involving the issue as to whether a certain work of art was an original or a copy. I heard extended criticism among artists of this method of settlement of the dispute, but the plain fact was the experts could not agree and were divided. The law let a jury determine after they all had an opportunity to testify as to their opinions.

I said at the outset the legal principles governing negligence are rules of common sense. I have mentioned a few examples—from a field which is as broad as living itself. Common sense and judgment are the basic rules of conduct on which the whole law of negligence is built.

> NOVEMBER ISSUE Gypsum Products-Their uses in remodeling and in new construction

### No question about it! In these five homes — and throughout the country — the combination of convection heating and Tuttle & Bailey Convectors meets every homeowner demand for efficient heat distribution...constant, gentle circulation of room air means even temperature from flaar to ceiling, no stratification or drafts... and fast response to thermostatic controls, quick transmission of heat from boiler to rooms is assured. Heating comfort at its best!

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OCTOBER, 1950

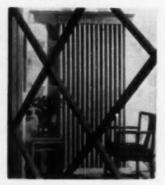
97880



### **New Vertical Fabric Blinds**

Production of a new type of blind, nade of vertical strips of a decorative material, "Celanese Multicord," and called the "Sun Vertical Blind" has recently been started.

A single control adjusts the blinds



ALTERNATE color arrangement of verticui blinda adds note of interest to room

to the desired position. The strips are thin-edged for clear vision when open and provide complete privacy in the

Made in

Seven Models closed position.

Resistant to dirt and dust, the fabric panels are easily removed when hundering is necessary. They are produced in a number of attractive color combinations.

The blinds may also be used as a room partition. When closed, they take the place of a wall and, open, add the appearance of greater length to a room. They are produced in any desired width and in lengths up to 12 feet. In addition to homes, they may be used in hotels, apartments, church-



SUN Vertical Blinds, open and closed

es and commercial buildings.

Manufacturer of the blinds is the Sun Vertical Blind Co., Grand Rapids, Mich.

# Ask for a "BESSLER" when buying a DISAPPEARING STAIRWAY

With a Bessler Disappearing Stairway it is possible to finish off the space above for use as either storage or added sleeping quarters.

Constructed of the finest materials, it is easily and quickly installed in old or new homes. Saves floor space in the room below and is easily operated.

Write for literature THE BESSLER DISAPPEARING STAIRWAY CO. 1900 E. Market St. Akron 5, Ohio

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# SEND FOR IT

What will the coming year hold for you in home-building opportunities? Will the new restrictions on financing get you down? How about shortages of materials? Labor? Home buying prospects who are shopping for bargains?

You may find the answers to these problems in a National Homes dealership. As the nation's largest producer of prefabricated homes, National has unprecedented purchasing, manufacturing and

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THESE PICTURES TELL THE STORY .

financing resources. Think what this can mean to you during the critical months ahead!

Get the facts. Write for new illustrated brochure and details on how you may qualify for a National Homes franchise. It may well be the most important step in your life!

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Let us send you this book of

# HOME BUILDERS SHORT-CUTS for FREE five-day trial

More than 800 "practical job pointers" that save time, expense and labor on building jobs.

Now! Carpontry, building construction and building repair jobs are made easier with the practical methods shown in this big 211-page book. Every one of these methods has been TESTED in actual use; every one saves time, saves work, saves money.

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on stair construc-tion; 37 window suggestions; 54 ide-as for installing doors; 29 tips en closets, shelves and built-in equipment and trim; 27 helps built-in equipment; 24 flooring pointers; 35 aids in installing sanitary equipment; 44 short-cuts in laying out work; etc., etc., etc. More than 700 illustrations whow you exactly "how-to-de-it." All items indexed so that any pericolar idea or short-cut you want can be located in-stantly.

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an irregular surface? Replace broken asbeston shingles? Repair worn door hinges? Lay a wood floor ever a concrete base? Fit door casing to a wall surface out of plumb?

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JOHN E. SLAGEL. President Sowyer-Cleater Lumber Co.

"HE slogan, "Square Deal in Lumber," used by the Sawyer-Cleator Lumber Co., Minneapolis, Minn., describes their dealings with builders and the building public roday, the same as it did in 1906 when the company was formed. The organization has continued to expand through the years by consistently adhering to this policy, and by supplying the type of merchandise in which the customer can have absolute confidence.

The Sawyer-Cleator Company is not considered a large yard, since it covers less than three-fourths of a city



THE unimposing frame building and addition to rear contain the office and sales room which is a beehive of activity at all times

block with sheds, yards, store and office buildings; yet the volume of lumber sold (their principal product) approximately equalled this past year the amount sold by the largest dealer in the trade area. This situation is a posttive testimony that the officers of the company-John F. Slagel as president, Elmer T. Johnson, vice president, and Marshall W. Sawyer (a descendant of the founder and the third generation to serve the company) as secretaryand the staff, have continued to render quality and service to the customers.

Materials handled by the company, in addition to lumber, are hardwood flooring, plywoods, insulation and all types of rooting materials. Millwork is provided through job arrangement when requested. Because of the heavy demand for basic items, the officers have found it unnecessary to take on other allied lines.

Part of the service rendered is the preparation, when requested, of a complete bill of material from plans submitted by the customer. This is done by a number of employees skilled in estimating, the company having the confidence of the builder who knows that the total amount of material delivered will not be in excess of his needs. When material is ordered, the list is turned over to a yard man who loads trucks in a way which leaves material to be

(Continued on page 206)

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Hunter PACKAGE ATTIC FANS

## Mystery House

(Continued from page 95)

rooms, one bath, a large living and dining room in one area, large kitchen, dinette, garage and storage room. The first alternate called for a



A WORKMAN completing assembly of the compact water baller for the radiant heat ing system in Mystery House and others in the 70-house Green Acres project

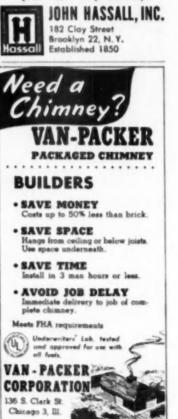
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*****
HEATING PLAN

#### LAYOUT al copper coils imbedded in concrote slab for radiant heating system

partition between the living and dining areas so that the additional room created there could be used as either another bedroom or a den. Because of the trussed roof construction, most of the partitions could be shifted without major changes in the basic (Continued on page 160)



type wallboard use Hassall wallboard drive screws. Specifically designed with spiral threading for better holding power. Supplied with nickelplated finish with either casing or button heads. Advise quantities. Prompt delivery.



You can increase your basement window profits when you sell STEELCRAFT basement and utility windows of steel. There are so many advantages in these superior windows it's easy to increase your turnover and collect a greater profit on each sale!

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#### **Mystery House**

(Continued from page 258) structure. Another alternate plan provided more floor area with area complete bedrooms. All plans included a fireplace in the living room.

The beautifully wooded, rolling terrain with large lots ranging in width from 65 to 125 feet, with minimum depth 150 feet, permitted judicious use of large window areas in both the front and rear elevations of the houses. Various color combinations of trim, shingle siding, and asphalt shingles on the roofs, along with plan reversals and changes in elevations and landscaping create sufficient variety so that any trend toward monotonous appearance in the project is at a minimum, All lawtis are graded, seeded and rolled as part of the purchase price.

#### BRANDED NAME PRODUCTS USED IN GREEN ACRES HOUSES

# BUILDER EQUIPMENT USED ON

Two 15-ton flat hady Character trucks Own 4-particleump Feed truck Own 20-bases faither for the Own 20-bases Deltail and stored arm Own 5-bases Meltiplex pawer saw Two 10-inch Delta trubs saws Five Americk Delta trubs saws Five Americk Delta trubs saws Own Stantis Geer reuter Own Stantis Child have and saws Startury 2-inch air hammer Six Partie-Child pawer hand saws

Interior walls are plastered over gypsum lath, with a white sand finish swirled on the ceilings. Bathroom walls and floors are covered with ceramic tile. Asphalt tile flooring was used throughout the balance of the bause. Copper tubing in the insulated concrete slab carries hot water for the radiant heat. Automatic outdoor as well as indoor heat controls assure maximum conformity of indoor temperatures to comfort levels regard-(Continued on page 162)

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Balanced seven-ply construction to provide controlled reaction in changing weather conditions.

 Hardwood construction throughout—stronger, more durable, free from grain-raising, more easily and economically finished.

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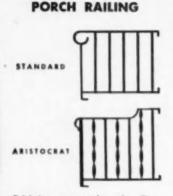
8 Mengel Flush Doors are economical --- no mouldings to paint -no corners to collect dirt. Smooth hardwood surfaces are less absorbent and less costly

to finish - easier to clean and longer-lived, 23% we Write for complete specifications. Use the coupon, Gamma

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1709 FRONT STREET

Mystery House

(Continued from page 160) less of sudden changes in the weather. Heating units are oil-fired. Each coil installation includes piping to the garage driveway so that when the purchaser desires it, he can have coils laid below the driveway to keep snow and ice melted in winter.

Kitchens are large enough to handle a complete set of equipment re-



THES built-in wardrohe with sliding doors and ample drawer space was affered to purchasers of the basic house at additional cost. It is made in firm's own shop

quired in today's modern basementless house. The Mystery House was completely equipped with an all-electric General Electric kitchen which included a range, refrigerator-home freezer combination, electric sink with dishwasher and Disposall, an automatic clothers washer and metal cabinets. This equipment, however, was not included in the basic price. Wood kitchen cabinets, fabricated in the firm's own woodwork shop, are included in the base price.

Power tools are a big factor in holding costs to a minimum in Green Acres. All framing and trim is precut in a woodworking shop. All the roof trusses are cut and fabricated there. In addition to making kitchen cabinets in their own shop, the firm also fabricates built-in wardrobes, flower boxes, shutters, pilasters, and other specialty items. There are 22 running feet of clothes closet space in the basic house, plus a linen closet and vestibule closet. Sliding doors on closets and built-in wardrobes are not included in the basic price. A folding stairway to provide access to attic storage space is another extra offered. Beckenstein reports that the average purchaser receives about all the extras desired in the basic house for \$500 or a total price of \$12,400.

The Beckenstein firm, which developed Green Acres, builds about 70 houses a year.



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RADIANT BASEBOARDS

# **B&G** Hydro-Flo Heating



B& G Hydre-Flo Forced Hot Water Heating with radiant baseboards offers three great selling advantages.

First, amazingly smooth and accurate control of indoor temperature. You don't open windows to regulate the temperature in a home with B & G Hydro-Flo Heating ... the system automatically adjusts the heat supply to meet every change in the weather. No overheating, hence, no fuel wasted.

Second, radiant sunny warmth from heating units which look like conventional wooden baseboards and are just as anobtrasise! Radiant baseboards distribute heat so evenly that from floor to ceiling, the temperature hardly varies. Always uniform, draftless heating!

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Wherever steel or wood must be fastened to concrete, steel or other hard materials there's a spot for DRIVE-IT to save you money. Reports of 75% to 85% savings over old-fashioned methods are common. With Drive-It, a drive-pin plus a power charge does the job in a split-second-and better than the old "dig and drill" method.

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HIRFA To Study Builder Organizations, Modern Family Housing Needs

Advantages of different types of home builder organizations and the needs of families in houses will be studied in two separate research projects under the HHFA Housing Research Program, Administrator Raymond M, Foley of the HHFA has announced.

The Massachusetts Institute of Technology will study the economic advantages of different types of house producing organizations, from the small builder to the factory producer. The University of Illinois will gather data on what families need in bouses as a guide to builders planning housing developments. The studies were developed under the supervision of Dr. Richard U. Ratcliff, Director of the HHFA Division of Housing Research.

"It is recognized that the organization of the builder has much to do with the construction cost," Dr. Ratchiff said "Scine types of organizations have demonstrated their ability to sell houses at lower prices, but not enough is known about the factors that produced the results."

The objectives of this research are to determine the most efficient type of dwelling-producing inganization related to the type of dwelling and the size of development.

The study should also reveal the volume of production needed to make the use of mechanical equipment and preassembled parts a profitable venture for the builder.

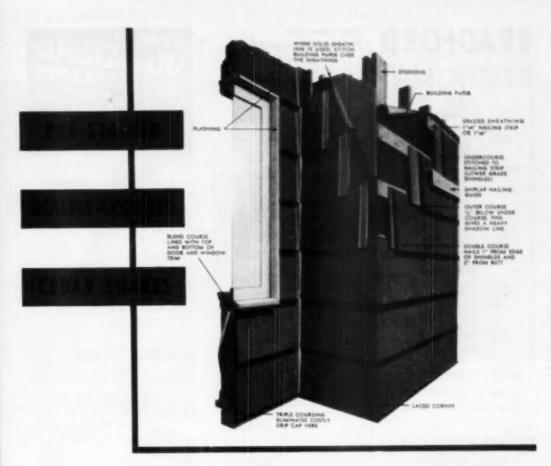
The study to be made by the University of Illinois, Dr. Ratchiff said, is expected to produce knowledge needed in the production of better houses. Many builders are prevented from improving their houses because of a lack of knowledge of family needs and the lack of time for developing more contemporary plans, he said.

In the study data on the reaction of families to room sizes, arrangement of windows, equipment and other items in their present dwellings will be gathered and classified. Plans will be developed for various dwellings, incurporating various combinations of all the satisfactory arrangements. These will be tested by having families occupy full-size structures of selected arrangements.

In addition to describing dwellings better suited to the current family needs, the study will attempt to show how these needs can be met without an increase in costs through knowledge of good design.

AMERICAN BUILDER

164



# You cannot find a residential wall material that offers as much quality for so little money

Double-coursed shake walls save insulation costs. No extra insulation is required. Ask the builders who use double-coursing in New England where it's cold—or in Texus where it's hot. Cedar shakes have valuable insulation properties.

**Pre-staining** saves you color money. Production line factory staining is faster, more thorough, and cuts the cost of color application to the very minimum. No delay waiting for "painting weather."

Wide weather exposures are demanded for

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ranch type, colonial, Cape Cod, and most other popular home styles. Prestained cedar shakes provide you with weather exposures of 12" to 14"—at an applied cost that is competitive with all quality wall materials.

You can sell more homes while a-building when you use pre-stained cedar shakes. With the application of the first pre-stained shake wall, your prospective buyer can see the color that appeals ... the color that sells.

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# BRADFORD ELECTRIC SAWS



Model 180 — 8" Saw Straight cut: 2 29 32" max.; 1" min. Bovel cut at 45'; 2 1/10" max.

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Own a new Bradford Portable Electric Saw — they're the choice of craftsmen everywhere. See your Bradford dealer for a demonstration. Write for bulletins giving specifications and prices.

# THE BRADFORD MACHINE TOOL CO.

634 Evens Street Cincinnati, Ohio Precision since 1840



### New Idea For Placing Door Jambs

A new method of placing door jambs for concrete block walls, with low labor costs, has been devised by Austin Ayers, in charge of the new Los Angeles City Jail project for Zoss Construction Co.

Ayers' method, employing bent sections of plasterers' 155 inch hot-rolled carrying channel, has cut unit costs of such installations on the Jail project to 17c as opposed to a cost of



NEW method of installing door jamba for concrete block type construction uses 12-inch pieces of steel channel

90c when the ordinary dowel method is used to anchor the foot of a door jamb to concrete.

Under Ayers' direction, twelveinch lengths of the channel are bent 90 degrees so that a four inch length will attach vertically to the jamb. The remaining eight inches fit against the concrete floor. Two holes in the shorter part are provided to screwfasten the channel to the jamb. The eight inch section of the channel is fastened to the concrete by means of a Powder power gun.

#### **How Permalite Is Made**

Permalite, a versatile building material manufactured from perlite ore, has a natural source in perlite. But in finished form it is almost entirely a creation of man. Unlike sand, which it replaces as an aggregate in plaster and concrete. Permalite is subject to control at the will of the processor. Its particles can be made uniformly of the desirable size for a given use, and within broad limits they can be varied as to density and other characteristics.

Manufacturing process, as revealed in the new Permalite plant of Great (Continued on Page 158)



105

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Because of the outstanding performance delivered by MA-TI-CO Asphalt Tile Flooring in Metropolitan's Peter Cooper Village, Stuyvesant Town, and Riverton in New York, MA-TI-CO is selected for Metropolitan's West Coast communities-Parklabrea (above) and Parkmerced, San Francisco.

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Wherever MA-TI-CO is used it provides enduring beauty, resilience and economy – qualities that make MA-TI-CO ideal for every type of installation. Remember, MA-TI-CO's precision-cut square edges assure easier, faster installation - save you time and money on every job. When next you think of flooring, think first of MA-TI-CO. It's today's best all-around flooring,

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That's why leading architects and builders recommend and specify JUST LINE Custom Built equipment.

If you want to be sure that you will please your clients, write today for FREE illustrated Booklet B10 and name of our nearest Factory Representative,



#### Permalite

(Continued from page 366) Lakes Carbon Corporation at Torrance, Calif., is too delicate for manual control, and electronic devices take over at every step.

Perlite particles contain entrapped water. The water is expanded under high heat, causing the particles to expand, and in the course of expansion Permalite is formed—white, dry clusters of tiny gluss-like shells with innumerable air cells. The objective is to liberate the countined water from the solf or molten ore at a rate that will form the cellular structure desired but not so fast that the particles will be literally exploded.

Although the manufacture of expanded perfite, on a commercial scale, is a development of the last decade, as long ago as 1890 there was evidence that the expansibility of perfite under proper temperature was known. The art was apparently lost or forgotten, It was revived in 1941 by an assayer at Superior. Ariz. After extensive field examinations and research, a pilot plant was built in Torrance, Calif., for investigations into a method of producing a large amount of uniform material at a low cost. The plant went into operation in June, 1946.

The pilot plant had a capacity of 10 tons a day, at the beginning. Today, in the new plant in Torrance, each of two furnaces can produce as much as 75 tons of Permalite a day.

Each furnace, rotary kiln fired through a combustion chamber, uses either gas or oil as fuel. The feed rate is controlled by an automatic weight feeder which puts the feed into the furnace at a constant rate. The upheat rate, or rate at which the material is heated, is controlled by an oil-flow gas-flow air-flow temperature recorder controller and an excess-deficiency combustion air recorder-controller and a kiln pressure recorder-controller. Control instruments are interlocked in such a manner that if the feed rate varies, the instruments automatically compensate by changing the gas-air ratio, the kiln pressure, the upheat rate and the temperature level. Particle size and density of the finished product are controlled from a central panel. To change the density of the product, an operator changes the adjustment on the feed rate controller or the adjustment on the temperature level controller. The finished product is cooled at a controlled rate, as in a steel annealing furnace, to add strength to the structure of the particle.

A partial list of varied uses of this product include monolithic and precast slah concrete, scratch frown and finished coat plaster, interior and exterior stucco, accoustical plaster, fireresistant plaster for column beams.

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### Dual-Unit Air Conditioning Assures Your-Round Comfort in Medium Priced Development

One of the first medium-priced housing developments in a northern area of the country to offer complete year-round air conditioning is now mearing completion in the Mount Airy section of Philadelphia.

Built by Max Chipin and Sons, each of the 54 homes in the development is equipped with a General Electric packaged air conditioner and a General Electric warm-air furnace. While these installations employ gas-fired furnaces, oil-fired furnaces are equally adaptable.

Designed and installed by the George C. Lewis Company, contractors and G-E distributors in Philadelphia, the year-round air conditioning system provides cooling, heating, humidification and dehumidification as needed. For betweenseason operation, when neither heating nor cooling is required, the system brings in fresh outside filtered air.

The self-contained air conditioner and the furnace are located side by side in the basement utility room, and cool or warm air is carried to the rooms by a common ductwork system. A single high sidewall supply serves each room, with the return located low on the same wall. The change from heating to cooling and vice versa is accomplished simply by throwing a switch. A simple damper arrangement permits diversion of more cool air, if desired on extremely hot days, to the room actually in use.

The homes, including garage, sell at \$16,500 to \$17,500 and are of brick, semi-detached construction, with an all-stone front. Of the center-hall type, each home has a fully completed basement recreation room with adjoining powder room; living room, dining room, breakfast room, kitchen and first-floor powder room. The second floor includes a master bedroom with private bath, and two other bedrooms with a hall bathroom.

The first group of 24 homes was sold within one week after the demonstration home was opened, according to builder David Chipin. Especially significant is the fact that they were all sold before a previously huilt, lower priced group (almost identical except for the air conditioning feature) was sold.





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GALVANNEALING PROTECTS against rust; even when the doors are exposed to weather for weeks before painting. Galvannealing consists of a heavy galvanized zinc coat, oxidized to provide an excellent base for paint; no priming coat needed.

QUICKER TO INSTALL-the one-piece door leaf elim-



inates field assembly of single doors. Packaged hardware is factory assembled. Installation is simple and easy.

EASIER OPERATING ... ALWAYS—Steel can't warp, shrink, rot or stick; hardware is dependable. Steel does not absorb moisture—weight of the door remains the same in hot or cold weather, for uniformly easy operation.

Shipments of the new 9' x 7' door start November 1. Strand Doors are also available in Canopy and Receding (track) types for 8' x 7' openings; and in a Double-Garage-Door (track-type only) for 16' x 7' opening unobstructed by center post. Order from your dealer, or mail the conpon for information and dealer's name.

STRAND GARAGE DO Betrait Steel Products Dopt. AB10-2242 Ees	Company
Detroit 11, Michigan	
D Please ruch det Gerage Door for	alled description of the new forund all-steel
Pieces send full	information about Brand Doors for 8' s. P' and openings.
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# Luxury Look. How to build-in the

Economically

Partitions of Blue Ridge Patterned Glass can be used to add appeal to even the smallest house . . . build-in luxurious decoration for two rooms at once. And you save on papering and painting!

Blue Ridge Patterned Glass passes light from room to room ... makes homes brighter, more attractive. Over 20 distinctive patterns provide privacy, create smart effects in every foom.

