

NEW NOTE in building; night scene all glass block research laboratory of the Owens-Illinois Glass Co., in Toledo, said to be the world's first all-glass, windowless structure.

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and Building Age

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An Inside

Fenestra's Complete Window for Summer and Winter Gives You—

- 1. Fenestra Steel Casings take the place of interior trim, mouldings, stool and apron. Delivered already attached to Fenestra Casements. Installed as complete units. No weights, no cord, no fitting or hanging of sash. Installation costs reduced.
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- **4.** Fenestra Inside Storm Sash replace the screens, in winter. They eliminate condensation and frost under all ordinary conditions; reduce heat loss and save fuel by providing a dead air space between the two glass surfaces.

DETROIT STEEL PRODUCTS CO., 2245 E. Grand Blvd., Detroit, Mich.	Fenestra Casements
Please send me information, as checked at right.	Fenestra Storm Sash
Name	Fenestra Screens
Address	Fenestra Casings
Fenesti	ra
STEEL CASEMENTS A	ND CASINGS
INSIDE SCREENS AN	ID STORM SASH

YOU CANNOT DICTATE TO YOUR MARKET

VARIOUS estimates of the number now unemployed average about 12,000,000, the American Federation of Labor's estimate being the largest. To imply that business does not want to increase employment is obviously absurd. The reason for the continuance of unemployment must be sought elsewhere.

The main reason for it is probably that so many, both business men and working men, are trying to dictate terms to their market. The market for the products of American industry and labor is the entire American people. How large a market they afford at any given time depends upon the total national income, how it is divided, and how high prices and wages each person receiving income is able and willing to pay.

AFTER three years of "recovery," the total income of all the people of the United States in 1935 was still 40 per cent less than in 1929. They cannot buy as much products and labor with their present total income at the prices and wages of 1929 as they could and did buy in 1929.

Wages per hour in certain of our largest industries are as high as in 1929; prices almost as high. These industries and their employees are trying to *dictate* to their market, instead of trying to *enlarge* it. And it is in these industries that there is still the largest amount of unemployment.

Business and labor are surprisingly slow to learn that the economic law of supply and demand has not been repealed—and is not repealable. Labor leaders are the slowest of all to learn it. They advocate a six-hour day at eight-hours' pay to reduce unemployment in the industries in which it now mostly prevails. This would be effort at

further dictation to the market that would simply further increase labor costs and prices in these industries, reduce the public's buying of their products, and hinder increased employment in them.

THE potential market afforded by the American people for industrial products and labor is unlimited. They can give employment to every person who wants to work. But they will and can buy all the products and services that industry and its present and former employees can produce only when industry and its employees offer prices and wages that 100 per cent of the American people are willing and able to pay.

Too much is said about "labor's" purchasing power, too little about the purchasing power of the people as a whole, who afford the market for labor and everybody else. Efforts of business and labor to dictate prices and wages to their market cannot succeed. They are free to ask any prices, working hours and wages that they please; but the public is equally free to refuse to buy.

The public—the market—not employers, decides how much will be paid for it, and how many will be employed in producing it.

When both business and labor decide to quit trying to dictate to their market and begin trying to cultivate and enlarge it, the depression and unemployment will soon be ended.

Same O. Drun,

AMERICAN BUILDER PUBLISHING CORPORATION
SIMMONS-BOARDMAN PUBLISHING CORPORATION

Teel



Mott Brothers Community at Surrey Lane, Hempstead, L. I., an outstanding example of modern construction

80 HOUSES COMPLETED 800 MORE PLANNED

All beautified with STUCCO

THERE are eighty beautiful houses in this new community completed in February of this year by Mott Brothers, who are the architects, builders and owners. Each house is constructed of part stone or brick and part stucco. The stucco was supplied by C. A. DeLevante, Inc. of Rockville Centre, L. I., and was made with Atlas White Portland Cement.

Eight hundred more houses are planned by Mott Brothers for a development in Garden City, L. I., all of which will be of the same construction.

The beauty of using white portland cement in stucco is that you can get just the right color to fit the architectural design—from pure white, through pastel tints of cream, salmon, tan, pink—to rich warm yellows, browns, greens, and other shades. Stucco made with Atlas



Stucco made with Atlas White Portland Cement was used on each of the 80 houses in this development, Furthermore all house foundations and roads were constructed with Atlas Gray Cement.

White is economical to apply on old buildings as well as new. It is permanent, firesafe, weather-proof. It requires little or no upkeep. (A factory-prepared stucco is preferable.)

For information about Stucco made with Atlas White Portland Cement, plain or waterproofed, write Universal Atlas Cement Co., United States Steel Corporation Subsidiary, 208 South La Salle Street, Chicago, Ill.

MADE WITH Atlas White PORTLAND CEMENT

AMERICAN BUILDER AND BUILDING AGE

HOW TO INCREASE EMPLOYMENT

PRESIDENT ROOSEVELT in his relief message to Congress on March 18 asked "private business to extend its operations so as to absorb an increasing number of the unemployed."

The employers of labor in the home building and general construction industry are eager to do this—just as fast as the consuming public is ready to utilize their services and products.

The volume of building activity and the number of men employed at any time depend directly on the attitude of property owners and buyers toward investment in building improvements. If the Administration could be persuaded to join wholeheartedly with real estate and building industry leaders to foster home ownership in this country, normal building demand would very soon re-employ all available building mechanics and all building industry products workers, numbering, it is estimated, still about four million unemployed.

TWO appalling threats hang over property owners today, dissuading them from making further investments in building improvements and causing renters to hold back from commitments toward home owning. The first is taxes—the unfair and excessive load heaped upon homes and other improved property, with the certainty of further increases to pay for our ever-increasing public spending; and the second is fear of government competition and subsidy in the home and housing field, a fear that is growing.

The general property tax as assessed in most states puts a premium on renting and a penalty on home ownership by menacing real estate with an unlimited tax load not measured either by rental income or use value. As practically the only source of revenue for the support of public schools and local governments, real estate has been assessed more and more, trying to keep up with public extravagance and spending, until general tax delinquency called a halt.

Naturally with such a known record of tax persecution against homesteads and other real estate—while many other forms of wealth go tax free—a man has to be driven pretty hard by necessity or desire before he is willing to make himself liable to the same by joining the home owning (and direct tax paying) class.

A NUMBER of the states have already remedied this situation by passing property tax limitation laws and by making the income from real estate rather than its cost the basis for tax valuation. In other states these matters are now a live issue.

If President Roosevelt wants to aid home building so that the construction industry can extend its operations and absorb an increasing number of the unemployed, he should use his influence and leadership to attack this unfair and increasing tax burden on homes. By some proper means it should be possible to influence the several states to cooperate to reduce all state and local governmental costs and to redistribute the tax load so as to encourage, and not discourage, home ownership.

DURING recent months the threat of serious government competition and subsidy in the home and housing field has become an upsetting factor of importance to private industry and to the owners of privately financed homes and apartments. Building improvements financed at normal interest rates cannot compete with government housing projects.

Private home building, fostered by the sound standards of the Federal Housing Administration and financed by private funds, is showing a very promising pick-up this spring. Housing Administrator Stewart McDonald recently revised his forecast for 1936, raising the estimate to 250,000 homes (which, by the way, coincides with the *American Builder* January forecast figure). This will double, or more, last year's volume of private home building. Good low cost homes are being built by small private building contractors and sold to low income families, while the "housers" at Washington are wrangling over who shall pay the subsidy involved in their elaborate government housing schemes.

The helpful course for the President in this situation seems clear—sweep out the subsidy boys and throw his great influence squarely behind the individual privately owned home and the time tested and functioning home building industry.

If he will do that the home buying and property owning public will promptly exert a demand that will increase all building operations and permit the re-employment of idle mechanics and operatives as requested.

Watch the "Hidden Market"

STRANGE as it may seem, there are no complete records of building activity in this country. Reports are gathered mainly from the larger centers where permits are recorded and information is relatively easy to get. This provides no accurate record of what is being done in the smaller communities, which comprise what American Builder has termed the "Hidden Building Market." This hidden market will bear watching. Things are happening there.

People in the hidden market have solved the low cost housing problem with no outside aid or subsidy. In fact they do not regard it as a problem. These people are building houses right now that average less than \$4,000 complete. These homes may not be "Westminster Palaces," but are good, livable dwellings, and the important

thing is that they are being built.

American Builder has gathered information on building costs and activities from 240 retail lumber dealers in smaller communities. A more detailed analysis of this survey will be published in an early issue. Of the total number, 188 dealers are located in towns of less than 10,000 population. Another group of 52, selected so that comparisons can be made, are in towns having from 10,000 to 25,000 population.

Labor costs in these 240 towns are low when compared with the big-city figures that have so frequently been mentioned in newspapers in connection with the "high cost of building." Skilled carpenters average 66½c an hour, and unskilled building labor averages 37¾c. Wage scales vary in the two groups of towns. In the 52 towns having more than 10,000 population, 80 per cent of the skilled, and 65 per cent of the unskilled workers receive more than the average wage reported. In the 188 towns of less than 10,000 population, only 43 per cent of the skilled, and $40\frac{1}{2}$ per cent of the unskilled laborers receive wages above the reported average.

Some interesting variations are noted. Lowest wages for both skilled and unskilled labor are found in southern states. Carpenters and laborers receive highest wages in the closely settled, highly industrialized eastern and middle-western states, and in the Pacific Northwest. Only five towns in the entire group reported wage advances since 1929, and three of these were in the Northwest. Extent of the wage decline ranged from 10 to 50 per cent, with 25 per cent mentioned most frequently.

Reports from areas that have experienced successive crop failures showed building at low ebb, but were hopeful.

The average cost of a house in the hidden market is \$3,936. One lumberman reports that a six-room house sells for \$2,500. Another says that a complete five-room house is built for \$3,000. Others are built for as little as \$1,250. Only one speculatively built house was reported by the entire group.

Wages, lumber and material costs have been adjusted

to what the hidden market home buyer can pay. Contractors, builders, and dealers in hidden-market areas are busier than they were a year ago. "Double last year," "100 per cent increase," "Over twice as good," say their spokesmen. There is building in the hidden market. The 240 towns reported 592 houses under construction, together with 82 stores and offices, and 280 other buildings (barns, garages, schools, factories). By June 1, they expect to see 1,374 buildings under construction. They are only 240, of many thousand similar towns. That is why we say, "Watch the Hidden Market."

Be Careful How You Use The Term "Air Conditioning"

SO MUCH misuse of the term "air conditioning" has occurred in the advertising and selling of products over the past year or so, that the National Better Business Bureau, in line with a recent ruling of the Federal Trade Commission, has issued the following information for the guidance of both consumer and advertiser as well:

Because the functions performed for air conditioning in the summer differ from those required in winter and because units are offered to the public which produce air conditioning in the summer, but not in the winter and vice versa, the following classifications and minimum requirements of air conditioners have been adopted by the trade, scientific authorities and the National Better Business Bureau.

Summer Air Conditioning should perform, as a minimum, the following functions: 1—Cool the air, 2—Dehumidify the air, 3—Circulate the air.

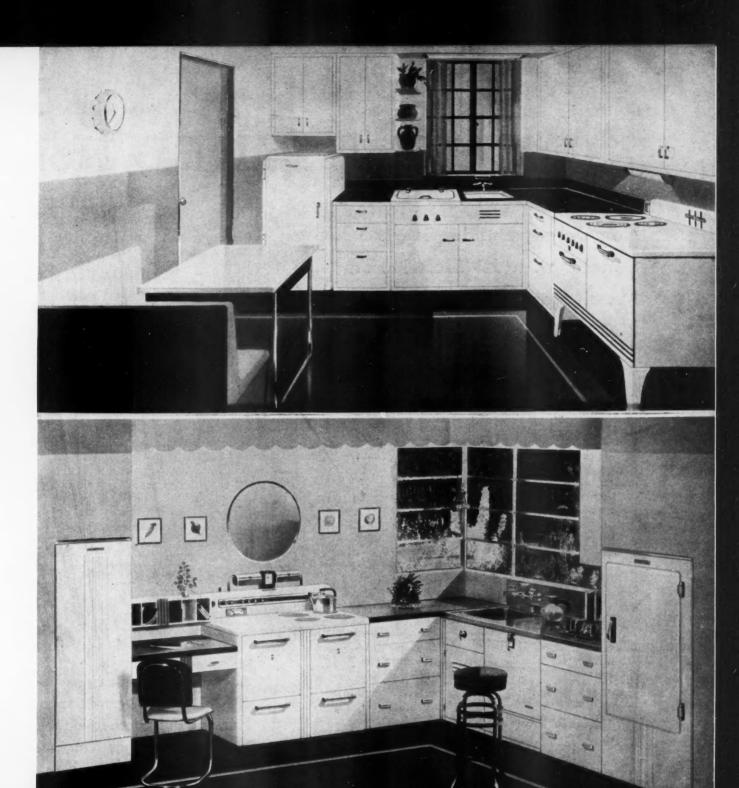
Winter Air Conditioning should perform, as a minimum, the following functions: 1—Heat the air, 2—Humidify the air, 3—Circulate the air.

Year-Round Air Conditioning should perform, as a minimum, the following functions: 1—Cool and dehumidify the air in summer, 2—Heat and humidify the air in winter, 3—Circulate the air.

It is understood that the functions required by the season of the year are performed automatically and simultaneously to meet the specific requirements of the

The Bureau requests the cooperation of all interested in fair advertising in eliminating the use of the term "air conditioning" or "air conditioner" or "air conditioned" to describe such articles as fans, humidifiers, odor absorbers, underwear, hats, etc. Loose terminology of this nature may not necessarily deceive the public but it paves the way for a manufacturer who may wish to "cut corners" to offer to the public air conditioning equipment which does not perform the minimum functions of air conditioning as generally understood by the trade; justifying his deception by claiming that the term "air conditioning" has no exact scientific meaning.

The Bureau recommends that publishers, advertising agencies and advertisers apply the definitions given herein in the censorship and preparation of advertising copy and that salesmen adhere to them.



Alert Builders Feature Sales Appeal of 1936 Model Electric Kitchens

ABOVE: Kitchen designed by General Electric for homes in the five- to six-thousand dollar class. BELOW: Kitchen features in the current sales campaign of Westinghouse Electric.

AIR CONDITIONED Homes

New Jersey Builder Starts 1936 Season with 10 Model Homes. March 1st Opening Brings Out 2000 "Nothing Like it Since 1931"

THE 1936 home building market is getting off to a vigorous and encouraging start. Operative builders in practically every important community in the country have reported the biggest and best spring open-

ings since 1931.

Biggest gun in the early bombardment of the 1936 home building market was the March 1st model home opening of Charles H. Reis in his new Lylewood Hills development near Tenafly, N. J. It was the first big opening of the 1936 season in the metropolitan New York area. It had been planned for February 1st but unusually severe weather conditions prevented completion of the model homes. Exceeding all previous years, Reis opened 10 model homes in a batch on March 1 and had a crowd of more than 2,000 people. Seven houses

were sold on the opening day; 3 more were sold on Monday; and on the following Wednesday Reis gave orders for the digging of 12 foundations for 12 more houses to go up at once.

The story of Charles H. Reis, who has been building in New Jersey for many years, is in itself potent proof of the bright prospects for 1936 home sales. In 1932 and '33 he opened one model home only. In 1934 two were opened but very late in the season. Two model homes were opened in 1935 fairly early in the season, and the results were far beyond expectations. This year the Reis building program is getting off to an early start with 10 model homes. The crowds and the buying enthusiasm displayed prompted Reis to say, "There has been nothing like this since 1931." He expects to sell 100 homes by June 1st.

There are many factors that make for this popularity of the 1936 Reis homes. Undoubtedly one of the most important is air conditioning and insulation. This is one of the first big developments in the country to play up air conditioning in houses selling as low as \$6500. It should be made clear that this system does not include cooling, but it does perform the necessary requirements of conditioning, circulating, humidifying and filtering the air. The system adopted by Reis is the Superfex oil burning plant made by the Perfection Stove Co. and installed by Hart Air Conditioning and Engineering Co.

of Union City, N. J.



COMPLETE detailed drawings of the 1936 Reis air conditioned homes, showing duct work layouts, are given on next two pages. They merit close study by builders in planning and specifying homes for the 1936 market.





THE NEWSPAPER ADVERTISEMENT AND THE OUTDOOR SIGNBOARD above tell their own story about the new Reis program. The advertisement features FHA monthly payment plan with installments of \$49.75.

for \$6500

By JOSEPH B. MASON

OPERATIVE BUILDERS A Monthly Department for the Men Who Plan, Erect and Equip Homes for Sale



ONE of the popular Colonial models featured by Reis. Plans on next two pages.

The very maximum amount of advertising and publicity value has been obtained from the air conditioning feature, and it has attracted wide attention. All of the Reis advertising and promotion is in the hands of Emanuel London, president of the United Service Advertising Company, who is a man of wide experience in this field.

There are, of course, many other features that contribute to the success of the Reis program. The new development, Lylewood Hills, is a former country estate

narily rapidly expanding section of New Jersey affected by the George Washington Bridge. The houses themselves which are the result of years of experience and observation by the Reis organization, expressed in the plans of Architect Stanley A. Leeks, are, of course, the final clinching appeal to the home owner. The 1936 Reis homes, which are fully detailed on the

The 1936 Reis homes, which are fully detailed on the following pages, are six-room insulated houses of Colonial design, located on plots 50 by 135 feet. There are 10 models using the basic floor plan and construction methods shown on the following pages.

of 73 acres, located in Tenafly, which is in the extraordi-

Photographs and drawings can only partly show the appeal of these little Colonial homes. Reis has developed the art of creating colorful, cheerful interiors that are neither garish nor overdone. The kitchen, for example, has a cheerful wallpaper in attractive pattern. The linoleum floor is of a light modern color. The cabinets and trim are enameled in bright reds and blues that contrast with the cheerful light tones of the sink and the wallpaper. The bathroom is commodious and colorful, and a novel plan is followed in placing the lavatory and toilet in the corners. The basement recreation room is also painted and decorated in a light, cheerful fashion that makes this a really important room in the house.

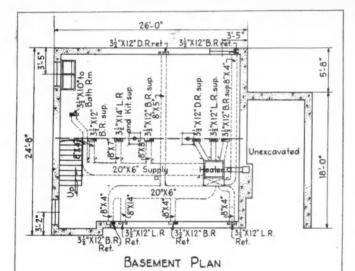
Use of air conditioning dictated the thorough insulation of the house and use of weatherstripping and sound-tight construction throughout. Charles Reis believes that air conditioning and insulation are paramount among features attracting the 1936 home buyers.

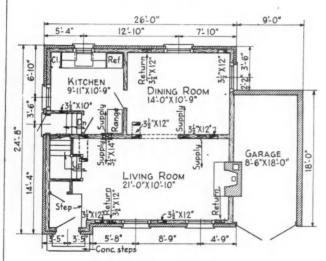


VIEW of the Reis model home basement, showing oil burning heating and conditioning system with duct installations and oil tank at right.



COLONIAL homes with several different exteriors are featured by Reis in his 1936 program. This design is one of the most popular of the new model homes.



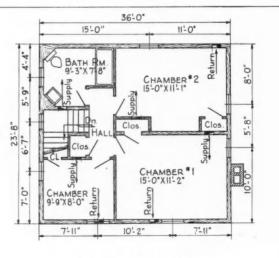


FIRST FLOOR PLAN

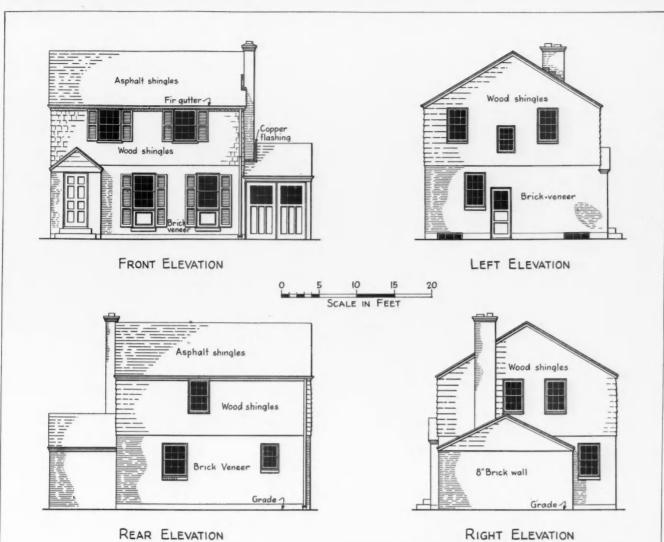
Details and Duct Work Reis Air Conditioned 1936 Model Homes

Stanley A. Leeks, Architect

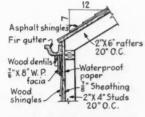
WITH an overall floor plan of 26' by 24'-8" (without garage) Reis has produced a compact and livable house as these detailed plans show. The side entrance Colonial is probably basicly the most pleasing style to more Americans than any other. Houses are insulated with four inches of rock wool. Construction details have been approved by Federal Housing Administration, as proof of their quality.



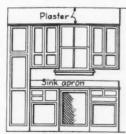
SECOND FLOOR PLAN



ARCHITECTURAL details are handled with skill and simplicity. The kitchen below is finished in very cheerful tones of red or blue. Colorful wallpaper and linoleum make it one of the most pleasant rooms in the house. The cornice detail at left is well executed, simple to handle. Cabinet detail of kitchen also shown.



MAIN CORNICE DETAIL



KITCHEN CABINET DETAIL



New Supervised Home Service

THE FIRST Federal Savings and Loan Association, of Rochester, New York, recently assured residents of that city that it not only would lend four dollars for each dollar invested in building a new home, but would provide a complete "Supervised Home Service" that would begin with selection of lot and plans, supervision of construction, and final inspection after completion. The announcement was received

with mixed emotions by various divisions of the building trade. Some were inclined to "view with alarm," although proponents of the plan maintain that it "in no way puts the financing institution in competition with nor in control of the architect, the builder, nor the materials dealer." Others regard the program favorably, because it is announced and described in ways that should help to establish confidence that is so much needed today, and should help remove some of the many doubts and uncertainties that hold back many people who might otherwise become home owners.

The plan, as announced, apparently applies a construction supervisory service that Philip Lieber of Shreveport, La., has for many years included as part of savings and loan association practice in that city. This service feature has long been admired, but rarely adopted by other savings and loan associations. It was

Residents of Rochester Assured That Home Building Has Been "Made Easy" by Savings and Loan Association Plan

not until wide-spread adoption of long-term amortized loans deprived the associations of their former tremendous competitive advantage that the Federal Home Loan Bank Board was urged to advocate such a service for general use, and to provide a "service guide" that the associations could follow.

The Rochester association is believed to be the first to announce the service feature advocated by the Federal

Home Loan Bank Board.

The American Institute of Architects is said to have endorsed the program, and members will participate through local chapters. According to E. Clinton Wolcott, executive vice-president of the First Federal Savings and Loan Association of Rochester, ten of the city's best small-house architects will furnish floor plans and color renderings for fifty to seventy-five proposed houses.

Prospective home owners who desire additional infor-

mation regarding the plan are given a fourpage folder entitled "Home Building Made Easy," which describes the various services offered and the "you-pay-like-rent" features

of the plan.

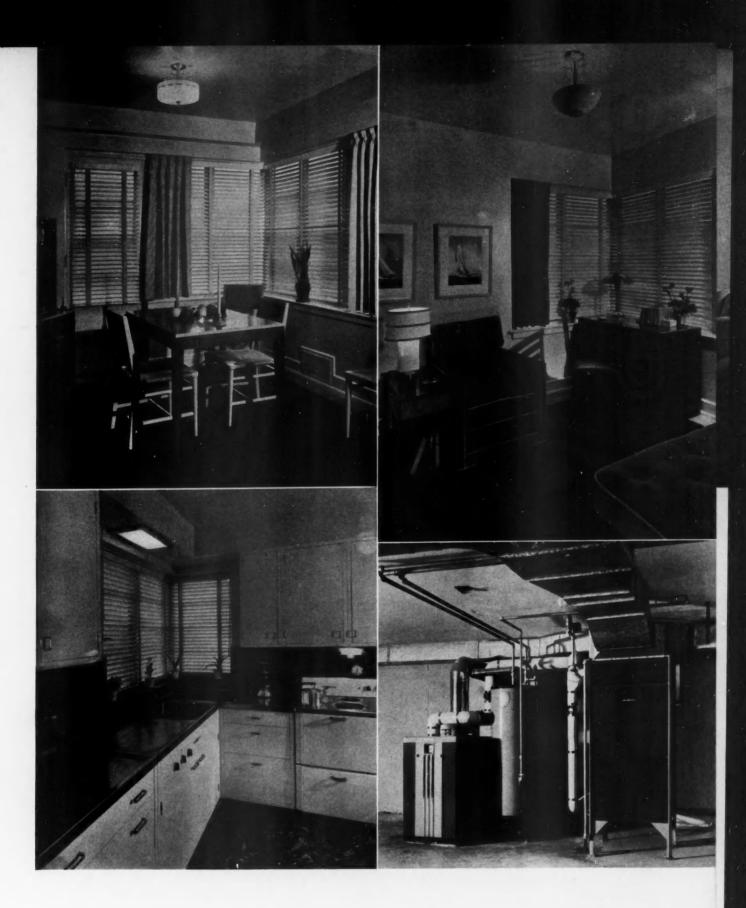
"This service was prompted," says Vice-President Wolcott, "by the thought that many people in the city desire a new home and have cash or its equivalent in a lot to represent the necessary 20 per cent equity in connection with a Federal Housing Administration mortgage. We think that these people have only the desire, with no knowledge at all of the procedure to be followed, and no acquaintanceship or knowledge of a good architect or competent builder. . . . In other words we imagined many people with the desire but fearful about entering what appeared to them to be an impenetrable maze of detail. We tried to set up our service in such a way that these people could come to us with nothing to offer but the desire and the necessary down-payment and could through us have this desire realized."



FIRST FEDERAL
SAVINGS AND LOAN ASSOCIATION
HOME SERVICE HOME

-FREE - - - USE COUPON- -

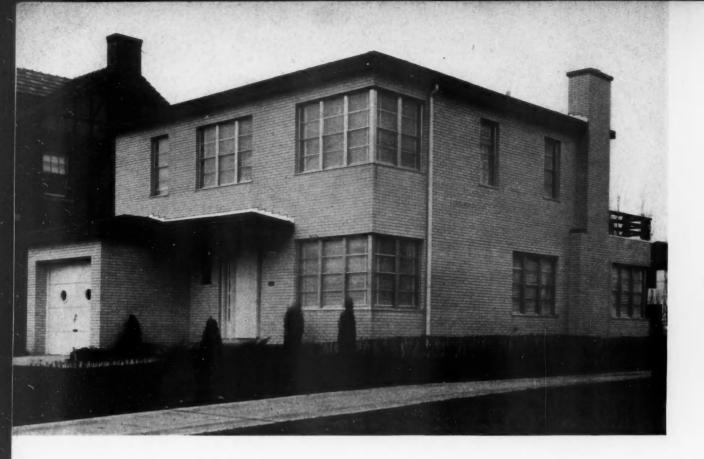
and is aimed at would-be home owners who are unwilling to risk the unknown hazards and intricacies of building. Half page space was used for this.



SELECTED HOME DESIGNS

ABOVE, interior views of G-E prize winning design built at Oak Park, Ill.—John Ekin Dinwiddie, architect—showing dinette portion of living room, convenient first floor study which can serve as guest room, well planned electric kitchen, and air conditioning equipment. Further details are on the next two pages.