To meet special needs, Blue Ridge Glass may be Securitized (heat



tempered) for greater strength and Satinol\*. finished for greater obscurity. Ask your LOFF Glass Distributor about it. You'll find it surprisingly inexpensive . . . practical even on modest building budgets. 18

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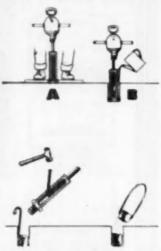
Blue Ridge Soles Division, Libber Owens Ford Glass Company \$3105 Nicholas Building, Toledo 3, Ohio Please send me my free copy of "New Adventures in Decenating"

PLEASE PRINT



#### How To Drill Hales In Concrete With & **Botary Drill**

A new masonry rotary drill offered by the Tilden Tool Manufacturning Co., Pasadena, Calif., has a side exhaust slot through which pulverized particles can escape and a spiral groove to carry the particles out of the hole. Carbide cutting teeth set around the perimeter of the head cut only outer edges of the hole, allowing the core of concrete or masoury to slide up inside the drill, to



KONKRETE Kore drill should be started into concrete by chipping %-inch groove on surface, or by using board with hale drilled in it over spot to be drilled, as shown in Fig. A. II hole is larger than 114 inches in diameter or deeper than six inches, use water in hole; See Fig. B. To remove core from drill insert punch in drill slot. To remove broken core from hole, use wire with small hook, as above

be removed later by means of an exhaust slot.

The drill, called "Konkrete Fore," may be used with ordinary electric drill motors, and will go through steel reinforcing rods, glass, or rock embedded in concrete. It can be resharpened easily.

To use, the drill should be firmly tightened in drill chuck on flats of shank. Retighten after using a few minutes: These rules should be followed :

1-Chip a groove 16-inch deep to fit drill diameter, or use a 1-inch board three inches long and drill a hole with wood bit to fit the drill to he used. Place board with hole over spot to be drilled. Stand on board. Apply slight pressure for few sec-

(Continued on page 178)



As functional as they are beautiful, modern Fox-Made Gate City Awning Windows anticipate tomorrow's living needs in offering all these advantages for your buildings: **COMFORT** - Cooler in summer - they scoop in up to twice the amount of fresh air with uniform, draftless ventilation. Equipped with Thermopane or interior storm sash, they assure greater warmth in winter.

SAFETY – Made of Protexol-impregnated lumber they will not burn. They lock in any open position (children cannot fall out, intruders cannot enter.) CONVENIENCE - A simple turn of one handle tilts sashes out to any degreethe tilt keeps out rain. Both sides can be washed easily from inside ... screens are applied from within.

BEAUTY- Their graceful lines plus the warmth and charm of wood construction add to overall building appearance.

Our consultant and technical staff is available to architects and builders.

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To For Bros. Mig Co. 7271 Siniery St., St. Lovin, Ma. Send me information on the fullowing products: Gate City Awning windows Wood fire doors Melamaio resin veneer Custom built panetting Name. Addrest. City. State.

OCTOBER, 1950

173



"Swing" is old fashianed in doors! FOLDOOR's the thing!

America's xxw folding-type door closure with the cornice that gives it a "finished look."

FOLDOOR is the answer to SPACE SAV-DOD, to an unbeard of PLEXIBILITY of room-arrangements, to new, up-to-theminute BEAUTY.

FOLDOOR is the best looking door clorure you ever saw. Folds into beautiful pleates into an unbelievably small space, can be operated by a child ... and open or closed, retains its beautiful pleated lines to add charm to any room.

Built on a rugged, rust-resistant steel frame, FOLDOOR comes in a wide choice of beautiful, colored plastic fabrics to harmonize with any color scheme and is topped off with an attractive, formed cornice that gives it a "finished kok."

FOLDOOR is the HORAL closure for ULENETS, BROAM, ALCOVES, and can be used to escellent advantage as a PAM-TIFINS ... fits into all homes, modern as well as period ... just the thing for stares, schools, offices and institutions.

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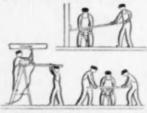
#### How to Drill . . .

(Continued from page 172)

onds. The remove Board (See Fig. A).

2---Use a drill motor that is powerful enough to supply sufficient presure to cut at least two inches per minute for drills up to 1-inch in diameter, one inch per minute for drill two inches in diameter, or 2- to 4-inch diameter drills should have a motor that will drill ½-inch per minute.

3-After drill reaches depth of from 2 to 4 inches, remove drill from hole every inch or so to avoid slowing of drill motor, keeping motor



METHODS of exerting pressure on drill running when removing drill from

hole. 4—When drilling down where hole is 1½-inches in diameter or larger

is 1½-inches in diameter or larger and deeper than 6 inches, use water. Pour in hole slowly, keeping hole full (See Fig. B).

5-If steel is encountered while drilling, have spare drill, freshly sharpened to do the work.

6—Do not use after drill shows a  $l_{32}$ -inch flat on cutters, as drill is then too dull and will cause excessive wear or breakage of cutters.

### Revere Quality House Division Approves Three More Housing Projects

The Revere Quality House Division of the Southwest Research Institute, San Antonio, Texas, has recently granted approval to three more projects as follows: Greenville, Mias., (100 houses)—Builder: W. S. Rhode; architect: Dean and Turner. Harrisburg, Pa., (475 houses)— Builder: N. P. Ninneman; architect: Milford H. Patterson, Morristown, N.J., (300 houses)—Builder: Edward S. Klausner; architect: Nemeny and Geller.

This brings the total of projects approved by the Division to 14, involving 1,399 houses. Of the three recent projects approved, the Morristoon development represents fine architecture for less than \$15,000. The Greenville project features two-bedroom houses for \$6,500 and threebedroom houses for \$7,250, the direcetor of the Division stated.

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says Walter Collier, Methuen, Mass. Builder

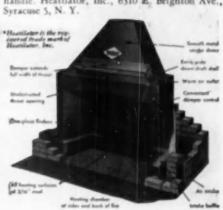


Syra HEATILATOR\* Fireplaces are strong sales features of Mr. Collier's new development near Boston . . . and of successful developments all over the country. Here's why:

1. Customers are assured of smokeless, trouble-free fireplaces when genuine Heatilator units are used. All vital fireplace parts are provided in one compact form . . . even inexperienced masons can't go wrong. No extra parts to buy or build. It saves on expensive firebrick. It saves mason time and labor, because all designing is done.

2. The Heatilator unit takes heat that is ordinarily wasted and circulates it to every corner of the room . . . and to adjoining rooms as well. On cool spring and fall days, furnace operation





175

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American Radiator & Standard Senitary Corp.

F. O. Box 1726 Pitteburgh 30, Pa.

Buyers of G. I. two and three bedroom bomes in all Allied Gardens residential developments built, sold and now under construction throughout to angoing fourty have come to recognize the quality of materials in our bomes through the use of "name" brends.

June 16, 1990

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We have meen in the restantial construction business here for more than 25 years, and have developed 20 major G. I. and F. H. A. tracts in Los Angeles County states the and of the ear. In the sales of these threads of hemes, buyers reacquite the long-latting economic value in these homes with such mationally femal brands as American-Standard. The repidity of sales of homes is allied Cardens at Bushington and Fascons Eleds., allied Cardens at Vachington and Parsanunt Bleds., allied Cardens is Sleaven for is the San Shilter area, and the current Allied Cardens is the Bonch Disting distingtion and to the public recognition of quality materials and equamonity. American-Standard contributed and contames to generalize to public acceptance of Allied Cardens homes, particularly in the face of nempetition.

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It is with pride that we continue to install American-Standard products because we find that the test plushing fixtures win estimalastic praise from prospective Betti

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# **Plumbing Fixtures in our homes is** a powerful aid to sales,"



### reports Los Angeles builder

SINCE the end of World War II, Bollen-bacher and Kelton, Inc., Los Angeles builders, have developed 20 major tracts in Los Angeles County. The developments, known as Allied Gardens, are comprised of some 4700 two and three bedroom housesall American-Standard equipped. These builders feel that the use of American-Standard products in their developments is a large contributing factor in the wide public acceptance of the homes.

"Moreover," says Mr. Walter Bollenbacher, president of the firm, "the use of American-Standard products has, we feel, added to this firm's reputation for always striving for the highest quality of materials and construction.

More and more builders all over the country are depending upon American-Standard **Plumbing Fixtures and Heating Equipment** to help make fast sales . . . with minimum selling expense. The smart styling and skillful designing of American-Standard products, their dependability and economy of maintenance, assure satisfied customers,

American-Standard Plumbing Fixtures and Heating Equipment will add to the salability of the structures you build, too. Whatever the type of structure you're building ... whatever the budget ... there are plumbing fixtures and heating equipment for your particular need in the complete American-Standard line. Ask your Heating and Plumbing Contractor about these reputable products. American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.



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# Test Racking Strength of Plywood Sheathing

Results of tests of the racking strength of Douglas fir plywood when used as sheathing in walls are given in an article published in Technical Bulletin No. 13 of the Housing and Home Finance Agency. These tests were sponsored by the HHFA to provide information needed in regard to the use of lower grade plywood veneers as sheathing for lowcoat dwelling construction.

Plywood found unsuitable as veneers for panels and other decorative uses on account of knotholes and small defects, can be used for sheathing, thus permitting an economical use of veneers that otherwise would be wasted.

Various methods of application of plywood sheathing are discussed and evaluated in this article. Test results indicate that the racking resistance of plywood sheathed walls is affected by (1) direction in which sheets are applied and whether long dimension is horizontal or vertical; (2) location and spacing of nails; (3) ability to retain resistance when subjected to wetting or vibration.

In using plywood for sheathing, the following design procedures are recommended: (1) construction should have the customary safety factor of approximately 254 times the design load; (2) deflection under design load should not exceed a reasonable amount, such as 0.25 inches for a wall eight feet high. (3) strength, when tested under ideal conditions, should be discounted slightly to provide equivalent strength when plywood becomes wet or is subjected to vibration.

Another article, "Low-cost Wiring Methods and Materials for Houses, gives minimum requirements for the safe installation of flexible metal armored cable systems, nonmetallic wiring systems and surface metal race-way systems for use in houses of ordinary construction. Besides metal conduit, there are seven types of wiring which may be used in houses. They are: (1) open wiring on insulators; (2) concealed knob-andtube work; (3) armored cable; (4) nonmetallic sheathed cable : (5) service-entrance cable; (6) nonmetallic waterproof wiring, and (7) surface metal raceway.

Technical Bulletin No. 13 is available from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. at 20 cents a copy.

# CARPENTRY ESTIMATING

#### Quick ... Easy ... Accurate with this simplified guide!

You can earn higher pay when you know how to eximute. Here is everything you need to know to 'take off' a bill of materials from a set of plane and specifications for a frame house. Saves you time figuring jobs, protects you against oversights of moralest that wave materials and uses memory. Nothing complicated—just use simple arithmetic to do house carpentity estimating with this easy-touse teady reference handbook:

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Shows you, step by step, how to figure materials needed for (1) foundation, (2) framing, (3) exterior finish, (4) interior finish, (5) hardware, and (6) stairs. Gives definite "take-off" rules, with many helpful quick reference tables and short-sut methods that simplify the work.

SPEGIAL FEATURES: Lumber Checking Lin, Millwork Checking Lie. Hardwore Checking Lin. Maserulas Ordering Information. Owick-Faparing Tables for est mating concrete loosing and walls, concrete piers, window trames, done and window greas, add weights, nail quantities. How to figure labor boars per soit of work, Ruites for linear, area and volume measurement. Mathematical reference tables, including documal equivalents, Jumber reckoner, convertion of weights and measures, etc.

TURN TO CHAPTER 8 and see the "Estimating Short Cuts" for quick figuring of board for age. Here are simplified tasss to estimate lumber needed for floors, walls, utilings, roof, door and window frames, insuling trim for those frames, insulde trim for inside doors, and drawers and exhinets. This chapter allow can be south the entire price of the boards to your!

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### HOW TO DESIGN AND INSTALL PLUMBING

by A. J. Matthias, Jr. 1949 edition. 442 pages, illustrated. 114 inches by 814 inches. American Technical Society. 63.50. No. 11 on appendix page.

By describing the basic principles of plumbing practice and then showing by word, plan and picture exactly how a plumbing system is installed in a modern six-room two-hath house, this book is a valuable instruction volume for any progressive-minded plumber, contractor, builder or building trades student. As the author of the book points out, plumbing is the foundation of all modern sanitation and there are many experts who feel that plumbing is the most scientific of all the building and industrial trades. While this statement is perhaps open to question by members of other building trades, there is no doubt that a good plumber must have at least a working knowledge of such diverse sciences as physics, chemistry, bacteriology, mathematics, metallurgy, architecture, as well as know the fundamental mechanics of the plumbing trade. In other words, it takes a smart man with broad experience to be a good plumber and such a book as HOW TO DESIGN AND INSTALL PLUMBING can certainly help an ambitious person to achieve that status.

In this 442-page book will be found thirty-seven chapters covering the broad range of modern plumbing methods from Municipal Sewage Disposal through Joints in Clay and Iron, House Sewer, Water Supply Systems, Plumbing Fixtures, Bathtubs, Sinks, Questions Pertaining to Plumbing, and dozens of other equally important plumbing topics. The single feature, however, that places this book a cut or two above other works of a similar nature is its fifty-page section that illustrates and explains the design of an actual plumbing system. Here the blueprints for a typical house, the specifications for it, the rough drawings, and the design and installation of the system are explained in their proper order, thereby supplying the reader with information not generally found on builders' plans for houses and other small buildings. This section together with the rest of the book is copionaly illustrated with clear, easy-to-understand pictures and diagrams.

### STANDARD PLUMBING DETAILS

by Louis J. Day, Fourth Printing, 110 pages of detail plates. 91, incluse to 114 incluse, John Wiley & Some, Inc. \$7.00. No. 13 on obscute page

This is an entirely different kind of book that has proved its popularity by being reprinted a number of times since it was first issued in 1938. Specifically it is a carefully selected group of 119 full page plumbing detail plates drawn to scale that show the reader just how home, school, medical, and apartment water and sanitary facilities should be laid out. It can safely be said that all the important plusses of modern plumbing practice are graphically covered in this book, from installing stall showers and kitchen sinks to designing office building sanitary systems and street water main connections. Because the drawings tell the full story, the book has no text, making it easy to use and a sound value for plumbers, contractors, architects, engineers and building trades apprentices.

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#### Heat Where You Want It, When You Want It, with New Air Diffusers

Engineers can direct heat where they want it, when they want to, in factories, offices, warehouses, garages and public rooms through technical developments completed recently by The Trane Co., La Crosse, Wis.

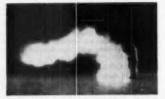
The new product developments are called "Louver Cone" and "Louver Fin" air diffusers. They are flexible



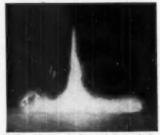
THE 56 vertical blades and 7 horizontal louvers of Trane Lozver Fin Diffusor twist air stream vertically and horizontally simultaneously. Smola was released in heat units for these tests

accessories for the horizontal propeller and vertical projection types of steam and hot water unit heaters.

The new Trane Louver Cone and Louver Fin diffusers were designed



WITH half its blades straightened and half turned to loft, diffuser can direct air to blanket a doorway and cover a counter. This is a typical store use



FOR widespread flow of low-velocity warm air, alternate rows of lowver fin blades are turned in opposite directions, to obtain this close in air diffusion

to solve diffusion problems on the job by a simple adjustment of the diffuser. The diffusers eliminate the necessity for moving heaters and (Continued on page 182)

# You Need All Three...You Get All Three

1. PERFORMANCE, 2. DEPENDABILITY, 3. SERVICE

# HOMELITE Cannyable GENERATOR

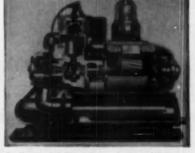


1. Performance. True, a Homelite Gasoline Engine Driven Generator is light enough for one man to pick up and carry but its performance is big enough to operate all your electric hand tools. In fact, it gives you power plus... power plus a large overload capacity... power plus a constant voltage under all loads ... power that isn't sapped by long dangerous cables. Easy to get on the job, quick to start at all times, never bothered by extreme temperatures, a Mamelite will keep your power tools going at peak efficiency always. It will save time and money for you on all jobs. Ask for free demonstration and see for yourself.

STICK TO THE RULE OF THREE 1. Performance 2. Dependability 3. Service, DEPENDABISend you'll always stick to a Manalite



BARRACTURES OF HOWELITE CARTAGE PUMPS + GENERATORS + BLOWERS + CHAMILSAWS + PAVING BREAKERS OCTOBER, 1930



2. Dependability. For more than 25 years, Homelite engineers have specialized in building carryable gasoline-engine-driven units. Their experience in building close to three hundred thousand of these units has been responsible for the simplicity of design and precision construction with finest materials that insure lang-houl dependability and lowest maintenance costs.

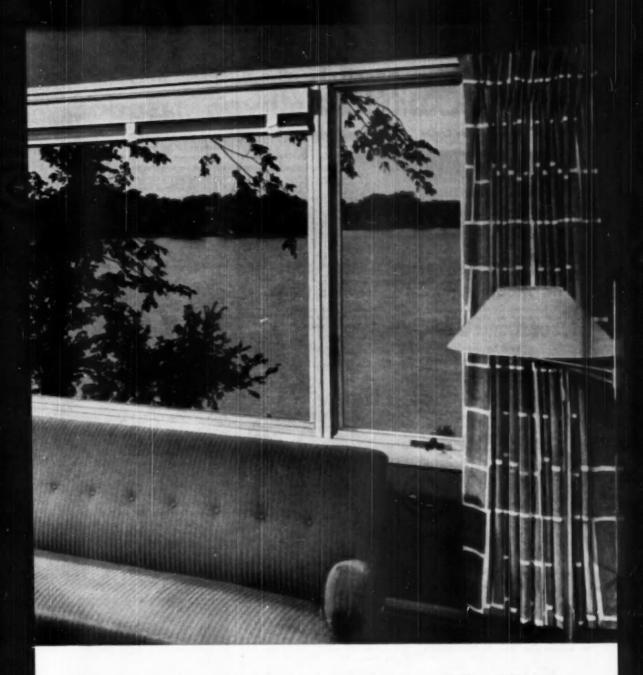


3. Service. A Homelite seldom needs service, but when it does, there's a trained Homelite service man near you... a man who will drive his truck right out to your job and put your Homelite in perfect operating condition. This prompt, competent service is a great money saving factor for those who want to get continuous production out of their power tools.



WENDOWALL shown is an Andersen Casement Picture Window Unit in home by Long & Thorshov, A: chitecta.

Indowa 15 WINDOW UNITS



**STUDY IN COMFORT**—Into this study an Andersen WINDOWALL brings a flood of even brightness . . . a restful view . . . plenty of fresh air. And to these comforts of a large window are simultaneously added those of a wall—a weatherstripped barrier to cold and moisture.

The beautiful woodwork in this Andersen Casement Picture Window Unit is important both to the beauty of the room and to the beauty of the view it frames. Wood's low thermal conductivity is important, too. Sash and frames of WINDOWALLS don't heat up in summer or frost up in winter ... one more reason why WINDOWALLS mean quick sales for builders and lasting satisfaction for home owners.

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

\*TRADERARS OF BROEROER CORPORATION

Andersen Cosporation . HAYPORT . MINNELOTA



rials as construction progresses. Ample er-air cooled motors-use minimum fuel, even operating continuously. No maintenance except upkeep on the engine, You build the pine lumber track and platform floor - we furnish structural

hoist with 400 lb, single line pull. Ele-vate wheelbarrows, blocks, bricks, reofing to as high as five stories. WRITE FOR to as high as five stories. WRITE FOR DESCRIPTIVE LITERATURE or See Your Distributor.

**ALSO Electric Powered Winches, Hoisting Wheels, Safety Hoeks** 



#### **Heat Where You Want It** (Continued from page 178)

piping to accommodate changes in floor layout. Unit heaters may now he mounted higher or lower, farther from or closer to the zone of occupancy and still assure complete heat

coverage of the working area. By fingertip adjustments of the new diffusers, using no tools, heating engineers or unskilled workers can direct the flow of heated air in an almost infinite variety of useful pat-



TRANE Louver Cone diffuser, susper from unit heater, has spoke-like bindes. Anole of blodes can be set with fingers

terns to produce comfort where it is needed.

The Louver Cone diffuser fits projection type unit heaters, which are generally used to recapture wasted heat that collects under a high ceiling and to re-distribute it to the workers' comfort zone near the floor. The Louver Cone diffuser's 24 adjustable blades fit between a die-cast hub and a cone-shaped spun steel rim. The blades may be adjusted with the fingers to direct the air from the unit heater in any desired pattern.

The Louver Fin diffuser attaches



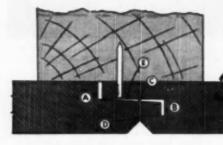
TRANE inhoratory smoke photograph shows how Louver Cone diffuser can direct heat straight down from high cealing

to horizontal type heaters (the calinet-shaped units that line low-ceilinged factory walls, loading docks, garages and plant office areas) cir-(Continued on page 186)

## Every Home and Business is a Prospect for Johns-Manville CEILING PANELS

You, too, can make more money with this J-M Insulating Board Product!

You can save time by stapling • By using a trigger-type automatic stapler, you can cut application time by one-half; and tests show that staples hold as securely an anils. Thanks to the J-M Lightning Joint, all staples or nails are concealed in the



finished job.



land far free Instruction Shoets and full-color brothure on J-M Insulating Board products, IB-30A. Write Johns-Marville, Box 290, New York 14, N. Y.

B-level Lightning Joint about of the top of the top speed installation of the top speed top edge of the top speed installation and keep alignment ... and the large native for expansion and contraction ... the top speed top edge of the top speed installation and keep alignment ... and the large native finished job which provides lasting customer-satisfaction. One job sells another-and your potential market is unlimited.

Application is easy

with each carton.

 J-M Decorative Ceiling Panels are easily and quickly applied on new or existing construction. All you need to do is install furring strips at right angles to ceiling joists, and nail or staple the Panels in place. Detailed instructions come



A revolutionary, pre-engineered, new forced warm-air system, with all standard parts delivered complete for easy low-cost installation



This illustration shows a Calaman BLEND.AIR installation with the furnace located in the utility room. The Meat Tubos are located in the attic. In bosoment installations, the Meat Tubos are located in the basement immediately baneath the Roor.



A sistement about BLEND-All by W. C. COLEMAN, Foundar and President of The Coloman Company, Inc. 184

WE AT Coleman are proud to introduce to you the first really important development in forced warm-air heating in years. BLEND-AIR is the biggest thing in home heating since furnaces took the place of open grates and pot-bellied stoves. It makes central heating easier to install and homes easier to sell. It fits any construction, old or new. There is nothing else like it.

It is not just a furnace. BLEND-AIR is a complete, pre-engineered, forced warm-air heating and ventilating system with an adjustable fresh air intake for continual inflow of freshly heated air. The system has three parts: (1) 3½-inch HEAT TURES that fit inside walls. They carry freshly heated air from the furnace to the (2) Maarc BLENDERS that fit in the walls of each room. They blend the heated furnace air with room air and recirculate it for even comfort floor to ceiling — no drafts, no dead air pockets; (3) MODUMATIC FURNACE designed just for the BLEND-AIR system. Models for gas and oil fuels.

For new homes, for old homes, BLEND-AIR is a new kind of central heating comfort



# **Heating and Ventilating System**

#### FOR GAS AND OIL FUELS



What a difference! Compare the low cost and ease of handling of BLEND AIR'S compact 31y-inch Hoat Tubes with that of gravity warmair pipes 8 to 14 inches in diameter. Saves metal-acces time-marks work.



No more of this! Gene is the sprawling, space-consuming menster that clutters basemants, instead you install a space-saving, highefficiency Coloman Modumatic forced warm-air pernace aperating through 315-inch Heat Tubes.



Couldn't be easier! See how simple and easy it is to install these 315-inch Neat Tubeal They fit together quickly! Prefabricated elbows band around obstacles. A development that simplifies heat installation.



Extra space galars? In the basement BLEND-AIR gives more room for game tables, closet space, loundry, werk shop, etc. It's quiet, closes and compact. Put the Coleman Madumatic Putnoise anywhere-basement, bitchen, utility room.



How Blander works! Blands warm oir from the furnace and coal room oir, recirculates it through the room. Three types fit any construction problem. This blanding magic is an estimsive Colomon invention.

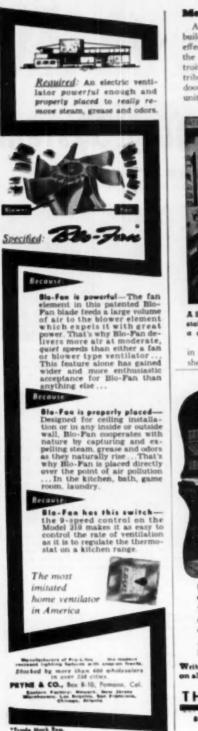


Here it is complete! It is Coleman designed, Coleman mode with the famous Coleman quality of construction and parformance. It is delivered complete, ready to install—the greatest development in modern automatic have beating!

that is economical and easy to install. The Blender in each room adjusts to warmth wanted. At the same time, there is over-all automatic thermostal temperature control for the whole house. BLEND-AIR is delivered complete — all parts are standardized and packaged, ready to install. Nowhere will you find a comparable heating system, and the cost may be less than the equipment you are now using. For more information on this revolutionary new central heating system, write: The Coleman Company, Inc., Dept. AB, Wichita 1, Kansas.

A BIG BOON TO BUILDERS! You get quick, easy installation in this pre-engineered, completely packaged, low-cost central heating and ventilating system. Assures more even distribution of heat in every room. Has built-in flexibility to overcome bad job conditions. Investigate BLEND-AIR, compare its advantages, see how it saves you money and simplifies your heating equipment problems.

Comfort costs so little with a Coloman America's loader in home heating The Colomon Company, Inc., Wishits 1, Kanas Coleman



#### Merchandise Sliding Doors By Installing In Salesree

A new merchandising idea for building material dealers is being effectively used in the sales room of the B. A. Chapfow Lamber Co., Detroit, Mich., where the firm, local distributor for the K-D sliding closet door units, has installed one of the units, with a painted sales message.



A SLIDING door with a sales message. Installed in a dealer's salesroom, has proved a good attention-getter and sales-maker

in front of a floor-length series of shelves.

The closet unit is manufactured by the American Welding and Manufacturing Co., Warren, Ohio. It can be seen at the extreme left of the sales room. Stored behind the sliding doors is the Chaplow line of household paints, a large variety which the potential customer notes during the the closet demonstration.

In describing the effectiveness of the demonstration method, Chaplow said: "This display has stirred up a lot more interest than the usual model or product sample. As customers enter the store, they can't help but see the door, and most of them accept our invitation to try it out. As a sales starter, for both doors and paint, it can't be beat.

#### **Heat Where You Want It**

(Continued from page 182) culating warm air horizontally. This type of diffuser generally has seven horizontal and 56 vertical blades, each adjustable by fingers, without tools.

Because the diffusers can concentrate the flow of heated air in a column, they permit use of small unit heaters to accomplish a given task. The ability to split the output of heated air two ways often eliminates an extra unit heater.



# HOW to plan distinction

## at low cost 4



#### with the MASONITE HARDBOARD FAMILY

When owners want distinction—but the budget says "no"—the Masonite\* Hardboard family offers a happy solution! Available in 19 types and thicknesses, these smooth, grainless, all-wood panels create out-of-the-ordinary interiors at low cost. Supremely workable-staunch and enduring-they speed the work while assuring lasting value. Here are a few ways in which Masonite Hardboards can assist you-

#### HOW to Provide Crackproof Dry Wells

Big, rigid panels of Masonite 54" Panelwood" go up quickly over open framing to create attractive effects like this. Panelwood builds crackproof walls and ceilings-dent and scuff resistant, too. And its supersmooth surface is easy to finish.



#### to Add individuality —at Low Cost

There's more scope for your planning after you specify walls of Leatherwood -- the Masonite Hardboard with a surface that looks and feels like Spanish-grain leather. Use Leatherwood, too, for inexpensive cabinet work with a laxury look.

# нош

#### to Have High Style on a Low Budget

Masonite Temprtile" -tempered for extra durability and moisture resistance -- comes already scored in a 4-inch tile pattern. Temprtile can be enameled, lacquered or painted-keeps its gleaming brightness for years. The cabinets are made of 44 "5andard Preedwood".





Lumber dealers have 19 types and thicknesses of MASONITE HARDBOARDS for 1000 uses october, 1950



Every home-owner is a hot prospect!

# ...for R-W Vanishing Doors

other doust in some home. Note I door vanishing into wall-packe ows placing of furniture where reactioned door would varies.

Silver Streak 8.W. No. 1819 Vanishing Dear Hangers and Aluminum Track

Chairs, beds, and tables can be arranged permanently, more attractively and conveniently in homes where doors operate on Silver Streak R-W No. 1019 Vanishing Door Hangers and Track. Only Silver Streak "opens the door" so completely to modern

Another Richards-Wilcox Standout

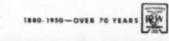
H-W's No. 020-2

Bine Strenk



Solf-Lubercation Desc Manager With OKLITE BROAZE BRARHOS (Providing Perpentual Lubercation) for down 1%4 to 21% hot, excepting up to 300 sounds ... on perspect, earthouses, factaries, living convenience. The newest development in hanger and track, by Richards-Wilcox, for the hanging of lightweight vanishing doors in thin wall-pockets built in a standard 2" x 4" studded wall, Silver Streak is also adapted for use on parallel residential wardrobe doors, 3d" or more in thickness.

Rells on Boll Beorings—The Silver Streak hanger wheel, made of fine-weave cloth base bakelite, is equipped with extra high finish ball bearings for longer wear and amoother operation.





#### Aluminum Protab House Fills Varied Needs

An eye-catching aluminum prefabricated house called the Holiday House is now being produced by The Lennox Furnace Company at its Grinnell, Iowa plant.

Designed primarily for use as a vacation house to be erected for a fishing or hunting lodge, children's



HOLIDAY house can serve as garage

play house or lake cottage, it can also be used as a bath or boathouse, recreation center, or workshop. With the addition of upward-acting doors it can be used as a garage. In this adaptation it can serve as a playhouse during colder weather.

The Holiday House has modern lines. An optional 3-foot overhang, or sun visor, adds a ranch house tooch to the building. Temporarily, it is available in three sizes—12x14, 12x20 and 12x26 feet. But the house is expansible, and panels may be added. These panels are assembled by tension cleats, or metal strips, which lock the panels together. This



ROOF overhang gives aluminum Heliday House a modera, ranch-style appearance

principle eliminates the use of many screws in the assembly, distributes the stress equally along the panel edges, and keeps out wind and rain.

The house is furnished with aluminum shade screens for the windows and door. Window frames are so constructed that glass panes can be added at little extra cost. The windows provide an abundance of light and air. There are five windows in the 12x14-foot size, with room for two more. The 12x25-foot house has nine, with provision for six additional windows.

Since no floor is provided, recommended materials are flagstone, concrete slabs, or treated wood, Black top has been used satisfactorily, and in all cases the house is bolted to the floor. The high reflective value of the

(Continued on page 190)

Dubl-Coverage Tite-On Shingles, These houses sold for between \$20,000 and \$30,000. INSISTS ON QUALI MRS. BUYER DEMANDS BEAUTY

# TITE-ONS give both

Smart builders know that the buyer wants both quality and beauty in a roof. That's why the builder, Garry & Co., selected Ruberoid Dubl-Coverage Tite-On Shingles. He depended on Tite-On's windresistant, fire-resistant, long-lasting features for quality. The new owner found enduring beauty in Tite-On's color blends and basket-weave pattern.

Your Ruberoid dealer can tell you why Tite-On interlocking shingles stay on in any weather, last longer and look better-besides performing their basic function of giving maximum weather protection, with a minimum of two thicknesses over the entire roof. See your dealer now or write the nearest Ruberoid sales office for free literature.

e is one of a group built in Roalyn, L. I.

by Garry & Co., featuring Rubernid

This ho





Landscaping with Grader



LANDSCAPING of a veterame housing project in West Allin, Win., a Milwarshee subuch, is done with an Allin-Chalmern Model D motor gradie. The development of 4-coan apartments is fingured by city

#### **Aluminum Preiab House**

(Continued from page 188)

aluminum keeps the house cool in summer.

The house is designed on the skinstressed principle, which is similar to that used in aircrait and can take extreme pressure over a wide area. It has been blasted with winds reaching a velocity of 82 miles per hour without damage. It can be wired for

**PANELS** are joined with tension cleats

electricity like any other house or cabin, using conduit, BX, or Romex.

Although not specifically designed for winter use, the house can be insulated with wallboard cemented to the panels. Heat can be added by installing a Lennox Wheel-Away Grille, which has a fireplace canopy, or by other units.

Maintenance of the Holiday house makes it a lazy tran's haven. It is inexpensive in price, and built on owner's property, may be financed through FHA Title 1.

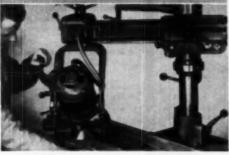
Here's a shop machine designed to cut costs



13 POWER TOOLS IN ONE!

WALKER-TURNER "900" Radial Saw





Don't cut corners—cut costs with a Walker-Turner "900" Radial Saw

SOLD ONLY THROUGH AUTHORIZED BEALERS



DRILL PRESSES RADIAL DRILLS TILTING ARBOR SAWS BELT and DISC SURFACERS

#### **Does ALL the Radial Saw Jobs!**

Ripping + Bevel Ripping + Bevel Cross Cutting + Dadaing Miltro Dadaing + Shaping + Miltering + Campound Miltering Routing + Cross Cutting + Greaving + Tenening + Plaughing

#### CUTS DEEPER-WITH SMALLER BLADEI

Only Walker-Turner's "900" Series Radial Saw cuts 3 35" deep with a 9" blade — more than most machines that require a 14" blade. You get greater capacity, use less power.

#### SPEEDS CUTTING, BOOSTS PROFITSI

Full work visibility (gliding ram leaves work area free of obstructions). No binding, bumping, dodging. Ease of operation and built-in safety features save skilled labor costs.



Address. City

#### GET THE WHOLE COST-CUTTING STORY-

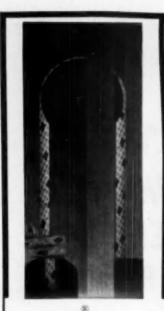
Send for new bulletin that talls how the Walker-Turner "900" Radial Saw can belp you make more prafit on every cutting jab. Mail asupon today!

Walker-Turner	Division,	Kearney	& Trucher	Corp.

Please send me the new Walker-Terner "900" Secter Radial Sow Bulletin None Company

METAL-CUTTING BAND SAWS LATHES SPINOLS MAPERS

ADDATES



# SPOT SASH CORD

Simplicity — no other device is as simple or as permanently efficient for balancing double-hung windows as the time-tested combination of Spot Cord, pulleys and weights. Perfect and permanent balance and noiseless operation are assured. There is nothing to get out of order.

The part that takes the wear is the cord — and Spot Sash Cord will last almost indefinitely. It is made of extra quality fine cotton yarn, firmly and smoothly braided, and guaranteed free from imperfections.

Identified by our trade-mark, the Colored Spota (Reg. U. S. Pat. Off.) Send for sample card with table showing right sizes for different weights.



#### Saberson ...

(Continued from page 100)

against my income. I don't think we left out a penny. After we really got into our budgeteering program, we became so interested we could hardly talk or think of anything else. Every day we'd find some new item we had overlooked. As we look back upon those busy months they seem to be the turning point in our life.

"Up to the time we decided to buy a home and go on a budget we never seened to have any definite objectives." be continued after he had changed the sprinkler. "We were living a haphazard sort of a life . . . spending too much for this—not enough for that. Actually we seldom knew where the money went or had anything to show for it. That is one reason why we were a hit timid about taking on the deal. If we had so fittle left under such circumstances, how could we expect to get by after we had bought a house."

"Good question !" I agreed. "What was the answer?"

"Budget!" he replied. "Figuring everything out before hand and making up our minds to live accordingly. If you are really serious about such a proposition you'll finally get everything in, including a provision for emergencies. However, that's the easy part. Sticking to it is hard, terrifically hard, at first. Then it gradually becomes easter and easier until it finally becomes a pleasant habit."

It turned out that my new acquaintance was the office manager for a local factory.

"At the beginning of each year we make out our budget for the next 12 months." he explained. "If it's good husiness for us to do that at the plant, why isn't it imart for a family to do the same thing ?"

The answer to the question was obvious. "Why don't more people do it?" we asked.

"Here's a better way of putting it," he suggested. "Lots of families go on a budget for a few months. Then something happens. Perhaps the old car begins to give triuble, so they decide suddenly to quit bothering with it and buy a new one. The budget goes blooey at that procise moment and usually stays that way.

"In order to stay on the budget beam you must have a powerful objective in order to make it work." he continued. "In most cases it's the house that makes the difference. Without it we no doubt would be as rudderless as we were when we lived in an apartment. It was costing us \$864 a year for (Continued on page 194)



Double contact with leakproof watershed sill stops wind and rain.

 Maximum Strength and Rigidity Sturdy 14 gauge frame, electrically welded throughout.
 Fins welded to jambs for easy installations in block or poured concrete walls.

Also casement, utility and barn windows, Vento steel lintels for costsaving block construction. Write for full information.

Steel

247 COLORADO AVE: . BUFFALO 15, N.Y.

AMERICAN BUILDER

CO. INC.

Products

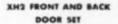
# Builders' big business-building promotion features YALE hardware exclusively!



HOW TO PROFIT FROM THE "GOOD AMERICAN HOME PROGRAM"

Tie in with the "Good American Home Program" that's showing all America that low-cost homes can be bought! Feature YALE, and reap the prestige of using the only hardware endorsed for this special promotion, backed by a powerful, nationwide publicity campaign. Watch your paper to find out when the "Good American Home Program" hits your town, then call up the sponsors to tie in.





Front Door: XH 291 Latch Set, XH handle outside and knob and rose inside. 170 KA deadlock with XH cylinder collar.

Bock Door: 170 KA deadlock, inside trim chromium; keyed alike with front door lock.



#### Here's what they say:

#### THE ARCHITECT



I choose plaster because it's sound construction. It's a one-piece, joint-free part of my walls and ceilings, regardless of their shape and

8170

Fire-safe too, and when well done, it seems to last forever. For finishing time I've long specified Ohio White Finish-it really has no equal.



If I have the choice . . . it's plaster every time. I've tried substitutes, but in carefully checking my

costs, I've found there's no saving in using them.

And plaster always fits too, of course, with no waste of material left over.

#### THE BUILDING OWNER

I'll have plaster on my next job. Those true, smooth surfaces are more than just pleasing to the

eye . . they're accoustically right, and sanitary.

They may be decorated and re-decorated in various ways, economically, and that's a saving in the long run.



#### THE PLASTERER

Good workmanship requires the right stuff to work with. That's why I choose Ohio White Finish

for my finishing coats. It has great plasticity.

You can feel this in the fatness of the lime putty, like we feel it in the workability under the trowel. Spreads farther too, covers more per bag, and that's economy.



#### Saberson ...

(Continued from page 192) four rooms that never really seemed like home. Our job was to find a house that we could pay for at that rate. This is it! \$72 a month takes care of the payment on the mortgage, taxes, insurance, upkeep. Incidentally, when you're operating your personal affairs on a business-like basis, the upkeep on your home is a far different proposition than otherwise. You watch things constantly and fix them yourself by nipping them in the bud instead of allowing them to become a major repair item requiring outside assistance. Same way with a car. You don't slam it around when you know how long you are going to have to drive it. I even know how much I can spend for lunches next week and I'm going to enjoy them a whole lot more than if I drifted into some fancy place and blew the works at one sitting. Feel better too."

And so we talked as we relaxed in the easy chairs on the shady side of the house. Neighbors were busy in their yards. A peaceful scene.

"Like to take a look inside?" he asked as we began to get ready to take our departure. We stepped into the kitchen where I met Betty who was making a pie.

"Mother always liked to cook," she explained. "She taught me how, Fred likes home-made things too."

#### **Earned TV Set. Too**

We talked some more as we sat in the immaculate kitchen and nibbled away at some freshly made cookies.

"It's like this," explained Betty as we talked of the new television set. "We actually earned it just the way we are earning the home and every new thing we've put into it. That's the way you feel when you operate on a rigid budget. We didn't know about television when we first made up our schedule. Consequently there was only one way to get it and that was by pinching out a little here and there from our regular allowance for different items. Then when you finally get it, it really means something."

Fred followed me to the car where he sized their home up from the street.

"It's not as big as the Jones'," he admitted. "But it's as much house as we need. Plenty of room. Easy to keep clean. Low upkeep. Maybe it did cost more than it should . . . based on some prewar method of computing values, but the fact remains that if we built it today it would cost more than when we bought it. Materials and labor are both higher. I can sell it at a profit of \$500 or \$600 any time I want to put it on the market, but

(Continued on page 196)







Required length of KIMSUL\* blanket is cut from roll and stapled to top plate through fiber strip.

So easy to install new Reflective Kimsul<sup>-</sup>— you actually save time, save labor !



2 Snug fitting, many-layer KIMBUL blanket is then expanded to full length of stud space.

4 Flanges stapled to sides of framing hold blanket permamently in position and also provide air space. Part of flange folds over face of framing to complete vapor seal.



3 Staples through fiber strip attach end of KIMBUL blanket accurely to floor plate. Stitched construction assures uniform coverage-prevents thick spots, heat-leaking thin spots.

For complete information about new Reflective KIMSUL, see Sweet's Architectural and Builders' Catalogs, or write to Kimberly-Clark Corporation, Neenah, Wisconsin.



WITH REFLECTIVE VAPORSEAL

Now 2 types of Kimsul Insulation -Regular and Reflective

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# he knows what he wants

## and it takes ADEQUATE WIRING

Millions spent in national advertising have convinced prospective home purchasers that electrical living is for them.

Make their conviction—your selling point! You must wire anyway. Adequate Wiring is one of the least costly "plus values" you can add to clinch sales.

With Adequate Wiring you get all these advantages:

#### Easter sales Faster, better loans Selling helps Reputation for quality

For information on Adequate Wiring, or help in applying this selling tool to your operation,

#### Just use the handy coupon.



Selling's Loss Tiring With Adequate Wiring

#### National Adequate Wiring Bureau Department A.10

155 East 44th Street, New York 17, N. Y. Please put me in touch with the nearest local Adequate Wiring Bureau. I'm interested in giving my houses more sales appeal.

NAME.	In the second second
COMPANY	
ADDRESS	
C	STATE

196

#### Dealer New Products Group ConferswithManufacturers

The Building Materials Consulting Committee of the Northeastern Lumbermens Association, Rochester, N.Y., recently conferred with manufacturers in a meeting which was part of its program of aiding in the development of new products. The meeting was held at the Hotel Statler, New York City.

The building materials group, created by the association six years ago, is selected from dealer-members who function as a committee with the objective of assisting manufacturers having problems in connection with the marketing of their products. The committee's primary interest is in new building products which are in the developmental stage, and in products already existing, the uses of which might reduce the cost of construction and maintenance.

Since some members of the committee come from distant points, and all of them serve without remuneration, they prefer not to have manufacturers use this session as a springboard for promoting their products, but for meeting with them to confer about problems in connection with marketing and development.

#### Saberson ...

(Continued from page 194) we're not interested."

"How about your military status?" I asked.

"I can't make the grade physically," he replied. "Burn knee from a had blast of shrapnel at Okinawa. However my neighbor is already in. Several of the fellows up and down the street will be going too. We've talked things over. Those of us who stay behind will look after things. That makes it easier for them than if their families were in an aparenent or had to double up again with the old folks. They know they're not going to be kicked out of their home while they are gone. It's sort of a comfortable feeling, having us all here together . . a community with common interests. It's something to think about while they are gone and to come hack to after it's over.

We stepped on the starter. He waved at a neighbor across the street. As we shock hands he said, "You're absolutely right. Hones really do make a big difference."