16 Pages of Choice Examples of the Builders' Art; Presented on Special Coated Paper Stock



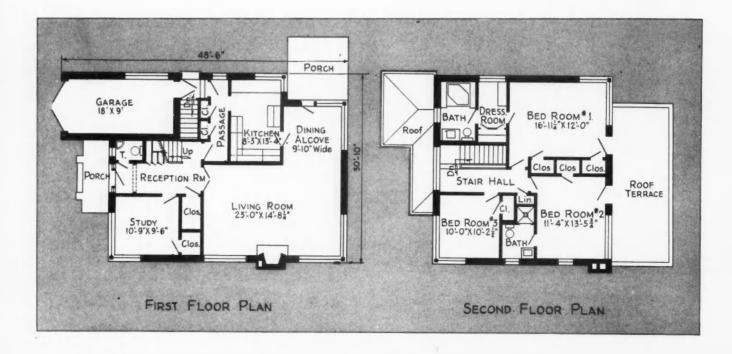
NEW AMERICAN PRIZE WINNER, Oak Park, Ill.

John Ekin Dinwiddie, Architect, San Francisco.

Ronald F. Perry, Associate Architect, Chicago.

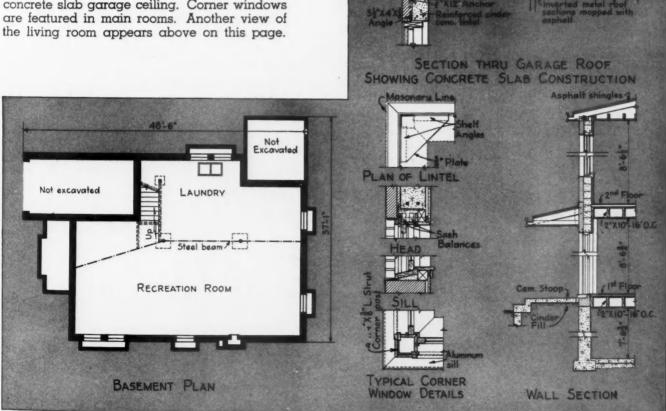
Alfred J. Glawe, Builder, Chicago.

COST KEY is 2.091-156-1064-46-25-13.





RIGINAL plans as submitted in the General Electric competition were revised by Architect R. F. Perry to provide for basement location of laundry, heating and utility space instead of being on the first floor. Garage was moved back to use this area, making the design more compact and suitable to its site. Concrete block and brick veneer are used in exterior walls, an interesting detail being the method of carrying the wall load above the concrete slab garage ceiling. Corner windows are featured in main rooms. Another view of the living room appears above on this page.





BUILT ON A SLOPING SITE

at Downers Grove, Ill., as Model Home

J. T. Schless Construction Co., Builders, Chicago

Robert H. Salisbury, Architect, Wheaton, Ill.



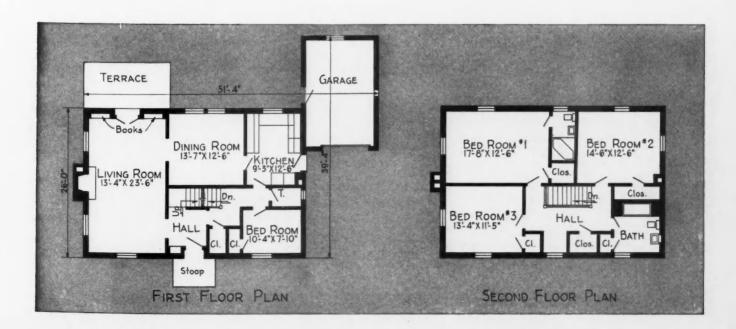
COST KEY (without garage or terrace) 1.735-129-1006-42-24-14.

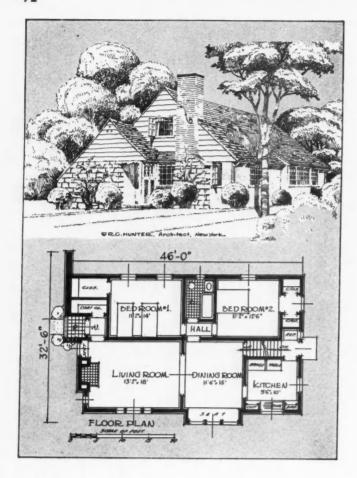
LEFT, construction view of Downers Grove Model Home as seen from right side. Above, other end of house showing manner in which garage and terrace are placed to take advantage of sloping site with motor entrance from the rear. Plans to right indicate another position for a level plot.



THE FLOOR plan below gives an alternate arrangement of the terrace and garage where the location does not allow the garage to be placed at basement level with terrace above as seen on the opposite page—otherwise the room layout is the same. Living room has plenty of light and allows for good furniture grouping with attractive fireplace (illustrated above) as the center of interest. Built-in book shelves flank

the doors leading to the terrace. A small maid's or guest room with convenient toilet occupies a first floor corner off the rear hall. On the second floor are three good sized bedrooms with easy access to baths and ample closet space. Considering the size of the house, the plan is compact and has a minimum of waste space. Equipment includes a G-E year 'round conditioning system and complete electric kitchen.





A BUNGALOW FOR A CORNER LOT

THE end entrance of this homey bungalow designed by R. C. Hunter makes it suitable for either a corner lot or a narrow lot. The cubage is only 22,800 cu. ft. It was built late in 1935 in Rochester, N. Y. The sketch at left is Architect Hunter's original proposal for this house, and indicates in an interesting way how the completed house compares with the original sketch. Plan shows good space use.

COST KEY is 1.261-150-1182-49-15-17.

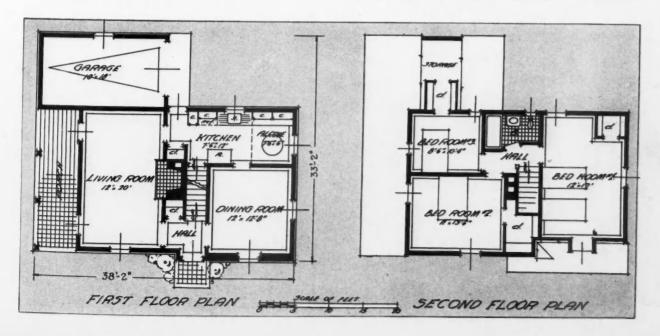




FAMILIAR FEELING

COST KEY is 1.476-142-688-31-19-16.

ANOTHER house designed by R. C. Hunter and built at Rochester, N. Y., is shown above, which has a home-like touch that inspires confidence. The open porch is good, the plan efficient, attached garage well placed.





ABOVE: Copper flashed circular bay of unusual charm in a Garden City, Long Island home. BELOW: A Colonial bay window executed with skill and simplicity. The bays are spaced equally on either side of the entrance.

BAY WINDOWS

No. 2 of a Series of Architectural Details That Help Sell Homes.

WELL designed and well built bay windows add greatly to the charm of the modern home. In this month's Better Detail Series we feature the work of well known Eastern residential architects, Reinhard M. Bischoff and Randolph Evans. Other features in this series will include fireplaces, stairways, built-in cabinets.





IN THIS charming shingled and stone house the three section window is handled in an unusual but interesting fashion. The white trim provides a pleasing contrast with the dark stained shingles.

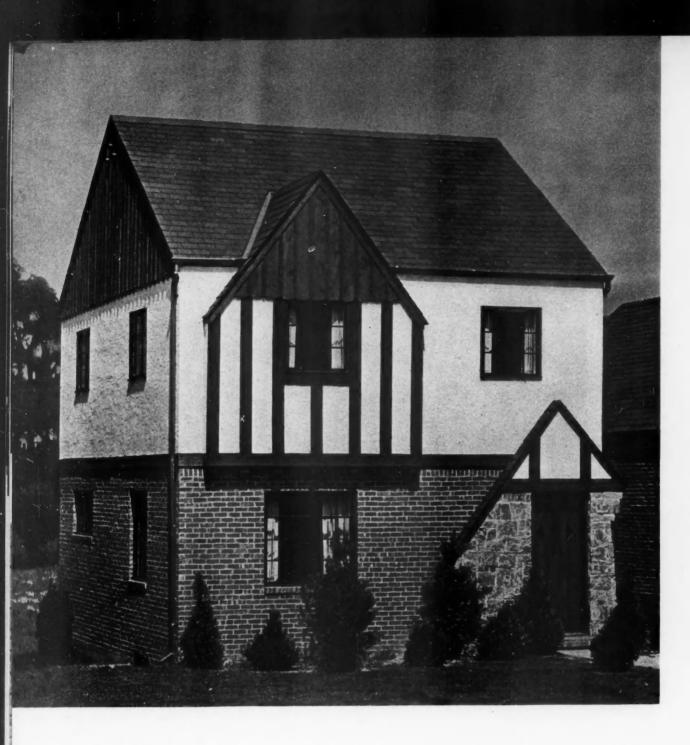
Photos by Gustav Anderson



THE BAY WINDOW above, with its brick case and white wood frame windows, with tight fitting screens that do not spoil its appearance, dominates the living room of this house designed by Randolph Evans and built last year by Harmon National Real Estate Corp.

THE BRICK AND SHINGLED house at right has both a charming entrance and a window treatment that is most attractive. The contrast of irregular shingles and brick is a pleasing one and gives character to the house. The architect was Reinhard M. Bischoff.

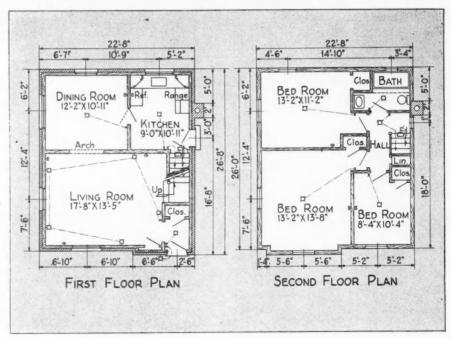




LOWEST COST FOR 6 ROOMS

COST KEY is 1.203-98-602-26-9.

UTSIDE foundation dimensions of this house are only 22'-8" by 26 ft., and it is just about the minimum size for a 6-room house. It was designed by Architect Arthur E. Allen and opened as a model house last year by Aladdin Homes, Inc., operative builders at St. Albans, Long Island, N. Y. The very low selling price was made possible by extreme economy in use of space and in avoiding design ideas that increase costs.





SPLENDID DETAILING

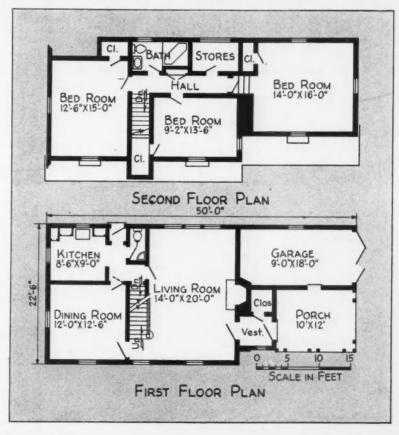
Randolph Evans, Architect

COST KEY is 1.863-144-764-34-19-17.

THE floor plans of the Harmon built house above show a number of fine features. The open porch is good and is connected with the garage. There is a good sized coat closet and vestibule leading to the spacious living room. The downstairs lavatory is well placed and upstairs there is ample closet and storage space.

The "Ideal Suburban Home" illustrated on the opposite page was put up last year by operative builder Drewry and opened as a model home which attracted wide attention in the Short Hills section of New Jersey. It is truly an "Ideal" home, with all of the features that make for fine suburban living. Equipment includes a G-E air conditioning system and electric kitchen, Reynolds Metallation, Standard fixtures, American concealed radiators, Schlage self-locking door locks, Bakelite kitchen walls, washable wallpaper. A low cost but well built home.

The results of expert craftsmanship and careful architectural detailing are clearly shown in the charming results achieved in this Colonial cottage. It is one of the popular houses built last year by Harmon National Real Estate Corp. of New York.





STEEL CLAD HOME

Built at Birmingham, Ala., by the Tennessee Coal, Iron and R. R. Co. to demonstrate value of Sheetsteel for low cost homes and farm buildings.

Rear Porch
Original Services

BED ROOM
12:0"X9:6"

BED ROOM
12:0"X9:6"

KITCHEN
11:6"

KITCHEN
11:6"

KITCHEN
11:6"

KITCHEN
11:6"

KITCHEN
11:6"

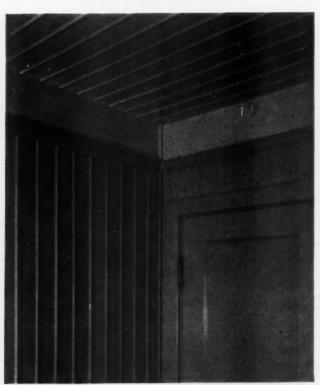
KITCHEN
11:6"

FOO'Wide

N JUNE 22, last, this "Tennesteel Homestead" was opened to the inspection of architects, builders, agricultural authorities, industrialists and the general public. Interest in this demonstration of low cost home building has continued since. Sided with 28 gauge steel weatherboard sheets and lined with 28 gauge beaded ceiling sheets, both applied over 1/2 inch insulating fibre board this steel clad house offers a fire resistive home of cozy conventional appearance.

COST KEY is 1.107-120-896-38-14-16.

BELOW is close-up view of beaded ceiling sheets used throughout this house as inside finish.



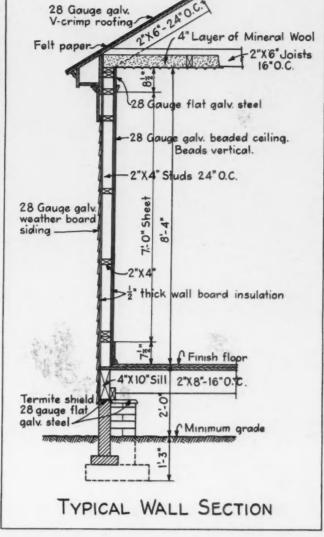
Bill of Materials - Steel-Clad Cottage

•
BRICKWORK Common brick (and mortar)6800 No. 2 Buff Face brick
SILLS: No. 1 L.L.Y.P. S4S 4 pcs. 4x10"—14'0" 187 ft.B.M. 4 pcs. 4x10"—16'0" 213 ft.B.M. 2 pcs. 4x 8"—8'0" 43 ft.B.M. 3 pcs. 4x 8"—12'0" 96 ft.B.M. 1 pc. 4x 8"—14'0" 37 ft.B.M.
GIRDERS: No. 1 L.L.Y.P. S4S 3 pcs. 4x8'— 800'64 ft.B.M. 1 pc. 4x8'—20'0'54 ft.B.M.
FLOOR JOISTS: No. 2 S.L.Y.P. S2E 5 pcs. 2x*-10'0' 67 ft.B.M. 13 pcs. 2x8*-12'0' 240 ft.B.M. 50 pcs. 2x8"-14'0' 933 ft.B.M.
STUDS: 146 pcs. 2x4'—16'0'1558 ft.B.M.
HEADERS: 2x4'—1170 lin.ft780 ft.B.M.
PLATES—No. 2 S.L.Y.P. S4S 16 pcs. 2x4"—16'0"171 ft.B.M. 18 pcs. 2x4"—14'0"168 ft.B.M.
CEILING JOISTS—No. 2 S.L.Y.P.S4S 52 pcs. 2x6'—16'0'832 ft.B.M. 17 pcs. 2x4'—10'0'113 ft.B.M.
RAFTERS—No. 2 S.L.Y.P. S4S 34 pcs. 2x6'—18'0'
POSTS: 6 pcs. 6x6'—8'0'144 ft.B.M.
BRACING: 1x4'—180 lin.ft 60 ft.B.M. ROOF DECKING, 1x6' 1650 ft.B.M.
PORCH ROOF: %x3%' Ceiling150 ft.B.M.
SUB-FLOORING: 1x6' and 1x8'950 ft.B.M.
FLOORING: 1x3' Rift Pine1350 ft.B.M.
INTERIOR TRIM: 1 x 3 1/4 No. 1 K.D.Trim 200 ft.B.M. 1 x 2 1/4 No. 1 K.D. Trim. 225 ft.B.M.
EXTERIOR TRIM: %'x3 ½' No. 1 K.D.Y.P 100 ft.B.M. %'x4 ½' No. 1 K.D.Y.P 100 ft.B.M. %'x7 ½' No. 1 K.D.Y.P 150 ft.B.M. %'x11 ½' No. 1 K.D.Y.P. 75 ft.B.M.
WOOD STOPS: 1/4 'x3'
MISCELLANEOUS LUMBER FOR WINDOWS, DOORS, SCREENS: 1/2x1"

-Steel-Clad Cottage
14 "x1 14" 200 lin.ft 14 "x3" 60 lin.ft. 14 "x1 14" 75 lin.ft. 14 "x2 14" 150 ft.B.M. 14 "x6" 325 ft.B.M. 14 "x6" 75 ft.B.M.
MOULDING: % 'x2 %' mould
WINDOWS: 12 lts. 10x14"—1¾"
INSULATION: % Wallboard
ROOFING: 5 V-crimped galv. steel 28 ga. 57 sheets 10' long
SIDING: Weatherboard siding—galv. steel, 28 ga. 5 sheets 10' long
BEADED CEILING—28 Ga. Galv. Steel Resquared: 18 sheets 10' long 3.6 sqs. 50 sheets 9' long 9.0 sqs. 18 sheets 8' long 2.88 sqs. 120 sheets 7' long 16.8 sqs. Plain Galvanized Steel Sheets— 235 lin.ft. 9' wide 28 Ga 138 lbs.
TERMITE SHIELDS—Galvanized STEEL 28 GA.: 120 lin.ft. 8" wide 25 lin.ft. 16" wide126 lbs. 16 lin.ft. 20" wide
FLASHING AND LOUVERS— PLAIN GALVANIZED STEEL: For roof—40 lin.ft. 8' wide, 26
For sizes—100 lin.ft. 8' wide, 28 ga

PLUMBING AND ELECTRICAL MATERIALS AND FIXTURES—as desired.

DOORS, NAILS, MISC. HARD-WARE AS NEEDED.



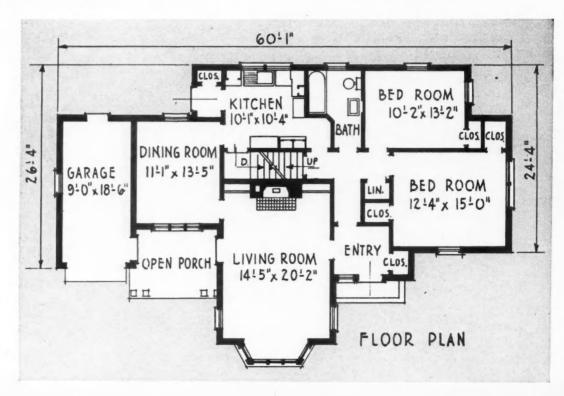




REAL SECURITY

in Concrete Home at Seaforth Manor, L. I. Richard Heidelberger, Architect, Seaforth, L. I. WALLS are concrete stucco on cinder block; floor concrete slab on Junior Beams; roof slate.

COST KEY is 1.813-210-1308-56-24-23.



FLOOR plan shows plenty of roomy convenience.



A PRIL House of the Month choice falls on a colonial home of brick and shingle veneer on a Stron-Steel frame built on Piedmont and Keeler Avenues, Detroit, and typical of a quantity of fine homes going up currently in the motor city. For exterior dignity and interior comfort with maximum economy in layout this design rates very high. See next two pages for additional dimensioned plans, elevations, outline specifications.

blans, elevations, outline specifications. Ted Wilkins, Architect

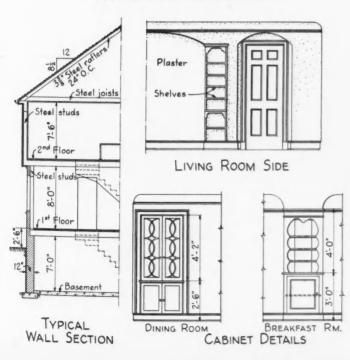
Working Plans on Page 82 Specifications on Page 83

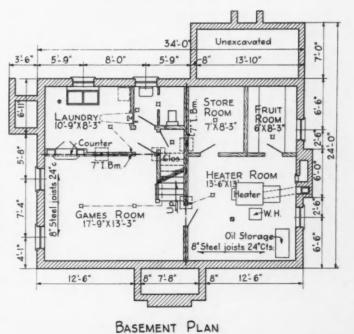
QUALITY CONSTRUCTION

IN DETROIT

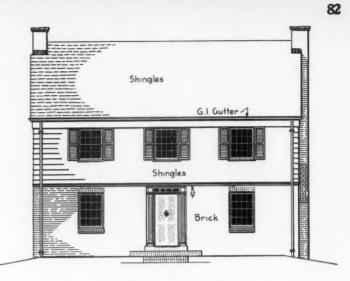
Knight-Menard Co., Builder

COST KEY is 1.637-120-834-35-24-12.

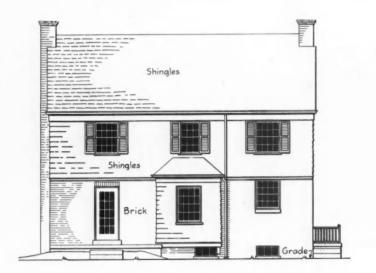




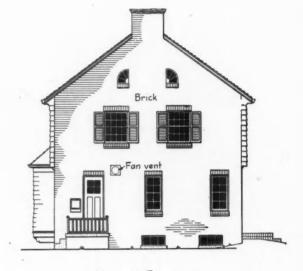
SOUTH ELEVATION



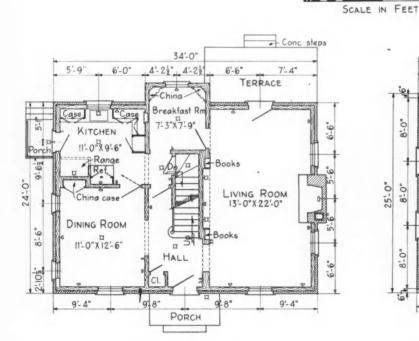
FRONT ELEVATION



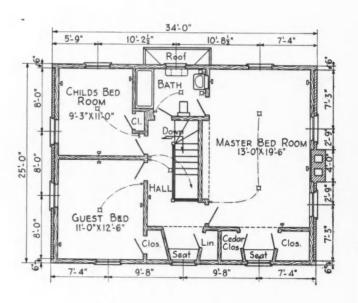
REAR ELEVATION



NORTH ELEVATION



FIRST FLOOR PLAN



SECOND FLOOR PLAN

Specifications for Steel Frame Detroit House; Knight-Menard Co., Builder; Ted Wilkins, Arch.; Stran-Steel Corp., Producers

WORK CONTEMPLATED consists of an entire frame composed of steel members as manufactured by the STRAN-STEEL Corporation, 6100 McGraw Ave., Detroit, Michigan, and as hereinafter specified and required by the drawings.

ABBREVIATION "S.S.", as used throughout this Specification, shall be understood to mean and refer to the products of said STRAN-STEEL Corporation.

THE ENTIRE FRAME shall consist of joist, cross-bridging, plates, sills, studs, wall bracings, rafters, ridge plates, stair carriages, headers over openings, gadgets and such other parts as are necessary to make the entire frame complete in every detail, notwithstanding that each particular item, therefore, may not be particularly mentioned herein.

SHOP PUNCHING OR HOLES shall be such as is standard practice with the manufacturer, and all members shall be delivered so punched.

FIELD HOLES shall be hand-punched or drilled as may be necessary for proper erection of frame. Such holes for the various trades to install their work shall be hand-punched or drilled in field by each trade as required—all in addition to those of S.S. standard practice as hereinbefore specified.

SHOP PAINTING shall consist of the special S.S. rust resisting paint as applied before shipment. All parts shall be so painted.

FIELD PAINTING shall consist of touching up in one coat work all parts where shop coat has been damaged, and the painting of all bolts and screws placed during erection.

FRECTION OF FRAME, in its entirety, shall be done by skilled mechanics in a first class workmanlike manner, true to lines, level and plumb. All field assembling shall be done with stove and machine bolts with jouts, with special thread-cutring metal screws, or with a combination of any two or all three fastenings.

TEMPORARY BRACING, as necessary to hold the frame to line and plumb, shall be provided and installed by the Erection Contractor. Also any and all necessary planking to provide means for walking and for the protection of all workmen.

S.S. JOISTS throughout shall be of sizes and spaced as noted on the drawings, and in general spaced 24" on centers—all joists shall have a wall bearing of not less than 4", and anchored with a government anchor, above foundation walls. On all partitions joists shall lap for a full partition plate bearing, and shall be secured to such plates with two screws or bolts for each bearing.

In balloon framing the joist lying against and running parallel to walls shall be secured to each stud with two S.S. Combination Clips nailed to studs and with end wings of clips bent over joist flanges and side wings bent around stud flanges. Nail to joist also.

Nail to joist also.

Double up all joists as trimmers and headers around all floor openings and around all projecting parts such as chimneys, etc., or else provide single joists of a heavier gauge and proper carrying capacity. All double joists shall be fastened together with S.S. "C" Clips spaced 24" on centers for both flanges. Drive clip wings into nailing grooves.

At all partitions running parallel to joists, where joists are not placed to provide nailing, provide and place half studs to provide a nailing for ceiling lath, etc., and secure same to studs or plates with S.S. Combination Clips nailed to half studs and to supporting members. Bend end wings around flanges of half studs and supporting studs.

S.S. CROSS BRIDGING of a special channel type shall be provided and placed for all joists, spaced 6'0" on centers in all joist spans over 8'0". Same shall be secured in place by bending ends of same over joist flanges and nailed to each joist.

S.S. JOIST HANGERS shall be provided and placed for the support of all headers at trimmers, for the support of tail joist where same are not set

in between flanges of headers, and at all other places requiring same. Screw and nail to joist flanges through holes provided.

S.S. TRIMMER JOISTS, as half studs with coped and crimped ends, shall be provided and placed 24" on centers or one under each stud to carry all interior partitions paralleling joist which are not directly supported by joist. Nail same to top flange of joist and bend ends over joist flanges.

S.S. CHANNEL PLATES shall be provided and placed as sills and plates for all exterior wall studing, all interior partitions, dormer walls, sills for all window openings, for heads of all window and door openings, and wherever else required. Miter or butt all such plates at all corners. Secure all corners and all corners formed by abutting walls and partitions with S.S. Corner Brackets screwed or bolted to flanges of channel plates. See also heading "S.S. SILLS and HEADERS."

All sills for exterior wall studding, and where otherwise required, shall be bolted to masonry walls by ½" dia. built-in hook bolts spaced not over 4'0" on centers. Hook bolts will be furnished and built in by mason contractor. Drill such bolt holes in field.

S.S. STUDS, spaced generally 24° on centers, shall be provided and placed for all exterior walls and interior partitions, secured to sills and plates with four screws to each.

and interior partitions, secured to sills and plates with four screws to each.

All studs shall be 3 % 's standard studs, except for such interior non-bearing partitions as are noted on drawings to have 2 % 'n narrow studs. Vertical walls of dormers shall be built with narrow stude.

Jack studs shall be provided and placed between wall sills and window sills, between opening headers and partition or wall plate above. Also for all gable walls, and wherever else required to provide a nailing for collateral materials. Where sills are not placed to secure jack studs to flanges of same, provide and place S.S. Stud Clips. At gable end rafters provide and place S.S. Rafter Clips to secure studs to rafters. Nail such clips to both studs and rafters and bend wings around stud

Double studs at jambs of all openings where loads cannot be safely carried by a single stud. Secure same together with S.S. "C" Clips spaced approximately 3'0" on centers. Drive ends of clips into nailing grooves of studs. Also double studs to carry concentrated loads.

S.S. PARTITION FURRING, to increase thickness of partitions to accommodate pipes, etc., as shown and noted on drawings, shall be accomplished by providing and placing half studs secured to narrow plates and sills. Brace same to main studs at center of height.

S.S. SILLS AND HEADERS shall be provided and

placed for all exterior and interior openings.

Window sill shall consist of a channel plate with flanges pointed downward, screwed to flanges of main studs, and intermediately supported by jack studs where openings are over 24' wide.

Headers, over openings in wall and load-carrying partitions, shall consist of a stud or joist member and a top channel plate member supported at main studs by S.S. Header Brackets screwed to stud flanges and header flanges. Top channel plate shall be nail-set punched on center line of web in the field, nailed through such holes to joist header member and flanges screwed to stud flanges.

Headers over all other openings shall consist of a channel plate only, with flanges screwed to flanges of studs and webs to jack stud clips.