According to the association, all interested producers of new products are invited to make appointments for discussion. Its address is 339 East Avenue, Rochester 4, N.Y.



## KOHLER ELECTRIC PLANTS Undependent Source of Electricity PORTABLE AND MOBILE

Low-cost Kohler Electric Plant for saws, drills, pipe-threaders, cutters. Eliminates power line hook-ups. Jobs finished faster. Operates tools having universal (AC-DC) motors. 1500 watts maximum for intermittent duty. Compact—weighs 75 lbs. Handle for carrying. Powered by 4cycle, air-cooled Kohler engine. Other models available. Write for folder K-14. Kohler Co., Kohler, Wisconsin. Established 1873.

undet 1.5865, 1900 watts, 114 volt DC. Manual mitral. Longth 18", width 14", height 22".



Available with ar without brass air vent tube. \_\_\_\_\_



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Angle type Flow Control Volvo.



Thrush Horizontal Water Circulator.

GR 1

SD MAR

# Men Design To save fittings, simplify installation

2/51

tical FLOW

ONTROL

VALVE

HERE IS the Vertical Thrush Flow Control Valve. It has the same proved dependable construction and offers all the advantages of the angle type Thrush Flow Control Valve, but in many installations the vertical valve will save fittings and simplify installation. Like the standard valve, it provides both flow centrol and air elimination without requiring any "air tube" fitting. The air is automatically separated as it rises from the boiler water and vented directly into the pressure tank. Water free of air passes up inside the tube.

> YOU SAVE installation time and assure better heating plant operation for your customer when you install Thrush "T" flow Control Valves. If you are not familiar with the Thrush Flow Control System and heating specialties, see our catalog in Sweet's or write department G-10.

THRUSH & COMPANY, PERU, IND



#### Automatic Door Openers Are Home Sales Aids

Continuing the trend in home building toward more conveniences, an increasing number of builders are using automatic garage door openers as home sales aids. Practical because they save the home owner steps and time in opening and closing a door, these devices are now easy to install and maintain, and manufacturing techniques have made them easier on the pocketbook. The fact that many home owners still think of these step-savers as belong-



STANDARD automatic control made by Richards-Wilcox Manufacturing Co. is installed in post beside driveway. To open door, driver inserts key in switch as post

ing to the more expensive home can work to the benefit of the builder who installs them. He can readily find out that their extra expense can be far outweighed by the added sales appeal they add to the home.

The automatic door openers are available in several different sizes, lift capacities and types. One manufacturer, the Richards-Wilcox Manufacturing Co., for example, offers three different types. Each saves the driver from getting out of his car to open the garage door. One opener with a standard control is installed in an ordinary post beside the driveway. The driver stops his car near the post, reaches out the car window, and inserts a key in the opener switch. To close the door once his car is inside, he merely pushes a button installed on the garage wall.

A second type, the magnetic driveway control, incorporates an electric coil buried in the driveway about 3 inches below the surface, and a transformer and sequence relay located near the door controller unit. The control has a single push button at some convenient place on the dash of the car connected to a relay mounted under the hood of the car. To operate, the car is driven over or close to the location of the driveway switch and the button in the car is pushed. A third type is the radio control.

A third type is the radio control. To open or close the door, it is necessary to press the button on the transmitter of the car, any distance from 40 to 75 feet from the garage.





OES ON AND O HARDWOOD

. Simple to install direct on steel, concrete. any type subflooring. No special tools or skills needed. Integral cross-grain-reinforced tongues prevent splitting when blind nailed.

FLOORING

With these Factures:

2. You also install Higgins Blocks quickly. No "rights" or "lefts" to slow you down. Pick any block and it fits.

3. Completely finished at factory: final on-thejob labor eliminated-every block a gem of beauty just as it comes.

EASY TO LAY SPEEDS YOUR JOBS

**BRINGS YOUR MONEY IN FASTER** 

4. Each block precision cut to exact 9" x 9" net face: no dimensional loss allowance needed for tongues and grooves when you order-another big saving!

**Higgins Bonded Hardwood** Block Flooring will not warp. buckle, cup, or crack-it's water-repellent, termite-proof, rot-proof-highly resistant to scuffing, scratching, and soiling-costs less laid down than any topquality flooring-easy and economical to maintain.

IOIN THE FAMILY OF SUCCESSFUL HIGGINS DEALERS-

Mail this Coupon for Sample Block and Literature

Higgins. Incorporated Dept. 1031 New Orleans, Louisiana Gantiamen: Places send sample of Higgins Sonded Hardwood Flooring block, together with detailed literature. Firm Name 8.4draas Sinta

BONDED HARDWOOD BLOCK FLOORING

199



INDUSTRY BRIEFS

Wilmer H. Cordes, manager of market development and advertising of American Steel and Wire Co., Cleveland, Ohio, has been named general staff manager of the company's sales department, it has been announced by H. M. Francis, vice president-sales, of this U. S. Steel subsidiary. Cordes succeeds Paul H. Lindsay, recently appointed Cincinnati district manager of sales. In his new capacity, Cordes announced the establishment of separate advertising and market development divisions in the general sales department of the company, with O. B. Stauffer as manager of advertising, and John E. McGrath manager of market development.

Jesse F. Presley has been named field representative in Texas, Oklahoms and eastern New Mexico by the Western Pine Association, which is resuming activities in this area after a lapse of eight years. A native of Texas, Presley attended the University of Oregon, and served in the Army during the war.

Recently appointed to the sales and service staff of American Kitchens, Conneraville, Ind., were William H. Neil as Dallas district manager, and Donald C. Putnam as field service engineer for the Eastern region, it was announced by F. F. Duggan, general sales manager of the American Central Division, AVCO Manufacturing Corp.

The appointment of Sidney J. Smith as product manager of wallhoard and accessory sales of Kaiser Gypsum Division of Kaiser Industries. Inc., Oakland, Calif., has been announced by Gil Richards, general sales manager. Smith, whose new duties will make him responsible for sales of these products throughout the company's entire market area, has been affiliated with the company since 1948, when he was named export manager.

The Fleming Manufacturing Co., St. Louis, automices the opening of a new division of the company, the Bin and Batcher Division, which will specialize in all types of material handling equipment used in the concrete products and ready-mixed concrete industries. John F. Van Way has been placed in charge of this new division. He was formerly connected with the C. S. Johnson Co., and the Erie Steel Construction Co.

. . . . .



Don't guess about quality Be sure with names you know!

eldwoo

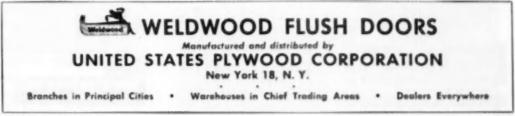
These Trademarks on doors you buy are quality insurance

Hollow core flush doors today can almost be described as a building "staple." Probably no other building item has had such a sudden and sustained consumer acceptance and demand.

Be sure you reward that demand with the quality it deserves. Install Weldwood Honeycomb Core or Mengel Hollow Grid Core Doors.

THE WELDWOOD HONEYCOMB CORE DOOR is a new development of the United States Plywood Corporation. Thoroughly tested in actual service, it is extremely strong, exceptionally light, eminently serviceable and unusually attractive . . , this new door can be had with birch, oak, Korina or other hardwood faces. Here's top-flight quality at low prices. THE MENGEL HOLLOW GRID CORE DOOR has thousands of satisfied users to attest its quality. A long-time, low-cost favorite, this popular door is available with faces in a wide variety of beautiful, decorative hardwood veneers.

Don't accept any substitutes. Wherever you have a requirement for interior flush doors, make certain the doors you install bear one of the trademarks above. That way, you can be sure about quality, with a name you know.



# STEEL TAPES are best for BUILDERS....

the facts prove it !

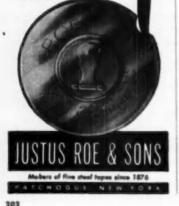
FIRST AND FOREMOST, Roe Steel Tapes are extremely easy to read... and they go right on being clearly legible year after year. The black markings are permanently etched into the steel which is then sikeniplated its provide a lustrous contrasting background. A transparent plactic overoating is added for topmost wear resistance-and durability.



Privates for it the bolished chromopiatod, sturdy welded steel case. Other floor models feature cases in handnewn leather, and in metal-banded insther and instheretts. They have a reinforcod reat realstant liner, precision winding drum, flush-folding handle, press button center and roller mouthpices. All are available with 25, 50, 75 or 100-foot tapes; foot in inches and sighthe, or in tenths and hundredtha.

50

Get Ece Steel Tapes from your hardware dealer-orwrite us giving his name and address.



INDUSTRY BRIEFS

The public relations and advertising firm of Onslow and Brown has been organized in Washington, representing an expansion of Walton Onslow and Associates. Partners in the new organization are Walton Onslow, president, and Earle P. Brown, vice president, of the original firm. Onslow and local and regional public relations activities, while Walton Onslow and Assoviates will concentrate on national public relations accounts.

#### . . . . .

Four new members of the Armstrong Cork Co. Building Materials Division wholesaler's policy committee were elected at the close of the third annual convention of the group in Lancaster, Pa. The policy committee is made up of representatives of Armstrong wholesalers in each of the four geographical sections of the country, and four members of the Armstrong management. Elected were W. C. Gibson, of the Dalton Wholesale Supply Co., Glendale, N.Y., representing the North Atlantic section; Walter G. Meyer, W. H. Pipkorn Co., Milwaukee, Wis., Central section; George W. Rummel, U. S. Mengel Plywoods, Inc., Houston, Tex., Southern section; and T. J. Jones, Pacific Yard Service, Portland, Ore., Western section.

. . . . .

Louis H. Miller has been appointed manager of marketing of the General Electric Co. Appliance and Merchandise Department, succeeding Charles R. Pritchard, recently elected president of General Electric Supply Corp. Succeeding Miller as manager of the household refrigerator division is Charles K. Rieger. Robert E. Boian has been named to succeed Rieger as manager of the heating device and fan divisions.

#### . . . . .

The Blackburn Specialty Co., Cleveland, Ohio has changed its name to Blaco Manufacturing Co., and products manufactured will be sold under the new trade name Blaco. There are no changes in management personnel. The company was formed in 1904.

#### . . . . .

Protection Products Manufacturing Co., Kalamazoo, Mich., has announced the promotion of **H. C. Kennedy** to assistant general sales manager. Kennedy joined the organization in 1943 as a salesman, and for the past three years has been Middle West district manager.



Hassall threaded asbestos siding nails are the choice of contractors throughout the country. Made of bronze and steel with plated finish. Note threaded shank which guarantees maximum holding power. Made of #14 gauge wire (082) in 1°, 1%°, 1%° lengths. Advise quantities, Prompt shipment.











## Free to Builders... Two New Planning and Idea Books

"Sales Features for Electrical Living Homes" shows the "most wanted" sales features in homes...features that have proved their appeal to home owners. Has 32 pages of illustrations, diagrams... on kitchens, laundries, electric bathrooms, and smart lighting ideas for every room in the house. Also gives simplified data to help in planning an adequate wiring system.

With each Sales Feature, you'll find a brief summary of Selling Points to help you and your salesmen turn prospects into buyers.

"Dosign Desails for Electrical Living Humer" fills a real need for construction details on valances, cornices, cove, soffit, pinhole spot, under-cabinet and other usual lighting effects. Kitchen and laundry plans, with complete dimensions, are also shown.

Photographs of actual installations illustrate the planning ideas, and construction details show exactly how to build them.

To get these books, send coupon below to Better Homes Bureau, Westinghouse Electric Corporation, Dept. AB-10, Box 868, Pittsburgh 30, Pennyivania. G-10115



#### Who Pays for Utilities? Usually the Home Duyer, ULI Bulletin Reports

Thousands of miles of new surface and underground utilities are being added to American cities, but home buyers are paying for most of them in the initial cost of the home, according to a survey by the Urban Land. Institute. The survey of municipal practice in underground utilities and streets is reported by the ULI in its new technical bulletin No. 13, "Who pays for Street and Utility Installations in New Residential Areas?" prepared by Seward E. Mott and Max S. Wehrly.

The institute, a private research and haid planning organization in Washington, D. C., contends that the pendulum is swinging too far in the matter of having developers and home purchasers provide facilities that are used by the public at large. Examples given are that sever and water lines installed by private developers are used by cities to produce revenue without any municipal investment whatsoever and that there is a tendency to require excessive installations of sewer, gas and waterlines, streets, sidewalks and paving.

The result, the report says, is to drive new developments out beyond city limits, thereby accelerating the decentralization of cities, with subsequent loss to central areas with their heavy physical investments and facilities. Excessive requirements in these cases, the ULI warns, actually results in tax losses and greater expense to the city in the long run.

The ULI feels it is reasonable for the home purchaser to foot the bill, provided that two other things follow. One is that the municipal requirements and standards for underground utilities and streets be reasonable, and scaled to the size of the new development concerned and the type of traffic and use to which they will be subjected. The other is that once the utilities are in and paid for by the developer and home owner, they should not be used by the municipality as sources of income through fees based on volume of use, and so on.

#### Prize Winning Design Copies Made Available

Planographed copies of 23 winners in the apartment design contest sponsored by Timber Engineering Co. are available free from the company. The designs, for wood garden-type units, include a number of architectural treatments for both one- and two-story buildings. Address of the firm is 1319 18th St., N. W., Washington 6, D.C.



A long-time favorite with craftsmen, the

No. 923 Bit Brace with the new self-centering chuck is now better than ever. It saves time . . . speeds work. Just drop the bit into the square socket, tighten the chuck. and the bit automatically centers itself. Securely seated in a square steel socket, it's ready for any boring job. For fast, smooth action . long, dependable service, get the No. 923 with the new self-centering chuck . . . it has everything you want in a Bit Elrace. Stanley makes a complete line of Bit Braces. See the style and size you want on display at your local dealer's.

OTHER WORK-SAVING FEATURES. Head spins on ball bearings and a branze bushing. Cocobolo hordwood hondle and heads. Not and cotter pin lock duck in place. Forged Universal jaws take bath nound and square taper shark bits to  $1_{1}^{-1}$ . 5 sizes  $-6^{-1}$  to  $14^{+1}$  sweep.

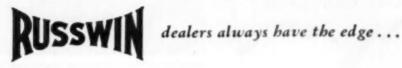
#### STANLEY TOOLS, NEW BRITAIN, CONNECTICUT



Wal " line tring cy

## ... in extra value

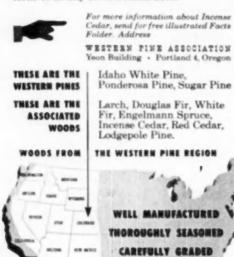
Seven extra quality features put Russwin tubular locks and latches in a class by themselves. They save time and trouble . ... and give your customers a better "buy". There's no price difference for Russwin quality. Easy to install, reversible for any hand of door. Exclusive Russwin all-steel rack and pinion assures smooth, positive action for life. Write for a new folder showing designs and finishes . . . and all the features. Russell & Erwin Division, The American Hardware Corporation, New Britain, Connecticut.





Incense Cedar, as produced by member mills of the Western Pine Association, is one of the most decay-resistant wood species found in America. Its light weight and easy workability lead to worth-while economies in construction work.

The uses of Incense Cedar range from siding to pencils. Its pleasant fragrance makes it a most popular closet-lining. It may be painted and stained in any color or finish desired. It is available in a wide range of paneling patterns to fit any architectural need.

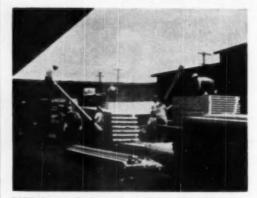


#### **Betaining Builders' Confidence**

(Continued from page 150)

used first on top. The company has eleven trucks which are in constant use; five are under lease to care for the expanded business.

Material is sold on the basis of quality only. To assure this quality, lumber is obtained from the large mills whenever possible. Iluilders are thus assured that only lumber that is thoroughly dried, sized and trimmed will be delivered to their jobs. In addition the com: any protects the



PORTION of open lumber yard and private switch track at rear of property where boscars can be unloaded directly into yard without further handling. Storage sheds flank open area on each side

builder on a firm order, between the time the order is placed and the material delivered, in the event of a price increase.

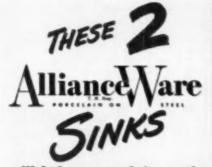
The organization is composed of thirty employees, nine of which are in the office and sales department. These men are quite versatile in that they can double for yard men when the occasion arises. The hardest working men in the company are the officers who establish the pattern by being the first to arrive and the last to leave. This has a tendency to spur the others on and make them happy in the task they are doing, for they realize there are no shirkers in the organization and that everyone produces.

The buildings that comprise the physical assets of the company are a group of unimposing frame structures. The office and sales room is an old building to which several wings were added as business increased. In the case of this organization, however, the character of the structures are incidental to the business, their reputation sustaining them without the need of new and imposing buildings.

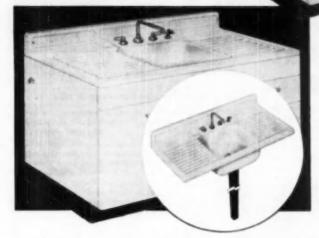


Seventy five per cent of all lumber is stored in sheds as above AMERICAN BUILDIE

.



will help you cash-in on the NEW TREND IN KITCHENS



SINK AND TRAY COMBINATION

With Fancet Ledge and Sliding Drainboard for Installation with Cabinet or Leg.

#### DOUBLE DRAINBOARD ROLL-RIM SINK

for installation with Cabinet or Leg

BUILDERS who are profiting most from today's housing needs are the ones who are prepared to meet new trends. Prospective home owners insist on kitchens that are modern in utility as well as in appearance.

Ideally meeting today's demands of home buyers are these two AllianceWare porcelain-on-steel kitchen sinks. Both accommodate a hot and cold mixing faucet and a disappearing spray hose. Either can be installed with a standard sink cabinet or with a leg. Brass goods and cabinets are not supplied.

The sink and tray combination, overall size  $48'' \times 25''$ , has a sink bowl 8'' deep and a tray bowl 12'' deep which meets a variety of uses, such as laundry work, spray rinsing of dishes, and washing fresh vegetables.

Overall size of the double drainboard sink is 54"x 25".

Made of 14-gauge enameling steel and finished with AllianceWare lustrous stainproof wet-process purcelain, these sinks give kitchens the much-wanted sparkle that stays young.

Ask your plumbing contractor or write us for catalog sheets giving complete details.

Alliance Vare. Inc. Alliance, Ohio Bathtubs . Lavatories . Sinks Alliance Vare



### Comfort AND VINGS ... PROVIDED with METAL WEATHERSTRI

It's mighty hard to provide maximum comfort in homes that do not have the necessary full protection of Metal Weatherstrip to seal the cracks around windows and doors. It literally puts a blanket around them . . . prevents needless heat loss and discomfort.

Metal Weatherstrip pays for itself in two or three years by savings in fuel alone. Reductions in fuel cost range from 20% to 30%. In addition, it's a weather-tight defense against rain, wind, storm, snow and all moisture.

For better Metal Weatherstrip it's "smart business" to talk with anyone of the Weatherstrip Research Institute members. Suggestions and inquiries about metal

weatherstrip are invited-WEATHERSTRIP Research INSTITUTE for the benefit of all.

Weatherstrip-the original Fuel Conservator . . . Saves Most Fuel in Proportion to Cost!

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MACHLANDIDS-DORCAS (D.	H6185, INC.
Bes 3107, Chiefense City, Obio.	8199 So. Chicago Ave., Obtogo 57, 8

**Old Company-New Methods** 

(Continued from page 97)

minimum of moisture is needed so that the particles of sand pick up and are esated by the cement. A common mixture consists of 31/2 parts of sand to 1 part portland cement although this ratio is varied to meet specific situations. Also white portland cement and silica are used when coloring is added. Regular concrete coloring is satisfactory.



**DETERIORATED** tions of lown State College Stadium were chipped and cloaned aff to expose solid concrete for shooting new surface

#### **Invent Special Conveyor for Mix**

The Miller Construction Company has found that a 3½S mixer is capable of mixing the materials fast enough to service their jeterete gun. In keeping with their inventive proclivities, the company perfected a conveyor to carry the dry mix from the mixer to the hopper of the gun machine. The mix is dropped from the conveyor through a screen into the hopper and then into the barrels of a horizontal, rotating cylinder from which it is shot under 45 to 65 pounds pai to the nozzle. Clean water is pumped to the nozzle, under at least 15 pounds pri more pressure than the mix, through a separate hose. The minimum volume of water, controlled by a valve on a perforated ring attachment of the nozzle, is added since, in view of the absence of forms, slumping must be avoided. The machine has a builtin water pump to insure a steady, even supply. The Millers



AFTER cleaning tiers of stadium, reinforcing mesh was formed on templets and put in place. Battle boards to restrain spray were hald in place with sand boys

(Continued on page 208)

# New ways to PROFIT in FINISHING, FLOORS!



American helps you increase your production and profits in floor finishing in two ways!

With the new American Super 8 Sander-jou can deable your production because this high speed machine cast twice as fast as a standard 8" machine? This greatly reduces time and costs... and thermaster the contractor's profit Powerful 2 H.P. motor... drum speed range 1600 to 2800 r.p.m. assures greatest efficiency under varying conditions... correct drum pressure selected by variable control-52 lb. to 103 lb.-to meet all conditions in floors. Operates efficiency even with low voltage. Plus many more all-new features. Write for bulletin and prices.

# NEW All-Floor Chart on FINISHES

When it comes to problems in choosing the finishing material-American now gives you the complete facts in this handy, new 3-foot chart 'Vou'll find it helpful in estimating coverage, drying time, selection of materials and other data for all floors. This chart will be sent free upon request. Also, a complete new A.LA. file on preparation, finishing and maintaining all types of floors is available without obligation.

SEN	D COUPON
The Am	erican Floor Surfacing Machine Co. 1 So. St. Clair St., Toledo, Ohio
Send free descrip	nion and prices on the new American ader. No obligation.
	Chart showing all materials for all floor
Send FREE Spe- Finishes, Mainter	ofication Sheets on American Floor tante Materials and Geaners.
Name	
Screet	
Gov	Seare



# SINCE 1903 MERICAN FLOOR MACHINES

**Old Company-New Methods** 

(Continued from page 208)

have found 35 pounds pri on the material with 100 feet of hose satisfactory with about five additional pounds pressure for each additional 50 feet of hose. For them, about 150 feet of hose gives best results.

The foremen of the company have learned that cleaning and repair of the machine can be held to a minimum if the machine is placed so that dust and dirt do not blow on it. In addition, two men spending ten minutes at the end of each working day keep the unit in good, clean working order. The gun itself is manufactured with and without the air compressor; that is, a standard air compressing unit can be used with the gun machine.

When shooting, the nozzleman arches the hose against his body, with the pressure in the hose counteracting the hose weight, holding the nozzle at 3/5 to 5 feet from and at right angles to a clean, solid surface, working from the bottom to the top on vertical sections.



ONE COAT of pnoumatically applied concrete was shot into place. 14 to 1-inch thick, Layer and bond are stronger than original

#### **Uncoated Rebound Particles Discarded**

The Miller Construction Company experiences about 20 per cent rebound, but anywhere from 0 to 50 per cent can be expected. Rebound consists of uncoated particles of sand which bounce off the surface being coated and which, since it has no strength or bond, must be removed. The Millers have found that a lime admixture reduces the amount of rebound. The amount is also affected by the pressure, for although higher pressures make somewhat stronger concrete, they also increase rebound. In any event, cate must be taken when using this method of applying to avoid covering any rebound within the structure since this will weaken the work.

When finishing a day's work, the nozzleman tapers off the work to a feather edge, not leaving a square joint likely to form a pattern in the finish. The nozzleman is the key to success, the company has found, for he controls not only the amount of water added and the rate of application but also the amount of rebound created and the texture and evenness of the finish.

After being shot into place, the mixture is cured as is regular concrete, but the Miller Company occasionally uses curing compound admixtures. Also like regular concrete, this concrete cannot be shot in freezing weather. Unlike other concrete, however, pneumatically applied concrete must be trowelled smooth within one-half hour, for it sets quickly.

(Continued on page 212)

AMERICAN BUILDER





BOWLING ALLEYS, gymnasiums, and dance floors finished with shellac remain beautiful, almost unmarred after months and months of heavy traffic, Looks like satin, wears like iron, even on surfaces that take the most abusive treatment. No wonder 75% of all wood floors are finished with shellact



the finest finish you can use for floors, for all "natural" woodwork

Unsurpassed as a primer and sealer for woodwork and plaster walls

Nationally Advertised!

SHELLAC INFORMATION BUREAU OF THE AMERICAN BLACHED SHELLAC MANUFACTURES ASSN., INC. 46 PINE STREET, NEW YORK 5, N. Y.

MAIL TODAY

Please send, without obligation, "Standard Specifications on the Use and Application of Shellac".

NUM 8.80	CITY & DOWN	STATE
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## according to recent national survey by a leading home magazine

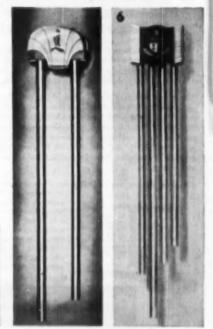
 Nowadays, a door chime is regarded as "standard equipment" by prospective home buyers. A good looking, sweet sounding door chime is a signal of gracious hospitality — it echoes the whole spirit of better living that is built into the well-designed home of today.

Thus the door chime (in itself an extremely modest item in the total cost of the home) becomes an instrument of good will for the builder who installs it and the dealer who sells it.

That's why it pays to buy the best in door chimes. That's why it pays to buy Edwards. Dollar for dollar, you can't beat Edwards Door Chimes for decorative value, musical perfection and trouble-free service.

There is an Edwards Door Chime for every type of house-large or small, modest or luxurious.

Edwards Company, Inc., Norwalk, Conn. In Canada: Edwards of Canada, Ltd.





WANT

DOOR CHIMES

Chordette - Continuous melody.
 Fairfax - Non-electrical Door Knecker

 Captain - Neat, compact, two-note front, single note rear.

4. Twist Chime - Low cost, non-electrical,

EDWARDS

Door Chimes

 Wedgwood – Popular tubular chime -two note and one note.
 Westminster – Beautiful eight note melody – The finest in modern

Chime.

good looking.

door chimes.





#### NO RABBETING - NO INTRICATE FITTING NO SCRIBING - NO SPECIAL TOOLS NEEDED



Here at last is a sink frame that seals joints watertight to stay! The frame overlaps the covering a full quarter-inch so edges can't work loose or curl up. The joint stays near and sanitary as long as the covering material lasts!

Yet the Sink-Lok Frame is one of the easiest of all frames to install! It is a simple T-type frame anchored from underneath the sink-top. No intricate scribing, or fitting is needed. No special tools are used. No rabbeting or mortising of the counter top is required. In addition, the frame supports the sink bowl itself, and the sink can be removed at any time without marring or damaging either the frame or the sinktop material.

Sink-Lok Frames are available for flat-rim sinks of any size,



#### **Old Company-New Methods**

(Continued from page 210)

To date, the Miller Construction Company has repaired a municipal swimming pool and constructed a second at the Sunnyside Country Club, Waterloo. In the construction of this new, saucer-shaped pool, forms were not used since the concrete was shot against the earth. The surrounding walks and clubhouse walls were shot with a jeterete gun. After excavation for the pool a hole 1x6x6 feet was dug at the lowest point to receive rebound swept into it. Some rebound was worked into the soil under the first coat, but as the concrete was shot around the sides, most of the rebound was worked into the pit and covered. The nozzleman stood on a plank platform over the 1/2-inch reinforcing rods so that he held the nozzle at right angles to the surface. It was necessary to shovel out the rebound of the second coat; care was taken to avoid shooting over any of it. A flash coat, 1/4 to 34-inch thick, was applied as a finish to the pool.



NEAT, smooth finish of the new surface of the tiers adds not only to the appearance of college stadium, but to its durability as well

#### Shoot Walls of Exposition Building

When constructing the 140x300-foot Dairy Congress Exposition Building at Waterloo, Iowa, the Miller Construction Company shot the concrete from both sides into a shell of steel reinforcing rods supported by a steel superstructure. For work of this kind it has been learned that walls two inches thick are required for spans up to four feet; walls must be not less than three inches thick for spans up to eight feet.

To form the shell, galvanized welded fabric with openings not over four inches square was used, comprising not less than 3% of 1 per cent of the cross sectional area of the completed wall. This mesh was spaced 15-inch from the back surface of the wall and attached directly to the superstructure. In buildings with concrete superstructures, supporting loops can be cast in place to hold the reinforcing for the walls. To avoid the possibilities of creating undesired tensions, the reinforcing rods were not sprung into place, but they were first formed on templets. Sections of the mesh were overlapped 11/2 meshes at their joints and were tied about 18 inches O.C. Finally, an extra sheet of 18-inch mesh was placed over the basic reinforcing and wired into place. Generally, when using this method, extra strips of reinforcing 9x24 inches are placed diagonally at corners of openings. Water stops at openings are fastened to the reinforcing also.

(Continued on page 214)



#### Better for structural work

Duraplastic air-entraining portland cement requires less mixing water for a given slump, makes concrete more plastic, more workable, more cohesive, more uniform. The increased plasticity sids proper placement, improves surface appearance of structural and mass concrete.

#### Makes more durable concrete

Duraplastic air-entrained concrete minimizes water gain and segregation. Finished concrete is thus fortified against effects of freezing-thawing weather. (At right, Promontory Apts. Architect: Pace Associates. Contractor: Peter Hamlin Construction Companyall of Chicago, Ill. Duraplastic cement used exclusively.)

OFFICES: Albany, Birmingham, Boston, Chicago,



## YET DURAPLASTIC\* COSTS NO MORE

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Daynov, Kanana City, Misnonipolin, New York, Philadelphia, Pattobargh, St. Louis, Waeo.

\* Duraplastic" is the registered trude mark of the air-entraining pertilent count manufactured by Universit Atlan Commit Company,



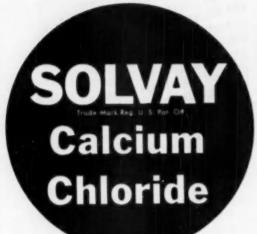
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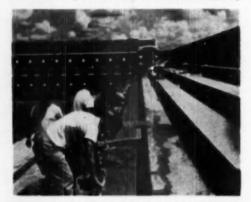
New York 6. N.Y.

#### **Old Company - New Methods**

(Continued from page 212)

In this type of construction and in other instances, as a fire procaution or for appearance, steel columns, girders and beams can be encased with the piteumatically applied concrete. The steel members are first thoroughly cleaned and then covered with a steel mesh set out about 34 inches. A 3.1 mix is shot up to 135 inches in vertical webs, to 2 inches on outer edges and on bottoms.

The concrete was applied in three coats in building the exposition auditorium. Between the shootings, the undercoats were allowed to cure and were then washed down and blown with compressed air before applying the subsequent coats. Ground strips formed guides around openings. Adaptable to trowelling as well, the flash finish was floated only.



AFTER shooting concrete into piece on tiers. II was finished like regularly placed concrete screeded, floated, trowelled and tooled

#### **Used Against Hydrostatic Head**

The Miller Construction Company has used pneumatically applied concrete in the repair of small coffer dams. shooting against a hydrostatic head. The manufacturers of the equipment have pointed out that the technique can also be used to waterproof leaking basement and similar walls. In these cases, bleed holes are first drilled at the base of the wall to lead off the seepage during the application. Secondly, the surface is cleaned off thoroughly. Concrete with the proportions of 214 cubic feet of sand, I cubic foot of cement and 30 pounds of metallic waterprisoling is shot on the wall in a first coat 1/2 to 3/2 inches thick-for a three to fivefoot head. It is shot up to 11/2 to 3 inches for a 10 to 20-foot head. After screeding and allowing to set for 8 to 12 hours. the surface is dampened and shot to an additional 12-inch with a straight 3:1 mix and trowelled off. The last step consists of plugging the bleed holes and filling them by hand with the metallic waterproofing and finish mix after the section has been allowed to set for three days.

#### Floor, Roof Slabs Shot in Place

Pneumatically applied concrete is used successfully for floor and roof slabs, notably with lightweight aggregates such as pumice. Celocrete or Haydite. Standard reinforcing for concrete is installed, not closer than M-inches to expaned surface. Concrete is shot over strong, non-sagging forms which are not removed for at least 48 hours after the concrete has been placed. Slabs up to 335 inches thick can be shot in one coat. For thicker slabs, it is recommended that they be shot in two or more coats, providing that the (Continued on page 216).



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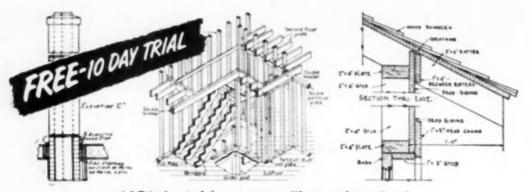
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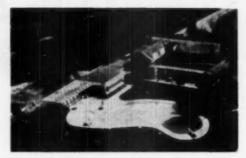


**Old Company - New Methods** 

(Continued from page 214)

top coat is not less than one inch thick. Regular concrete finishes are employed on the surfaces. As in other work, the undercoats are cleaned and dampened before applying subsequent layers.

-61



THAT applying concrete pseumotically is an economic method of constructing owimming pools is attasted to by the Miller Campany, builders of the one shown in photo

Mr. Miller Sr., has been one of the leading exponents of pneumatically applied concrete in his company. He is one of lowa's few remaining AGC charter members and is also councilman-at-large for the city of Waterloo. Employing 250 men, the company has, besides its pneumatically applied concrete crew, its own steel, concrete, bricklaying, carpenter and shop crews, and extensive private lumber yard and its own drafting department.

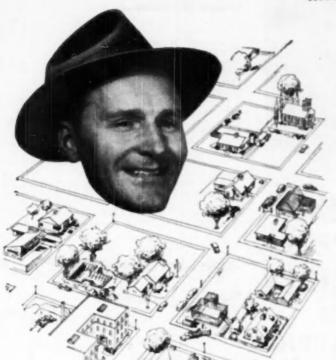
#### **Diffused Dining Room Lighting**

To achieve this indirect-type background illumination, one single-lamp fluorescent lighting fixture is mounted against the wall eight inches above the top edge of each niche and is shielded by a frosted glass panel which lifts up easily for changing lamps. The four sections of the longer wall contain 15-watt fluorescent lamps.



IN ADDITION to being decorative, this lighting technique assures sufficient illumination in dining area without bareh gigre

Useful and decorative lighted niches highlight figurines and knick-knacks, add color and character to the room and provide an extra buffet in this alcove designed and illuminated by the Sylvania Electric Products, Inc.



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New mosenry, perois and somparase, can be color-assert and weatherparatected, fisanks to TEXOUTE Scherier, Hara's on all-resin paint that increases property volves. Combines unerposed basety and quality with autotanding working adventages. Wide array of colors with any architectural style.



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- \* One Piece Welded Steel Frame
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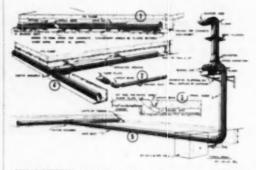
#### New to Install Ventilation System for Garages

In most cases, normal window ventilation is inadequate to guard against dangers of carbon monoxide in garages. This is particularly true in garages where several automobiles are kept and where men must work around them. Even if there are several windows, kept open, there is danger of poisonous gas fumes collecting where air cannot immediately remove them.

A safe system of garage ventilation is one where fumes are taken directly from the automobile exhaust pipe and delivered by fan through a hose to the outside of the building. Such a system, properly installed, offers the best protection. And to save construction costs, it should be installed at the time building construction begins.

The National System of Garage Vertilation, Inc., Decatur, IlL, offers this kind of ventilation equipment which may be installed underfloor or along the colong. The following are installation suggestions this firm makes for the underfloor system:

1. Assemble system (see drawing) on floor or ground in exact position where it will be when completely installed.



RECOMMENDED installation of underfloor garage ventilation system manufactured by The National System of Garage Ventilotion. Inc., is shown in those drawings. Gas tumes are taken directly outside from enhances pipe of automobile

If necessary to shorten any duct, make certain to shorten from plain end and not from crimped end.

 Make a mark on floor, or in case of ground use sharp instrument, two inches on each side of duct work, clearly marking where trench is to be dug.

3. Disassemble system and place it out of way.

4. Dig trench. If trench is to be dug through concrete it should be 17 inches deep from floor level. If trench to be dug before floor is laid, subtract thickness of proposed floor from 17 inches and make trench that depth. Trench should be 12 inches theep.

5. Reassemble system in trench, setting it on two-inchbricks spaced about every 10 feet (Fig. 1). Use three sheet metal screws to fasten each length of duct in main line. Do not use screws to secure duct work in branch duct that houses the flexible tubing.

6. Completely encase duct work with concrete. Work concrete down around the battom of duct work. Keep floor plate iree so that it can be adjusted to desired height (Fig. 2). A slope of one-half inch up to floor plate is desirable to prevent water iron running into duct (Fig. 3). Wedge duct work in such a way so it will not float when concrete is yourcel (Fig. 4).

7. Continue with regular floor laying.

(Continued on page 220)



levight with i when Gloss Block naads paintiin, screens or storm south





For dining areas, Insulux Glass Block lets you forget about near-by buildings or paor views; gives you light, privacy, insulation and beauty.



In kitchens, Insulux Glass Black gives you more customer-selling points: light, privacy, insulation and easy maintenance. Glass resists water, grease, heat, smake-wipes clean.



Your homes can easily have extra touches of value and luxury that mean easier sales, faster sales, more sales. At small cost, Daylight Engineering gives your homes BIG talking and selling points . . . makes your homes even more attractive to buyers.

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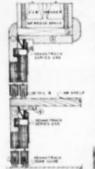


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Part 310 Post catalog



#### Nursery's Open Front Typical of Modern Commercial Design

FLORAL shops and nurseries are particularly well suited to the modern trend in commercial design of using floorto-ceiling front windows so that the entire store becomes a "showcase" display. This technique has two obvious advantages: it permits entry of more daylight, and it gives the store front an "openness" likely to induce potential customers to come into the store.

Blanding's Nursery in Santa Ana, Calif., is a fine illustration of this technique. Built on a concrete slab, the structure is generously provided with a plate glass front section



EXTENSION of stone vensor through glass front wall creates illusion of openness. Corner pool also extends under wall to outside

which permits using the entire floor as a display area with the stone veneer rear walls as an appropriately decorative background. The use of this stone in the wing adds to the feeling of openness.

Although no attempt was made to canouflage the exposed ceiling joists, their exposure adds rather than detracts from the attractiveness of the interior.

#### **How to Install Ventilation ...**

(Continued from page 218)

8. Before blower unit is installed, make certain that oil cups will be in an upright position.

9. Check rotation of motor. This is important. Fan must create suction.

10. Always have discharge straight up whenever it is possible, to go through roof with the exhaust (Fig. 5). Weight the end of a string and allow it to hang from ceiling in order to determine where the center of exhainst will pase through the roof. Cut hole of the correct diameter and run exhaust stack through it. Place flashing on floor in its correct location. Nail and seal with roof cement, Place elbow on end of exhaust, then place weatherhood on the elbow. Always point the exhaust discharge with the prevailing wind.

 Hook into hot line, 110 or 220 volts as required and then install switch. Wire to motor and start. Oil motor at starting, and twice a year.

The overhead ventilation system, equally efficient, is easily installed. Motor for at a shipped for mounting upright on beam, girder or platform, and fittings with stubfor flexible tubes are placed to allow each tube to come down between two cars.







OVER THE TOP

• Simple in design, easy to adjust, smooth in operation, surprisingly low in cost ... that's the all-new Sectional-Type "Over-the-Top" Garage Door. Here is a door rugged enough to withstand the hardest use and roughest weather, yet perfectly balanced for lightrunning, automatic action. A turn of the handle starts is up and in -- completely out of the way. Adjustable brakes prevent slamming or rebounding door rolls freely, quietly on ball-bearing rollers. Equipped with quality Frants hardware throughbout, the new "Over-The-Top" Sectional Type Door comes in six residential sizes: for openings  $B'x^{*}$ , B'x6'6', 5'x7', 9'x6'6', 15'x7' and 16'x7'. Only  $13b'_{2}$ " of headroom are required for installation.



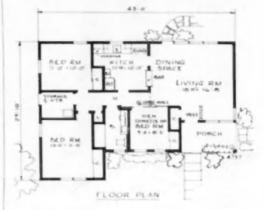
Flexible Room Arrangements In Three-Bedroom Homes

LEXIBILITY of room arrangement to meet future living requirements of most every family; the immediate advantages of a three-bedroom layout, and the introduction of unusual kitchen equipment are features of the new Fairview Kanch colony of the Strausman Construction Company, in East Meadow, L.I., N.Y.

The \$1,600,000 development, which will comprise a total of 160 residences on a 34-acre tract, is being erected on the former Walter's and Reimels' Farms. Directed at families in the middle-income groups, the project will offer purchasers a completely equipped house priced at \$2,-490 on landscaped plots of approximately 6,000 square



STRAUSMAN Co. house sells for \$9,490. Floor plan, below



feet and larger. Mortgage expenses and all legal fees are to be included in this one price.

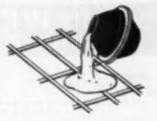
The new colony marks the entry of the Strausman organization into the medium-priced mass home building field following twenty years of specialized construction of custom-built individual homes in Queens and Nassau Communities. Many of the refinements of home living created during this period will be introduced in the new development by the sponsors, who have adapted their over-all planning to the demands of present day living occasioned by the servantless house and the limitations of the average middle income budget.

The houses, planned by Matern & York, architects, (Continued on page 224)

### For Better Homes . . . Quicker Sales

### **American Welded Wire Fabric**





YOU can build additional sales pull into your new homes - promise lasting good looks-by reinforcing all types of concrete construction with American Welded Wire Fabric. And those new homes will stay new, for proper reinforcement prevents the excessive settling that usually results in cracked plaster, gaping baseboards, sticking doors and other annoyances.

Welded Wire Fabric distributes the strength of steel evenly throughout concrete structures. Its many small, closely spaced members provide continuous reinforcement, join founda-tions, walls and floors into a single unit, protect the entire house from disfigurement and damage.

Wherever you plan to use concrete construction, plan to use American Welded Wire Fabric reinforcement, Many prominent builders have found that policy the sure way to build better homes, to assure quicker sales and satisfied buyers.

You can get U.S.S American Welded Wire Fabric in every locality from jobbers' and dealers' stocks.

#### **Get Expert Advice**

It will pay you well to get the latest information on American Welded Wire Fabric. Send unday for our illustrated folders, which show typical uses of wire fabric reinforcement in factories, farms, airports and public buildings, as well as in residences, sidewalks, curbs and driveways. If you wish, our qualified expert will be glad to call and show you how you can use U S S American Welded Wire Fabric to the best advantage. Just drop a line, on your business letterhead, to our nearest sales office.

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Every type of concrete construction needs





MINNEAPOLIS 16, MINN.

#### **Flexible Arrangements...**

(Continued from page 222)

provide a number of exterior elevations and color combinations for interesting alternate designs. Exteriors emphasize large sheltered porches and outside decorative features. The center circulation type layout features three bedrooms, living room, dinette, kitchen and bathroom.

A novel disappearing wall arrangement provides for flexible usage of one of the bedrooms. The room is planned to allow conversion as individual space requirements demand as it may be used also as a dining room or a den.

The large L-shaped living room and dining area emphasizes front and rear floor-to-ceiling picture windows and a built-in bookcase which screens off the entrance vestibule. A convenient pass-thru bar connects the



SLIDING doors serve as "disappearing partition" in this home

kitchen with the dinette for formal dining.

Unusual kitchen equipment for a house in this price class includes baked enamel colored cabinets, storage and broom closets, six feet of colored Formica work top area, seven cubic foot popular brand refrigerator and four burner range, automatic washing machine, exhaust fan and fluorescent light fixtures. Ample space is provided in the kitchen for informal dining.