S.S. JAMB STUDS shall be provided in all openings where the regular spacing of main studs do not act as such jamb members.

S.S. STUD CLIPS shall be provided and placed at top and bottom of all jack studs to secure same to other members, where regular sills or plates are not provided as means of securing studs.

S.S. STAIR CARRIAGES shall be provided and

placed for all stairs, either in two's or three's as the width and nature of stair run requires. Also for all stair platforms or landings. All shall be stud or joist members, well and substantially framed, and secured to stairwell headers with S.S. Rafter Sleeves bolted to both carriages and headers, and to studs with S.S. Combination Clips.

S.S. RAFTERS, spaced 24" on centers, shall be stud or joist members and provided and placed for all pitched roofs. Joists shall be considered for flat roofs. At walls secure rafters to wall plates by providing and placing at the heel of each rafter an S.S. adjustable Rafter Hinge screwed to both plate and rafter. At ridge secure rafter to ridge plate by providing and placing at each rafter an S.S. Rafter Plate with plate end bent in field to suit roof pitch, and bolted to both rafter and ridge plate and screwed to rafter flanges.

Jack rafters shall be secured at heels in same

Jack rafters shall be secured at heels in same manner as main rafters, and at hip and valley rafters with S.S. Rafter Sleeves and S.S. Rafter Plates.

If no ridge plate, as hereinafter specified, is provided the rafters meeting at ridge line shall lap each other and shall be bolted together through

S.S. HIP AND VALLEY RAFTERS shall be of stud or joist members and provided and placed as and where required by the drawings. Secure same to wall plates and ridge plates in same manner as specified for main rafters.

S.S. STRUTS shall be of stud members, provided and placed to break up large spans of hip and valley rafters, as may be required. Same shall bear on joists, secured to same with S.S. Stud Clips and to such rafters in same manner as top of jack studs are secured to rafters.

S.S. RIDGE PLATES shall be provided only for special conditions and so placed. Drill in field for all main, hip and valley rafter connections.

S.S. COLLAR TIES, to brace and tie rafters together, shall be provided and placed as and where required by the drawings. Same shall be of S.S. stud members, and shall have flanges abutting rafters cut and bent to plane of webs, and shall be secured to rafters with S.S. Collar Tie Brackets. Bend wings of brackets around rafter flanges and bolt collar ties to brackets.

DORMERS shall be built where and as shown, using S.S. members throughout for frames. Frame in same manner as for other similar parts.

S.S. GADGETS shall be provided, placed and secured throughout for the proper and complete assembling in the field of the various S.S. members to complete the frame as a whole.

FLOORS, CONCRETE. All subfloors shall be of 2" thick 2000 lb. 1-3-4 mix concrete reinforced. Reinforcement shall be ½" diameter plain rods placed not more than 6" on centers, or ¾" 4.0 lb. rib lath, or wire mesh. Reinforcement, lath or mesh should be stapled directly to tops of STRAN-STEEL joists. Top surface shall be prepared to receive finish flooring. Wood sleepers shall not be used.

FLOORS, WOOD. In some instances, it is possible, under existing Building Codes, to use a wood floor, and same may be applied as follows: Lay 2" x 4" sleepers 16" on center, flat, at right angles to run of joists; nail sleepers to joists and nail wood subfloor to sleepers in ordinary manner.

WALLS. As a plaster base secure to each stud %" thick approved gypsum board or a 2.5 lb. diamond mesh sheet lath. Gypsum shall be secured with No. 12 wire 2 ½" long 1" diameter disc headed coated nails spaced not over 6" on centers. If board be 16" wide use four nails at each stud bearing.

CEILINGS. As a plaster base secure to each joist ½ thick approved gypsum board or a ¾ 3.4 lb. rib lath. Gypsum board shall be secured in manner and with same nails as specified under "WALLS."

EXTERIOR WALL, INSULATING, SHEATH-ING. Not less than ½° thick approved insulating board shall be nailed to each stud on exterior face of exterior wall with same nails as specified under "WALLS." A superior job will be obtained if such insulating board is covered on exterior surface with an approved damp-resisting sheathing paper, well lapped and nailed.

New Connectors Make Strong Timber Joints

THE changes in timber construction brought about by connectors are in many respects as dramatic as the change from wrought iron to steel framing, or the substitution of Portland for natural cements.

There has never been, in building circles, any question as to the structural strength of timber. An 8 x 8 timber column 10 feet high has a safe load capacity of 67,500 pounds and weighs 156 pounds. A 6 x 6, 18-pound steel H column 10 feet high has a safe load capacity of 69,000 pounds and weighs 180 pounds. A 3 x 8 inch wood tension member such as employed in a truss chord has a safe load capacity of 31,500

pounds, and weighs 5.7 pounds per linear foot. Two steel angles $2\frac{1}{2} \times 2\frac{1}{4}$ ", with a net section of 1.8 square inches, have a safe load capacity of 32,400 pounds and weigh 7.24 pounds per linear foot. Pound for pound, the strength of timber compares favorably in either case with that of steel. The trouble with wood has previously been that its full strength could not be used in actual construction as could that of steel.

There were a number of reasons for this, and it may be said that all of these difficulties, through energetic action of the lumber industry and of governmental and allied agencies, have been overcome or are now being

rapidly eliminated.

1. Ten years ago no sound rules were in general use for determining the allowable working stresses for timbers of a given species and grade description. Such rules are now published and in general use by the more important groups of engineers and builders, such as the American Railway Engineering Association, the American Society of State Highway Officials, the American Society for Testing Materials, and by Federal and State engineering organizations.*

2. Timber sizes were, and still are, not sufficiently graduated. It often was, and still is, necessary, because of the 2-inch intervals between commercial sizes, to use sections much larger than are required by the loads. This difficulty still obtains to a considerable extent, but it is more and more a practice of progressive mills to saw special sizes for specifying timber users. Not long ago a shipload of such material was shipped from a southern mill at prices well in excess of those for ordinary sizes. Because the mill made its product worth more to the user, he could afford to pay more for the product.

3. The use of all-heart timber of certain species, or of preservative treatment where conditions make this desirable, has greatly increased the service life of timber structures exposed to unfavorable conditions, and enables the builder to balance the fixed and maintenance charges for a low cost structure, against those of a higher priced and possibly no more durable one. New preservatives of established effectiveness permit of suc-

Revolutionary Improvement in Heavy Timber Construction Perfected During Past Year

By FRANK P. CARTWRIGHT

Structural Engineer

cessful painting and are adapted to interior uses of

4. The most important development in structural framing, however, is the substitution of timber connector joints for the bolted, spiked or butt joints characteristic of the older timber structures. With these older connection methods it was possible to develop only from 50 to 67 per cent of the safe working strength of the timber members. The bolted joint was from onehalf to two-thirds as strong as the timber, and a considerable part of the material in the structure was wasted. Connector joints are from 80 to 120 per cent as strong as the members connected, and the structural efficiency of timber used with these connections is increased from 50 to 100 per cent. It is possible in many cases to design timber-connector structures weighing no more than steel structures, for the same load bearing service. A 60-foot Fink type roof truss of timber-connector construction for a typical loading, requires 886 feet b.m., and weighs in standard dressed sizes 2660 pounds. A steel truss of the same span, rise and loading weighs 2800 pounds.

An improvement of this magnitude in the usefulness of one of our principal framing materials is a development of great importance in the building industry, and its full effects will of course not be realized for many years. The use of connectors, however, is increasing rapidly. Since their introduction into American practice several years ago, over three million have been employed in over 8000 buildings and structures of all types, including bridges, cofferdams, cooling towers, roof trusses, trestles, radio and tank towers, school buildings, ships, churches, camps and many others.

Three types of connectors are in general use, each having its field of application and its advantages for

particular purposes.

An interesting result of the use of timber connectors is the development of a class of fabricators for structural timber comparable to the steel fabricators, for many years available in practically every large town. With the exception of a few outstanding concerns the lumber industry has not previously had such a group between the producer and the builder; and reasonable quotations and dependable delivery on structural timber framing have not always been easy to get. With con-

^{*}See also U. S. Dept. Agriculture Misc. Publication No. 185, Guide to the Grading of Structural Timbers and the Determination of Working Stresses. Feb., 1934, 26 p. Supt. of Documents, Washington, D. C. 5 cents.

nector construction it is quite feasible to fabricate from shop details in exactly the same fashion structural steel is fabricated, and to ship the members knock-down or partly shop-assembled to the treating plant or to the site. The 326-foot wood radio tower, recently built by Station WRVA at Richmond, Virginia, was entirely fabricated from shop details, though the work was actually done at the tower site. Numerous roof trusses. lookout towers, and other items have been shop-fabricated and the list of concerns known to be experienced in such work is increasing rapidly.

Fabrication equipment is relatively simple and portable as compared to that for steel shops, consisting simply of a rip and cut-off saw and a motorized port-

able, or bench, drill.

Cost of fabrication is stated to range from \$10 to \$30 per thousand feet, depending on the amount and uniformity of the work as well as the complexity of details. Timber-connector roof trusses of the Fink and bowstring types up to 100 feet span are in use, and an arched roof of 120-foot span is under construction. Largest bridge of this type so far built is the Dolan Creek three-hinged arch on the Pacific Coast highway in California, with a 180-foot clear span and several approach trusses.

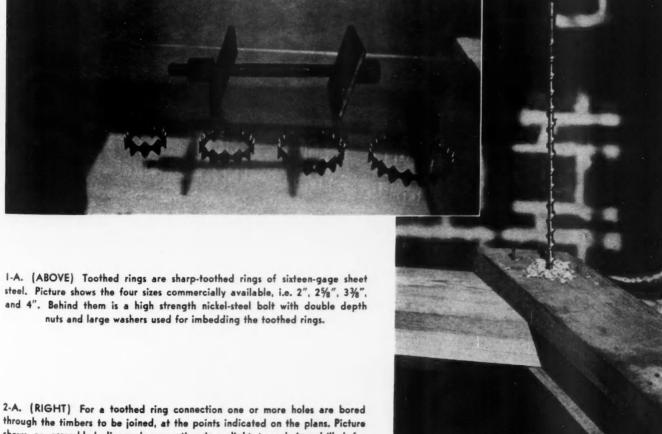
Timber connectors were introduced into America by the United States Government, which after careful

study of their use abroad, desired to make them available to builders in this country. Samples of several types were imported by the U. S. Department of Commerce and tested in connection with American structural species by the U. S. Forest Products Laboratory. Based on these tests and a large volume of similar work under private auspices, a suitable range of sizes was selected for American Standard timber sizes and safe working loads for various structural species and use conditions were developed.

Connectors have been made commercially available to the building public by the National Lumber Manufacturers Association of Washington, D. C., a subsidiary of which, known as the Timber Engineering Company, manufactures and distributes them in the United States, Canada and Mexico. Comprehensive literature has been prepared describing the connectors and their applications for numerous purposes, and illustrating the various structures and purposes for which they have been used. Sample designs illustrating the use of connectors, are available for roof trusses, bridges, towers, trestles and other common types of structures, also a Manual of instructions for timber connector design. A number of leading technical schools are carrying on, or have completed, research work in connector applications, and instruction in the use of the system bids fair to become a part of the usual curriculums.

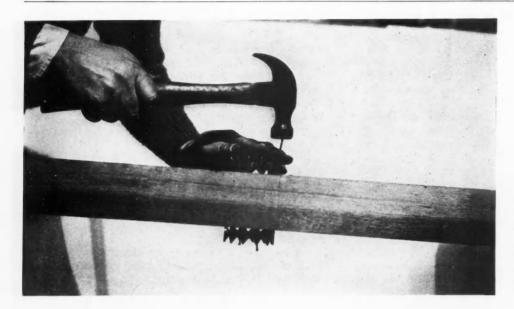
WHAT TIMBER CONNECTORS ARE AND HOW THEY ARE USED

THERE are three types of connectors in general use: toothed rings, split rings, and shear plates. The following pictures illustrate these devices and their installation.

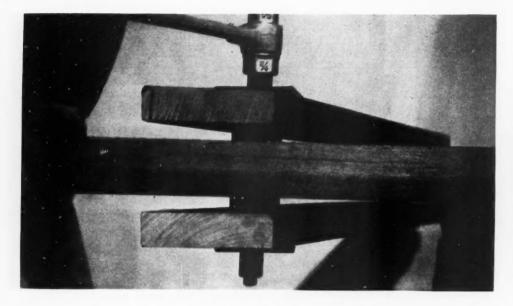


shows an assembled diagonal connection in a light truss being drilled for toothed ring connection. Outer diagonal pieces are lightly spiked to the chord to hold them in position.

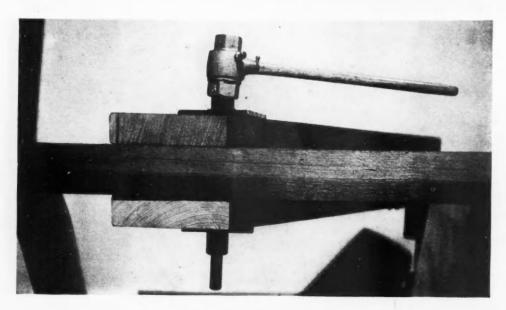
TIMBER CONNECTORS PROPERLY USED MAKE STRONG JOINTS



3-A. AFTER boring the necessary holes the timbers are lifted apart and toothed ring connectors placed between them. Picture shows workman tacking the toothed rings in place with small finishing nails before re-assembling the joint.

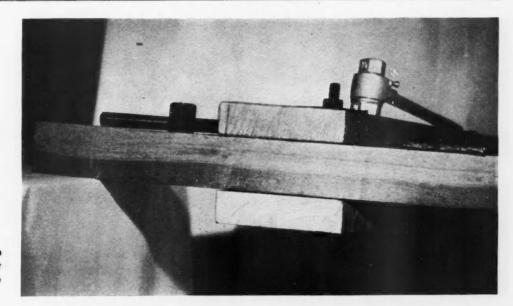


4-A. IMBEDDING toothed rings with high strength steel bolt and large washers. Double depth nuts are used to afford more bearing on the threads. Toothed rings show between timbers. Note long-handled ratchet wrench employed. This is more convenient than an ordinary wrench, which must be removed and replaced between each half revolution. High strength bolts and nuts are obtainable from the Timber Engineering Company.

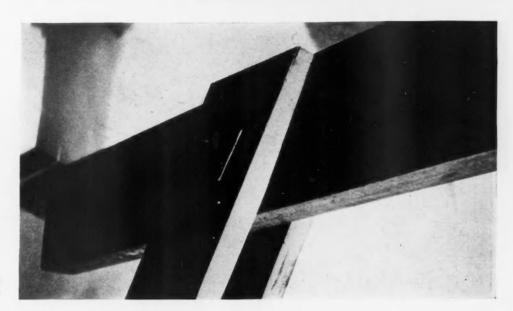


5-A. JOINT drawn together with high strength bolt. Toothed rings completely imbedded, and surfaces of timbers in contact.

NEW USEFULNESS NOW FOR HEAVY TIMBER CONSTRUCTION



6-A. HIGH strength bolt and large washers removed toothed ring joint and replaced with ordinary machine bolt and square washers.

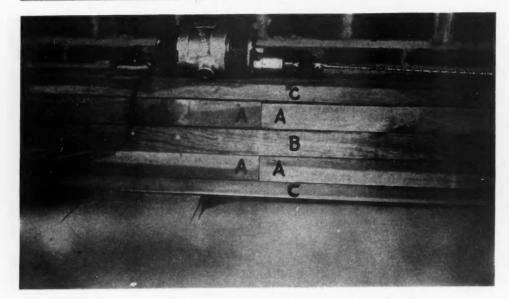


7-A. COMPLETED joint showing 3x3x% washer, ordinarily used with 3% toothed rings.



1-B. SPLIT rings are plain steel rings of rectangular cross section, with a tongued and grooved break in the perimeter. Picture shows split rings of the four sizes commercially available, i. e., 2½", 4", 6", and 8", shown with grooving tools for each size.

ENGINEERS CAN NOW FIGURE SAFE LOADS ACCURATELY



2-B. TYPICAL split ring spliced joint for a lower truss chord consisting of two pieces 3x8, marked "A". Splice to be made with one 3x8 center piece, marked "B", and two 2x8 side pieces, marked "C". The splice pieces are placed outside and between the chord pieces and the assembly lightly spiked together before boring.



3-B. HOLES are then bored with a portable motorized drill, the full thickness of the splice assembly. Care should be taken to plumb the drill so that the hole will be perpendicular to the timber surfaces.



4-B. THE pieces forming the splice are then laid apart and grooved with a 4" grooving tool obtainable from the Timber Engineering Company. This also can readily be driven with a portable motorized drill. The pilot of the grooving tool fits in the bolt hole, centering the groove about the hole.

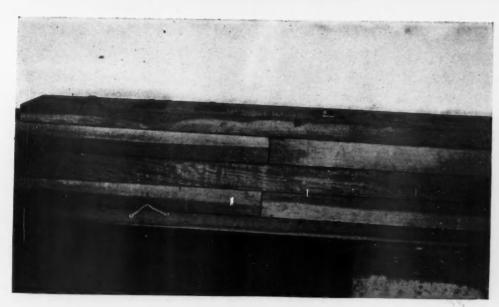
ENLARGED LOAD BEARING AREA SECRET OF THIS SYSTEM



5-B. SPLIT rings being placed in the outer chord members. Outside splice plate shows below grooved to fit on the rings as shown above. Note the split or break in the ring perimeter. The grooving tool is purposely made to cut a groove slightly larger than the diameter of the ring when closed.



6-B. SPLICE pieces reassembled and bolts are being inserted to hold the members together in the structure.

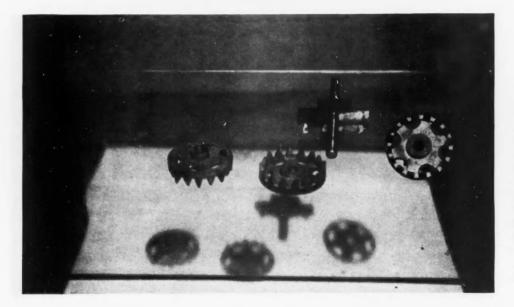


7-B. COMPLETED splice. With six pairs of 4" split rings on each side of the splice, between the four contact surfaces provided, the joint has a capacity of 84,000 pounds in dense timber.

LABOR SAVING TOOLS DEVELOPED FOR CONNECTOR WORK



8-B. BORING timbers from shop details for a wood radio tower. Timbers for important structures are often laid out from shop details in the same way as structural steel, cut to length, drilled, and grooved ready for assembly in the finished structure. This may be done in the shop or at the site. Any millwork plant has the necessary equipment for such work.



I-C. A SHEAR plate is a malleable casting consisting of a circular plate with teeth arranged about the perimeter of one face, and a cylindrical hub on the opposite face concentric to a hole for the bolt which holds the assembly together. Picture shows shear plates and tool used for cutting the daps in which they are imbedded. Note at left, the hub or boss which fits into a 15/16" drilled hole in the steel plate or shape to which connection is to be made, and at right the hub on the inner face which adds to the working load of the connector.

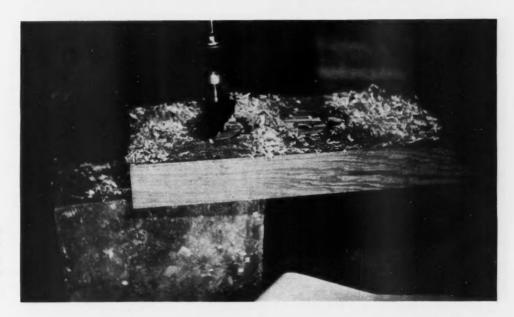


2-C. MARKING the holes for a column footing connection. The steel shapes with which the connection is made may be used as templates in spotting holes. Use of a drilling punch which fits the hole in the steel or template is preferable to marking with a pencil.

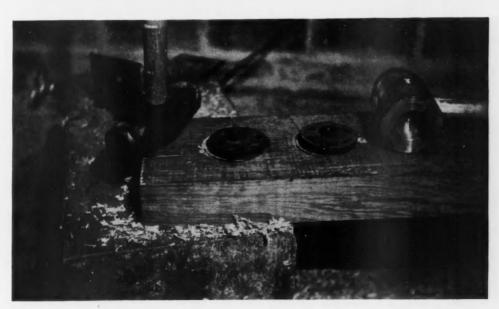
CONTRACTORS BECOMING TIMBER CONNECTOR ERECTORS



3-C. BORING 9/16" bolt holes at the points marked from the steel plate as a template. Holes should be bored from each face to meet at approximately the center of the timber.



4-C. CUTTING the circular grooves or daps for the shear plates. A portable motorized drill is used for this purpose, with a special cutting tool obtainable from the Timber Engineering Company.



5-C. TOOLS for imbedbing shear plates. The sledge at right with recessed face is placed on top of the shear plate, and struck with another sledge shown at left. The shear plates are partly fitted, partly driven, in the pre-cut grooves or daps.

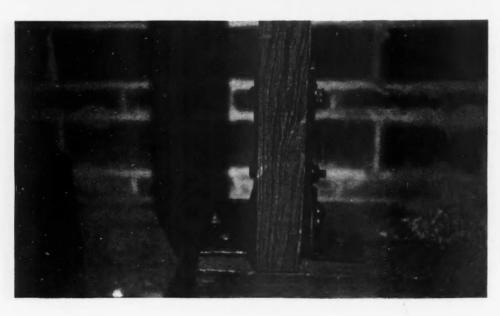
TIMBER CONNECTORS ARE NOW SPECIFIED INCREASINGLY



6-C. THIS shows one shear plate already imbedded and one in process of driving. Note the tip of the striking sledge on top of the recessed sledge. Grooving tool and motorized drill appear in the background. Pilot of the grooving tool showing at extreme left is inserted in the bolt hole to center the dap accurately.



7-C. BOLTING on the steel fittings. Note wide washers used to give the half-inch bolt head adequate bearing over the 15/16" hole in the steel. Note also the end of the boss or hub of the shear plate showing in the 15/16" hole at left.



8-C. COMPLETED column connection. Footing bolts fit in the holes shown in the horizontal legs of the connection angles.

NODERNIZATION

"which makes buildings of all kinds more cheerful, more livable and more salable"

Try Selling the Job Complete

AFTER having become disgusted, discouraged and about to lose our loyalty to the profession of supplying sanitation to property owners by way of modern plumbing, we called our gang together to determine if possible just what was the cause of our depressed condition. It was at

once agreed that the chief cause was that little was being sold and what was being sold was being put on the books at an unsatisfactory profit. The reason for this we figured was that after chasing a prospect and doing everything we thought necessary to make a sale we found that a hungry competitor had taken the business at 15 per cent less than we had asked.

In desperation it was decided to make a little study of our sales methods and to investigate why we with a very attractive item for use in modernizing the home were making few sales while other forms of equipment were enjoying great advances in sales over previous years. What we learned from our study and investigation was to us a discovery. It was so new to us and so different from anything we had ever thought of and from what our fellow joint wipers have practiced that

Advises R. E. L. Rainey of Chicago, Successful Kitchen, Bath Modernizer

> we were inclined to look upon the information as a revelation. The using of the information has brought such an improvement in our sales and profits as to inspire the writing of this article, hoping that our fellow strugglers may benefit from it and our experiences.

> Some embarrassment is felt when it is admitted that we could not answer the first question asked which was, "What are the three principles of selling?" Our answer was "Get the order," but this is what we learned.

Since Eve sold Adam the apple the principles of selling have been the same. These are, First: create interest. Second: cause desire. Third: produce action. That is, cause the prospect to put his hand in his pocket and give you the dollar he has been holding there so tightly, in exchange for something you wish to dispose of. All three of these principles must be put into effect for if

NEW venetian mirror and case. ->
NEW style side bracket lights. ->

NEW "Hyd-rod" shower curtain.

"VEOS" tile, installed in two days, complete, made possible finishing the entire job within the week.

NEW lavatory — chrome fittings.



A COMPLETE job by the author which made the owners happy.

interest is aroused and yet no desire there will be no sale. If the first two are made to work there still will not be any sale until the third principle, that of action, is made effective.

These principles apply in selling both commodities and specialties. In fact they apply to all selling. The methods of selling, however, differ slightly, and it is this difference in method that we in the building industry should give thought if there is to be success in that part of the business which has to do with the sale of

specialties.

For many years our business was that of supplying labor, materials and equipment for use in new construction. We were shoving out bath tubs and radiators like a lumber dealer was moving out so many doors and windows. We were commodity merchants. Then there came the change. The new business to be had was largely from home improvements and the buyer was the actual owner of the property to be improved. No more did orders come in over the telephone. No more did the building contractor say, "Put in complete plumbing as per our specifications No. 2, in ten bungalows on Willow Street."

The second part of the discovery was that instead of selling plumbing our business had changed to that of selling bath rooms, a specialty. That we were no longer commodity merchants so far as the home modernizing part of the business goes. Being specialty sellers the principles and methods of specialty selling must be put into effect. To cause us to realize that we had unknowingly passed into specialty selling it was pointed out that an electric motor as used in a refrigerator; a bath tub; a radio tube and a sack of rock wool insulation are commodities. But an electric motor, an ice box and a cooling

unit when assembled ready to set in place and put to work is a specialty. Likewise, three pieces of plumbing fixtures, two electric light fixtures, tiled walls, a venetian blind, a radiator cover, radiator, and some paint and paper when assembled and put into place to create a modern bath room is a specialty.

The third important realization was that when a home owner calls on a plumber for price on three bath room fixtures what he really wants is a bath room, not just some plumbing. When he asks a lumber dealer the price on shingles, the owner has in his mind a new roof, not just some shingles. If an owner was compelled to buy a motor one place, an ice box at another; hunt up a cooling unit and then locate some mechanics to put these together to produce an electric refrigerator it is hardly probable that many would be in use. The owner's hesitancy in considering a new bath room is much the same as it would be in having to assemble a refrigerator. This was proved by contacts with prospects, some typical examples follow:

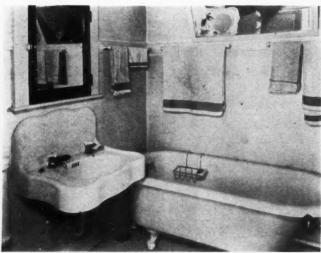
1—An owner asked for prices on plumbing fixtures. When pressed for the order the prospect resisted by saying he wanted to look into the price of tile and electric fixtures before he would know the entire cost and whether or not he could afford a complete new room. A few days later the salesman contacted the owner and was informed that the tile cost had not been looked into. He had not had time to get to it. Finally the tile man was called in and he too was stalled off on account of the buyer having several other materials to investigate. It was three months after the first inquiry before the

contract was finally given.

This owner like many others would not buy until he knew the complete cost, and all the time he was taking

VENETIAN blind, with valance trimmed with rope and hung -> at top of window casing (not shown) added much to the attractiveness of the room by hiding the outmoded wood work and frosted glass panes.

OLD hamper which occupied space now taken up by radiator has been discarded and this new hamper installed. Note doors at top and bottom, making it unnecessary to stoop to take out soiled clothes. Double recessed tub used in room 6 ft. 6 in. wide. End boxed in and tiled. Relieves the necessity of scrubbing this space and makes space for the hamper.



OLD bath room before restyling-what looked to the owner like a difficult and expensive operation was seen by Mr. Rainey as a clear business opportunity. He took responsibility for the entire job.



THE OLD two-tube high radiator behind door was replaced with seventube low radiator, and covered with radiator cover in the top of which was placed one-inch board of insulation. Now used in place of stool.

to collect this data, every one who anticipated a sale was held in suspense.

2—The wife had collected catalogs on three different makes of plumbing fixtures. She had descriptive folders on floor coverings, shower curtains; samples of wall coverings, and magazine articles. In addition she had been supplied by three plumbers with prices on about every style and type of fixtures that had ever been used in a bath room. This collection and the penciled figures of the several who craved to serve her with a set of plumbing fixtures, were placed under the nose of her home loving husband, who being quite satisfied with the present accommodations for sanitation and not being eager to part with his dollars, failed to appreciate his wife's pastime of collecting such information and gave little notice of her library of plumbing facts. They were, however, shortly thereafter, made the happy owners of a modern bath room.