An over-sized bathroom with colored fixtures and ccramic tile contains a dressing vanity with overhead fluorescent illumination. Color choices in both kitchen and bathroom cabinets and fixtures are being given purchasers in addition to choice of interior wall decorations throughout the house.

Complete insulation in walls and ceilings, steel casement windows with metal screens and venetian blinds are included in the purchase price.

Other features include a large storage room with both exterior and interior entrances; automatic oil-fired hot water radiant heating system.

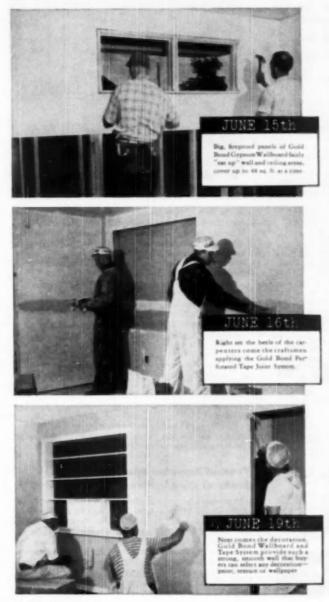
All houses, inspected and approved by the Federal (Continued on page 226)

AMERICAN BUILDER

#### 224

# "SAVED 2 WEEKS

Construction time with Gold Bond Wallboard and Tape Joint System!"



### Writes Howard Pearce, Pres. of Pearce & Pearce, Buffalo, N.Y.

OVER 500 ranch type homes in Buffalo's Lincoln Park Village are distinguished by their charming design and sturdy yet lowcost construction. Here's what Mr. Howard Pearce, creator of this delightful development, writes about his experience with Gold Bold Gypsum Wallboard construction:

"Like every investment builder, we had the usual problem—how to build a quality house at a price folks can afford to pay.

"One thing that runs up costs is lost time... one crew waiting for another to finish...days of waiting for materials to dry.

"We solved this problem with Gold Bond Gypsum Wallboard for the walls and ceilings, with joints completely concealed with Gold Bond Perforated Tape Joint System.

"So satisfactory that this Gold Bond System has become standard on all out homes."

And Mr. Pearce's experience is not an isolated case. Hundreds of builders the country over are building strong, fitesafe walls and ceilings with Gold Bond Gypsum Wallboard at important savings in time and money. These days of mounting costs, with builders trying to hold prices in line, the best answer is often gypsum wallboard construction.

#### NATIONAL GYPSUM COMPANY BUFFALO 2, NEW YORK



Fireproof Wallboards, Decoratise Insulation Boards, Lath, Plaster, Lime, Sheathing, Wall Paint, Rock Wool Insulation, Metal Lath and Sound Control Products.



#### Flexible Arrangements . . .

#### (Continued from page 224)

Housing Administration and Veterans Administration, are insured under the FHA-Mortgage plan.

Under the purchase arrangement, no down payment is required from veterans and monthly carrying charges total approximately \$54. Carrying charges for non-veterans are about \$57 a month after a small cash payment. Twenty-five year mortgages are available to all purchasers.



EXTRA room provided by sliding doors can serve as des. as extra bedroom, or as extension to dining room in Strausman home

The property, two blocks from the Wantagh State Parkway leading to Jones Beach and other recreation areas, is within walking distance of an elementary school. Two shopping centers, including a new \$5,000,000 shopping center on Hempstead Turnpike are conveniently nearby. It is only a short distance to the Hempstead Station of the Long Island Railroad.

According to David Strausman, president of the construction firm, the new colony will now make three-bedroom living accommodations available within the financial resources of the average middle-income family.

"Our planning is designed to meet the requirements of the expanding family without the necessity of future additional exy ense resulting from conversion of attic space. Flexible room arrangement, depending upon the individual needs of the home owner, assures maximum use of all parts of the homes."

More recently the firm has been active in the Village of Hem-stead, where more than two hundred homes were built and sold under the development name of Fairview at Hemostead.

In additon to David Strausman, officers of the building organization include Edward Strausman, vice-president and treasurer, and George Strausman, secretary.

#### **Federal Agencies Plan Study of Cooperatives**

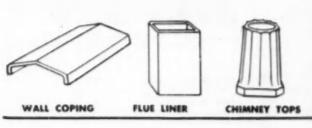
A comprehensive study of cooperative housing activities in the United States is to be undertaken by the Bureau of Labor Statistics and the HHFA. The study, according to Dr. Richard U. Ratcliff, HHFA director of housing research, will provide information of types of housing cooperatives established, their current status, membership requirements, method of financing, occupancy data on income level and size of family, together with the extent of cooperative action in planning, construction and management of the projects.

# CLAY PIPE PROTECTS the builder

THE BUILDING BUSINESS, perhaps more than any other, is based on confidence — in the builder's "know-how," his craftsmanship, and his use of quality materials. That's why Vitrified Clay Pipe is the all-time favorite with builders who value their good reputations. It's the quality pipe, universally respected by contractors, engineers, architects, and owners alike. It's the safe pipe, unaffected by chemical action — the only pipe that never wears out. Clay Pipe can be installed with complete confidence, because it can't be affected by present or future wastes. It's the only pipe that's sure to protect your reputation by lasting forever.

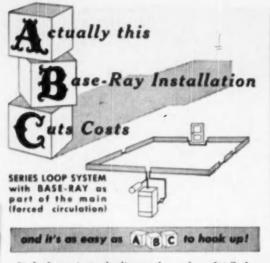
NATIONAL CLAY PIPE MANUFACTURERS, INC. 100 North LaSalle St., Room 2100, Chicago 2, III. 703 Ninth & Hill Bidg., Los Angeles 15, Calif. 1105 Huntingtor Bank Bidg., Columbus 15, Ohio 206 Connally Building, Atlanta 3, Georgia

SPECIFY





OCTOBER, 1950



Study, for a minute, the diagram shown above. It tells the whole story. Installed in series, each BASE-RAY<sup>e</sup> panel becomes part of the main. This can mean a saving in labor, pipe and fittings up to 50% of installation cost. In many cases, this saving is the determining factor in the landing of contracts. Further details on this Series Loop System, recommended hy I-B-R, are given in their new Guide No. 5.

LOOK at these Five Features

1. RADIANT COMPORT

2. DURABILITY 3. APPLABANCE LOSS IS GREATEST S. LOW FLOOR-TO-CEILING TEMPERATURE DIFFERENTIAL

4. LOCATION WHERE HEAT

\*Reg. U.S. Per. OH.

Below: Cost as a single the firs on BASE-RAY permanent, That's BASE RAY'S officiency I much proafier.

Above. The law, evenesing tines of BASE-RAY and beauty to any ream and make this method of beating perticularly appealing to woman.



THE IMPORTANCE OF CAST-JRON CONSTRUCTION, BASE-BAY Bedient Benchoards nov mode of cost iron, the mated which combines accellant head conductivity with likeling service. Its durability hear preven if to be superior to all other motals. Many Bureham row-iron heating units we still giving dependable service after more than a half contery of use.

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PLOMEERS OF RADIANT BASEBOARD HEATING" IRVINGTON, N. Y., Dept. AB-100 FREELNEW, EFVISED "Botings and Isobalistics Guide

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	Burnham Corporation Irvington, N. Y.	Begs, A9-100
	Please send me capy of "Batin Guide" on BASE-RAY Redient I	as and Installation
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#### **New Product - New Method**

Savings in time and material are claimed by contractors who completed plastering job with a machine and a new type lath

Plasterers on a recently completed home in Pasadena, Calif., say they have experienced new ease in plaster application by using a plastering machine and a new type lath. And building contractors using the new product and method claim new savings in time and plaster.

Machine used on the \$100,000 home, built by Brummett & Denblon, Inc., is an E-Z On Plastering Machine; the

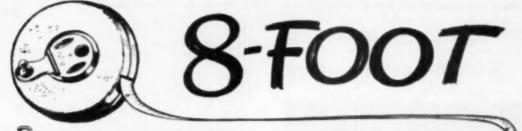


PLASTER made of light weight appropriates in sprayed on a paper-backed lath. K-Lath, by E-Z On Plastering Machine

8		
-11	121 Martin Hillson	

SPRAYED on with proper pressure, the plaster forms a strong key behind openings in the K-Lath, as illustrated here

new lath is K-Lath, which is made of wire and paper. K-Lath consists of a series of parallel galvanized wires, with tough durable paper interwoven through it, as illustrated here. It weighs 2½ pounds per yard, and is suitable for interior plaster or exterior stucco. For use on interior with plaster, it is placed directly against the stude by tieing or nailing, and plaster is sprayed against it. Plaster keys (Continued on page 230)



# **BLANKET-TYPE ROCK WOOL BATTS**

Warm Up Your Insulation Business with this Easy-to-Store, Easy-to-Sell Barrett Product!



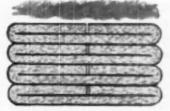
8-FOOT LENGTHS. Go on faster. Fewer seams-an unbroken vapor barrier from floor to ceiling-mean better insulation, less condensation. Also available 15" a 24" and 15" z 48", full and semi-thick



WON'T LUMP UP. Firm, springy Barrett Rock Wool doesn't "drift" or get lumpy. High resilience assures uniform density of insulation over all areas.



FIRE-SAFE. Barrett\* Rock Wool Insulation is a fire-proof material-functioning as a barrier to the spread of fire. A blowtorch won't burn it.



NO STORAGE CASUALTIES. Batts can be stored for long periods and will spring back to specified thickness when removed. No "flatties" at the bottom of the pile!

Barrett

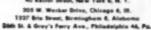


noises and, strategically applied to partitions between rooms (as in the case of a bathroom), it virtually eliminates sound transference.



QUICE OILIVERY. Barrett's conveniently located distribution points assure immediste attention to your orders, no lost sales through empty shelves.







OCTOBER, 1950

#### "Miss National Home Week" Selected

To add more publicity to National Home Week, September 10-17, a "Miss National Home Week" was selected, and wore a special gown for the occasion that depicted the evolution of the log cabin to today's ranch rambler.

"Miss National Home Week" for 1950 was Geneva Tomlin. Her special gown was adorned with paintings done by Artist Charles Latshaw.



GENEVA Tomin, "Mins National Home Week." posses in special gown depicting evolution of log cabin to today's ranch rambler. Gown was painted by Artist Charles Latshaw

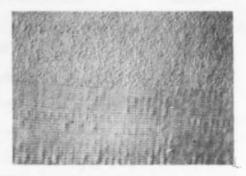
The National Association of Home Builders said members in 140 cities were to have open houses on their projects, with power tool demonstrations, parades and other celebrations.

#### New Product - New Methods

(Continued from page 228)

behind slots in the lath.

Plaster made with light weight aggregates is used in the E-Z On Plastering Machine. It is poured in the hopper of the machine by a bad-carrier. The hopper holds four cubic feet of plaster and the machine sprays one cubic foot per minute. The brown coat and scratch coats are sprayed on, but the finish coat is applied by hand. One man operates the spray gan and three men work at the rodding and darbying.

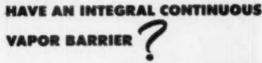


TOP half of this illustration shows surface of scratch coat as it comes from gus. Bottom shows same coat hand scratched

Plasterers like it because of the savings in physical effort, and they say it is a "natural" for use with K-Lath. K-Lath is made by K-Lath Co., Monterey Park, Calif., and the E-Z On machine by McNulty Bros. Co., Chicago, Ill.



#### WHY SHOULD INSULATION



Condensing vapor has always been a problem in building. But in today's tighter-built houses—with such modern improvements as air conditioning and hamidifying equipment . extra bathrooms . . automatic clothes washers and driers . . . it is more of a problem than ever! That is why insulated construction must be protected from condensing vapor. Condensation, if it occurs within a wall, may result in wet insulation, reducing its efficiency, and may lead to decay, paint blistering, and other damage.

Balsam-Wool is completely protected from condensing moisture by an integral, continuous vapor barrier. This vapor barrier—the asphalt coated and saturated liner of Balsam-Wool—meets government specifications requiring a barrier on the warm side of the insulation having a permeability not exceeding 1 grain per square foot per hour at a vapor pressure difference through the material of one inch of mercury.

What's more, Balsam-Wooi adds an EXTRA safety factor beyond requirements—a tough, cold-side liner which reduces convection through the insulating mat, reduces air infaltration, gives additional support to the mat, and helps protect it against rough handling and the penetration of iree water during the construction process.

Years of research and constant testing are behind every Balsam-Wool feature-and no other insulation contains all of them:

> Wood Concerdes Company Dept. 119-1995. First National Back Building 51. Paul 1. Minnessta

Please send me a set of Balaam-Wool Application Data Sheets

Address

- a Continuous integral vapor barrier
- a Sturdy wind barrier
- a Baubia air spaces
- · Special spacer flanges
- a Double banding of mat to liner
- a flat and termits treatment
- a Highly fire retardant
- · Rigid quality control

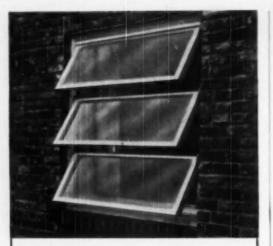


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SEALED INSULATION BALSAM-WOOL + Products of Weyerhoeuser + NU-WOOD\*

BRES. U. S. PAT. OPP.

pon today!



## **51** Sizes and Combinations

Gate City Awning Windows come in so many sizes that there's no problem at all in including these sales-building windows in your homes.

Compared to the ventilation, convenience and safety values they add, their cost is low. \$100 will approximately cover the additional cost for the average home. Figured on a 25-year mortgage, this comes to  $56 \epsilon$  per month. Only  $1\% \epsilon$  per day for the owner!

They'll cut your installation costs, too, because every window comes precision-assembled and ready-glazed, with all hardware in place and factory-tested. Full Lumite indoor screen with every unit. Double glazing available on order.

Whether you work with an architect, or build from other plans, you'll produce better, more salable homes by including Gate City Awning Windows.



#### **Americans Are Good Credit Risks**

Today's high percentage of home ownership has been possible only because Americans are sticklers in paying their debts and maintaining their credit, according to Martin C. Huggett, executive vice president of the Chicago Metropolitan Home Builders Association.

Reporting that home ownership has increased 22 per cent in the United States in the last 10 years, Huggett emphasized that few home owners in this period have defaulted in their mortgage payments.

"As a result," he said, "the government has been able to continue offering mortgage insurance at a low premium, and this has had the effect of encouraging lenders to loan their money readily.

"Today's mortgage," he said, "provides the certainty of continuous uninterrupted possession because it is gauged to the income and earning capacity of the owner."

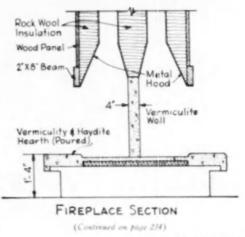
#### **Select Fireplace Ideas**

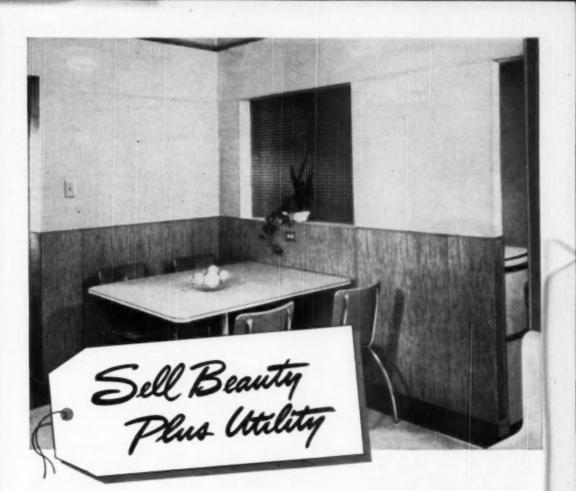
The two fireplace ideas shown here were designed and built by Eral Leek, of Sausalito, Calif. Both are well proportioned, and offer attractiviness through simplicity in design. A winding stairway to the left of one is formed of heavy 2x14-inch boards, with ends left exposed in the living room. Materials used include wood, brick, stone and concrete.



Photo by Dagmar Cogill

THIS attractive fireplace was built aboard a barge by Builder Eral Leek, and would add attractivines to any home





When you install Marlite bathrooms, kitchens or other interiors, you're certain to attract buyers who want chcerful color, easy housekeeping features and beauty in their home.

Today interest in Marlite plastic-finished wall and ceiling panels is at an all-time peak. Coupon returns from magazine advertising are breaking all records. Dealers are selling as many as five out of six of the prospects who send in these inquiries!

For here is a product that offers beauty plus utility. Sparkling, durable Marlite cleans swiftly with just a damp cloth. It never requires periodic painting or redecorating. The genu-

ine Marlite baked plastic finish seals out dirt, grime, smudges and moisture . . . seals in the striking beauty.

Marlite Plastic Finished WALL PANEL

Specify genuine Marlite for new construction or remodeling. Look for the name on every panel—your client's guarantee of satisfaction! Choose from 63 smart color and pattern combinations. Mail coupon today for free Sample Folder. Install nationally advertised Marlite!

# 

OCTOBER, 1950



5.16

DISTRIBUTOR

234

Select Fireplace Ideas (Continued from page 232) Stone -Flue Planting 6"X12"Beam Damper Asbestos LIron Covered with Copper Fire Brick Conc & Stone Floor-Fill Sleepers 2 Slab Footing i i Photo by John Bickel

FOR a home with a high living room ceiling. Appeal is added to this fireplace by combining massive wood beam with stone

Boos the job! This plan shows how Coleman Gas Wall Heaters can be used in modern homes.

## Keeps costs down-Helps sell homes

SAVES SPACE, INSTALLS EASILY

The modern heater that fits in the wall between studs. It extends out only 3% inches so takes no living space. Smart, modern style with a smooth, bright, luxurious finish that won't discolor, chip, flake or peel. And won't discolor wall or crack plaster. No ugly pipes show.

Saves on installation because it needs no excavation, no special construction, no basement. Ideal for slab-floor homes as there's no ripping floors. A dandy for heating 2nd-floor areas where space is scarce. Makes and moves the heat for an abundance of fresh flowing warmth. Safe for children — the casing they can reach heats to only 53\* above room temperature.

Coleman GAS WALL HEATER

#### TWO MODELS-Single and Dual Wall, for Gas and LP-gas. Use anywhere.

Single Wall Model heats 2 average rooms with 25,000 BTU per hour input rating. Dual Wall Model, set in wall or partition, heats adjoining rooms. BTU per hour input rating 45,000. Beparate controls to regulate temperature individually. Send coupon to find out why Coleman Gas Wall Heaters do such a dependable job of heating thoroughly — yet keep costs low.

THE COLEMAN COMPANY, Inc., Wabile 1, Kamas

#### COLEMAN HIGH-PERFORMANCE Gas WATER HEATER

Fully estomatic-for estural, manufactured and LP-gas. Amaningly feat recovery role keeps plenty of hot water always on top. 20, 30, 45galion capseities. Heautiful gleaming finish. Automatic temperature control and 100% Automatic Safety Shutoff Valve. Seed coopen.



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Street				

OCTOBER, 1950



Approved Corbin Automatic Exit Fixtures with sturdy dropforged levers provide instant exit wherever

people gather. These Corbin mechanical safequards are the first choice of discriminating architects and builders.



#### **Gay Colors, Bright Wallpaper Prints Spark New Donial Center**

#### **Fireplace**, picture windows, landscaped patio assure patients' ease in layout designed for efficiency

**G**ETTING a tooth pulled might be a pleasure in the en-jøyable surroundings of the Dr. James Vernetti Dental Building at Coronado, Calif., for the architect and builder have designed and constructed a building that embodies every known convenjence for operating efficiency and for the patients' comfort. Built by Hamilton-Daugherty, Inc., Beverly Hills, Calif., and designed by Richard Wheeler, San Diego architect, this structure would be a welcome architectural addition in most any community.

The visitor is first confronted by the flat roof and wide eave overhang that enhance the decor of the stone facade and flagstone patio. The stone motif is repeated in the reception room where it is used on the fireplace and hearth.

Wallpaper in the reception room reflects only in part the regard given to color in this dental building, for Gustave Plochere, color consultant, directed selection of the interior decoration that includes yellow Coralite wainscoting



THIS pleasing entrance groots visitors to new dental building in Coronado, Calif., designed by Richard Wheeler in cooperation with the builders, Hamilton-Daugherty, Inc., for Dr. James Vernetti



#### PATIENT control is effective but unobtrusive in this dental build. ing. A rear exit permits movement of patients in one direction

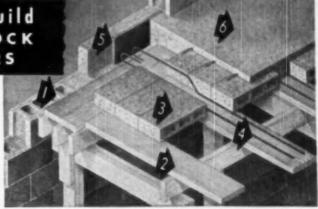
with black baseboards in all operatories. Gay colors and bright, bold patterns line all wall surfaces and are used on the ceilings in the individual operatories. Corridor ceilings are finished with Acoust-Celotex sound-absorbing material. In keeping with the general decorative tenor, woodwork and the flush doors are hirch in a natural finish. Double louvre doors of the operatories are also a natural birch fittesh

(Continued on page 238)

## Here's how to build CONCRETE BLOCK JOIST FLOORS

Concrete block joist floors are easy to build. Their popularity for residences and other buildings with light floor loads is greatly increasing. Here are the simple construction steps:

- Build exterior wall to the height of a floor.
- 2 Erect formwork of parallel planks for supporting filler units and the concrete slab.
- 3 Lay rows of block on planks, with cores running horizontally. The joints between block in adjacent rows may be staggered or continuous.
- A Install reinforcing bars for the castin-place joists as per design table.\* Also place conduits for wires, plumbing and heating.
- 5 Set a continuous strip of 1" waterproof insulation board-as deep as the floor is to be-around the edge of the entire floor.



Place concrete for joists and slab. 6 The floor is firesafe and an ideal base for any floor finish desired. The flat underside can be painted, plastered or left exposed to show the grain borrowed from the wood forma.

# Write for free, illustrated booklet explaining the design and construction of concrete black joist floors. Distributed only in the U.S. and Canada.