The point is that all this dope the wife had did not mean anything to her. She didn't know what a bath room would cost. Had not even decided what would be put into it. But she did sincerely want a bath room; not some plumbing, and what a struggle she was making to

get what she wanted.

3—Owner hearing of the complete job policy came into the office and said, "My wife has been after me for a new bath room ever since she saw some model rooms at a Century of Progress, but I am a busy man and have delayed getting the various equipment together and besides I hardly have time to look after all the details of getting the thing in. If you can take care of the entire installation you are the man I am looking for."

From such examples as these we were convinced that owners are slow to buy things which are hard to locate or hard to get installed, or to obligate themselves for something they do not know the cost of. Their interest has been aroused in the many attractive items offered by the building industry by magazine articles, displays, Government propaganda and direct mail advertising. This has also created desire, but action has been slow. By making it easy for home owners to secure the things we have for sale, more sales will develop. To sum it all up our discovery was this.

We are specialty sellers. We must use specialty selling

methods.

The owner wants a complete job. We must make it

easy for him to have it.

And, knowing these things a sales policy was inaugurated under which we would plan, specify, furnish all material and equipment for, and install the job completely. The following of this sales policy shows the following gratifying results:

1st—The prospect can be brought to a quicker decision. For he knows just what he is to get, as set forth in written specifications on the entire room, all supplemented by descriptive literature. He knows to the penny what the complete job is to cost. There is no good reason for further delay. Action takes place.

2nd—Resistance is greatly decreased when the owner knows that a complete new bath room can be installed in a week's time. Several sales were made to owners who had hesitated to go ahead as they were of the wrong opinion that they would

have to be mussed up a couple of weeks.

3rd—When the complete job is under one supervision the cost is lower, as the one in charge can co-ordinate the work of the different trades in such a way as to reduce waste time to a minimum. One owner had three mechanics on hand one Monday morning. The plumber, tile man and electrician. All had been told, "we are ready to put the bath room in. Be sure and be here." All except the plumber had to be sent home; but someone paid.

4th—The dealer can usually secure a fair profit for the job. Competition is greatly reduced. The price for the complete

job is given in one lump sum. Owner does not therefore know the cost for tub, tile or light fixtures. In fact, he does not seem to care to know the itemized cost any more than he wants to know the itemized cost of the motor, cooling unit and box in his refrigerator. He is buying a bath room. The bath room you have designed is different than the one offered by someone else. If the buyer likes your bath room best and you have convinced him that he is getting good value, the sale is made. In this we are again in the same position as a specialty salesman of oil burners or washing machines.

When first considering selling the complete job it was felt that what we wanted to sell was plumbing. Why bother with items we did not deal in? What did we know about light fixtures, Venetian blinds and radiator covers? It looked like a hard job to us, but being desperate for business we were ready to try most anything once. The arranging for these little extra items was

found to be amusingly simple.

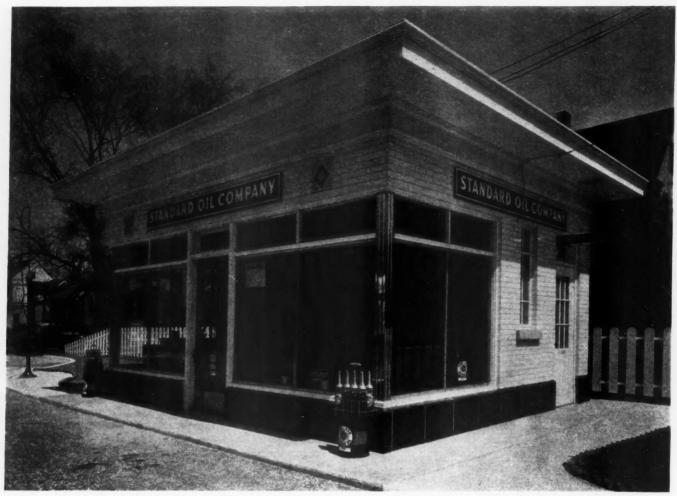
In the bath room pictured here about three-fourths of the total cost is represented by plumbing and tile. It is quite standard for us to figure these two items, so the only extra work in selling the complete job was to arrange for about sixty-five dollars worth of materials and labor. The local electrician gives us a set price of \$4.00 for each new outlet, and furnishes us a catalog with prices on light fixtures. The decorator gives us a price on the decorating; a price of 40c a square foot is known to apply on the Venetian blind and we have a price list on different sizes of radiator cabinets, so that these little items are easily figured; and as for getting them installed it is only necessary to phone the order. To us the selling of the complete job is very little extra effort, but to the home owner this complete service is much appreciated and considered of great value. Try selling the job complete.

And remember, that no matter how thick the glass may be you can always break it with a sledge hammer.

How the Job Figured Out

Three pieces plumbing fixtures, shower, mirror and radi-	138.00
4 1 1 1	
ator, installed	247.00
Wall-Tex on walls and ceiling. Enamel door and win-	
dow casings	15.00
	23.00
Hamper, \$7.00; Radiator Cover, \$11.00	18.00
Venetian blind	7.00
m	140.00





ABOVE: Small unit planned for economy and efficiency is neat and attractive.

Service Station Building Forecast

New Construction and Modernization Programs of Sizable Volume Will Increase Building Activity This Year

WITH the motor industry again turning out cars in a volume that recalls the days when "two cars in every garage" was a popular slogan, the field of service station construction is again of interest to the builder. The pickup in this construction started last year and indications are that a sizable volume will continue during 1936.

As in other forms of merchandising, convenience and appearance are the important features in selling gas and oil. Competition leads to the modernizing of existing units and the better planning and building of new ones. One new modern neighborhood station usually means that the others in the vicinity must be improved in order to attract trade and maintain sales. Both modernization and new construction programs will be important this year.

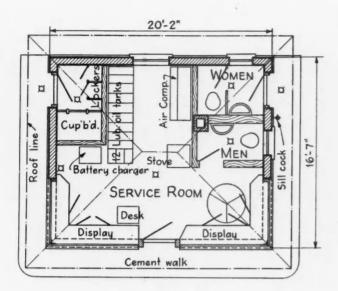
The figures on the number of stations in the country show that out of a total of about 80,000 drive-in type, 25,000 are owned and operated by fifty major companies,

10,000 local independent jobbers own and operate 50,000 stations of which approximately 80 per cent sell the products of the major companies, and the balance are locally owned single independent units. Thus, of the total, about four-fifths handle major company lines.

Some of the larger oil refiners maintain design and engineering departments with plans for units sent to various divisions for bids by local general contractors and construction supervised by a company engineer. This is the universal policy of Standard Oil Company, one of whose small units is illustrated on these pages. Independently owned stations with contracts to sell their products are also furnished with plans, information and necessary assistance.

The station shown on this page is of the small type without interior space for such work as greasing and washing. It is planned for maximum operating efficiency where a unit of this size is adequate. Clean cut and attractive in appearance, the job was designed by Charles A. Urbanek, company architect. Brief outline specifications, plan and elevations appear on the opposite page.

In a later article several stations of various sizes and design, both company and independently owned, will be shown to give the builder an idea of the types of service stations which represent the latest and best in the current building program.

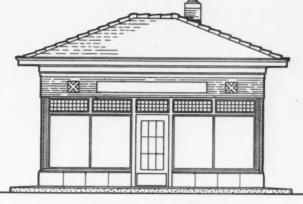


FLOOR PLAN

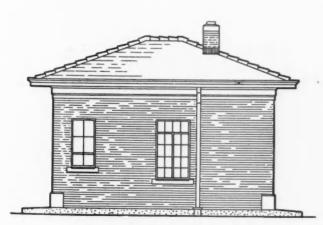
OUTLINE SPECIFICATIONS

- FOOTING—9" wide, extending 4 ft. below grade.
- FLOOR—5" reinforced concrete slab trow-
- EXTERIOR WALLS—Base, terra cotta laid up with mortar of same color; body of building, glazed face brick; trim, terra cotta.
- INSIDE WALLS AND PARTITIONS—Glezed tile or brick.
- ROOFING 10"x10" porcelain enameled shingle tile.
- CORNICE AND FACIA—Wood with gel. iron gutter.
- WINDOWS AND GLAZING—Display windows, Alumilited sash, plate glass; other sash, steel, D.S.A. glazing; toilet rooms, Mazex glass; transoms, Transex glass.
- DOORS—Front, 21/4" solid oak, D.S.A. glazing: exterior, 13/4" white pine; interior, 15/8" birch.









REAR ELEVATION



LEFT END ELEVATION

Take a Power Tool Tip from the Movies

Power Equipment Cuts Costs of Building Movie Sets \$15,000 a Year for Paramount

No. 3 in a series of Articles Showing How To Cut Construction Costs

IG dividends accrued to its set-construction department soon after one leading Hollywood studio bought its first shipment of electric saws.

"We sliced from \$12,000 to \$15,000 annually off our picture budgets when we tossed about eight or nine hun-

dred of our old-time saws to the junkpile."

Ed Davis, superintendent at Paramount for many years, says his books will reflect a still healthier balance this season as enlarged production schedules swing into high-making more operating short-cuts mandatory; and as the 400 master carpenters in his employ learn to profit by all the manifold adjustments available to latemodel power saw-users.

In motion pictures, America's fifth largest industry the only known business wherein Demand exceeds

Supply,

-whose cargo purchases of lumber and gypsum products reveal this peculiar art-industry as one of the largest single customers of building material men,

—where building crews (drawing the scale, or better) toil 8-hour shifts round the clock raising and razing their lavish sets for the screens of the world,

-where the "nut" (overhead expense) stands at \$2500

per hour.

—where saws and other labor-saving equipment must first pass trial tests supervised by efficiency experts and lynx-eyed cost accountants, before orders are issued to adopt them as standard equipment,

under such conditions, it is not surprising to find at least one power saw working alongside every set. In fact, standing orders on the Paramount lot, direct that a power saw shall be wheeled in with every load of mate-

rial delivered to a job.

To economize time and money, much of the "finish" is of course turned out by the mill—a 50,000 square foot building fitted with every worthwhile stationary power tool. It is because of its mobility, as well as versatility that the portable saw is so highly prized in the movies.

Mounted on a sturdy though light chassis, with oversize casters, it can be readily shifted to strategic points on the job-by only one man. All miter cuts up to 45° are plainly visible on the dial; and by shooting the arm up or down, these can be made on 6" stuff of the tiniest mould.

"While the power saw is indispensable on rafters, tiebeams, bridging, etc., one can do a much neater job of trim too. In getting out several thousand feet of birch trim for the panelled library of an 'art connoisseur,' last week, we found that the power saw had saved us exactly two hours on the one cabinet-making crew," Mr. Davis

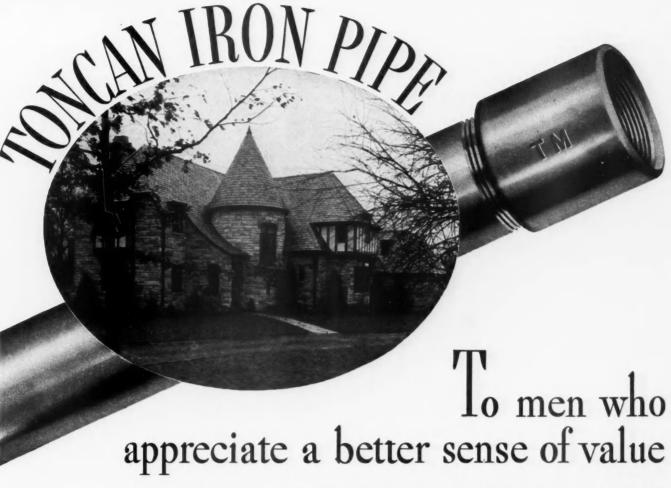
In the new art of creating illusion in the theatre, that which you see on the screen is often, but not always, what it seems. Skilled builders in the audience can spot some "faking" here and there that theatrical license excuses. However, it is in furthering these deliberate deceptions that the revolving saws play their vital and

most interesting roles.

In one recent picture, you may have seen, for instance, a stretch of the Sahara. Soldiers of the French Foreign Legion were fighting over sand dunes which stretched for miles, apparently, to the distant horizon. On this desert waste, not a stick of timber was visible; yet into its construction went as many board feet of Nos. 1 and 2 as you would buy for a city-blockful of five-room homes. Beneath those acres of "drifted sand" lay a labyrinth of short-length framing, each 2 x 4 notched or curved on the power saws, then jute-covered and



TWENTY SAWS OF THIS TYPE mounted on wheels are used in the Paramount studios. Some 200 men are employed in three shifts in construction work. Paramount estimates savings through use of power equipment at from \$12,000 to \$15,000 per year.



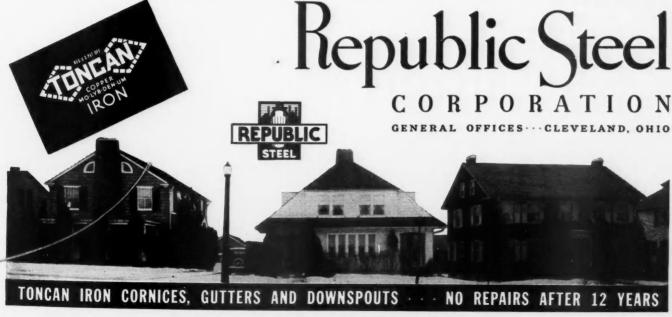
The almost forgotten sounds of trowels, saws and hammers are again playing a symphony of hope in city and country. New homes are springing up everywhere—and architects, contractors and owners are searching for real values for these homes.

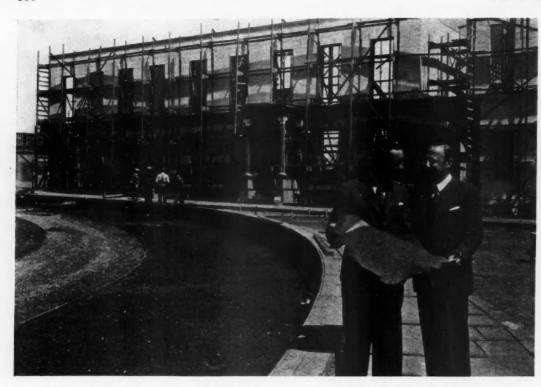
For hot and cold water and heating lines, Toncan Iron Pipe is all honest value. For duct work, cornices, gutters, downspouts and flashings, sheet metal of the same material is available.

Toncan Iron, for more than 27 years, has

been building a reputation through its remarkable ability to resist rust. It is an alloy of refined iron, copper and molybdenum processed to resist rust to a higher degree than any other ferrous material in its price class. It lasts longer in service—it minimizes repairs—yet it costs but little more than short-lived materials of non-alloy composition.

See Sweet's Catalog for complete information, or write us. Supply houses in all distribution centers assure quick delivery.





MOVIE moguls Frank Lloyd and Jesse Lasky check plans for a city block of scenery. Note the wooden curbstone.

air-gunned by crews spraying plaster-grout to simulate the wind-driven wastelands.

Even the sky was formed of a forest of machine-prepared two-by-fours from which purple muslin suspended.

Rome's captives and slaves toiled, bled and sweated for years on the Coliseum's construction; Hollywood, with its power saws, duplicated the huge amphitheatre

in seventy-two hours flat.

One saw is shaping the sleek hull of a cup defender whilst another squares bundles of straw-thatch for the roof of Shakespeare's cottage. On an adjoining sound stage, the gang is working on baroque ornament as another saw, twenty feet away, strips off the brash, square mould that characterizes some penthouse apartment . . . but there is no point in multiplying examples: you can take it that every *thing* that has ever been built of whatever material will, some time or other, be duplicated in wood on the whirring saws of movieland.

For "sets," you see, are no longer the crude back-drops of yesteryear. In line with the screen's present passion for attaining the utmost realism, the greatest care is now taken to build up an authentic atmospheric background. More fidelity in presentation, it has been found, helps the participants in the filmdrama to get the proper mood or feel of their roles while shooting is in progress. As a corollary, there is induced on the spectators in the theatre the desired effect of reality.

Since speed and appearance of finished work are stressed equally in Hollywood, it is obvious that mechan-

ical sawing becomes virtually obligatory.

Among the 2200-odd technicians on Paramount's payroll are shipwrights, wheelwrights, wagonwrights and many other crafts who have access to and avail themselves of the superior help afforded by the many power saws dotted about the lot. For a time, at the advent of the new machines, it was hard to convince some of the older generation of stair builders of their advantages, Davis says, but now nearly all are enthusiastic converts. The ability of the machines to trim heavily ornamented work to close tolerances, won 'em, he adds.

Much of the power saws' grist consists of 1/4-inch

veneer. Used to simulate parquet flooring, it is cut into 3' x 3' squares, each side necessarily squared to the utmost accuracy so as to fit snug in the finished mosaic. Any reader of *American Builder* who has worked plywood extensively will appreciate the difficulty of squaring some acres of it into small tiles without mechanical aid.

The latest, and perhaps the most interesting application of power saws to the solution of the huge entertainment industry's problems will be found on one of the so-called perspective sets. By that is meant an exterior or interior of some pretentious mansion, Hall of Justice, mediaeval castle or whatnot which has been detailed on the art director's drawings to create the illusion of depth. To create this apparent "third dimension," walls, floors, ceilings, stairs and all trim is ripped to produce the optical illusion, a tricky test of carpentering skill. One can readily appreciate that without adequate power equipment it would be an endless job to get out these long angles that fade to feather edges.

Every order is a rush order. In "reel" as in real life, like the average homebuilder who meditates for years on getting a contractor to put him up a house and then when the deal is signed expects to move in at once,

directors harry the construction crews.

An extent of the sawing operations at a studio like Paramount may be gauged from the following: The corporation manufactures about 100 pictures per year, each of which will average about six weeks in production and require from ten to 100 sets.

"Old fashioned hand-saws simply can't cope with present-day schedules," is the verdict of the motion picture

producers.

Sweat the machine rather than the man—Henry Ford's capsuled advice to those seeking to get out more work at less cost has been well applied by the shrewd experts of the celluloid city.

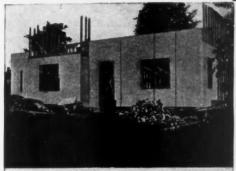
As Ed Davis says: "Our construction department would no more think of going back to archaic hand-saws than our transportation department would consider re-

verting to ox teams."



BILDRITE SHEATHING

Lowers Application Costs







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FUNG!

All Insulite products are treated against termites, rot and fungi. Insist on this seal of protection.

BILDRITE Sheathing can be applied much faster—affording a time saving of at least one-third as compared with horizontal wood sheathing. A still greater saving is possible in comparing its application time with that of diagonal wood sheathing. And—you get greater bracing strength. Nailing marks assure faster and correct nailing. Bildrite Sheathing is applied with a minimum of waste—still another saving that furthers low application costs—provides more house for the money.

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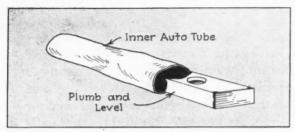
IT WILL PAY YOU TO SEE AN ARCHITECT WHEN YOU BUILD OR REMODEL

PRACTICAL JOB POINTERS

A READERS' EXCHANGE of tested ideas and methods, taken from their own building experience. Two dollars or a year's subscription to American Builder is paid for each item published. State business connection or trade.

Case for Plumb and Level

HERE is an idea which is simple but one I have found to be quite useful. To keep my plumb and level from getting battered up and perhaps broken, I cut a piece from an old inner tube long enough to hold it, and sealed up one end with rubber cement. A band cut from the same tube and put on double will hold the level in this easily made case.—Melvin O. Phelps, Builder, Montpelier, Idaho.



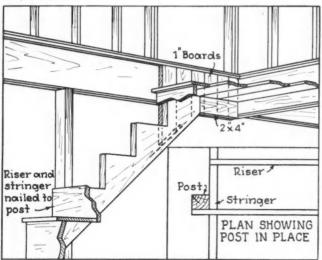
PLUMB and level case made from old inner tube.

Strong Simple Stair Building

WHEN building inside stairs in a basement, and especially when a platform is needed to save room, I have found a simple and strong method of construction that I haven't seen before, which is shown in the drawing below.

The 1 inch boards, fastened to the joists to give nailing support for the 2 x 4 and stringers, need not project below lower edge of these members.

Posts, the way they usually are fastened to a stair, easily come loose. The sketch also shows one way I have tried and found to be strong, satisfactory and cheap, with hardly any extra time required to give the added strength. Just allow the riser to project even to the outside of the posts, thus forming a corner for nailing.—NILS OLAF FAGERSTROM, Carpenter, San Francisco, Calif.



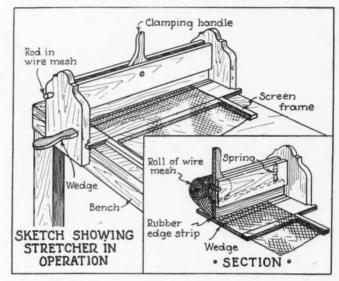
SIMPLE method of building stronger basement stairs.

Wire Screen Stretcher

A NUMBER of contributions have appeared in your "Practical Job Pointers" column, showing various methods of constructing wire screen stretchers. Here is one which I think measures up to any I have seen to date.

The stretcher is built of kiln dried birch, 1 inch and 1¼ inch thick, of such a size as will fit on a bench as shown in the drawing. The lever for holding the mesh tight has an oval-shaped end which is attached off center. By pulling the handle to one side, pressure is applied to the rubber-edged member so that the wire is held in place. The tapered wedge is then forced in to stretch the wire mesh over the frame for tacking.

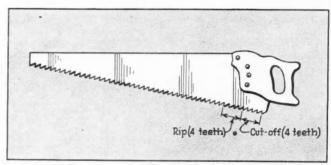
You may be interested to know that I recently received an inquiry from Denmark regarding "Reconditioning Stair Treads," a contribution I made to your "Practical Job Pointers" page some time ago.—FRED W. WESLEY, Burks Falls, Can.



STRETCHER for applying wire screen to frames.

Better Way to File Rip Saw

I AM enclosing a "Practical Job Pointer" for your approval. This idea might be useful to those men that are getting their tools ready for spring work and want to have their saws in shape to do a good cutting job.



FILING a rip saw with alternate cut-off and rip sections.

The illustration shows how I file a rip saw. Joint and set the saw first, then alternately file every four teeth as a regular rip saw; then go back and alternately take the other four teeth and file as a cut-off saw, the result being four rip teeth, then four cut-off teeth, etc. The cut-off teeth should be filed with a 35 to 40 degree angle from the blade with the slope of teeth, the same as one files a rip saw.

The advantages of a saw filed like this are that it cuts better and smoother, if properly filed, than the regular rip saw. It's most excellent for bevel work, and it works good for rough cut-off work.—F. A. Lubbs, Carpenter, Coleta, Ill.

Your Search for the Right Truck Ends Here



The Azor Lumber Corporation, Brooklyn, N. Y., has used International Trucks for years. This 1½ to 2-ton Model C-35 with dump body is one of three owned by the firm and is in the service of the Azor Building Material Co., a subsidiary.

In the International line there's a truck for your job. Here, in one line of trucks, with 25 different models and a total of 70 wheelbase lengths, the needs of the lumber and building materials industries are met completely.

Each year increasing numbers of truck operators realize that this complete line holds the best solution to their delivery problems. International new-truck registrations for the year 1935 over 1934 showed a gain nearly three times as large as that of the truck

industry as a whole. Truck operators recognize the extra value that International Harvester is able to build into every truck that bears the name. More than thirty years of perfecting all-truck construction means a great deal to every user.

Call on the nearest Company-owned branch, or an International dealer, and inspect the trucks designed to do your work. A demonstration will point the way to new profits in your business.

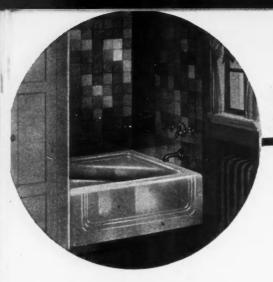
INTERNATIONAL HARVESTER COMPANY

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Chicago, Illinois

INTERNATIONAL TRUCKS

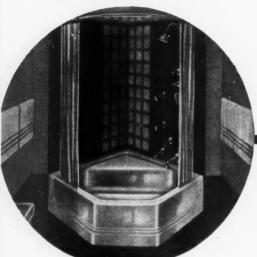


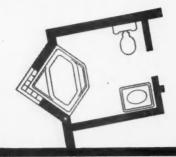
Too in

Reis Home

ENGLEWOOD, NEW JERSEY

The Neo-Angle Bath is featured in 54 homes, costing from \$5,500 to \$6,900, built by Reis Homes, Inc., and designed by Architect Stanley A. Leeks, Tenafly, New Jersey. The Neo-Angle was used in such a way that it provided extra closet space in the bathroom.





Home of Emmett Johnson TEANECK, NEW JERSEY

In this beautiful residence designed by Architect Erik Kaeyer, Yonkers, New York, the corner Neo-Angle is made the central theme of this attractive bathroom. Glass brick used in the wall back of the bath provides extra daylight. Cost of home, \$8,500.

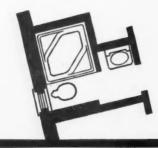




Hotel Taft NEW YORK CIT

One complete floor of this large hotel was modernized under the direction of the Bing & Bing management, to include Neo-Angle Baths in every suite. This floor has been especially popular with the guests.



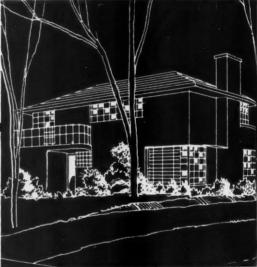


Apartment Residences

NEW YORK CITY

This apartment building, designed by Architects Leon & Lionel Levy, New York City, and built by Anthony Paterno, Builder, New York City, contains 40 one and a half room apartments, each with a Neo-Angle Bath. Approximately 4 feet of outside wall space was saved by using the Neo-Angle, the Architects say.









.large homes...hotels...apartments

AMERICA HAS DISCOVERED, Julie Balling Balling "Signification of the Control of

There's a new interest in the bathroom...a new enthusiasm for modern plumbing fixtures...a new bathing thrill that appeals to the whole family since "Standard" introduced the Neo-Angle Bath. Here, at last, is a bath so

different, so distinctive, yet so practical, that it is recognized as the symbol of a really modern home. Its attractive design offers almost unlimited opportunities for new and unusual bathroom planning. Its compact size makes it adaptable for every type of building.

The "Standard" Neo-Angle Bath is especially suitable for small homes. It is only four feet square, yet it provides a full-size, roomy bathing compartment, seats in two opposite corners, and an ideal shower bath. Eight bathing

features are combined in this one bath.

In every way, the "Standard"
Neo-Angle is the bath of the
future for the homes of today.
For complete information consult your "Standard" catalogue, or write today for descriptive literature.



Standard Sanitary Mfg. Co.

PITTSBURGH, PA. Division of AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

Comfortable Temperatures—

Radiant Heat—More Reasons for Insulation

By V. L. SHERMAN

Department of Mechanical Engineering Lewis Institute of Technology, Chicago

WHEN it comes to building homes for those borrowing under the supervision of the Federal Housing Administration not a little responsibility is

placed on the contractor. That, I suppose, is putting it mildly. With the weather opening up building is gaining momentum, and so many of the new homes have specifica-

tions including newer types of heating plants, of air cooling, and of air conditioning that it is no longer a question as to their inclusion in the equipment specified but as to what type and what capacities are best suited

to the particular job.

Among the questions asked there are a good many inquiries regarding the amount of floor space necessary for a residential cooling unit, and where best to place it. Going to extremes for examples of size and location let us take the units used in railroad passenger cars. Their space allotment is certainly small whether it is placed under the roof at one end of the coach or slung below the car floor. But it operates to full performance. Then there is the case of the rehabilitated apartment house with individual air conditioning units for each apartment stowed under closet ceilings with ducts above false ceilings in the halls leading away to the various grilles. Now there is no question as to the performances of these units. They were installed with the one purpose of making the apartments pay. Unless these conditioners played their part in making the comfort of the apartments an attraction for tenants and a reason for increased rentals there would be no reason for their installation. Owners of such property are not philanthropists.

Somewhat for the sake of curiosity I paid a visit to the offices of a corporation having about as varied a selection of housings as could be imagined. With many other shrewd organizations this one realizes that there is much "improved property" that is not paying, which, because of advantages of location and the drift of population, could be rendered profitable if prospective tenants were to know of the comfortable living conditions these properties afforded. These shrewder organizations know what comfortable living conditions require in the way of equipment. It is money they spend for it, but it is more money they expect in return. They want appreciative tenants just as the F.H.A. wants contented owners.

As much of the equipment tested out in these offices is under severe trial for capacity and location, connections are sometimes a matter of expediency. This accounts for the elevation of the unit shown in Figure 1. The grille is raised, but unfortunately the camera was not high enough to show the effective filter just below the grille. For these various pieces of equipment which do not carry their own refrigerating units there must be a sizable refrigerating plant. In one of the lesser used rooms it stands within its own little paneled closet. The panel was removed and the picture shown in Figure 2 was taken. The top of this closet or cabinet stands



FIG. I. A wall unit of trim appearance and large capacity. Filter at top. Grille removed.

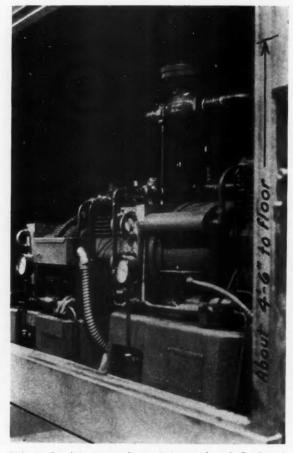


FIG. 2. Conditioning cooling unit in a cupboard. Cupboard panel removed.

HOMES LIKE THIS WILL ADVERTISE US BOTH, MR. BUILDER!



* This is the first of a series of illustrations of homes with CERTIGRADE Red Cedar Shingle exteriors from various sections of the country. Designed by George Wellington Stoddard, A. 1 A., this home was built by W. A. Lovell, of the Lovell Construction Company, Seattle, Washington.

Expert workmanship deserves the best materials! Let Certigrade Red Cedar Shingles give emphasis to your building skill!

On roofs and side walls CERTIGRADE Red Cedar Shingles will give unfaltering protection for decades to come. Their random widths, pleasing color tones and deep shadow lines will create permanent beauty—will be a source of lasting pride to you and the owner.

And beyond these factors of outward appearance there is the deep satisfaction of knowing that Red Cedar Shingles have high insulation value—assuring a home, cool in summer, snug and warm in winter. CERTIGRADES are economical too, not only in first cost but because they require practically no upkeep through the years.

Red Cedar Shingles are as useful in remodeling as they are in new construction. They can be applied directly over old roof and side wall coverings, giving an extra blanket of insulation.

RED CEDAR SHINGLE BUREAU

Headquarters: SEATTLE, WASH. Canadian Office: VANCOUVER, B. C.

Distributed only through established lumber dealers. Look for this label—it's your guarantee of rigid inspection and quality! CERTIGRADE

THASE MARK HINGLES

RED CEDAR SHINGLES

THESE SHINGLES ARE GUARANTEED

BY THE MANUFACTURER

BY THE MAN

CERTIGRADE DATA

GRADES: Shingles manufactured by member mills of the Red Cedar Shingle Bureau are standardized in three grades. The No. 1 grade must be 100% edgegrain, 100% clear, and 100% free of sapwood. Slight tolerances are allowed in No.2 and No.3 grades. The last two grades are intended primarily for roofs and side walls of buildings of cheaper construction and for under-coursing.

VALLEYS AND FLASHINGS: Best quality galvanized iron not lighter than 26-gauge or tin 30 per cent coating or better, should be used. On half-pitch and steeper roofs use 14-inch valleys; on flatter roofs use 16-inch.

DOUBLE-COURSING: In double-coursing—the laying of two shingles, one on the other, in each course—the butts of the top course should over-lap the buttline directly below by one-half inch. No. 2 and No. 3 grades can be used under the outer covering of No. 1's in double-coursing.

NAILS: Use hot-dipped zinccoated or copper nails in the laying of all shingles. Only such
nails will endure as long as
CERTIGRADE Red Cedar Shingles. Builders should insist on
the use of these rust-proof nails.
Nails should be placed one inch
above the butt line of the following course and one-half to threequarters of an inch in from the
edge of the shingle. Never use
more than two nails to a shingle.
This is important!

EXPOSURE: For regular coursing the following exposures are recommended: Roofs, 5" exposure for 16" shingles, 5½" for 18" and 7½" for 24". On side walls; 7½" for 16" shingles, 8½" for 18" and 11" for 24". For double-coursing on side walls the recommended exposures are: 12" for 16" shingles, 14" for 18" and 16" for 24".

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MECHANICAL EQUIPMENT FOR 20-YEAR FINANCED HOUSES

just high enough to make a shelf under shoulder height. It would take a very large residence to impose a load

equal to the one this unit cares for.

The inquiries also touch on size when it comes to heating and cooling coils of the convector types which are to be placed within the rooms. And there has been a good deal in these articles regarding the improvement in efficiency and decrease in size of these convectors. The two units shown in Figure 3, to the left, for small-space heating are typical. The one to the extreme left is a single section of finned tube cased so that the intake and outlet grilles make the unit a real convector. It is said to be equivalent to five feet of radiation. In Figure 3, just to the right of the first unit is one of cast flues with heating coils inside. This small unit produces a chimney effect that increases its efficiency.

Also in Figure 3, to the right is a cooling set for wall mounting that would answer in many situations where floor space is precious and appearances are not of immediate concern. This is a set of cooling coils of the finned tube type ranged along the wall and cased so that the warmer ceiling air is drawn into the section through the open top. One panel was removed to show the appearance of the coils. The cooled air is delivered out and down through the louvres and clings more to the wall. Drafts are said to be at a minimum, and no fan is

employed to move the air.

In none of these, so far mentioned, is there provision made for definite admission of outside air. But in pointing out that capacities for heating and cooling can be had at such relatively small space quantities it should be remarked that there are a number of cooling units providing dehumidification and filtering that are directly window-connected and in which the amount of air drawn from the outside is definitely known. These units, you

may then see, are not too large in size for their needed capacity. They fit the picture in any home, and can be had with refrigeration remote or as part of the unit.

Considerable research has been made in radiant heat, its effect in loss on the individual, and the advantages in its use in heating and cooling. The word "heat" is used only in a relative sense. Where heat can be delivered to a room through wall or ceiling grilles when such walls or ceilings might be of lower temperatures than the room air, then just so much of the wall and ceiling areas are effective as radiant heating areas. If sections of the walls or ceiling can be heated, even without delivering heat by convection currents of air, then radiant heat is supplied. In some ways this is the ideal heat, and for these reasons.

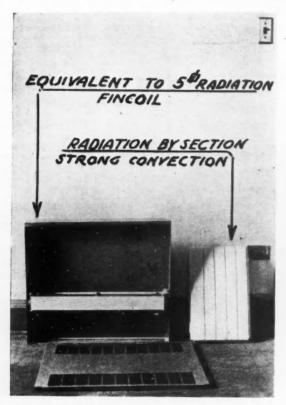
One's body delivers or absorbs heat by contact with another warmer or cooler body, by convection currents of air, or by radiation. Evaporation by perspiration tends to cool the skin, but we are dealing here with a loss or gain of heat by the body because of the nearness of a surface which is either warmer or cooler than the skin. There is no strangeness in the feeling of chill experienced in a room of cold walls, or the feeling of warmth on approaching a glowing fireplace, even when we know that no warm air currents are being delivered

from the fire itself. The name "radiant heater" is no misnomer when applied to the little electric reflecting basins which operate on the house circuit.

So long as I am pointing toward certain reasons for the use of insulation that are not always taken into account it can be more convincingly shown, perhaps, by quoting directly from the American Society of Heating and Ventilating Engineers' Guide for 1936. What is said therein is nothing but the impartial approach to defi-

nite facts through research.

"Comfort requires that heat be removed from the body at the same rate as it is generated by the oxidation of the foodstuffs in the body issues. The normal rate of heat production in a sedentary individual is about 400 British thermal units per hour, or, since the entire surface area of an average individual is about 19.5 square feet, about 20.5 B.t.u. per square foot per hour. Condi-



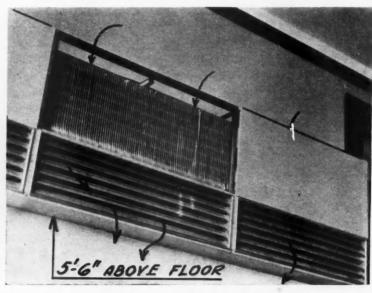
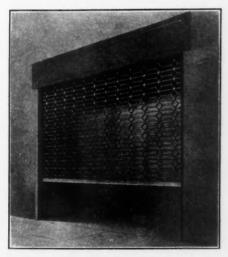


FIG. 3. Different types of finned tube convectors. To the right is a bank of cooling coils for circulating and cooling room air. One cover

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Artistic in design and built in any size or metal, there is practically no limitation to the places it can be permanently installed in old or new buildings. Composed of round steel bars and ornamental pressed steel links, the grille proper is of remarkable strength. Embodying the same principle of construction as the famous Kinnear Steel Rolling Door, it can be mounted on either the face of the wall or between the jambs and can be arranged for manual, mechanical or electrical operation.

Those responsible for new or modernization work of any type will find the suggested application and details of the Rolling Grille in Kinnear's A. I. A. File Folder No. 35-P-8 of real interest. It will be sent upon request. Also a Kinnear Engineer will be glad to discuss any specific problems.





velopment in pier door con-struction made in many vears-Kinnear's No. 3 Bifolding Door Composed of two sections that telescope and then raise overhead. Accurately counter-balanced and provided with ingenious safety features. For heavyduty purposes there's noth ing to compare with it.

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City ..

State

HEATING-AIR CONDITIONING-PLUMBING AND WIRING

tions should be such as to remove heat at this rate if the surface is to be maintained at the mean normal surface

temperature of the human body.

"Heat is transferred from any warm dry body to cooler surroundings principally by convection and by radiation, the approximate total rate of heat loss being the sum of the two. Where the body surface is moist there is an additional loss of heat through evaporation from both the body surface and the respiratory tract.

"The rate of heat loss by convection depends upon the difference between the temperature of the body and that of the surrounding air, and on the rate of air motion over the body. The loss by radiation depends entirely upon the difference between the temperature of the body and the mean surface temperature of the surrounding walls and objects. This latter temperature is called the mean radiant temperature. Because these two types of heat loss act in a supplementary manner toward each other, a required rate of heat loss can be secured by having a relatively low air temperature and a relatively high mean radiant temperature, or vice versa. Thus, if the air is reduced from a given temperature to a lower temperature, the amount of heat lost from the body by convection is increased, and this increase can be compensated for by raising the mean radiant temperature. Similarly, with a higher air temperature the same total heat loss will be maintained by a correspondingly lower mean radiant temperature.

So I have associated Figures 4 and 5. The temperatures through the whole shell of air within the room's walls, windows, ceiling and floor has so much to do with one's feeling of comfort that its neglect in calculations is very poor policy. In Figure 5, for instance, there is a conditioning unit shown in place below a large window. The wall panels have been removed, but the convection currents are well directed through grilles in these panels. A window is cold in winter and sometimes very hot in the summer. In fact we seldom realize the ex-

tremes in temperatures at a window face.

The idea then of putting a steam or hot water radiator

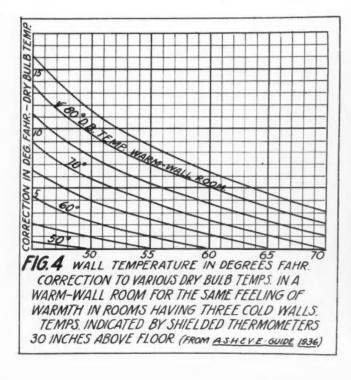
below a window is not only to check the cold drafts in their downward current but to maintain a warm rising curtain of air across the window. In the gravity warm air systems there was a likelihood of the colder window areas dealing seriously with a person's comfort. With a positively circulated warm air system, of course, this is not the case. How much of an increase in comfort then could come from double glazing wherein the heat transmission coefficient is less than half that of single glazing.

In Figure 4 is an analysis of wall temperatures in relation to equal feelings of warmth. The curves are not guess work, and are redrawn from the A.S.H.&V.E. Guide. If for instance the wall temperature of a poorly insulated house is around 50 degrees, and a desired warmth of 70 degrees for a warm walled room is desired, the real temperature must be maintained at nearly 76 degrees. Supposing it were summer a similar reduction in room temperature would be required. And beyond this cost of maintaining higher or lower temperatures to provide comfort, which, of course, cannot be entirely the case, there is the additional fuel cost because of heat losses or heat gains because of the lack of insulation.

Strictly speaking this department is supposed to be devoted to mechanical equipment, but it would seem odd enough if one were only interested in equipment and its use and not in the operating efficiency of it. The ultimate aim in building and in planning is to provide physical comfort and convenience. Expediency has no place, because it immediately leads to neglect of contrib-

uting factors such as insulation.

As was said before the weather is opening up and building is going forward. With the recent change in Chicago to the earlier eastern time we find time to drive after supper. The number of new homes that are under way indicates the faith in the new policy promoted by the Federal Housing Administration. But what is even more interesting to me is the difference in modern building in the way of homes and that of only a few years ago. It seems we have all learned a good deal lately.



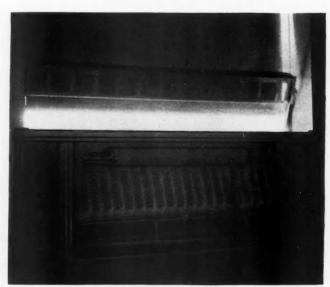
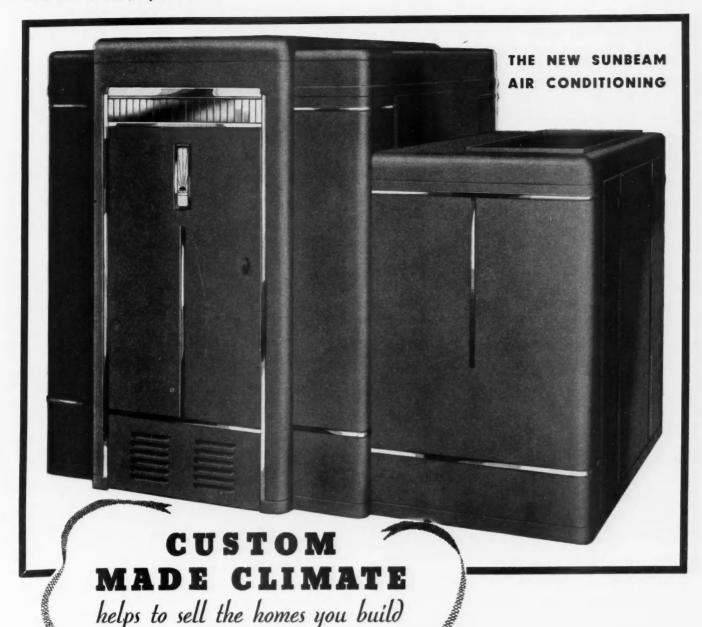


FIG. 5. Panels removed from a window conditioning unit. Large capacity and advantageous location for "radiant heat" balance.



IRST question a customer asks about a home these days is—"Is it air conditioned?" Air Conditioning will probably be the biggest selling factor in the building industry for 1936... and 1937... and 1938. And why not? Here is Sunbeam Air Conditioning... new, entirely practical, thoroughly tested, dependable... delivering everything the customer expects, at a price which is practical even for the small home.

It offers to the builder the selling advantages of Custom Made Climate: comfort, winter and summer. Air that is cleaned of all foreign matter, dust, pollen; automatically regulated for temperature and moisture content; circulated under pressure to every corner of the house through inconspicuous grilles which occupy no valuable floor space.

All equipment is installed in the basement. In winter, the Sunbeam uses oil, coal or gas to maintain a "June" climate indoors. Mechanical

cooling and dehumidification for summer may be included when the unit is installed, or added at any later time. A cooling effect, however, may be attained by forced ventilation with relatively cooler night air, cleaned and filtered.

National advertising, backed by a 50year-old heating reputation, makes the name Sunbeam as important as the words

"Air Conditioning" to you and to your customer. It's a name he knows. It's a name that helps you sell. Fox Furnace engineers will plan a complete air conditioning layout from your building plans. The service is free. Write today for complete information.



THE FOX FURNACE CO., ELYRIA, OHIO

A Division of American Radiator and Standard Sanitary Corporation

NEW PRODUCTS

FOR INFORMATION ABOUT any new product write American Builder Information Exchange, 105 West Adams Street, Chicago, Ill.

Adjustable Spring Sash Balance

AN ADJUSTABLE spring sash balance is to be marketed by the Pullman Manufacturing Corp., Rochester, N. Y., which is adaptable to many kinds of construction due to its special features, lending itself to a wide scope of design by allowing the use of narrow trim and mullions and the elimination of weight pockets. The balance has been used in government buildings and is approved by the Bureau of Standards.

Of pressed steel construction, it is light in weight, non-breakable, and the mechanism is entirely encased for free action of moving parts. These consist of an adjustment gear and screw for regulating the tension of the balance spring to which the steel sash tape is attached (see illustration).

Installation is relatively simple, requiring about fifteen minutes to set into a plain plank frame and attach to sash. If the window should need immediate adjustment owing to incorrect weight specifications, or later on, due to wear or shrinkage the

householder can likewise increase or lessen the spring pull with an ordinary

screw driver.

A set of four balances for a double hung window weighing up to 29 pounds weighs 4 to 6 pounds. Special finishes also are available in solid brass or bronze.

LEFT, Pullman adjustable spring sash balance ready to install. Below, balance taken apart showing tension regulating device.



Streamlined Floor Sander

A STREAMLINED floor sander, known as the Reid-Way "Professional 8," has been announced by The Reid-Way Corporation, Cedar Rapids, Iowa.

This machine has several new features made possible in part by the streamlined design, among them being: an automatic pressure control, separate and enclosed heavy duty vacuum motor, thick sponge rubber padding on drum, indirect greasing arrangement, new sandpaper application, adjustable rubber tired wheels, three wheel suspension and an increased capacity motor.

It is claimed that this machine was not streamlined for looks

only but mainly to facilitate the use of additional weight and an improved three wheel suspension.



REID-WAY "Professional 8," the new floor sanding machine of streamlined design.

Pneumatic Tired Carts

ALL THREE sizes of the CMC concrete and material carts (6½, 9 and 11 cubic foot capacity) being manufactured by Construction Machinery Company, Waterloo, Iowa, are now equipped with Timken tapered bearings in the balloon pneumatic tired wheels, which are reported to give easier handling with less effort and allow running the carts directly over the ground without boards.



PNEUMATIC tired, bearing equipped material cart.

It is said that the standard size 18 x 5.25 inch four-ply balloon tires used are more than ample for the larger 9 and 11 foot carts, and on the smaller outfit have the advantage of being available in all parts of the country.

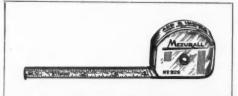
Mezurall Tape-Rule

THE "Mezurall" is an all-purpose, 6-foot steel tape-rule recently placed on the market by The Lufkin Rule Company of Saginaw, Mich.

Common measuring, either butt end or hook, is done in the usual way. To take an inside measurement, butt the square back edge of the case against one side of the opening being measured, extend the blade to the other limit, and add 2 inches to the reading indicated at the square opening of the case, the case being 2 inches wide.

End hook of this tape-rule has short sliding action, so it automatically adjusts itself to give accurate results when hooked over any object, and also when blade is projected against any surface, (as in taking an inside or any other butt end measurement). The steel blade will stand unsupported, like a rule, yet also flex, like a tape.

MEZURALL, a 6 foot steel all-purpose tape rule.



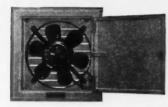


Another Opportunity to Sell, Lease or Rent is Lost ... Because ...

People all over the country have learned that they need no longer endure the nuisance of kitchen odors, excessive heat, smoke and fumes that make the air unfit to breathe and ruin curtains, furniture and decorations. That's why so many home owners are installing ventilating fan equip-ment... why they demand it when they go out to buy, lease or rent a house.

To meet this demand, install Emerson Kitchen and Attic Ventilating Fans, in the houses you're building, and in the homes or apartments on your rental lists. Why Emerson Ventilators? Because they boast an enviable reputation for efficiency, for trouble-free performance and long life ... because they're easy to install.

EMERSON Fan Ventilators for Built-in Installations



Emerson Ventilating Fans perform a dual service. They have electrically reversible motors and draw out superheated air, kitchen odors, greasy smoke, etc., or draw in cool, refreshing outdoor air. They move from 36,000 to 63,000 cubic

feet of air per hour, depending upon size.

The Emerson All-Steel Wall Boxes, which are separate units, adjustable to wall thickness, may be built into the walls of homes under construction, or installed in houses already completed at small expense.

VENTILATED HOMES are Easier to Sell, Lease or Rent

This powerful but quiet Emer-son Attic Ventilating Fan, when turned on in the evening, clears the house of warm daytime air and floods it with fresh, cool night air. Simple to install. Buyers decide quicker, more desirable tenants are attracted, if the homes you have to sell, lease or rent are equipped with Emerson Attic Ventilators.



Write for Folder 51-J "How to Select Emerson Exhaust Equipand the Name of Your Nearest Emerson Installer THE EMERSON ELECTRIC MANUFACTURING CO. ST. LOUIS, MO. Branches: New York . Detroit . Chicago



MOTORS - FANS - APPLIANCES

"LEADERS IN THE FAN AND MOTOR INDUSTRY SINCE 1890"

Bathroom Mirrors and Accessories

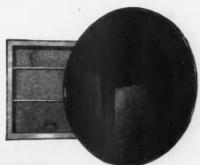
Miami-Carey Bathroom Cabinets meet all requirements because this world-famed line includes a good selection in every price class, from the least expensive to the finest. Many distinctly different and original designs. Write for Bulletin AB and full details.

The Moderne

Round mirror-door, 26 inches in diameter.

Standard Miami all-steel recessed cabinet with glass shelves.

Mirror-door eleverly hinged to extend mirror out over lavatory when cabinet door is open.





Lighted Cabinets

Tubular lights of opal glass with chromium-plated brackets as illustrated at left can be supplied with many types of Mismi Cabinets. Wired complete at factory, ready to install.

Cabinet illustrated at left is No. 1100 Full-Mirror-door, chromium-plated frame. 3 sizes.

A Sensational Value in a Low-Priced Cabinet

We believe this to be the lowest priced, all-steel re-cessed, quality cabinet on the market. Full-mirror door, copper backed. Two adjustable glass shelves. Nickel-plated hinges. Body of cabinet finished in three costs of first quality baked enamel.

Write for Catalog



Showing full line of Miami-Carey Cabinets, mirrors, access doors, laundry chute doors and built-in ironing boards.

Miami Cabinet Division

THE PHILIP CAREY COMPANY

Dept. AB, Middletown, Ohio

Staining with Wood Preserver

A LOW cost treatment is featured by the Tennessee Eastman Corporation, Kingsport, Tenn., manufacturers of NO-D-K, for the protection of homes against decay and termite attack. NO-D-K Wood Preserver is highly toxic to decay fungi and termites. One of its outstanding features is that it does not contain free carbolic acid and will not burn the skin. The recommended method of application is by brushing, spraying or dipping, which can be done by inexperienced workmen without danger of burns.



SPRAYING NO-D-K on a cabin for protection and appearance.

One gallon will cover from 60 to 80 square feet of timber, with two coats, making the cost of protection per home low. The dark brown color which NO-D-K imparts to wood is desirable on much exposed wood such as half-timbered work or the logs of a summer home or rustic cabin. The manufacturers of NO-D-K offer blueprints free showing the various parts of a house recommended for treatment with this product.

Upward Acting Sectional Door

THE Crawford Door Company, Detroit, Mich., is marketing a new sectional door containing features at no additional cost designed to give improved performance and appearance with easier, quieter operation and longer life.



NEW Crawford sectional door of upward acting type.

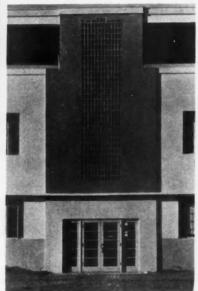
Single torsion spring with floating counter balance, reinforced bakelite rollers, aviation-type cable on slip-proof single width drum, and self-centering roller bracket are among the operating features listed. Nu-Seal self-aligning joints and elimination of outside bolt heads have improved exterior appearance; corner brackets hold the stile and rail together forming a cradle for the door.

Standard sectional doors come in either 13% or 13% inch stock with 3-ply fir veneer panels, waterproof glued, and meet the average garage requirements. The complete Crawford line includes sectional doors for residential and industrial use, highlift doors, overhead operating hardware for one-piece doors, electric operators and accessories.

Glass Blocks for School Construction

THE use of water-clear, translucent glass blocks developed by the Owens-Illinois Glass Company, Toledo, Ohio, for exterior walls and interior partitions is contributing to the safety of school children by eliminating the hazard of dark stairways and corridors in the new Coburn Country Day School at Normandy Island, Miami Beach, Fla.

These glass blocks also proved their safety value against havoc of hurricanes when they stood up under a 130-mile gale that swept across Florida last year. Broad auditorium windows were caved in and the roof ballooned beyond the breaking point by the hurricane, but the glass block stairway section of the structure stood firm.



LEFT, exterior of Colburn School showing glass block window in stair well. Below, well lighted interior view.



Modern Kitchen Cabinet Hardware

A LINE of cabinet hardware specially developed for the kitchen has been placed on the market by the National Brass Company, Grand Rapids, Mich., under the trade name, "Modern Kitchen Cabinet Hardware in Crome." In keeping

with the new kitchen appliances, this hardware is of modern design and sparkling non-tarnishable Crome finish. The line is broad and complete having a selection of catches, hinges, pulls, and knobs for both flush and offset doors. Within this line is the reversible catch for either right or left hand doors. In redecorating kitchens replacement of the cabinet hardware may be eas 'v and neatly done, usually covering the markings of the old hardware.



REVERSIBLE catch, one of items in new line of modern hardware.



Completely artistic and modern effects are now within reach of the small home budget. This year thousands of smaller homes will come from architects' boards, in which the kitchens and bathrooms will be distinguished by a charm not formerly possible within limited budgets.

The range of colors in MARSH WONDER WALLS and the easy workability and application of the sheets lend free rein to design. Unlimited effects are possible.

The types of surfaces available are:

MARLITE-plain surface, highly burnished, wide range of colors.

MARSHTILE - tile marking, highly burnished, wide range of colors.

MARSHMARBLE—exact reproductions in color of rare imported marble: Black and Gold, Verdi Antique, Breche Rose, Skyros, and Jaune Benou.

MARSHWOOD—exact reproductions in color of rare wood, including Italian Olive, Mahogany Crotch, Circasian Walnut, perfectly reproduced in rubbed finish treatment.

Sheet sizes of these products range from $4' \times 32''$ to $4' \times 12'$.



Ask us for complete literature, and visit our display in Radio City, Shop No. 15 Concourse, R. C. A. Building, New York City.

MARSH WALL TILE CO. 43 Marsh Place · Dover, Ohio

Wonder Walls



Patrician answers the builders' problem in household hardware. Its new plastic knob material brings just the right touch of color to please the client. The new two-tone effect of these knobs in a jewel-like setting of natural metal finishes, appeals to all classes.

Black or Ivory are in great demand for general use, but should color accents be desired, Patrician is available in delicate pastel tints, Chinese Red or mahogany.

Patrician is more than beautiful, it is practical. The durable color material is not affected by moisture or perspiration—stains wash off.