#### PORTLAND CEMENT ASSOCIATION Dept. 10-3, 33 W. Grand Ave., Chicage 10, III.

A national organization to improve and extend the uses of partiand cement and concrete .... through scientific research and engineering field work





Mengelbord<sup>\*</sup> is a low-priced, one-piece face, 3-ply, utility hardwood plywood, <sup>3</sup>/4" thick. Made from beautiful White Tupelo Gum (a genuine cabinet-maker's hardwood). It is ideal for "natural" finishes!

Mengelbord is ideal for all interior uses: DRY WALLS PARTITIONS CABINETS STORE FIXTURES

FURNITURE

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

> Where fine wood panels of Mahogany, Oak, Birch or Walnut are desired—ask for Mengelux<sup>4</sup>. Literature on request.

THE MENGEL COMPANY Plywood Division • Louisville 2, Ky. \*Rep. U. S. Port. Off.

#### New Dental Center ...

(Continued from page 236)

Of frame and stucco construction on concrete foundations, the building has wood subflooring with a plywood base for the carpeting used in front offices and for the asphalt tile used elsewhere.

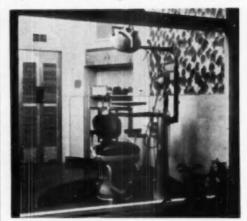
The floor plan indicates the efficient arrangement of the reception rooms, offices and operating rooms. A rear service exit is used by patients to avoid congestion at the front



THE reception room presents this view from business office. Twelve-inch mitred boards outline the stone face of the fireplace acreened with a metal curtain. Window and door at left face patio

entrance. The utility and gardener's rooms also have separate entrances.

Utility equipment includes a Toridaire gas-fired furnace the fan of which is used for summer air circulating. To reflect the summer sun, heat, the flat rool is covered with a white granular roofing material. Other devices incorporated into the building are an inter-communications



VIEW of an operatory as seen from the court is shown above. Yellow Cernilie (a baked enamed wallhoard) wainscoting contrans with black baseboard and asphalt tile floor in these rooms. Note bright wallpaper, double louvre doors. Cabinets are set at angle for dentist's convenience. Crane plumbing fixtures are used

system, phonograph outlets for recorded music and the latest in medical and dental laboratory equipment such as built-in medical cabinets.

Measuring approximately 65 by 27 feet (front section 45 feet wide) the building is constructed around a private court in a manuer that maintains the privacy of each room in spite of the large window openings.

**Renew Your Subscription** 





1. Built-in Bookcases add dignity and charm. They can be built with or without cabinets, according to individual needs.



2. A Television Corner provides an astractive setting for this coming "must" in home furnishing. Adds charm, too, in any room.



3. Corner Cupboards go in quickly and easily. Point out to prospects the grace, charm and convenient storage space this addition brings to disting room or breakfast mook.



6 A Dining Room Wainscot can be installed to blend with any interior ... inditional or modern. You'll find quick. improble reaction to this striking treat-

# 10 inexpensive to build extra sales

You'll install many a square foot of Weldwood<sup>®</sup>, once you discover how *much* appeal it can add to the houses you build ... in so many ways... at comparatively *little* cost.

And every Builder knows that, today, appeal is important. Because . . . regardless of a still-existing housing shortage . . . prospective buyers are looking more and more for the "plus-es" that lift new homes out of the ordinary.

A room paneled with decorative Weldwood Hardwood Plywood . . . one wall of it . . . or even well-designed corner cupboards . . . any one of these features does just that.



7. A Half-High Storage Wall is just what many small homes need. Important storage space, plus beautiful decoration as a division between living and dining areas.



8. Dressing up the Foyer in Weldwood Paneling can give new life to old homes, and help new ones create a striking first impression. Here's a real luxary touch you can add.



9. A Playroom Ceiling of Weldtex Squares goes up quickly and easily. Squares are cut to fit over 16" beams. And Weldtex® is one of the most moderately priced of all Weldwoods.



4. Frame a Picture Window in the soft luxury of Weldwood, and you have a striking center of interest for any room, Point out Weldwood's many advantages and watch prospects agree.



5. Paneling the Fireplace Wall is mother quick, inexpensive method of decorative eccent. Explain that interior Weldwood is guaranteed for the life of the home.

# ways appeal into your houses

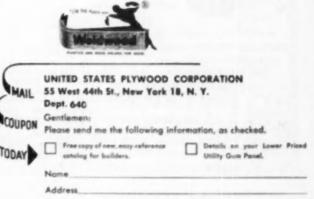
Prospects are quick to appreciate the luxurious beauty of Weldwood Plywood. And when you point out the practical side . . . the durability, the freedom from redecorating expense . . . they really begin to warm up. Then cap your story by reminding them that interior Weldwood Paneling is guaranteed for the life of the building.

The suggestions shown here are only a few of literally hundreds of treatments that can add important sales appeal to the homes you build. Let your own imagination he your guide.

## Weldwood PLYWOOD



10. A Bright Breakfast Nook can come to life as part of a hitchen. A business-getting "plus" for any home.



tals are increasing Profits with in a and this Fast-Selling Item for the A combination of sensationally low price and exceptionally high quality is exciting a lot of inter-ent in United States Plywood Corporation's new Welewood Utility Gum Panel. Builders everywhere are un-uoually pleased with this new item, and praise it with remarks the 5141.58

LOWER PRICED

UTILITY GUM

PANEL

**Builders** everywhere

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"Very versatile; almost un-limited applications." Made of all hardwood veneers ...thoroughly kills-dried before ancembly...this new panel uses modern 10-cycle Ures graing. The result is a highly water-resistant panel in 1-3 grades, grad 1 side. fere in (files) store X8:3 Horal Resed

10 20 Acres 1 21 Se-

gend I nide. Various sizes are available... 96" x 48"; 84" x 48" and 72" x 48" - with grain running the short length of the panet. One USP Official put if this way. "We believe we're making a panel that will meet many needs...both of the Builder, for a quality material at a low price to meet many, many applications ...and of the Dealer, who must carry that type of material to meet the growing need." 16.12 Senti br mad icebe.

Zone \_\_\_\_

State

City





Available with an without bransa covers that campletely hide spring, as shown above.

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

Slash Labor Costs

Simple installation allows one man to easily install 50 or more windows in 8 hours. No high-priced skilled labor needed. This means you can get more satisfied customers at lower cose ..., higher profit!

Jops in Operation!

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



ATTENTION MILLS AND LUMBER TARDS

IDEAL FOR PRE-FIT WINDOWS Can Also Be Sold in Single Unit Packages

Mail this coupon today!

Milwunkes Snip Sorvies, Inc. 4621-32 W. Liskan Ave. Milwankes & Wiscansin Please reach ma folder A10 and price list of Milwaskes Combination Sach Balance Weathercity. Name

Address State

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### Association News, cont'd

#### Contest Spurs Portland Membership Growth

A campaign with the goal of doubling present membership is being conducted by the Portland Home Builders Association, Inc., Wesley A. Dunn, membership chairman, has reported. Dates are Sept. 11 to Oct. 2.

The association's 100 builder and 200 associate members will be divided into two teams which will stage a contest and weekly and grand prizes will be awarded to individuals adding the most members. At the completion of the campaign new members will be given a dinner by the association.

Assisting Chairman Dunn, are Vice Chairman Lawrence Fushy, DeWayne Clack, Irving E. Jacobson, B. E. Lee, Stuart M. Pagett and Bill Starkel, Jr.

#### Long Island Outing Attended by 438

The second annual outing of the Long Island Hume Builders Institute, attended by 438 members and guests, was conducted recently at the Engineers Golf Club on Long Island. The event was highlighted by unusually active participation by those in attendance in the program of golf, soft ball games, horseshoe pitching contests, darts, nail driving contest, horse racing and other special events.

Charles J. Rorech was general chairman of the outing with Fred Jackson serving as co-chairman. Subcommittee chairmen were as follows: Prizes-Walter Stackler and Pete Fallon, co-chairmen; horseslices-H. Albrecht; golf-M. Sneddon and C. Rand, co-chairmen; haseball-J. De-Angelo; reception-Leonard Frank; darts-A. Villett; nail driving-A. DaSilva; dinner-W. Clair; special events-H. York.

#### Government Housing Role Discussed at MBA Meet

The issue of where the government should start and stop in providing he sing was one of the top discussion topics at the 37th annual convention of the Mortgage Bankers Association of America in Detroit Sept. 27–29.

Chosen to head speakers on the subject were Senator John Sparkman of Alahama, principal author of the Sparkman hill which failed of enactment last year, and Rodney M. Lockwood, immediate past president of the National Association of Home Builders, a leading spokesman for giving private industry a freer rein in bousing.

R. O. Deming, MBA president, said the symposium was designed as a sincere effort to get an insight into what national policy should be.

#### to cut the cost of your concrete work



Improved mixing blade design, drum rollers on Timhen hearings, advanced automotive transmission and drum gear protection --these are some of the features of Jaeger's lat-

est SPEEDLINE mixers. Sizes 65, 115, 168 with famous Skip Shaker power loader; 31/5 tilters and non-tilt types. Send for Catalog.



THE JAEGER MACHINE COMPANY 521 Bublin Avenue Calumbus 16, Ohio



Here is the answer to a long time need, a dado with superior performance, that can be set for any grouve width from  $1/4^{\circ\circ}$ to  $||^{\circ\circ}$  by merely turning a dial... and without removal from the arbor.

Smooth, accurate grooves up to  $\frac{3}{4}$ deep are cut by "Silvanite" High Speed Tool Steel blades, Rockweld Hardness test 58. Cutting edges stay sharp 4 to 5 times as long as conventional dados. Blades are silver brazed in interlooking aluminum and steel plates, perfectly balanced and steel plates, perfectly balmoony and temper saver at \$19.75. Selected dealersbips available.

See your dealer or write CONSOLIDATED MACHINERY & SUPPLY CO., LTD. Distributors 2031 Samo Po Ave., Las Anguiss 21, Calif.

# To Increase the Practical Value and Beauty of Plywood CUPRINOL

AIN



Whatever finish you give to plywood, for cabinets, panels or other construction, a coat of Clear Cuprinol before you paint, stain or varnish will greatly add to the practical value and beauty of the plywood.

For Cuprinol subdues over prominent grain patterns, stabilizes the wood fibres and minimizes grain separation cracks. It prevents grain raising that makes extra sanding necessary, and at low cost gives lasting quality to your work.

Cuprinal gives dimensional stability. It is a paintable, water-repellent wood preservative for safe and efficient on-the-job use. Stops rot and termites. Your local dealer should carry it.

See Sweet's File for Builders 28/4, or write for information on types of Cuprinol for specific uses.

CUPRINOL Division, Darworth Incorporated 56 Maple Street Simsbury, Conn.





# Compact BOILER-BURNER UNITS

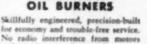
Here are compact, complete, packaged boiler-burner units in sizes for home and industry, for low-pressure steam and hot water heating and/or hot water supply.

They're economical to buy and use; easy to install in minimum space with a minimum of skilled labor. Six sizes in the Aldrich Series "B" Heat-Pak are rated at 118,000 to 808,000 BTU an hour ... 6 sizes for hor water supply with ranges of 125 to 850 GPH at 100 degrees rise.

All Aldrich boilers are available for either oil or gas firing with burners readily interchangeable.

If you buy, sell, specify, or install boiler-burners, write for information about Aldrich.







toe economy and trouble-free service. No radio interference from motors and transformers. Burners flange or base mounted. Model

CX1.75 to 2 GPH. Model SAX (shown) with interchange able draft tubes and air conest.75 to 4.50 GPH, Model BX:4 to 8.50 GPH. Model JU Heavy Daty: 7 to 19 GPH.



243



### BOICE-CRANE SIX-INCH JOINTER

Table 6" a 16" averall (5" longer than most); force 12" long a  $3\frac{1}{2}$ " high (16" longer than most).

Give your inside finish that high grade look, and even hundreds of high priord latter hours. The GN1 f fines that is 100% rigid, graning and guiding and sourcets rote through the full longth of large decars and such rails. Cashilled operators part perfect results and more establish housawe they can give emities attention to fording the riseA.

The only 6-meth interer with quick acting fenes looks at both ends, important when you joint long stack to fit doors.

The 31% diameter ratiochead has a 3" diameter rating are, the largest is any low prior 6-limb limiter, for 6 force rating "rehe-angle" to haires, for a chatterless and much smoother chearing cet, eather than the chapping and shattering ret raismon to small diameter estacheads. Catterlead and fuertons will estimate appendence Catterlead and fuertons will estimate appendence to 1000 r.g.m.

brating, will withinson random with the set of the process of the set of the

Dual frase controls BOTH at operator's finger-

#### MODELS ESPECIALLY DESIGNED FOR DOOR FITTING

Four models, halt or direct-matter drive, heach or floor type.

The direct-drive brack models are separatly revenuesed for fitting denses. Flaced ion on the flowe spectra bas full restrict in jointing the edges of direct and large panels. Flow subject has motor remporteness and dark schute.

Overall length: 4112". Max. width al cut: 6". Depth of not: Max. 9, 16".

At minimum not you can completely equip a shop that makes you practically independent of the mill.



Association News, cont'd

#### NRLDA Issues 32-Page Public Relations Guide

A 32-page public relations guide was issued to its members during August by the National Retail Lumber Dealers Association through state and regional associations. The looklic replanaizes the value of good public relations and gives a detailed account of the many components of a good public relations program.

The guide also states that the national headquarters will issue supplementary folders on public relations techniques and will furnish material for dealer use from time to time.

#### Pine Group Proposes Ways To End Rail Car Shortage

Recommendation that in-transit stoppage of lumber shipments be discontinued until Feb. 1, 1951 was made by the Western Pine Association in an effort to help remedy a serious current railroad car shortage.

The group also suggested at its summer meeting Aug. 14 in Spokane, Wash, that all railroads return to a six-day service week in the interests of speeding up car movements through terminals, approved a carrier program for "railroad efficiencies," and condemned any program of freight car construction by the government.

The association also voted to seek a meeting with carriers' representatives if the railroads' efficency program does not ease the shortage.

#### Fort Wayne Builders, Realtors Hear Gerholz

Robert P. Gerhola of Flint, Mach., president of the National Association of Real Estate Boards and a past president of the National Association of Home Builders, was guest speaker at a meeting of the Fort Wayne, Ind., Home Builders Association Sept. 13. The meeting, held jointly with the Fort Wayne Board of Realtors, was a highlight of National Home Week activities.

Dale E. Fisher is president of the Fort Wayne builder group and Ralph Shirmeyer served as president of the home week committee.

#### Hoo-Hoo Meets in Boston

The 59th annual convention of the International Concatenated Order of Hoo-Hoo was held Sept. 6-9 at the Copley Plaza Hotel, Boston Listed among program highlights were a stag dinner, concatenation, clambake, sightseeing and talks by guest speakers.

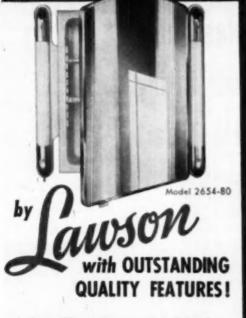
Host for the meeting was the Harry L. Folsom Chib No. 13 of Boston, of which Walter Webb, Jr., is president, J. M. Carlton was convention chairman.



AMERICAN BUILDER

244





# \* One-Piece Drawn Steel Body \* Bonderized after Forming

- · Baked White Enamel Finish
- · First Quality Plate Glass Mirror
- · Full Length Piano Type Hinge
- Snap-in (no screws) Electrical Inspection Plate
- Stainless Steel Mirror Frame
- · Convenience Outlet for Electric Razor, etc.
- · Bar-Type Door Stop
- Razor Blade Disposal Slot
- Underwriters' Laboratories Inspection Label

Lawson

BATHROOM

CABINETS

134 YEARS

Write for Catalog on Lawson Bathroom Cabinets, Lavatory Mirrors and Chrome Accessories . . .

THE F. H. LAWSON CO. BOI EVANS ST., CINCINNATI 4, OMIO

WORLD'S LARGEST BUILDERS OF BATHROOM CABINETS

OCTOBER, 1950



#### Bostitch TS Tackers DRIVE STAPLES IN WITHIN 1/16" OF INSIDE CORNERS

When a Boatitch T5 Tacker sticks its tiny nose into your business, you save time, money and work. It simplifies back-breaking ceiling jobs and close, difficult corner work. You just place the tacker, squeeze the handle and the staple shoots all the way in. No missed shots, no marred surfaces, no bruised fingers! One hand free for faster, more accurate positioning. Try Bostitch T5 Tackers on your next paneling, insulating or metal lath job. You'll notice a hig cost-cutting difference.

#### Quick, easy way to attach cornerite

Attaching convertine because an easy and handled job with bostsch H2 Self-freeding Hammers. The just-right-length stuples forbus the metal lath security to the plaster base without going through to the stude. This fleeting friend on "g acards as gainst cracked plaster due to settling of the structure.



Application time cut in half More and more reafers are withing to Basitoh HA Saft-Feeding Hommers. No wonder! A flick of the write drives frame a thardy M' stople like a two-pointed nail. No smooth, Long, one-arm reach outs down stoping media, Can hours aff new reafing into.



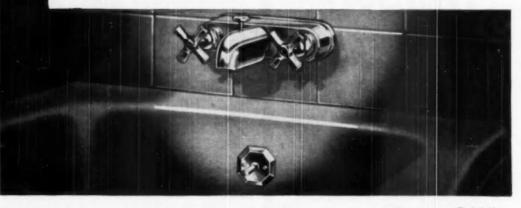
INVESTIGATE BOSTITCH — For installing insulation, attaching building paper or racefing, metal latits, etc., you'll find that Bastitch fasters II batter and faster at lower cast. Fill in crospon below for more facts.

	ra information about time-serving, cast autting
Bastitch machines for a	
Insulation	Paneling Building Pape
E Roofing	Motal Lath and Cornerite
List other application	191 ····
None	Title
Firm	
Address	
Cay	Zone State
BOSTI	TCH ALL TYPES OF MACHINES
tastess it better	with wire ALL TYPES OF STAPLES



At last! The simplest high grade tub and shower fitting ever devised ... <u>NEW</u> Truart WALL SURFACE FITTING

★ simple to rough-in
★ easy to install
★ streamlined
★ safe and sanitary
★ top-performance
★ low cost



BRIGGS NOW BRINGS you the most modern, easy-to-install wall surface fitting ever made. Good-looking-the gleaning, exposed surfaces are chromium plated! No temporary roughing nipples are needed. After the wall is completed, the rough copper tubing is silv-cut to desired length . . . no threading, you simply slip fitting over the tubing and solder the joints. Safe! Exposed valves reduce the possibility of braks within the wall . . . make servicing twice as easy, twice as quick! Better make sure you have this new Briggs fitting in stock . . . order today . . . and make way for sales! Illustrated are: T-8005 Truart combination bath and shower fitting for copper tube solder joint with automatic diverter in spaat, Everkleer solf cleaning shower head with ball joint shower arm and flange.

T-8410 Truart 11/2" jiffy pop-up drain.

VALVE BOTY SOLDERED TO WAYNES SOLDERED TO THANKES SOLDERED TO THANKATE

All roughing and finishing parts included with wall surface fitting. Write for free folder containing roughing in dimensions and other data.

BRIGGS Beautyware

## No wonder the demand is so great! NEW **BRIGGS** *Beautyware* VITREOUS CHINA CLOSETS offer unequaled value!

Why Briggs Beautyware vitreous china closets are better . . . \* Colors! Four beautiful pastel shades: sandstone, sky blue,

\* New, modern designs engineered for trouble-free operation!

sea green, ivory as well as sparkling white! ★ Large water area, deep seal, self-draining jet!



CARLTON VITREOUS CHINA CLOSETS-For 12-in. ronghing-in. Full syphon jet free-standing unit. B-6400 (illustrated) close-coupled combination with regular, extended shelf howl. Also available in closegated front extended shelf howl model.



DUKE VITREOUS CHINA CLOSETS-For 12-in. roughingin. Close-coupled, washdown, syphon netion combination. B-6430 (illustrated).



EARL VITREOUS CHINA CLOSETS— —For 14-in, roughing-in, Syphon action washdown bowl with 2-in, rear spud. B-6440 (illustrated).



EMPEROR VITREOUS CHINA FLUSH VALVE CLOBETS—For Join, roughing-in, Syphon jet bowl with 1½4n, top spad, B-6512 (illustrated) has elongated from bowl. Alse available with round free thowk.



PRINCE VITREDUS CHINA CLOSETS-For 12-in. roughing-in. Round front extended shelf bowl. Reverse trap closes coupled combination, free-standing model, B-6420 (illustrated).



RAJAB VITREOUS CHINA FLUSH VALVE CLOSET-For 12-in, roughingin, Round front washdown bowl, 11/2-in, rear spud. B-6559 (illustrated).



Interior view of Briggs Syphon Jet Closet Tank reveals latest design Anti-Syphon quiet operating flushing mechanism. This positive shut-off halleock incorporates the latest type volume regulator, triple seal rubber hall, 134-inch overflow tank valve, large refill tube and positive quiet action at high or low pressures. Every part quality engineered for lasting dependability.

Newly designed Briggs Beautyware Vitreous China Urinals are now available in four different types and sizes. Complete information available on request about these models ..., PENNTON (flat back wall), CLIFTON (pedestal), SPARTAN (floor stall), LAWTON (wall stall). BRIGGS MANUFACTURING CO. 3001 MILLER, DETROIT 11, MICHIGAN

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OCTOBER, 1950

Choose

#### the exact instrument you need from these three LOW PRICE MODELS

Finest 12" Dumpy Level available anywhere — gives you more features you want, more accuracy, more durability at less money than any other instrument. It has dust and dirt-free internal focusing and has coated optics for clearer distortion free, sharper images.