The line is available in sectional or pendant trim, in modern or period design. Take your client to the builders' hardware store showing Patrician and you'll find the rest easy. Write for literature.



DIVISION OF INDEPENDENT FITCHBURG, MASS.

GENUINE MASONITE CUTS COSTS FROM THE GROUND UP



Trade-Mark Reg. U. S. Pat. 0

From the time the ground is broken until finishing touches are put on the attic, Genuine Masonite Products speed up work and achieve better results.

DENUINE MASONITE TEMPERED PRESDWOOD makes ideal lining for concrete forms . . . produces smooth-surface concrete without sanding or finishing. Its natural warmbrown finish provides luxurious-looking paneled wall effects in the home. It is also extensively used for wainscoting, partitions, ceilings, shelves, cabinets . . . in fact, wherever a sturdy, smooth-surfaced hard board is needed.

MASONITE STRUCTURAL INSULATION offers unusual tensile strength and beauty along with efficient insulating and sound-deadening properties. It permits the execution of many unusual modern designs by beveling and V-grooving.

MASONITE DE LUXE QUARTRBOARD is harder and denser than STRUCTURAL INSULATION, but allows the same decorative effects.

MASONITE TEMPRTILE is a grooved hard board which, decorated in any color, produces realistic tile effects in bathrooms, kitchens and shops. Custom-finished TEMPRTILE and TEMPERED PRESDWOOD can be obtained to take care of installations of the highest class.

Samples and further information about Genuine Masonite Products will be forwarded to those who fill out and mail the coupon below. Do it today! No cost. No obligation.

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MASONITE CORPORATION, Dept. AB-4
111 W. Washington St., Chicago, III.
Please send me free samples and more details
about:
__TEMPERED PRESDWOOD
__DE_LUXE_QUARTRBOARD __TEMPRTILE

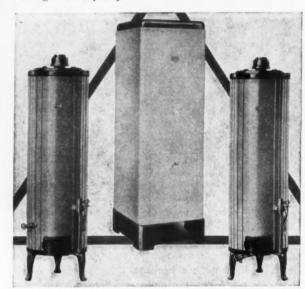
STRUCTURAL INSULATION

State

Name			
Address			

New Crane Water Heaters

PREMIER Heater Division, Crane Co., Laporte, Ind., has reported its 1936 models of Crane gas water heaters as now being on the market. Leading heaters of this line are shown in the illustration and are, from left to right: Crane Superior Automatic Gas Water Heater with ivory colored baked enamel finish and apple green trim. Made in seven sizes, from 16 gallons to 99 gallons capacity. Premier Automatic Gas Water Heater in ivory baked enamel cabinet body with jet black trim. All controls completely enclosed, accessible through the removable front panel. Equipped with Everdur Copper tank, with geyser principle of heating, and brass and copper fittings throughout all parts exposed to water. Made in three sizes, 20 to 55 gallons capacity. Crane Keystone Automatic Gas Water Heater in jade green baked enamel finish with palmetto green trim, equipped with double extra heavy galvanized steel tank with geyser principle of heating, and made in six sizes from 20 to 99 gallons capacity.



SUPERIOR, Premier, Keystone Models in Crane Gas Heater Line.

Features applying to all 1936 heaters are as follows: two and one-half inches of insulation on all models, reducing standby losses when hot water is not being used; refined and improved lines, and baked enamel finish; controls and drop-out burner moved to 30 degree angle, reducing floor space required, assuring access to controls in practically any installation; greater range of sizes and capacities, including two new sizes in the Royal Booster (circulating type) Heater, not illustrated, and the addition of the Little Gem Automatic Conversion Gas Water Heater, a low consumption gas water heater for attachment to existing range boiler installations.

Asphalt Treated Sheathing Material

A NEW type of sheathing material, which is claimed to have greater bracing strength and to be more resistant to moisture absorption and air infiltration, has been developed by The Insulite Company, Minneapolis, Minn. The new sheathing, designated by the name Bildrite, is impregnated with a special asphalt emulsion during the manufacturing process for added strength and moisture resistance.

The Insulite Company found in tests that 132 square feet of the material could be applied per man per hour, including all the time needed for erecting scaffolding, sawing, fitting; that for a heating season in the Northern Zone, where the record was kept, it effected a saving in fuel amounting to approximately \$10.00 per thousand square feet of wall area over ordinary sheathing (fuel costs figured at \$13.00 per ton for coal and 7 cents per gallon for fuel oil); that during a 20 mile per hour wind it was 20 times as resistant to air infiltration, and that it made possible a net saving in the cost of application.



Bathe-Rite Shower Stalls cost little and mean much in the market value of any home or building.

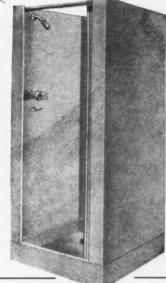
—and in shower stalls, Bathe-Rite represents startling improvements, just as modern engineering does in motor cars!

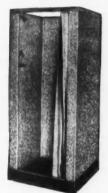
COMPLETE — added accessories for the luxury of the finest shower without extra items of expense.

COMPACT—easy to enter and exit, plenty of room for comfort but not one inch of waste space.

BEAUTIFUL—new refinement in design plus higher standards of sanitation in every detail.

It pays to be modern — with Bathe-Rite Shower Stalls!





Model A-Low priced Size 30"x30"

Model C - Bathe-Rite

Size 36" x 36" and 32" x 32"

The popular priced unit of national preference. Strong, durable, built to last for years. 18 gauge galvannealed walls. Handsome baked enamel finish. Famous non-slip Ferrostone receptor, leak and waterproof. Special instantly regulated, water saving shower head. Solid brass fittings, polished chromium finish. Smooth inside surface, easy to keep clean.

For All Buildings

Practical and attractive models for every new or remodeling plan, large or small, of modern American builders! Bathe-Rite Shower Stalls meet every price, size and style requirement. Distributed by leading plumbing wholesalers everywhere.

A REMINDER—to become posted! A letter or postcard to the factory will bring you our newest catalog. Contains valuable information on modern shower stalls. Something every builder should have

MILWAUKEE STAMPING CO.
Milwaukee, Wis.



Model D—Medium priced Size 36"x36" and 32"x32"

BATHE-RITE
SHOWER FERROMETAL STALLS





WEATHERTIGHT! A special closing action on the Barcol OVERdoor gives a snug and rattle-proof fit. At the end of the closing stroke the door is pushed uniformly and firmly against the stop strips on sides and top. A rubber astragal seals the bottom.



EASY WORKING! In motion, the door is held clear of the jamb. Note the roller crank positions shown in the diagrams. Above—door in motion; at left—door closed. This unique "elbowaction" gives a free-running, snugclosing door.

BARCOL door in motion; at left—doo closed. This unique "elbow action" gives a free-running, snus closing door. OVERDOOR



For New Buildings or Remodeling

Sturdy construction . . . exclusive mechanical features . . . low maintenance cost . . . availability in many sizes and types . . . these outstanding characteristics make the Barcol OVERdoor eminently suitably for all kinds of residence, commercial, and industrial applications. Time-tested in thousands of installations you can be sure of the Barcol OVERdoor.

AN IMPROVED OVERHEAD DOOR

Guerators and Controls

We also offer a complete line of Electric Door Operators for swinging, sliding, overhead, and steel rolling doors, and for swinging and sliding gates. Controls include switch control, time control, "electric eye" control . . . and the miraculous RADIO control. Send for literature!

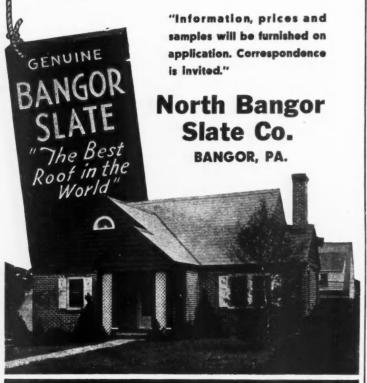
BARBER-COLMAN COMPANY
ROCKFORD, ILLINOIS
Representatives in Principal Cities



BARBER-COLMAN Rockford, Illinois	COMPANY	Date
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		AB436



- Permanent roofs of GENUINE BANGOR SLATE are covering all types of homes. Builders and contractors throughout the country are using this timeproven material to clinch their sales.
- Outstanding lumber dealers in many sections are stocking GENUINE BANGOR SLATE from our quarries, not only for new work but for re-roofing as well.
- Prospective owners easily visualize the permanence and economy of GENUINE BANGOR SLATE roofs. Sales resistance drops to a minimum. Many construction factors are of a disputable character, but there is nothing more convincing than "THE BEST ROOF IN THE WORLD."



Improved Stucco Spraying Machine

COLORCRETE INDUSTRIES, Inc., Holland, Mich., have announced a new industrial stucco spraying machine designed to apply and mix a waterproof, plastic material of mortar-like consistency. New features are cooling fan, air cleaner, air gauge and special oiled air lubricator.

The mixer is built on the base of the machine and is powered through a speed reducer which is driven from the shaft of the 2 H.P. engine. The machine is entirely portable, being mounted on wheels, and has an operating capacity up to 1,000 square feet per hour.



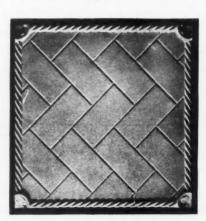
INDUSTRIAL stucco spraying machine and mixer.

Tile Pattern Steel Ceiling

THE Edwards Manufacturing Company, 401-417 Eggleston Ave., Cincinnati, Ohio, is supplying a new design in steel ceilings—the Edwards Herringbone Tile pattern. This is particularly adaptable for chain food store purposes, due to its simplicity of construction, the concealing of all intermediate joints, cost of painting cut to a minimum, arrangement of the design facilitating the maintenance by frequent washing, and modeled so as to harmonize with the present trend of tile walls and floors, thereby keeping the style of architecture uniform in buildings of this character.

Each sheet is provided with a substantial prime coat of gray paint, which gives a suitable background for light or buff colors to harmonize with the color scheme used in connection with the lighting systems and modern store fixtures. All sheets are flush back type construction, surrounded by 1 inch rope mold, rosettes 24 inches on centers. The individual tiles in the herringbone

pattern are 4 inches wide by 8 inches long.



EDWARDS' steel ceiling sheet in new herringbone tile pattern.

Now that's what I call a real kitchen"



In this appealing kitchen, floor is Armstrong's Embossed Inlaid Linoleum pattern 5413 in red, cream, and black. Walls are Armstrong's Linowall No. 704 Ivory.

PODAY, the average kitchen is one of the I most "lived-in" rooms in the house. During the day, women spend most of their time there. And at night, guests have a habit of constantly trooping in and out.

Prospects consider these things when renting or buying. Dress up kitchens with colorful Armstrong's Linoleum Floors and see what a difference they make!

You'll find the price reasonable and a worth while investment, because your prospects will consider these floors "just the thing." Send ten cents today for "Floors That Keep Homes in Fashion"—a smart color-illustrated book of ideas on attractive kitchens. Armstrong Cork Products Co., Floor Division, 1218 State St., Lancaster, Penna.



LISTEN, PETE-KNOCK ME OUT ANOTHER DOOR!

HOMES could be built that way. Doors could be made on the job. But BOY, OH BOY, what would the cost be?

Windows, too, can still be fitted on the job. But now there's a much easier way. Maybe you've heard of it—a new type of double-hung sash—the Curtis Silentite Pre-Fit Window Unit. It's pre-fitted at the factory to save your time. Comes to you as a single unit to save installation expense. All parts of the sash, frame and trim-even storm sash and screen-are machined and assembled by Curtis. Now you can figure a job closer and know

you're going to stay inside your bid.

Better than all that—you'll also build a better house. It will be fine advertising for you. There's no sash cord to break on the Silentite. No weights or pulleys to jam. These new windows

won't bind in damp weather or rattle when it's dry. Cold and drafts can't blow past'em. They keep out smoke and dust. Far less heat escapes. Here's an *Insulated* Window, dipped to prevent rot, and homeowners boast of fuel savings as high as 25 per cent!

If you want to please your pocketbook as well as your customers, get all the facts at once. Take our word. Silentite is the first real improvement in double-hung sash in 290 years! It's easy to install, easy to raise or lower, easy to look at. ye



And the coupon below makes it easy for you. Mail it now.	Silentite makes houses bett —and far more beautifu
CURTIS BROS. & CO., CLINTON, IOWA CURTIS & YALE CO., WAUSAU, WIS. CURTIS SASH & DOOR CO., SIOUX CITY, IC CURTIS DOOR & SASH CO., CHICAGO, ILL CURTIS-YALE-PURVIS CO., MINNEAPOLIS, CURTIS COMPANIES INC., CLINTON, IOW/ CURTIS, TOWLE & PAINE CO., LINCOLN,	MINN.

Curtis Woodwork is available through the following distributors:
Allen A. Wilkinson Lumber Co., Indianapolis, Ind.
Rust Sash & Door Co., Kansas City, Mo.
Morrison-Merrill & Co., Salt Lake City, Utah
Hallack & Howard Lumber Co., Denver, Colo.
Campbell Coal Company, Atlanta, Ga.
Jacksonville Sash & Door Co., Jacksonville, Fla.

WINDOW

Other Curtis products:

It is a Mile of Cabinet Strim Strim

CATTE TO	e C	COMPARIS	ES SERVIC	Rune	4.77		
Dept.	504	Curtis	Building,	Clinton.	, Iowa		
		-	_			-	 -

ne complete information on Curtis Silentite, the "insulated" window,

Name	
Address	
a.	



you can do so without sacrificing quality

Only an expert can tell Sloane-Blabon Linoflor from genuine inlaid linoleum. It has a long-wearing, genuine inlaid surface. Patterns are of the same high-styled type found in the most expensive inlaids. Back is cushioned felt-base, accounting for the moderate price. Let us send you the name of the authorized Sloane-Blabon contractor in your city who will furnish you with samples and prices. W. & J. Sloane, Selling Agents Division, 295 Fifth Avenue, N. Y.

Sloane-Blabon LINOFLOR

New Storm Sash and Screen Frame

A NEW window frame that permits changes from storm sash to screens, or vice versa, from inside the house, has been developed by Earl Marquart of Oshkosh, Wis. The units required for a window include a regular window frame with a special outside casing, two sections of half-size storm sash, and two sections of half-size screens, a removable sill member, and special hardware.

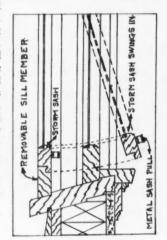
This new frame reverses the usual procedure, these screens and storm sash slide or swing into place from the inside, and are made weather-tight at all junctions by tongue-and-groove joints. The upper section of storm sash or screen is slid into place between two side guides and the moulding of the extended outside casing, and is held by a pivot top-sash rest that is swung into place at each side by a touch of the finger. The lower sash is then slid into place and is fastened by a swivel

hook on each side of the top rail that slips into an eyelet in the upper sash.

When the window is raised, the lower storm sash may be swung inward to provide ventilation, and may be fastened in either of two positions by means of a simple eccentric on each side rail that locks into metal slots fastened to the window stop and parting stop.

Many advantages are claimed for this new frame. Changes from storm sash to screen, or vice versa, may be made in a minute or less. Storm sash and screen units are interchangeable,

permitting use of top sash and bottom screen simultaneously. Storm sash may be cleaned at any time from inside the house. Storm sash are factory pre-fitted and are ready to slip into the frame when received. Frame and sash are primed with two coats of aluminum paint, if desired. Small storage space is required for sections not in use, and the sections are easy to handle because of their small size. By adding three pieces of moulding, any old style window frame can use the new storm sash and screens.



SECTIONAL drawing of screen and sash frame.

Tinted Mirrors for Wall Decoration

THE use of new type tinted mirrors, made in a variety of colors by the Pittsburgh Plate Glass Company, Pittsburgh, Pa., on interior and exterior surfaces is increasing. A recent installation has been completed in the new Shelton Corner bar at the Shelton Hotel, New York City, where they were used as part of the decorating scheme. The illustration shows the arc-shaped bar and woodwork of bleached mahogany; wall space behind the bar is composed of a series of flesh tint mirror panels on which Chinese scenes are painted.



TINTED mirrors behind bar of Shelton Hotel.



Now, even with a restricted budget and limited space, the added "livability" and convenience of an extra bath is practical—and easily available, with a Weisway Cabinet Shower. In fact, if space is a chief consideration a Weisway Cabinet Shower provides all needed bathing facilities—for each is complete, with shower-head, valves, waste, soap dish and curtain—a bathroom in itself!

Guaranteed leakproof, Weisway Cabinets, with one piece vitreous porcelain receptor and Foot-Grip, No-Slip floor, are independent units, hence not affected by shrinkage of materials or settling of the building. Easily, quickly installed, without special preparation of walls or floor—in space no larger than an ordinary clothes closet.

Weisway Cabinet Showers are nationally distributed through plumbing channels. Every Contractor, Builder,

Architect should have

complete data on the

entire line — seven models to suit homes of every type, institutions and industrial

buildings. Write for details and specifica-

tion data-without any

FOR THE MASTER BATH

With its gleaming vitreous porcelain walls, smart modern design and leakproof construction the new VP Weisway provides shower bathing facilities entirely suited to the most luxurious home.

The exclusive vitreous porcelain Foot-Grip, No-Slip floor, non-absorbent, sanitary, and equally safe wet or dry, gives surefooted comfort never before attained in shower construction.

Top—ceiling unit—with dome Showerlite, and glass door with chrome trim, available if desired.

HENRY WEIS MANUFACTURING CO., INC.

CABINET SHOWER DIVISION, 401 OAK ST., ELKHART, IND.

Cabinet WEISWAY Showers



THE Heatilator is a correctly designed metal form around which the masonry is easily laid. Complete from floor to flue, it replaces firebrick, damper and other materials. Yet it does not limit the design of your fireplace or the type of masonry you wish to use.

Operating on proved warm-air heating principles, the Heatilator is a steel heating chamber hidden in the fireplace—correctly proportioned for smokeless operation. Cold air is drawn from the floor into this heating chamber—warmed—then circulated uniformly to every corner of the room and even to adjoining rooms. It provides living comfort during cool spring and fall weather—cuts months off the heating season and dollars off the fuel bill. In mild climates and for summer homes and camps, it is the only heating equipment required.

NEW LOW PRICES make the cost of a Heatilator Fireplace little more than ordinary construction. Heatilators are sold by leading building-supply and lumber dealers—with stocks in principal cities for quick delivery. Send the coupon

for complete details, including fireplace suggestions, installation data and new price list. Heatilator Company, 514 East Brighton Ave. Syracuse, New York.

Heatilator Fireplace

Heatilator Company 514 E. Brighton Ave., Syracuse, N. Y.	TARREST TO THE PARTY AND THE P
Please send book of fireplace suggestions and installation data. Also new price list.	
Name	
	COLO AIR COLO AIR
Street	
CityState.	



They Want the Best!

One of the country's leading merchandisers told us the other day that home owners and prospective home owners are buying more intelligently than they ever have before. Snap judgments of the old "boom" days are rare. Decisions are made only after careful study. They want facts. They want the best. Shoddy merchandise isn't tolerated. This is particularly true in the building field.

This development is most satisfactory to us because in Ponderosa Pine, Idaho White Pine, and Sugar Pine are to be found all the attributes of quality. These woods are dependable. That's why they have earned a place of distinction in the minds of the American people. Suitable for any job where even textured, carefully milled, and thoroughly seasoned woods are required.

Home owners and prospective home owners are going to know all about these Western Pines because the Western Pine Association is launching a nation-wide educational campaign to home owners and prospective home owners.

The builders of this country will want this information, too. So, if you haven't seen the new booklet giving factual information on Ponderosa Pine, Idaho White Pine and Sugar Pine send for it today. It's called "The Western Pines." It's free.

WESTERN PINE ASSOCIATION

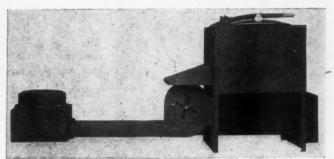
B-2 YEON BUILDING, PORTLAND, OREGON

Shepard Underfeed Residential Stoker

ENGINEERS of the Shepard Elevator Company, Cincinnati, Ohio, have perfected a new type of underfeed stoker for residential use. The Homeheater, as it is called, has very few moving parts. Quietness in operation, ability to handle cheap grades of coal efficiently, simple, sturdy construction, and attractive prices are features listed.

When installing the Shepard Homeheater, the regular furnace grate is removed and the stoker burner put in its place. The burner is automatically fed through one of the tubes leading from the coal storage hopper. The other tube supplies air for combustion. Aside from filling the fuel hopper, the only other attention necessary is removing the fused clinker.

Feeding rates from twenty-five to fifty pounds of coal per hour make the stoker adaptable to large as well as small homes. Owing to the complete combustion, soot and smoke are eliminated and a small amount of clinker is the only waste in the fuel.



UNDERFEED stoker for residential use burns cheap coal.

Cab Type Stake Trucks

AWIDE range of stake trucks designed for quick, economical transportation of building supplies has been announced by the Reo Motor Car Company, Lansing, Mich. The variety of wheelbases, tonnage capacities, and prices offers a complete selection to meet every branch of building supplies transportation requirements.

Stake trucks are equipped with new streamlined French type cabs—steel up to the roof panel, which is Masonite covered with first grade top decking. Other features this year are optional engines, 5-speed transmission in certain models, 2-speed rear axle and double reduction axle, de luxe cabs, forward drive and low price drop-frame models.

Distinctive styling is combined with generous loading space, maximum payload capacity, and correct load distribution in a practical manner that will please any truck owner. Power is provided by the famous Reo-built Gold and Silver Crown engines which have won an outstanding international reputation for economical, carefree operation. Ample power to handle heavy trailer loads is characteristic of these models.

The Reo-made full floating axles are of the dependable, heavy-duty type with steel housing and tapered roller bearings throughout. Sturdy Reo transmissions have helical countershaft drive to promote quiet operation. Optional at slight extra cost is the Reo 2-speed axle unit—a great money saver giving the driver 8 speeds at his control.



1936 Model Reo stake truck with streamlined cab.



If you ever have occasion to fasten anything "up" or "down"
— in any type of material with wood or lag screws, bolts, or nails—then you cannot afford to be without a copy of this Index and Specification Hand Book. It will be gladly sent on request.

The Rawiplug Company, Inc. 92-94 Lafayette Street New York City

and Everywhere

Send 50c for a household outfit for trial, contains No. 8 screws, Rawlplugs and No. 8 Rawldrills.

Any Jobber or Dealer can Supply You With

A HEAVY DUTY MASO

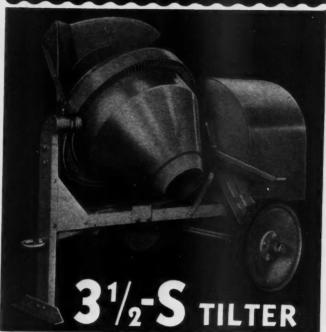
RY ANCHOR FOR BOLTS

Rawldrill

THREE POINT

RAWL ANCHORAGE DEVICES

LEADERS FOR 36 YEARS



Handy 2-Wheel Trailer Mixer

• Here's the new SMITH 31/2-S! Positively the greatest small mixer value on the market today. Same general design as the big SMITH 3-yard and 4-yard Tilters used on the world's greatest projects — Boulder Dam, Muscle Shoals, Norris Dam, etc.

Muscle Shoals, Norris Dam, etc.

The SMITH 31/2-S is the ONLY small mixer with big handy feed chute. Discharge is fast. The drum tilts thru a short 40° arc instead of an 180° arc. You merely "tilt and pour"—like emptying a pail.

All modern features! Spring-mounted axle and roller bearing wheels provide easy fast portability. A much better machine — costs more to build—yet sells at about the same price as other mixers. Use coupon below for literature.

SMITH MIXERS

The T. L. Smith Co., 2849 N. 32nd St., Milwaukee, Wis. Please send literature on the new Smith 31/2-S.

Name___

Address



The Gar Wood Tempered-Aire System continues to be the outstanding achievement in the air-conditioning field. Its astonishing economy is largely due to the Economizer working in coordination with the blower. All of the cold return air is pre-heated by being forced between the Economizer tubes-thus extracting heat from the hot gases leaving the firebox. This combination effectively uses heat that would otherwise be wasted up the chimney and makes air-conditioning an economy, instead of an expensive luxury.

Scarcely less interesting from the builder's viewpoint, is the scientific and practical installation co-operation which is available to him through any of the Gar Wood Branches or Distributors. This system makes correct results simple and certain. Full particulars furnished on request.



These forms aid computation, eliminate costly errors. insure proper installation and correct results.

GAR WOOD INDUSTRIES, INC.

Air Conditioning Division

7924 RIOPELLE STREET DETROIT, MICHIGAN Heating Data for Architects, Engineers, and Contractors.

New Developments in Glass Uses

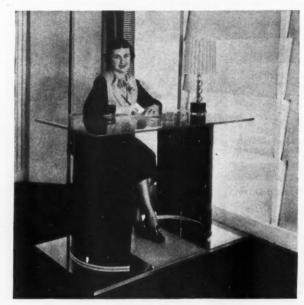
NEW type of glass desk that is amazingly simple in treat-Ament has recently been shown to demonstrate the adaptability of glass products. The top is a single plate of tempered halfinch thick glass made by the Libbey-Owens-Ford Glass Company, Toledo, Ohio, and the under surface finely frosted. The base is a piece of one-quarter inch tempered plate glass, silvered to produce a mirror, with the center portion sandblasted to prevent scratching and reflections.

The desk top is supported by two slabs of black Vitrolite glass, bent to form thirds of a circle. The supports are cushioned top and bottom by a small channel of soft white rubber. The glass in the base is mounted on a piece of plywood and finished with a chrome metal edge. The entire assembly is rigidly bolted by two chromium plated rods and the whole consists of only

five separate units.

The tempered glass top will support great weight, but if broken the whole surface would disintegrate into small pieces resembling rock candy, relatively harmless. A pane of the same heat-strengthened glass, only 3/4 inch thick, supported a threeton elephant in a test conducted at the Zoo in Toledo.

The new type of window back of the glass desk is sandblasted plate glass, set at an angle in the form of louvres, and provides a soft diffused light and an unusually striking effect.



DESK made of new tempered glass and Vitrolite.

Bronze Weatherstrip and Parting Stop

NEW type all-metal patented weatherstrip is being dis-A NEW type all-metal patented weathership and tributed to the building trades by the W. J. Dennis Company, Chicago.

This new spring bronze strip is unique in that it comes attached to a parting stop and is thereby easily inserted in the window frame. Its "S" shape fold conforms to all expansion or contraction of the sash or door frame. Other features are listed as no interference with sash pulley; easy removal of sash; fitted without nails; installation in old frames without removing sash.

SECTIONAL drawing through jamb and parting stop showing new "S" shape weatherstrip fitted behind stop to hold in place.





Humidified.

Tempered. Circulated. Air

Steel Boiler Heat

Year 'round Hot Water Supply without a storage tank

combined in a single

tional room in the home of today. Contains within its own jacket everything needed for conditioned air, heat, year-'round domestic hot water.

This unit works with any good oil burner, providing those conditions under which the burner operates with its best possible economy and satisfaction. The burner may be concealed within the jacket.

No other single piece of residence equipment has the powerful sales appeal to the home buyer that this unit offers. Get full information about this revolutionary residence development. Write Now!

Fitzgibbons Boiler Company, Inc.

GENERAL OFFICES: 570 SEVENTH AVE., NEW YORK, N. Y. Works: OSWEGO, N. Y. BRANCHES AND REPRESENTATIVES IN PRINCIPAL CITIES

Finished in sea-green crackle-finish enamel, trimmed with gleaming chromium



DUNBRIK MACHINE, PRODUCTS AND PROCESS

Evidence at every hand indicates that the gigantic building industry is breaking big. The manufacture of materials such as DUNBRIK and DUNSTONE in demand by builders everywhere, now offers greater possibilities than ever before.

Making DUNBRIK and DUNSTONE with this exclusive process offers generous profits. Line production methods enable a small size crew to do the work of a large force. Thus enabling you to supply common units in multiple sizes and face units in 40 colors and textures. Also hollow insulated ashlar wall construction at savings up to 33%.