Here's the standard convertible level for the country for the past 30 years! No other instrument has the recognition and acceptance as given to the David White Carnegie Improved Convertible level. Now it's available to you with complete dust and dirt free internal focusing and coated option for clearer, sharper, distortion-free images



The David White "Universal" level-transit is the most practical and complete builder's instrument on the market. Now available in a sere improved model—complete with internal focusing, coated optics — guarded vertical arc — in fact every possible feature to assure you lifetime durability and extreme accuracy.



C HOOSE the exact instrument you need from these three. Compare their outstanding features, their precise, yet ragged construction, their accuracy and their price with all others. Then you'll see why we say you'll buy "right" when you buy a David White. For complete information on any one or all three of these instruments, comult our nearest dealer — or write direct to David White Co., 311 W. Court Street, Milwaukee 5, Winscomm.



We after complete, prompt repair service on all makes of instruments --fevels, transits, theodolites, etc.

#### Winners of Parents' Magazine Contest for Builders Announced

TRIPLE honors in Parents' Magazine's 1949 competition for home builders were taken by Albert Balch of Seattle, it has been annoanced by George J. Hecht, president and publisher of the magazine. Individual honors in the contest, designed to "spotlight the pacemaking work of the nation's leading builders by finding and selecting the best homes for family living which were built and sold in the United States during 1949," went to six other builders in various parts of the comtry.

In order to be eligible for the competition homes had to be owner-occupied by families with one or more children. Entries were divided into five regional groups according to location, with two price brackets—less than \$16,000 and \$16,000 to \$25,000---in each. Prices included the cost of land. Ten entries were to be selected for merit awards, one for each cost class in the five regions. From the winners of merit awards one house was chosen for a national merit award. Balch's houses were picked for two merit awards, with his \$19,500 home also taking the national award.



JURY examines one of entries in Parents' Maquaine contest for builders. From left: Clarke Daniel, head of NAHB design and construction committee: Wulliam H. Scheick, A.L.A., executive director. Building Research Advisory Board, National Research Council: Richard Bennett, A.L.A., Loebi, Schlossman and Bennett: and Mrs. Maxime Livingston. family home editor of Parents' Maquaine

Among factors considered in the judging were (1) usefulness of site as planned for outdoor family activities; (2) intelligent use of manufactured materials and products for durability, simplicity of maintenance and attractive architectural design; and (3) structural soundness and quality of workmanship.

Awards will be formally presented to winners at the January NAHB convention in Chicago.

The winners :

HOUSES WHICH SOLD FOR \$15,999 OR LESS

#### Price of

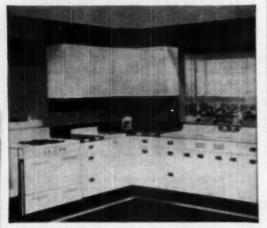
- Area
   Builder
   House
   Architect

   1
   Carl M. Freeman, Inc.
   \$14,950
   Robison Heap Washington, D.C.
   Alexandria, Va.
- 2 No award given (Judges ruled that entries did not justify awards)
- 3 No award given
- 4 Albert Balch

\$13,132 W. A. Wollander Scattle, Wash.



COMPARE FOR Beauty. Quality. Economy THEN RECOMMEND VIKON METAL TILES



LOOK TO VIKON, THE LEADER IN TILE STYLE FOR COMPLETE CLIENT SATISFACTION

Individual Vikon Metal Tiles, in a choice of sturdy steel, aluminum or stainless steel, are the perfect answer to any decorating problem where tiles are called for. Ideal for use on both walls and ceilings in new homes, excellent for remodeling existing homes and apartments. These are featherlight, *individual* tiles. You order only the number necessary to complete the job. No waste. For the smartest of baths, kitchens, utility rooms, investigate the wonders of the metal tile of lasting beauty—VIKON.

• 27 fade-resistant decorator colors and stainless steel

- e will not warp, crack or craze
- e resists heat and household chemicals
- · fire-resistant, waterproof, seels out insects

"The Original Individual Metal Tile" Established 1926. See our catalog in Sweet's Files



#### Lighting System Designed For Diversified Store

Advantageous lighting of a large, diversified store is exemplified by the system installed in the new Consumers Market in Tucson, Ariz. Utilizing three types of shielded fluorescent fixtures, the system has been designed to suit both seeing and decorative needs of the store which, although primarily a food shop, also contains a beauty salon, drug prescription counter, soda fountain and florist shop. Fifty footcandles of illumination are distributed evenly

VIEW of Consumers Market in Turnon shows louvered fluorescent flutures (right), and shallow units (left) for recessed lighting

over merchandise to permit a clear view of displays. In the grocery section, eight rows of louvered fluorescent fixtures are placed in continuous rows, spaced 15 feet apart over each shelf section. Each fixture is optipped with four 40watt fluorescent lamps.

In the forward section of the market, two- and four-lamp shallow fluorescent troffer units with louver-type shielding provide recessed lighting.

Sylvania Electric Products, Inc., New York City, furnished the plan and lighting equipment.

#### Winners of Magazine Contest ...

5 Jere Strizek, Inc. Sacramento, Calif.

A

\$ 7,300 Herbert E. Goodpaster Sacramento, Calif.

#### HOUSES IN \$16,000 TO \$25,000 RANGE

re	a Builder	Price of House	Architect
1	Stackler and Frank, Hempstead, N.Y.	\$24,900	Alwin Cassens, Jr. Forest Hills, L.L. N.Y.
2	Gerbolz Community Homes, Inc. Flint, M		C. W. Babcock Or- ganization (designer) Detroit, Mich.
3	Mrs. R. B. Butler and Son. Tulsa, Okla.	\$24,750	Mrs. R. B. Butler and Son (designer) as- sisted by Leo M. Clark, Tulsa, Okla.
4	Albert Balch Seattle Wash,	\$19,500	Chiarelli and Kirk Seattle, Wash.
5	Milton A, Ryan San Antonio, Tex,	\$19,990	Milton A. Ryan San Antonio, Tex.

Graduated Hinge that means Greater Profit to Raynor Door Dealers

THE

Pictured above is the Patented Raynor Graduated Hinge. By inserting the track roller in the special hole for each section the Graduated Hinge, combined with a tapered track, produces Raynor Graduated Seal.

RESIDENTIAL

INDUSTRIAL

Graduated Seal is built into every Raynor door to lend extra sales appeal for the dealer and added satisfaction for the user. By eliminating the use of a complete set of special hinges in the construction of a perfect weather tite seal, Raynor offers the Graduated Seal on every door at no additional cost!



A JOURNEYMAN'S TOOL, BUILT TO STAND UP UNDER CONSTANT, ON-THE-JOB CONTRACTOR OR INDUSTRIAL USE

PATS. PEND.

The all-purpose roughing-in powe saw <u>that needs</u> no starting hale!

 NO STARTING HOLE NEEDED ... Simply place guide next to material and "rock" tool into an upright position.

• CUTS SIGNT THRU IMSEDDED MARS ... wood, plaster, iron pipe, sheet metal, "Transite" and most other materials -- even in cramped quarters.

♦ FITS ANY HEAVY DUTY 's' or 's' DBHL . . . as easy as changing bits? Overall length only 10%"; weight only 3 lbs. 6 ozs.

Try it Yourself! See the Super Saw at your jobbers! Inspect it, try it! You'll agree that no other tool offers Super Saw's

try it? You is agree that no other tool affers Super Saw's lifetime construction at such low cost...no other tool provides such drastic reduction in labor costs?

SEND THE COUPON TODAY

R.C.S.TO	DL SALES CORPORATION
Gentlemen: Please send us Super Saw distrib	Bulletin 104 and name of the nearest
None	
Address	
Chy	Icas

OCTOBER, 1950

ARNOLD HARTMANN Builder of Oak Hill Village In Newton Center, Mass.

says:



### "Modernfold" doors bring FASTER SALES FOR 50 HOUSES plan to use them in 30 more!



That's what this well-established builder thinks of "Modernfold" accordion-type doors! Their eye-catching beauty and space-saving efficiency were so impressive that be installed two doors in each of fifty houses—one in the kitchen and another in the front hall closet. What's more, he intends to use even more "Modernfold" doors in his next project of thirty homes!

#### Builder after Builder turns to "Modernfold" doors

Yes, builders find houses move faster when they install extra value like "Modernfold" doors. And this extra customer appeal costs no more. That's because "Modernfold" doors eliminate expensive extras and the labor to install them. There are no jambs, no stops, no hardware or hinges, no fitting, no painting!

Don't pass up this idea that makes your houses more salable at no extra cost! Find out today how little "Modernfold" doors cost. Look up our installing distributor in your classified telephone book under "doors." Or mail coupon.

Sold and Serviced Nationally



Javi we the extra counter space a "Modernfold" door makes possible in this kitchen. No wonder Hartmann's customers were wenterstatic'

r	
i	New Castle Products P.O. Box 834, New Castle, Indiana
į	Gentlemen Please send me fuil details on "Modernfold" doors.
ì	Name
ļ	Address.
8	City

#### **Association News**

#### Oklahoma Dealers Discuss FHA Regulations

More than 200 members of the Oklahoma Lumbermen's Association attended a one-day meeting in Oklaboma City in July to discuss operating procedure under Title I. Section 8 of the Housing Act of 1950.

Walter Hinton, Altus, president, said that a survey by association members in 53 communities revealed a potential \$41,000,000 market for housing under this section.

Attending the meeting with the lumber dealers were members of the Tulsa and Oklahoma City FHA staffs.

#### Maple Flooring Group Returns to Chicago

The Maple Flooring Manufacturers Association re-established its headquarters in Chicago at 35 E. Wacker Drive, Oct. I, President W. C. Abenroth has reported, The group, founded in Chicago in 1897, moved its offices to Oshkosh, Wis., three years ago.

The association is composed of Northern hardwood flooring manufacturers with mills in Illinois, Ohio, New York, Michigan and Wisconsin, L. M. Mc-Clady is secretary-manager.

#### Wood Preservers Set 1951 Meeting Dates

The 1951 meeting of the American Wood-Preservers' Association will be beld at the Stevens Hotel, Chicago, April 24-26, President Fred W. Gottschalk announced recently.

The 46-year-old scientific group meets once a year to discuss developments in wood preserving techniques. More than 700 are expected to attend the 1951 session, Gottschalk said. The association has about 1,460 members.

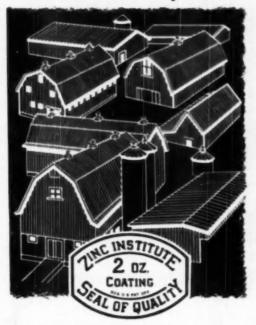
#### **NAHB** Newspaper Contest

The National Association of Home Builders has announced its annual contest for special newspaper sections featuring National Home Week. Any newspaper or editor may participate and deadline for mailing of entries is Nov. 1. Sections will be judged on interest and layout and awards to winners will be made at the annual dinner for the press at the NAHB convention in January.

More than 100 daily newspapers have already announced plans for special sections to run during National Home Week, according to NAHB.

In Your Novembor Issue GYPSUM PRODUCTS Where and New to Use Them In Remodeling and New Construction

# Give You All Three!



# The Seal that Stands for LIFETIME SERVICE

With galvanized sheets, it's the Zinc that stops the rust! While all galvanized sheets give years of service, the heavier the Zinc coating, the longer the sheets will remain rust-free and the longer your roof will last. Sheets stamped with the "Seal of Quality" shown above carry a quaranteed coating of 2 ownees of Zinc per square foot. Only slightly higher in cost, they generally have double the service life' Is will pay you to ask about "Seal of Quality" galvanized sheets for super service!



The free booklets offered in the coupon at right are fully illustrated and pocked with practical information on galvanized sheets, roofing installation, Metallic Zinc Fuint, etc. Send for these you can use, today!



## 1. Protection

A strong, sound, leak proof roof guards valuable crops, livestock and machinery against damage and destruction. Thru years of experience, farmers have found that galvanized sheets give more protection against wind, rain snow, fire and lightning than any other type of roofing. As a result, today more than a third of all farm buildings in the U.S. are covered by galvanized roofing!

## 2. Stay-Ability

You want a roof to hold at the nail holes...resist high winds and the elements...stay sealed and solid for years and years. Only galvanized sheets give you the strength of steel...the rust protection of Zinc! Only galvanized sheets cut down your overhead by staying "overhead" year after year-often for the life of the building.

## 3. Economy

Before you buy any rooting, consider these three longtime cost factors: (1) The original price of the rooting material; (2) The repair and up-keep cost; and (3) The number of years of serviceable life. Think of all three and you'll see why galvanized sheets are First Choice for farm buildings all over America.





## TIME TESTED!

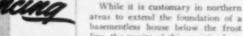
40 YEARS AGO. this Tennessee plant was ravered with galvanised sheets which are in excellent condition after 4 decades, with minimum maintenance. to YEARS AGO galcanized tooling was put on the eld Missouri herrs. The real has autimated the here and is still is gend condition offer a half century.

MERICAN ZINC INSTITUTE S.E. Wacker D Room 3030-A hicago I. Binois Parts About Galvanized Shorth 1 List et Metellar Even Parts Mire. Directions Per Applying Galvan- nized Shorts	Westrated backlots I have checked.
SMA NE	
ADDRESS	

OCTOBER, 1950



**IEW COLORS IN** 



basementless house below the frost line, the merits of this practice have never been subjected to research scrutiny. Since such construction is a major cost factor in a small house, it is believed that research might show how costs can be cut. In some areas, grade beam foundations (those which do not extend below frost) have been used successfully, but not under controlled conditions or scientific observation.

Must Slab Go Belev

Frost Line? Bule of

Thumb to Be Probed

To probe this subject, the Small Homes Council of the University of Illinois is undertaking a one-year research project in cooperation with Levitt and Sons, Inc., builders and developers of the Levittown subdivision of Manhasset. New York. A research grant has been given to the university by Levitt., to carry out the project.

Under this project, weather action will be observed on a group of floor slabs which will be maintained under controlled drainage conditions. Data to be collected will include accurate measurements of vertical and horizontal slab movement, weather, moisture and soil type will be determined, these being essential factors in establishing design criteria or construction requirements.

A series of house-sized floor slabs and foundation walls, typical of those being used in small house construction, will be built at the Small Homes Research Center for purposes of the study. These will include concreteblock rim-walls with footings below frost-line, and thickened edge slabs or grade beams.

The slabs and foundations will be built in three identical groups. The first of these groups will represent recommended drainage practices, (gravel fills, surface drainage.) These will be on a well-drained area; the water table will be held below the frost-line.

The second group of floor slabs and foundation walls will be identical in construction, but will be in an area protected by dikes and provided with water supply so the water table can be held close to the ground surface and above the frost-line.

The third group will be under operating conditions similar to those for the second group, the variation being that the under-slab fill of coarse gravel will be replaced with fine sand or tamped earth.



#### \* NATURAL WHITE

**ASBESTOS SIDING SHINGLES** 

- \* FOAM GREEN
- \* DOVE GRAY
- \* PALOMINO TAN

#### MUSTANG MERCHANDISING PLAN MAKES YOU MONEY

The four new colors of Mustang Asbestos Shingles are right for every style of architecture. Your customers will like the beauty, the charm of Mustang Asbestos Shingles.

Strong, tested advertising and merchandising helps back you when you sell Mustangs! These merchandising and advertising helps are yours for the asking. They are furnished at no charge to you.

WETT TODAY Get the full facts about how you can make money selling Mustang Asbestos Siding for remodeling jobs, for new homes, for housing projects. Write for free descriptive folder and price list. Dealer inquiries welcome.

The ASBESTOS CO. of TEXAS P. O. Box 1082 • Houston, Texas

#### Seabee Reserve Wants Skilled Construction Men

Skilled construction men over the age of 25 can still enlist in the Naval Reserve as Seabees and receive petty officer ratings equal to their civilian experience, the Navy has amounced.

By joining the Seabee Volunteer Reserve, older men in the construction trades not only will retain their rating when and if they are called to active duty, but they also will have reasonable assurance that they will be assigned to Naval Construction Battalions for high speed building and defense of overseas bases.

The same opportunity to join this standby Reserve no longer is available to men in the 19 to 25 age group because they have become subject to induction under the Selective Service Extension Act of 1950.

Approximately 70,000 additional experienced construction men are wanted in the Seabee Volunteer Reserve. This is considered the minimum number needed for a nucleus to develop the construction speed that would be required of the Seabees in case of full scale war.

The seven Seabee ratings open cover some 60 different civilian construction skills. These ratings are: builder, mechanic, steelworker, utilities man, construction electrician, driver, and surveyor. Volunteers will be placed on inactive duty, with no drills or required meetings. They may be called to active duty if needed.

Enlistment in the Volunteer Reserve is limited to men who have reached their 26th birthday but not their 45th. The upper age limit is extended in case of veterans to the same number of years beyond age 44 as their previous service has been with the naval service, volunteers will be accepted up to age  $50\frac{1}{2}$  years, plus number of years of naval service.

Depending on the kind and amount of civilian exerience, skilled construction men can expect to be rated at some point in the scale between Chief Petty Officer, with minimum active duty base pay of \$198.45 per month, to Third Class Petty Officer, with a minimum of \$117.60. Additional pay is given for dependents and for years of previous service.

Those desiring to volunteer should get in touch with the Commanding Officer of any Organized Reserve Construction Battalion Company or Volunteer Construction Battalion Reserve Unit. These are located in more than 300 principal cities throughout the country. Application also can be made at any Naval Recruiting station.



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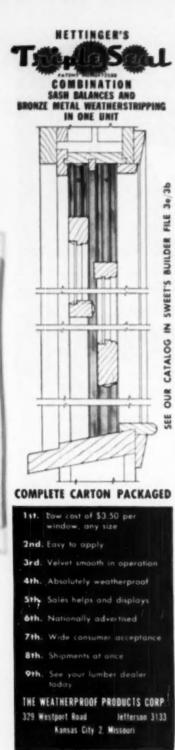
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Å	ssociat	ion	News,	cont	ď
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#### Defer Construction of NAREB 'Spiorama'

Erection of the "Spiorama," a specially-designed exhibit building planned for the 47rd annual National Association of Real Estate Boards convention in Miami Beach Nov. 12-18, has been deferred to a later convention, NAREB's essecutive committee reported that, in view of the corrent crisis, it had been decided not to use the building materials required for the structure.

Advance registration of the convention exceeds all previous early demand for accommodations, accounding to Henry C. Waltemade of New York City, chairman.

Exhibits of the 1950 meeting will be located in the Miami Beach municipal auditorium.

#### Association Booklet Aids New Home Purchasers

A 12-page booklet, "Important Information about Your New Home," has been published by the Montgomery County Builders Association, Dayton, Ohio, for distribution to buyers of member-built homes.

Included are a background information about the association, the association code of ethics, reproduction of emblem, an account of the builder's role as coordinator in producing the home, facts about the materials and equipment used in construction, and information on care and maintenance.

#### Lumberman's Picnic

The first annual Tri-State Lumbermen's Picnic, under the spousorship of the Sioux Valley Hoo-Hoo Club, was held in Sioux Fall, S.D., Aug. H. On the program were golf, swimming and entertainment. New club officers were elected, including T. E. Johnson, Sioux Falls, president; Ed Kuhlman, Menno, S.D., vice president; Nels Huseby, Brookings, S.D., treasurer; and Morse Bradford, Sioux Falls, secretary.

#### A.I.A. Omaha Meeting

Architects from the Central States District of the American Institute of Architects will hold their annual convention in Omaha, Neh, Oct. 13-14. The Nehraska chapter will be host to delegates from Iowa, Kansas, Oklahoma and Missouri. The two-day program will include an exhibition of work of the visiting architects.

#### **Open House** at Dallas

The seventh birthday of the Dallas Home Builders Association was celebrated with an "open house" Aug. 8 at its new 12,000 square-foot Home Builders Auditorium.



#### Fittings for Water Softening Service Installations Provided in All Units of Housing Projects

Calligan Soft Water Service recently announced that fittings for its water soltening service are provided in every house of a new 100-home project at Pueblo, Colo., and predicted water softening service will became more and more a standard feature in the 85 per cent of the nation now handicapped by hard water.

Provisions for installation of water softening units were made by John Bonforte of the Bonforte Construction Company, whose project is nearing completion.

To the nation's soft water service industry, specification of plumbing for soft water service as a standard part of home construction marks a new level of development. It was the first occasion in which soft water service was provided for in original blueprints of a housing project. Thus, it was recognized in planning on the same basis as regular utility services.

By including plumbing outlets and valves for water conditioning units in the plans, Bouforte was able to



COMPACT Culligon Service Tank which provides Eliused acit water in located in utility room of this home in Bonneyvillo Project. Pueblo. Colo... each unit of which has Brings for water softening service

make every home ready for immediate connection of the service at the modest cost of about \$10 per home. The plumbing provides both hot and cold soft water but by-passes toilets and sprinkling sillcocks.

The entire subdivision, known as Bonneyville, was approved by the Federal Housing Administration and the Veterans Administration. Price range of the homes is \$8,400 to \$10,200. Copper plumbing is used throughout. The softener is located in the utility room of each house.



The new Dremel Model 2000 is a fast-cutting, finish sander. It offers for the first time in the building field, a top-quality electric sander at a remarkably low price. Truly a versatile performer, it sands dry-wall joints, smooths plaster, puts a satio-like finish on doors, woodwork, siding, etc. Rugged construction, trouble-free design-plus low initial purchase and operating costall demand your therough investigation. Call your supplier, or write us for details.

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#### Method of Packing "Big 4" Hangers

"Big 4" hangers are packed one pair in a metal-edge box with  $2\frac{14}{x} \le 1/16$ -inch bolts for attaching the hangers to the door. Attached to each pair of hangers is a printed tag giving a list of the articles required to properly equip each door. The packages make an attractive appearance on the dealers' shelves.



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#### "Braced" Rail for "Big 4" Hangers

National "Braced" Rail comes  $1!4 \times 1!4$ -inches and is made in 4-, 6-, 8-, 10- and 12-foot lengths. The brackets are the same width and thickness as the rail itself. Braced below, diminishing the strain on the screws and tripling the carrying strength. Screw holes are staggered to avoid splitting the wood. Brackets are 12 inches apart and double-riveted making it very rigid. Any flat-rail barn door hanger will run on it.