Authorized DUNBRIK manufacturers are rapidly being established, each one granted exclusive franchise without cost. Their results right from the start have proven successful beyond anticipation and point the way for you.

If you want to dominate the building material market in quality, in price, in color range and at the same time establish an exclusive profitable business, then send for "4 Keys to Manufacturing Success." Write today. It tells the complete story.



DUNTEX ROOF TILE MACHINE

With this machine you can dominate the vast roofing material market with a product unequaled in value, permanence, beauty and fire safety. Get the major share of the thousands of both old and new buildings that must be roofed annually by supplying DUNTEX, the world's most beautiful roof. Your manufacturing costs are low, investment moderate and selling prices offer attractive profit. Send for "DUNTEX Survey and Manufacturer's Manual." It may mean manufacturing independence for you.

W. E. DUNN MFG. CO.

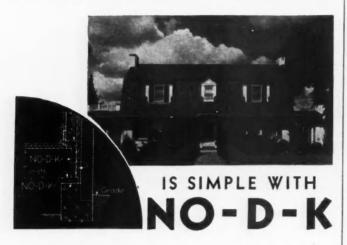
450 W. 24th St.



Holland, Mich.



TERMITES



The foundation timbers of every new house should be protected against decay and the attacks of termites by an application of Eastman NO-D-K Wood Preserver. The cost is small compared to replacements and repair bills due to timbers being left unprotected. NO-D-K is easily applied with a brush or spray, or by immersion of the timbers. NO-D-K is approximately four times as toxic to decay, fungi and termites as ordinary coal tar creosote, yet it will not burn the skin of workmen.

LOW COST TREATMENT

The use of NO-D-K adds very little to the cost of a building, as the retail price is approximately one-fourth the cost of good paint. One gallon of NO-D-K will cover 60 to 80 square feet with two coats.

NO-D-K imparts a dark brown finish to wood. It will not crack, chip, or peel off, but penetrates readily. Since NO-D-K is insoluble in water, it is not readily leached or soaked out by rain, or by exposure to the weather.

To give a ready picture of the places open to attack from termites, as well as decay, we have prepared an illustrated folder on this subject. If you will use the coupon below, this folder will be sent to you, together with our sixteen-page booklet entitled "Preservation with NO-D-K."

NO-D-K is stocked by lumber yards, hardware and paint stores everywhere. If your local dealer does not stock NO-D-K, ask him to write us for complete information.

-MAIL COUPON NOW-

TENNESSEE EASTMAN CORPORATION
Kingsport, Tennessee
Send at once your preservation guide and booklet entitled "Preservation with NO-D-K."

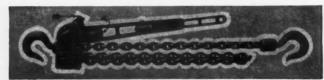
Name
Address

Chain and Ratchet Type Puller

HISHOLM-MOORE Hoist Corporation, Tonawanda, N. Y., has recently introduced the "CM" Puller, a general utility tool for lifting or pulling vertically, horizontally or at any angle. Capacities are ¾ ton and 1½ ton.

The "CM" Puller is intended for numerous pulling jobs, such as tightening guy wires, stretching fence, pulling posts, trench work and also for general maintenance and construction service.

The gear reduction in both capacities provides for a 43 pound effort on the ratchet handle to deliver a pull of ¾ ton. Little space is required in service or storage as minimum distance between hooks on ¾ ton size is only 9 inches. Handle is collapsible for tool box storage. "Herc-Alloy" double duty, alloy steel chain, with ultimate strength considerably in excess of five times capacity load, will not kink or become bent or strained in handling or storage. Operation is controlled by two buttons which also permit quick adjustment of chain. Mechanism and automatic friction brake are fully enclosed with no exposed bearings or springs, and are packed in grease with no further lubrication required. The ¾ ton size weighs 17 pounds.



UTILITY tool for lifting or pulling at any angle.

Steel Tilting Garage Door

AN ALL-STEEL tilting garage door, known as Tilt-A-Door, is being manufactured by the Tilt-A-Door Corporation, Highland Park, Mich. The principle of operation, involving tilting only with no sliding, is extremely simple and uses few moving parts.

Features are listed as: the unit being light in weight; large units rigid without using truss rods or extra bracing; doors chemically treated to prevent paint peeling. For large openings several standard units may be combined to make up various widths—each unit operated independently—providing a clear opening without posts.

A method for opening or closing the door from the driver's

seat of a car is available in the Driveway Control. This is a mechanical device controlled by a single strand of aeroplane cable, running overhead to a post or side of house. Electric operation can also be supplied for the units.



LEFT, Driveway Control for operation of door from car. Below, the door tilted open.





WHEN THE WIND BLOWS

Does Insulation really INSULATE?

 Your customers buy insulation as a permanent investment. But we all know that insulation cannot give lasting protection if, as time goes on, it leaves loopholes for the wind to blow through.

There are two reasons why Balsam-Wool is windproof. First, it is sealed in a covering which wind cannot penetrate. Second, it is firmly fastened in place. It cannot settle as do fill types of insulation. It tucks into every crack and crevice, and remains in place regardless of movement of framing members.

Balsam-Wool is also waterproof-condensation within the walls of a structure cannot rob it of its efficiency. In addition, it is verminproof and non-combustible. Available in three thicknesses, it allows you to specify the economical amount of insulation for any

> structure. Write us for the whole story!



Room 119 First National Bank Bldg. St. Paul, Minn.



JNIPAK" WOOD CASEM

ROTPROOFED . WEATHER STRIPPED . DOUBLE GLAZED



- INSTALLATION
- BEAUTY
- YEAR 'ROUND INSULATION

IN KEEPING WITH THE NEW ERA OF SMART MODERN HOMES.

THE NEW "UNIPAK" outswinging Casement offers you a distinctly new and

different window of modern, harmonious design. It provides efficiency and convenience never before thought possible in any before thought possible in any window. Strongly and compactly built of decay and termite proofed wood. Equipped with all aluminum screen. Sash operates and locks without screen interference. The double glazing meets year 'round air conditioning requirements. Effectively keeps out wind, weather and dust. Glass easily washed on both sides from inside of building. Installed cost compares favorably with ordinary windows.

"Unipak" comes complete with all hardware and accessories supplied. Sash are factory pre-fitted, weatherstripped, and hinges

Installed from inside of building. Each unit complete with hardware.

Complete details in Sweet's 1936 Catalog

applied. All installation uncertainties are eliminated.

DUBUQUE Qualitybilt IOWA U.S.A.

SASH • DOORS • FRAMES

MOLDINGS • GARAGE DOORS • STAIR WORK • CABINET WORK

PANEL WORK

"DELUXE" KITCHEN UNITS . . . DISAPPEARING STAIRWAYS

Write us for further information on Unipak Casements and other products. Check square and sign name and address in margin below.

AB436 ☐ BUILDER ☐ DEALER OWNER.

100 Jobs per Square Mile modernizing garage books

● In every good-sized town there are at least 100 garages per square mile with doors in bad shape. They can be remodeled with "Over-the-Top" Door Equipment at little more cost than for new doors. The property will be increased many times more than the cost of the equipment and garages so equipped rent easier. Many builders have been making good money at this for some time—especially with the National Housing Act financing remodeling jobs. Your dealer carries the equipment—no need for you to invest except as needed. See him—or write us for information today.



"Over-the-Top" Door Equipment was the first and only device for "overhead" operation that didn't require special doors. A real saving.



There's a size for every opening and only 31/4" head-room is required above standard openings. No excess trackage, no weights, pulleys, cables or chains.



Public garage doors can be remodeled without costly cutting or fitting for openings up to 18' wide by 12' high. Automatic electric opening if desired.



Women especially are so delighted with the effortless, quiet operation of this equipment that they tell others of it — one job sells another.



You can interest truck fleet owners in group installations at less cost. Never need servicing or adjusting.

Write today for complete information.

FRANTZ Mig. Co. Sterling, Illinois

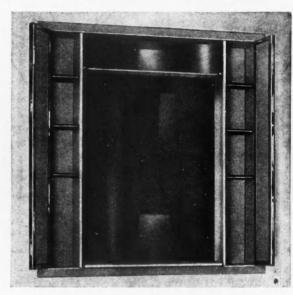
ONLY



New Type Bathroom Cabinets

TWO bathroom cabinets from the new 1936 Miami line being manufactured by the Miami Cabinet Division, The Philip Carey Co., Middleton, Ohio, indicate a radical departure from conventional designs so long considered standard.

In the Oxford (shown below) two cabinets, with mirror doors, are placed at either side of the center mirror which is recessed. The ground glass panel at top conceals a light which concentrates illumination on the mirror where most needed and also illuminates the entire bathroom. Regular clear-plate mirrors or new rose-tinted mirrors are furnished as desired. Regularly furnished in Miami Crystal Snow finish; special colors to match any bathroom can be supplied at slight additional cost.



OXFORD design, new Miami bathroom cabinet.

The DuBarry, another entirely new design, has a large stationary recessed mirror and separate recessed cabinets, without doors, placed at either side of the mirror. The large center mirror is furnished in rose color or regular silver. The narrow side mirrors may be had in blue, green, gunmetal or rose. Frames around center and side units are chromium-plated. Shelves are of colored glass to harmonize with mirror. Concealed light fixture back of ground glass panel at top of center mirror furnishes concentrated light for the mirror and sufficient illumination for the entire bathroom.

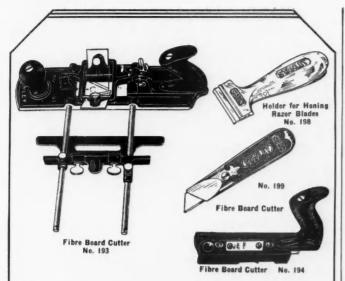
Bin Suspension Hardware

SLIDEWELL Bin Swing, attachable suspension hardware which can be readily fastened to any form or size of bin, of either wood or metal, is being marketed by the Ritsche Specialty Manufacturing Co., St. Cloud, Minn. It takes the place of other devices to eliminate danger of pinching fingers as the heaviest loaded bins as well as the light ones will open and close or stop at any point with ease. Due to the three-point suspension, uneven settling or shrinkage of the cabinet

do not affect the movement of the bin, which may be built square within 1 inch of the back of cabinet to save space.

This hardware is available in standard size for loads up to 75 pounds, and heavy duty, up to 150 pounds.

SUSPENSION hardware for swinging kitchen or other bins.



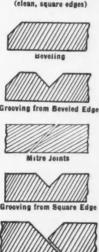
THESE TOOLS Open up NEW FIELDS of WORK



New fields of work new jobs - new profits come from working in Fibre Board with Stanley Fibre **Board Cutters!**

Making it easy to produce beautiful decorative effects with fibre board, as well as the various types of joints shown here, Stanley Board Cutters quickly pay back their moderate purchase

All of the operations shown here can be done with Cutter No. 193A. No. 194 is for chamfering, Fibre Board Knife No. 199 for cutting and trimming. See these popular new tools at your dealer's, or write now for descriptive circular.



STANLEY TOOLS New Britain, Conn.



That's what your customers will say if you continue to offer them old-style screens and storm sash. Once they have seen the New MARQUART Frame nothing else

Be the first in your city to show and sell the New MAROUART Frame, with its two-section storm sash and two-section screens that are so quickly interchangeable from inside the window. They sell at sight and will bring you profitable business.



QUICK FACTS about the New **MARQUART Frame**

Storm sash are air-tight and water-tight. Change from screens to storm sash in sixty seconds. No tools required.

No climbing of ladders. Storm sash or screens changed from the inside.

Storm sash and screens interchangeable.
Use top sash and bottom screen at one time if desired.

Storm sash and screens one-half the size of old style—easy to handle. Less storage space required for sections not in use.

Factory pre-fitted and ready to slip into frame.

All units painted with two coats of aluminum paint at the factory.

Can be used on any old-style frame by adding three pieces of moulding. Cost no more than old style.

Millwork companies: Write for information about manufacturer's license rights.

SEND THE COUPON TODAY

OSHKOSH MILLWORK CO.

City and State.....

Oshkosh, Wisconsin.

Send illustrated literature describing your New MARQUART Frame, Storm Sash, and Screens. This request places me under no obligation.

My Name.

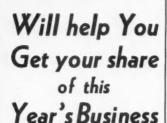
STORE FRONTS

STEEL BUILDINGS

STEEL TRUSSES

INTERNATIONAL NEWS of the MONTH

PRODUCTS



Building business is picking up! The long felt demand has at last brought out available financing and many contractors are going to be busy this year.

Jobs will be varied-Store Fronts - Steel Buildings - Miscellaneous Remodeling jobs-all requiring Steel Building Products.

You will find International Products Economical and Practical. Our designs will help you land some of these available contracts, our modern plant and a large stock of materials enable us to make quick

We will gladly submit designs and prices without cost. Write us.

PRODUCTS

Store Fronts Steel Windows **Steel Stairs** Marquise Airplane Hangars Modern Garages Fire Escapes Steel Buildings **Steel Trusses Steel Ceilings** Steel Joist **Reinforcing Steel** Skylights







STEEL CC 1390 Edgar Street **EVANSVILLE,** INDIANA

Building Activities and Meetings

FHA Insured Mortgage Certificates Available to Private Investors

A DEVELOPMENT of significance to all those who have been benefited by the National Housing Act—home owners, the building industry, and financial interests-was announced last month in a number of metropolitan newspapers by the advertising of the First Home Plan Income Corp., New York City, offering the public a new type of investment, Certificates of Deposit for single mortgages insured under NHA. In lieu of non-existant National Mortgage Associations which were to be set up under Title III as a means of placing before the private investor the mortgages which have been written under Title II, such a plan provides the method whereby the tremendous volume of private funds seeking investment can now enter this field of home financing. The establishment and operation of this system should again bring an adequate supply of private money to the home construction industry, and at the same time offers a new form of sound investment to the public.

Under the First Home Plan Income Corp. operation, Certificates of Deposit are issued by City Bank Farmers Trust Company, N. Y., for single mortgages insured under the National Housing Act. Each certificate will be for a complete single mortgage after there has been deposited with the bank such a FHA insured mortgage and covers an entire first mortgage on a definite property.

The Certificates of Deposit will range from about \$3,000 to \$16,000 each. No single mortgage or certificate may be for more than \$16,000. There is no limit to the number of Certificates of Deposit that may be held by one investor.

The return represents in part a return of principal by amortization payments and in part interest on the unpaid principal. Interest and amortization payments will be remitted to registered certificate owners semi-annually by City Bank Farmers Trust Company.

The National Housing Act provides that if the mortgage is foreclosed and satisfactory title to the property turned over to the FHA 3 per cent debentures, fully guaranteed principal and interest by the United States, will be issued to the owner of the mortgage equal in face amount to the then value of the mortgage. Such Government guarantee applies only in the case of mortgages insured prior to July 1, 1937.

Building Volume Keeps Ahead

OR February a contract total of \$142,050,200, covering all For February a contract total of the Policy Mountains Corporation for the 37 states east of the Rocky Mountains. This was practically 90 per cent larger than the total of only \$75,047,100 reported for February, 1935. Partly because of the unusually low temperatures and heavy snows the February contract volume was about 30 per cent lower than the total of \$204,792,800 registered for January of this year.

Residential building undertaken in the 37 states during February amounted to \$31,175,500 as compared with only \$16,616,800 for February, 1935, and \$37,439,500 for January of this year.

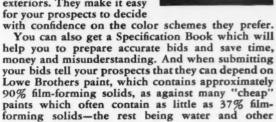
Gains in residential building over last year were scored in each of the 13 major districts in the area east of the Rockies, excepting only Upstate New York and the St. Louis territory (So. Illinois, Western Tennessee, Eastern Missouri, Arkansas).

Total construction for the first two months of 1936 amounted to \$346,843,000 as against only \$174,821,000 for the corresponding two months of 1935, a gain over last year of 98 per cent. For residential building alone the contract volume for the first two months of 1936 totaled \$68,615,000 for a gain of 76 per cent over the total of \$39,027,000 for the corresponding two months of 1935.



Here is a contract-closing help, available without cost or obligation through your local dealer in Lowe Brothers painting and decorating materials.

The Lowe Brothers Pictorial Color Chart is filled with ideas on color schemes for every painting need. It contains actual painted reproductions of charming interiors and attractive exteriors. They make it easy for your prospects to decide



evaporating liquids.
You will find that your local dealer in Lowe Brothers products can help you close more contracts, and more profitable ones. See him today. The Lowe Brothers Company, Dayton, Ohio.



PAINTS • VARNISHES

Quality Unsurpassed Since 1869



Home Owners Prefer

A WEATHER-TIGHT RESIDENCE

Be Sure To Calk All Door And Window Frames With



Don't wait until the owner complains that he cannot keep the weather out nor the heat in. A calked house is a tight house, especially when a reliable material such as Pecora Calking Compound is used. Properly applied, it simply will not dry out, crack or chip. Specified by leading architects and used by responsible builders for all types of buildings in all parts of the country.

Unlike all other Calking Guns

This New Type, High-Pressure Cartridge Calking Gun (patent applied for) is a great Time and Material Saver. Specially designed for Pecora Calking Compound which is packed in Non-Refillable Cartridges of approximately One-Quart Capacity.



Write for Bulletin and Prices

Pecora Paint Company, Inc.

4th Street and Reading R. R. PHILADELPHIA

SASH PUTTIES MORTAR STAINS Also Makers of

SUCTION MASTIC for Structural Glass

ASBESTOS FURNACE CEMENT COLORLESS DAMPPROOFING PECORA PERFECT PATCHING PLASTER WEATHERTITE LIQUID ROOF COATING

PERLESS

building Specialties

PROVIDE THE SERVICE YOU WANT IT

DOME DAMPERS

"TO CONTROL THE FLUE-DRAFT"



Prevent back drafts, smoke and heat loss. Three models—rotary control, poker control and chain control. All standard sizes made of heavy stove plate cast iron for lifetime service.

COAL WINDOWS

"FOR CONVENIENCE AND SAFETY"



Door and frame of heavy gauge steel. Malleable Iron hinges, brass hinge pins, body of steel, rigid in construction. Finished in black Japan.

WALL HEATERS

"FOR QUICK CLEAN HEAT"

Gas fired wall insert type for baths and small rooms — no floor space required. White or colored porcelain enamel.

Write for free descriptive literature.



Peerless	Manufa	cturin	g Corp.	
1400 W. C	Drmsby	Ave.,	Louisville,	Ky.

Please send me free descriptive literature on
Fireplace Dampers Coal Windows Gas Heaters

Name	
Address	
Town	State

J-M Inaugurates Training Courses

THE two weeks' Housing Guild Training Course for retail sales managers of building material dealers conducted under the auspices of Johns-Manville at the Commodore Hotel from Feb. 17 to 29 was attended by more than eighty executives of building material retail concerns in the states of New York, New Jersey, Pennsylvania, Massachusetts, Connecticut, Rhode Island and Ohio.

During this course, the business of retailing building materials was analyzed in minute detail and a plan of action outlined for the provision in local communities of an orderly and efficient program of consumer selling—a plan developed under the direction of Arthur A. Hood, Johns-Manville merchandising expert, and now being set in motion as rapidly as possible on a nation-wide scale, by the creation of local Housing Guilds.

These Guilds will be developed to coordinate all important factors of the building industry in a community (the dealer, contractors, architects, real estate dealers, financial institutions, etc.) into an organized group with a trained force of salesmen to merchandise better housing to that community.

Returning to their homes, the building materials retailers who have attended the course will employ the training they have received to analyze their local markets and, except in cases where peculiar conditions may advise against it, to start actual organization of the local Housing Guilds.

The course was repeated in March at Chicago. Later it is planned to follow these two programs with schools to train the salesmen of those who have already attended.

Texas Prize Design Under Construction

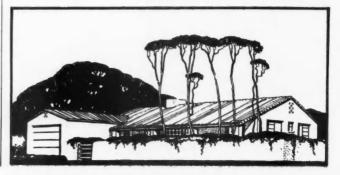
THE house design illustrated is the \$1,000 prize winner in the Architectural-Engineering Competition, recently sponsored by the Portland Cement Association for Texas architects and engineers, for a concrete house costing under \$4,500 to be built at the Texas Centennial Exposition. The prize winning design was submitted by Bubi Jessen, young Austin architect. Construction is now under way, to be finished in time for the opening of the Exposition. After the Exposition closes the house will be given to the Dallas Park Board.

Eleven prizes totaling \$2,350, including a first prize of \$1,000; second, \$500; third, \$250; fourth to seventh, \$100 each; and eighth to eleventh, \$50 each; were awarded in the competition which closed Nov. 10, 1935. The drawings of 89 contestants were judged in this competition. Ralph Bryan of Dallas was the architectural advisor. Judges were Miss Mary Gearing,

Robert M. Ayres, J. F. Staub, R. M. Jameson, and Thomas S. Byrne.



LEFT, plan of Texas Centennial prize winner; below, perspective of same design.







SKILSAW SAVES ON EVERY SAWING JOB!

SKILSAW makes profits because it reduces costs . . . because it enables you to out-bid, out-perform and out-time those who still cling to the old, slow handsaw methods! With SKILSAW, you can meet competitive conditions and STILL MAKE MONEY!





A Complete INSULATION LINE -Covering every requirement of the Home-Building Trade

-Wall-Thick Batt 2—Semi-Thick Batt 3-Loose Batt Wool 4-Roll Felt

WHAT is your insulation need? Is it "highest requirements" or "speculative"? What-ever the necessity or type of construction, you'll now find in this top-notch line just what you want, manufactured for utmost insulation convenience.



WALL-THICK BATT: So simple any workman can apply. Readily





1-WALL-THICK BATT

Unequalled; assures dealer of a product that will meet architects' and builders' highest specifications for insulation against heat and cold, yet with utmost installation

convenience.
Wall-thick (35%"); size 15"x23"; packed in carton; 8 pieces covering 19% sq. ft.; treated to repel moisture; used on walls, ceilings, slopes. Everlasting; fire-proof; wind-proof. Conductivity .250 B. T. U.

2-SEMI-THICK BATT

Differs from the above described Wall-Thick Batt in the following regards only: Thickness 2"; 13 pieces to the carton, covering 31.14 sq. ft.

3—LOOSE Batt WOOL

A new, handier form of loose commercial rock wool. Cheaper to install and gives absolute assurance of uniform insulation over every square foot.

Flexible: 8" thickness. Size 9"x15".
Packed in bags, 21 strips to the bag. A lighter-weight fabrication that covers 20 sq. ft. of walls, ceilings or slopes.

4-ROLL FELT

Like all Capitol Rock Wool, it acts as a sound deadener as well as an insulator. Should only be specified where 2" thickness is acceptable and expected.

Flexible, with paper on one side; 2" thickness; size 8 feet by 15 inches; two rolls; packed in a bag; covers 20 sq. ft. of surface. In wide demand for insulating ceilings, floors, slopes.

FREE SAMPLES of any or all of these four products sent on request, with complete details

ROCK WOOL INSULATION

..... MAIL THIS COUPON TODAY

The Standard Lime & Stone Co., Baltimore, Md. (Est. 1888) Please send us FREE SAMPLES of each of the kinds of CAPITOL ROCK WOOL Insulation checked below:

WALL-THICK BATTS
LOOSE BATT WOOL
ROLL FELT

LOOSE BATT WOOL

NAME.

COMPANY.

Check if also interested in Blowing Method for insulating existing homes

Enters Prefabricated Home Field

I SING large space in Milwaukee, Wis., papers to announce their new "20th Century" prefabricated home, the Harnischfeger Corp. of that city has added a Houses Division to its business. The company has been well known as manufacturers of industrial equipment for over fifty years and now, after several years of experimental work on various types of construction, has entered the home building field.

For the present, sales will be confined to the southern part of Wisconsin with real estate brokers handling the units and the erection done by local contractors under factory supervision.

One story, flat roofed, six rooms and bath without basement is the standard layout, three other plans having flat or hip roofs and optional basement being available. Prices range from \$3,475 to \$4,175 erected, which allows for a monthly payment of about \$35 under FHA terms.

A steel framework welded and bolted together has an exterior surface of building board and interior walls, ceilings and partitions of gypsum board. The house is erected on a sectional steel base supported on concrete piers and covered with a conventional double wood floor.

1936 "New American" Program Announced

RECENT announcement by the General Electric Company A of interest to builders of model and demonstration homes states that the 1935 "New American" demonstration home program which produced beneficial results, will be renewed and extended in 1936. According to J. F. Quinlan, manager of the program, General Electric plans to sponsor 400 "New American" homes in 1936.

As a result of the experiences of last year, the General Electric Company will avoid mistakes and increase effectiveness in the conduct of the 1936 program. As in 1935, local committees composed of G-E dealers or distributors, utility and other electric interests, will be in charge of each house. An executive director will be appointed to handle all matters. Since cooperation of a large number of other manufacturers of materials and equipment is expected, centralizing of control in one man will simplify the problem of the builder. Arrangement of special discounts in connection with model homes is planned.

According to Manager Quinlan, the 1935 program attracted thousands of visitors and increased the sales of the builders who put up "New American" demonstration homes. The publicity and advertising methods will be improved and increased, which should increase the benefits to builders who cooperate, he says. Local advertising campaigns and special newspaper advertising to tie-in with the model home are planned. Builders interested in building "New American" model homes can obtain information by getting in touch with a local General Electric distributor or appliance dealer. From him they can obtain the name of the executive manager of the local "New American" committee.

No architectural competition such as was held last year is planned for 1936, but cooperation with several large national women's magazines, using house plans provided by them, is being considered. Builders may use their own plans provided they are approved by the local "New American" committee. Houses built must conform to the concept of "New American" established by the General Electric Company, which is defined as a house that is planned from the inside out, providing for the fullest use of space and for health, comfort, entertainment and convenience, according to the accepted higher standards of home living.

Briggs Names Chicago Distributor

THE Weil-McLain Company of Chicago, one of the largest wholesale distributors of plumbing and heating supplies in the Middle West, has been appointed distributor in the Chicago territory for the Plumbing Ware Division of the Briggs Manufacturing Company.

The new distributor will handle the complete line of Brigsteel Beautyware, which includes bathrooms, safety bath tubs, laundry tubs and kitchen cabinet sinks. The Weil-McLain Company, which has plants at Michigan City, Ind., and Erie, Pa., also manufactures steam and hot water boilers and radiation.



In old homes or new, whether for renting or selling, "PERFECTION" BRAND Oak Floors give service and satisfaction. The greatest value for the money.

Take advantage of the new Housing Administration Act and sell good Oak Floors on your modernizing jobs.

Spicify

"PERFECTION" BRAND Oak Flooring as furnished by your local dealer is carefully manufactured from selected timber, scientifically seasoned and kiln dried, easily finished. Ask your dealer today to show you the "PERFECTION" BRAND.

Complete information is yours for the asking. Write us today. Sold only through retail lumber dealers.

ARKANSAS OAK FLOORING CO. PINE BLUFF ARKANSAS



I want to be lazy ...

Probably no prospect ever confessed, but what's back of his mind when he thinks of a home is a place where he can be lazy. What a break for the builder who puts in AGP Heating with Gas! It needs no attention whatever. And new low rates make it more attractive and economical. Ask your gas company, or write to—

AMERICAN GAS PRODUCTS CORPORATION

Says A. M. SAW...



YOU DON'T NEED TO CHISEL . . . YOU NEED TO MODERNIZE WITH MONARCHS

Estimates high? Sweet jobs going to the other fellow? Don't **blame** him ... **beat** him to the next contract with MONARCH Cost-Cutting Machines.

Modern, motorized, ballbearing . . . they're sturdy, dependable, precision machines — not playthings for the occasional user — but built for hard, accurate, continuous service. All MONARCHS quickly pay for themselves in time . . . labor . . . power-saving. If you want business instead of sympathy, modernize with MONARCHS now.

INCH
BAND SAW





A highly refined, self-contained machine of latest design and maximum efficiency. Built to meet all requirements of safety regulations. Wheels faced with rubber and ball-bearing.

VARIETY
WOODWORKER

No. 690



Four machines in one and so constructed that four men may use it at one time. Combines rip and cut-off saw bench with boring attachment, hollow chisel mortiser and 8" jointer. With electric motor, gasoline engine or furnished power.

ARBOR SAW BENCH

No. X24



A marvel of convenience and performance. Built-in motor with saw mounted directly on motor arbor. Left-hand table movable, permitting use of dado saw. Makes with ease any desired compound angular cut with stock on level table. A woodworking plant in itself.

Send for copy of complete catalog specifying your requirements for wood-working machinery, portable sawmills, gang edgers, trimmers, shingle and lath machines, solid and inserted circular saws. Let us quote you.

AMERICAN

SAW MILL MACHINERY CO.

Makers of Woodworking and Saw-Mill Machinery
60 MAIN STREET HACKETTSTOWN, N. J.



IF YOU are looking for extra profits—look to the SPEED-O-LITE. This amazing light-weight sander, cuts faster—works easier and quickly pays for itself out of savings on sandpaper, current and labor. It provides the best sanding service money can buy—and in addition our liberal time payment plan enables you to pay for it out of profits. No experience is required—simply guide it across the floor and the job is finished.

The SPEED-O-LITE is light in weight (80 lbs.). It works right up to the quarter-round. It requires no power wiring—operates from any convenient outlet. It collects dust perfectly and the ball-bearing construction provides faster, smoother and easier operation.

No job is too tough for the SPEED-O-LITE—it assures a ball-room finish on every floor. The only machine guaranteed for one year including motor.

With all its features—SPEED-O-LITE sells at a price that will amaze you. It is the lowest price quality sander on the market. It is unwise to pay less—unnecessary to pay more. Mail the coupon today for details on our 5-DAY FREE TRIAL OFFER.

The Improved Schlueter Heavy Duty Sander

For sanding large floor areas, the Improved Schlueter has been the choice of contractors for 40 years. It will put a glass-like surface on every floor right up to the quarter-round. One man can sand and finish an amazing amount of floor area in one day more efficiently than is possible by any other method or process. Sanding drum automatically adjusts itself to all floor irregularities without the use of levers. The improved vacuum picks up all dirt and dust, cleanly. Investigate this heavy-duty machine today. Try it 5 days at our expense.

MAIL THIS COUPON TODAY

Lincoln-Schlueter 222 West Grand	Floor Machinery Co. Avenue, Chicago, Illinois.
☐ IMPROVED SC	on your 5-DAY FREE TRIAL OFFER SPEED-O-LITE HLUETER. Also tell me how I can own one of these ested in Time Payments.
Name	
Address	
City	State

Somes to Promote Bildrite Sheathing

THE Insulite Company has announced that L. H. Somes has been appointed sales promotion engineer to specialize on the company's new building product, Bildrite sheathing.

Mr. Somes, who has been identified with the building and construction industry for nearly fifteen years, is a well known sales executive to the Central and Northwest trade. He will make his headquarters at the company's main office in Minneapolis.

Report Mixer Standards Benefits

A REVIEW of the Concrete Mixer Standardization Program shows a substantial contribution to the economies of the construction industry by enabling the manufacturer to give greater value per dollar invested in mixer equipment and providing the contractor with a more efficient machine with which to meet exacting demands of present day concrete practice.

After more than a decade of continuous cooperative effort, the accomplishments in the concrete mixer industry—where the variety of sizes has been reduced nearly 70 per cent, from 22 to 8—stand out as the most substantial contributions to the economies of the industry in this field. The present standards are approved by the Associated General Contractors of America, and are subscribed to by manufacturers producing 85 per cent of the building construction mixers and 100 per cent of the paving mixers in the United States. These standards provide that only six sizes of building mixers and two sizes of paving mixers shall be manufactured within the range of approximately one cubic yard of mixed concrete capacity. That is 3½-S, 5-S, 7-S, 10-S, 14-S, 28-S in building mixers, and 13-E and 27-E in paving mixers. Three larger sizes of construction mixers, namely, 56-S, 84-S and 112-S are also standard.

Thoroughly Insulated, Nevertheless

THE Realty Board Model Home in Lancaster, Pa., shown in the February American Builder, was described as being "thoroughly insulated with rock wool." While some of this material was used, it is found that the principal insulation was Armstrong's Temlok—a total of 10,000 feet having been used in the construction of this house.

Celotex Appoints Advertising Manager

A N EXTENSIVE advertising program planned for the current year by the Celotex Corporation will be under the direction of LeRoy Staunton, who has recently been named advertising manager of that company.

advertising manager of that company.

Mr. Staunton, who was formerly merchandise advertising manager of the Westinghouse Electric & Manufacturing Company and advertising manager of the Kolster Corporation, will be particularly concerned with those policies which are related to the needs of lumber merchants. He believes that the practical

experiences of dealers and suggestions from them are of prime importance in the development of a well rounded program.



LEROY STAUNTON, new advertising manager of Celotex Corp.

Your Customers deserve what only RO-WAY gives

—in exclusive features, greater value, reasonable price and greater year 'round ease of operation

When you install Ro-Way Garage Doors you know that you are giving your trade the very last word in the overhead type of doors. You not only save time and money on the installation but you provide the customer with doors that are never a source of annoyance and complaint. The exclusive "Seal-Tite"

Molding is just one of the features that make Ro-Way Doors

Molding is just one of the teatures that make Ro-Way Doors worth much more—yet they are always moderately priced.



Ro-Way Garage Doors are architecturally correct in design and pleasing in appearance.

RO-WAY OVERHEAD TYPE DOORS

—are made in all Standard Sizes as well as Special Sizes and Heavy Duty Doors with heavy tracking are available. Investigate especially the Ro-Way low priced Doors for residence garages and the Ro-Way specially designed Torsion Spring high lift Doors for use in public service stations.

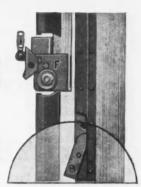
Only RO-WAY Doors have this "SEAL-TITE" Molding Feature

Note how the simple gravity operated cam (Fig. 8) illustrated at right instantly frees the lower section of the Ro-Way Door in opening and just as effectively seals the door draft-fight in closing.

Write for Ro-Way Door Folder and Price List

ROWE MANUFACTURING CO.

730 Holton St., ialesburg, Ill., U. S. A.

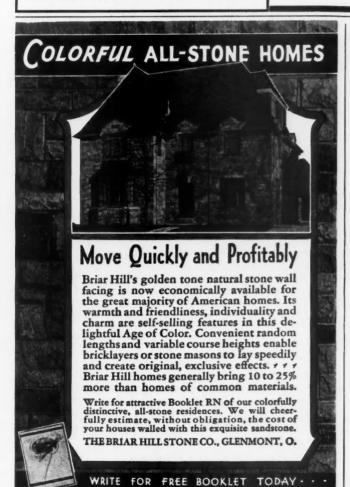


Not a particle of "drag" in opening the Ro-Way Door.

RO-WAY Electric Operators

Ro-Way Overhead Type Doors require fewer alterations in old buildings. Headroom requirements only 8½ to 21 in.

—are extremely sturdy and simple and very easy to install. Only 3" headroom is required. In addition, the Ro-Way Electric Operator can be installed complete at surprisingly low cost. If desired, a magnetic driveway switch can be used at very little extra cost. Write for special folder on Ro-Way Electric Operators.





EXPERIENCED BUILDERS know that good-looking, up-to-date Lightolier lighting fixtures add more and cost less than any other equally important equipment for the home.

So plan your lighting with the same care as you plan your heating and plumbing. Plan with Lightolier, an organization equipped to give you the service

and lighting equipment you need at a price you will be willing to pay.

Send 10c for our new booklet, "The Charm of a Well Lighted Home." It will help you plan decorative and efficient lighting for every room in every type of house. Address Dept. MB.



LIGHTOLIER

11 East 36th Street, New York 1551-2 Merchandise Mart, Chicago

Carpenters — Contractors

A Complete Planing Mill in One Machine

\$10.00 DOWN

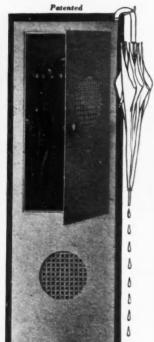
Under the F. H. A. Plan you have three years to pay for this complete equipment. The Electric Carpenter . . . 7 machines in one . . . Circular Saw . . . Band Saw . . . Lathe . . . Jointer . . . Shaper . . . Mor-

tiser... Sander. Ball bearing throughout. Guaranteed for 10 years. Does 35 woodworking operations...runs from any light socket... very small space necessary. We show you what to make... how to make it... and how to sell it. Make big money the year round... you can do what hundreds of others are doing. Write today for illustrated circular.

AGENTS WANTED... Carpenters, cabinetmakers, specialty salesmen and handymen are making money selling this machine in their communities. Get your own machine for nothing by acting as our agent4

CARPENTERS MACHINERY CO. 249 N. 11th STREET PHILADELPHIA

'BRELLA HANGAR



BUILDERS and CONTRACTORS CASH IN ON THIS BUILT-IN UTILITY

THE 'BRELLA HANGAR is an ettractive built-in, steel waterproof cabinet made exclusively to provide a permanent place for wet umbrellas thus preventing the spoiling of sinks and tubs. Will enhance the sales and rental value of any home or apartment many times its low initial cost. It is welcomed by the entire family, especially the women.

The 'BRELLA HANGAR is an added feature that helps in making sales of new homes and offers a source of extra profit on modernization jobs.

Full particulars furnished interested Builders, Contractors, Realtors and Operative Builders.

A few exclusive territories open for dealers and distributors. Write for sales plan.

FRANKLIN HOME UTILITY CO.

450 7th Avenue

New York, N. Y.

LETTERS from Readers on All Subjects

Facts, opinions and advice welcomed here

Came Home with a Contract!

Reno, Nev.

To the Editor:

This is a good opportunity to write to you, because no matter what you sell it is good news to hear of your customer's delight and satisfaction.

I received the free copy of "New Era Homes," and just as well tell you, we copied a new home from it, changed the plans a little here and there, and sold it the first day right out of your book. I was sold on the type of home because it corresponded with my ideas, and I carried my ideas to a prospect and now in about 60 days the proud owner can occupy the "Better Home," as our slogan on the signboard advertised.

I feel I should give you credit and inspire you, too, to look for better and better homes. How many people have the desire for a better home and do not sufficiently express their desire. But when you enable us to go with a good and sound plan, pictured or photographed exterior to a customer and show him in so-called "black and white" what they want and come home with a contract, then you know that your work is satisfactory and that American Builder is doing more than expected; but if I would not write to you, you would hardly realize what an asset you are.

R. REDELIUS, R. Redelius & Del Curto, Inc., Community Developers & Builders.

Kitchens Too "Modern"?

South Berwick, Me.

To the Editor

I have read your magazine for a long time and I think it is a fine paper. Your house plans are also up to the present modes and fashion, but don't you think that the kitchens are small and a little too modern for some to afford.

While an electric range is in the reach of some there are a lot of people who believe that they can use a regular range with oil burners and get more results, especially in this climate.

Thanking you I will now get back to my last issue which just came.

HAROLD PERKINS.

Low Cost Homes in Westchester

White Plains, N. Y.

To the Editor:

Anything showing houses that can be built in Westchester County between \$3,000 and \$10,000 and yet be of good design and allow the very high class construction that people demand will be of a great deal of interest to anyone in this section. Up until the time of the depression, a \$12,000 house was considered cheap and no one catered to anybody below that price limit. Since then there have been various people who have built houses in the lower bracket but very often they will start in that price range and find that the demand is for higher priced houses and will swing away from what they originally started to do. One of the most successful has been Mayfair Acres, in Greenburgh, which is right near White Plains, where under the able guidance of Gustave Feuerstein, in the last seven months, seventeen houses have been sold on 1-3 acre plots in a price range from \$6,200 to \$13,500. They started out between \$6,200 and \$9,750. I don't think they built anything below \$7,850 and they are finding now that the demand is running a little higher. Even this price class finds so little competition here in Westchester County that anybody giving good value is finding very ready sale for his houses.

If anyone can build houses to sell, exclusive of the lots be(Continued to page 140)

CUT SHEET METAL ON THE JOB with

STANLEY UNISHEARS



Don't buy your sheet metal tailor-made and pay the extra price. With a Stanley Unishear you can cut it on the job to fit exactly.

Portable Stanley Unishears cut up to 14 gauge, Galvanized Iron, cutting up to 15' per minute. Handle as easily as a pair of snips. Stationary models with capacities up to 1/4" boiler plate. Leave smooth, finished edges. Follow straight or curved lines

accurately. Unishears are one of the many Stanley Electric Tools that can save money on every building job. Write for catalog No. 64M.

STANLEY ELECTRIC TOOL DIVISION

The Stanley Works (STANLEY) New Britain, Conn.



For East Cutting . . STANLEY UNISHEAR



Stucco Spraying Masonry Surfaces Now Offers Big Earnings

This new machine and process completely solves the problem of permanently surfacing new or resurfacing old masonry buildings, walls, etc. It fuses a waterproofed plastic mixture on any masonry. It fills all cracks and can be applied in any thickness desired and in 30 colors and shades. Fully proven by over twelve years' actual use under all conditions and every climate.

LARGE WAITING MARKET

Cowners everywhere want to enhance present values and make their buildings more attractive and livable. The better builders are striving for greater permanence, beauty and salability in their new construction. With Colorcrete stucco spraying, you can supply this waiting market and can offer permanent, colorful surfacing at amazingly low cost. Many operators report costs of 2c to 4c per sq. ft. and sell at from 4½ to 7c. Some have paid for their equipment from first couple of jobs. Machine capacity up to 600 sq. ft. per hour.

Get the facts. The new Colorcrete Books tell the whole story. Write today. It may mean business independence for you.

COLORCRETE INDUSTRIES, Inc. 505 Ottawa Ave. Holland, Mich.





leatures...

Cleverly designed, sturdily con-structed and smartly styled — this super-efficient ventilator is so vastly superior to others, there simply is no comparison. Rids kitchens of cooking odors and grease fumes quickly and quietly. Easily installed quickly and quietly. Easily installed in walls of any type or thickness in minimum time. Equipped for either exposed or concealed wiring con-nections making it adaptable for old or new homes. Automatic control; rust-proof finish; streamlined, weather-tight shutter; one shot lubri-cation; ultra-modern in every respect. Ask for catalog showing Victor's com-plete line. Write today.

VICTOR ELECTRIC PRODUCTS, Inc. 705 Reading Rd., Cincinnati, Ohio



Above illustration shows how con-struction of Victor In-Biltsimplifies installation. Walland shutter are one assembly, motor and grill another.

DISTRIBUTORS

It's easier to sell the Victor line of ventilators than to compete with it. Exclusive sales rights still available in some territories. Write for details— stating your present lines and whether you now contact builders, architects and contractors.

"Better Light . . . Better Sight"



The electric lighting industry is spending millions annually to educate industrialists. building owners and the public in the sight-saving and money-saving advantages of adequate interior lighting. Industrial plants will spend millions in 1936 in improved lighting.

Our skylight catalog will help you to show your clients how they may utilize the cheapest of all light . . . daylight . . . and also greatly improve their ventilation . . . both in new building and remodeling operations . . . with

WILLIS SKYLIGHTS

Write for SKYLIGHT CATALOG



The WILLIS Manufacturing Co.

Galesburg, Illinois

"STANDARD" for almost half a Century





Catch

There are profits in the kitchen. Profits in easy sales. This complete line of distinctive, modern designed cabinet hardware in sparkling non-tarnishable Crome finish is spe-cially designed for the kitchen. With it an old kitchen can be given a charming new look by replacing the hardware and repainting in cheerful colors. In new homes the kitchen cabinets may now be as handsomely appointed as the surrounding appliances.

Creates remodeling jobs, clinches sales. Every kitchen is a prospect, even the most conservative for this different cabinet hardware though exclusive is not expensive. Order through your dealer.

Feature it. The beautiful metal display shows the broad, complete line. Neat and compact to put out-in-front on a counter or to take on the job. Effective in making fast sales.

FREE to Dealers:

The beautiful metal display—in a choice of 3 colors:
Black, Yellow, Green— is offered free; you purchase only the hardware on it.
Write for complete information, catalog, and dealers prices.

NATIONAL BRASS COMPANY, Mfrs. Grand Rapids, Mich.







AN OPPORTUNITY For Contractors and Builders

GENERAL HOUSES, INC., of Chicago, pioneer in prefabrication, wants progressive contractors and builders to distribute its new line of steel-frame dwellings.

Priced from \$2500 to \$5500, erected and equipped, approved for F H A mortgage loan insurance purposes—attractive, modern and convenient, THIS IS THE HOUSE THAT SCIENCE BUILT-for better living. vestigate our proposition.

Special attention to large building developments.

GENERAL HOUSES, INC. 220 South State St., Chicago, Ill.	
Please send, without any obligation on my part, complete details concerning your new line of steel-frame houses and your dealer franchise.	
Name	
Address	

Letter Dept.

(Continued from page 138)

tween \$3,000 and \$6,000, yet live up to Westchester County standards of architecture and construction, he would be a public benefactor. They would have to be good houses and not the type stuff that is springing up like mushrooms around Flushing on Long Island. If you will continue to publish house plans from a minimum of three rooms and one bath with a one-car attached garage, up to six rooms and one bath with an attached garage, I am sure that they will find a great deal of interest. Here, it is necessary to have a garage, and a great many sub-divisions require that it be attached. The detached garage is now obsolete. If the lot is so that it can be done, they like the garage either a full floor or a half floor below the first or living floor of the house. If it's a level lot where that cannot be done, then the garage usually goes in a wing, but even the smallest house must have a garage. Please keep on publishing this list of small houses

> CONKLIN YARDS, INC., Coal and Lumber, By Howard Conklin, President.

Likes February Issue

To the Editor:

Winnipeg, Can.

I want to congratulate you upon the February, 1936, issue, which has just arrived. I have seen the American Builder for many years and I think this is one of the finest issues I have ever seen. The home designs are very well selected and are of a size and type that can be sold.

G. E. KONANTZ. Sales Manager. North American Lumber and Supply Company, Ltd.

Stewart McDonald to Allie S. Freed

Washington, D. C.

To the Editor:

Attached is a statement by Mr. Stewart McDonald, Federal Housing Administrator, issued to the press in reply to certain statements made by Mr. Allie S. Freed, of the Committee for Economic Recovery, in a recent radio address.

Unfortunately, this article did not receive much publicity, and we would appreciate it if you will be sure to carry it in your next issue.

FRANK CARNAHAN,

Secretary, National Retail Lumber Dealers Association. FRANK CARNAHAN, Secretary, National Retail Lumber Dealers Association.

"The Committee for Economic Recovery states the objectives we are all striving for but, unfortunately, does not tell us how to accomplish them.

"The British system is held up as a pattern for us. We have given a great deal of study to the problem of trying to adapt the best features of the British system to the housing situation in America. Not much can be done in that direction. For example, the British residential construction activity is being financed at a very low interest rate. The Committee for Economic Recovery neglects to point out, however, that most of the contracts provide for a fluctuating rate of interest which can be raised on short notice in conformity to the prevailing rate. Most of the contracts, I am informed, contain clauses making the entire mortgage callable on six months' notice. In other words, the typical British mortgage which we are being urged to adopt is not a long-term amortized mortgage such as we are promoting in America.

"As for the 10 per cent down payment prevalent in English home buying at present, the Committee neglects to say that in most cases the builder guarantees an additional 15 per cent, so that the actual percentage of the mortgage in relation to appraised value is 75. In America it is proposed to leave the entire risk to the Government

"Mr. Freed is quoted as saying, 'There is growing up in Washington a carefully conceived, although fortunately, not yet executed plan, whereby the Federal Housing Administration would soon have under its supreme control, the definite power to say what mater als shall go into a home, how they shall be applied, where the home shall be located, who shall do the

(Continued to page 142)



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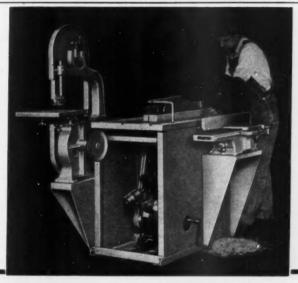


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plete details

Write for prices and com-

THE CINCINNATI FLY SCREEN CO., Dept. AB, Cincinnati, O.

Letter Dept.

(Continued from page 140)

financing, and who shall have the privilege of buying a home in this great country.'

"I believe Mr. Freed is having a nightmare. I have never heard any such thing proposed. Possibly he has it confused with his own scheme, under which the construction industry would be monopolized under a few large corporations and small builders would be driven out of business."

Doubts Home Building Yet Ready to Go It Alone

Columbus, Ohio

To the Editor:

The country is still in an extremely critical condition. The Townsend Plan, Inflation, Digest Poll, Supreme Court Decisions, the slight progress made in re-employment, the static relief load, the mounting Federal emergency expenditures, the so-called waste of relief funds, the suppressed dissatisfaction of W. P. A. and P. W. A. workers with their type of work, the general restlessness and vacillation of public sentiment, can be stopped only by tangible recovery.

Construction, especially residential construction, is the key and yet even the *American Builder* admits that it will take several years to reach normal. We cannot afford to wait if a way

can be found to avoid the delay.

The odds are still against the builder. Few families have weathered the depression in security. Houses are sold, not bought. Fewer still have a mind to buy without unusual sales persuasion. Thousands more who would, in normal times, be considered A-1 risks, have been sufficiently cramped by the depression that they are now entirely ineligible according to present financing standards. But when the tides does turn we will be swamped by another disastrous avalanche of Jerry building. That most basic of American institutions, the home, will suffer even more at the hands of competing industries, such as the automobile. Perhaps it will never recover until Government Housing and Big Business, with prefabrication, takes over the control.

When an already disorganized industry is eighty per cent under water, I feel that it is no time to sit back and rub our hands with the satisfaction that we now have a sound foundation and have doubled our production last year. We still need every ounce of fight we can muster. I feel that the fight can only be won by free cooperative action, which, in turn, depends upon nation-wide Federal assistance. If we do not get this type of Federal assistance now, we may expect more and more Federal inter-

ference of the F. H. C. type.

An operator who once counted his yearly totals in seven figures recently told me he could sell ten houses before they were finished if he only had a \$500.00 cash equity to start each. A builder said, "Sure, I'd take a contract but I won't leave my filling station yet." Another builder said, "A man would be a fool to leave his W. P. A. job to go in business on a shoe string." All these men need is a little cash equity which this plan provides. And three good tenants, who would eventually become owners, could be found for every home that could be built.

Your editorial policy has been about the only light for many a tradesman and builder during these trying years. I honor your judgment. Do you still feel that nothing more can be done

to speed recovery of home building?

R. R. FLING, Architectural Engineer.

Getting Back into Architecture

Huntingdon, Pa.

To the Editor:

At this time I want to tell you that the American Builder has been a real help to me since I subscribed for it last fall. I-had been away from architectural work for eleven years; had been engaged in designing furniture and manufacturing same for the Commonwealth of Penna., so you can judge that your magazine is giving me real service.

A. W. BODINE, Consulting Architect, Engineer and Forester.

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Frank Adam
ELECTRIC COMPANY

DRIVER Saws Quickly Earn Their Cost In the Shop or On the Job



In these days of highly competitive figuring, the contractor with DRIVER POWER TOOL equipment enjoys a distinct advantage. Because DRIVER Tools save time they enable him to quote a lower price or make an extra profit.

Catalog

Many exclusive features place this saw in a class by itself. The table size as shown is 31"x21". The 10" blade rips and crosscuts full 3" stock. Table tilts to 45°. The mitre gauge is extremely accurate. The wood faced fence makes ripping accurate and easy. Another feature is the "nested" table insert. This comprises a small insert which is removed for dadoing inside a larger one removed for disc sanding.

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and may readily be transported to the job.

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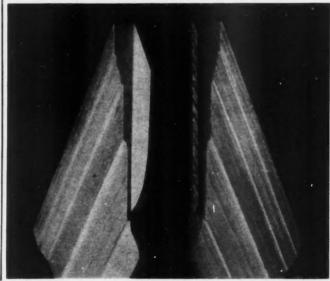
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1936 BUYERS' GUIDE Latest Information—INDEXED

New Helps for Contractors, Builders, Dealers, Mechanics The publications named on pages 150 to 168 may be obtained without charge either by using the coupon on page 168, listing the numbers desired and mailing to American Builder, 105 West Adams Street, Chicago, or by applying on your business stationery to the manufacturers direct, in which case kindly mention this publication. Either the titles or the numbers may be used in ordering. This list is an editorial feature for convenience of our readers.

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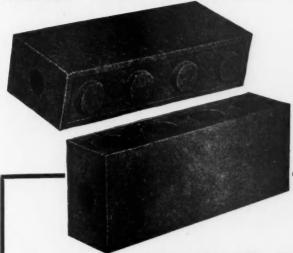
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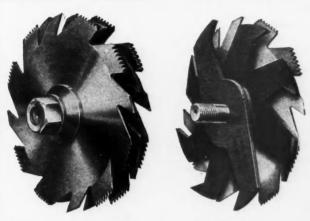
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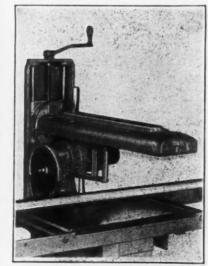
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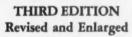
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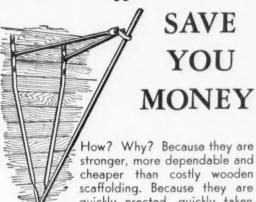
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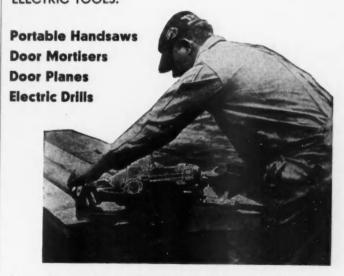
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F. D. KEES MFG. CO., Beatrice, Nebr. 139—Kees Corner Braces and Hardware Specialties—Catalog No. H-14 presents the Kees line of builders' hardware and hardware specialties, including corner braces for window screen frames, screen door guards, metal siding corners, etc.

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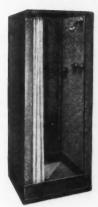
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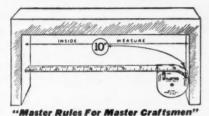
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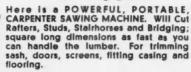
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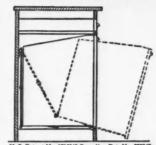


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153 — International Garage Doors —
"New International Life Door"; information regarding this door equipment for garages, warehouses, filling stations,

FRANTZ MFG. CO., Sterling, Ill. 154—Garage Door Equipment—Information regarding the Frantz line of "Over-the-Top" door equipment. Serviceable for modernizing old garages and for equipping new garages.

ALLITH-PROUTY MFG. CO., Dan-

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ROWE MANUFACTURING CO.,

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158-Garage Door Equipment--Full information regarding the Ro-Way door, upward-acting, with many special features. Also regarding the Ro-Way overhead type door electric operators.

THE F. E. MYERS & BRO. CO., Ash-

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162—Kitchen Sinks and Cabinets— "Crane Kitchen Guide—Plans and Ideas for the Modern Kitchen," a 36-page handbook on modern kitchen planning, with dimensioned diagrams of all important kitchen equipment.

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163-Neo-Angle Bathtub - Standard Presents Neo-Angle, the New Angle in Bath Design"; beautifully illustrated brochure in color, with floor plan diagram showing how to arrange a small bathroom for this new style tub.

REPUBLIC STEEL CORP., Cleve-

land, Ohio. 164—Toncan Iron Pipe—Full informa-tion regarding this better pipe for hot and cold water, and heating lines.

THE AMERICAN BRASS CO., Water-

bury, Conn. 165—Anaconda Brass Pipe, Copper Tubes and Fittings—Complete informa-tion contained in a 28-page fully illustrated handbook giving range of appli-cation, suggestions for assembling, specifications, size and weight data,

THE F. E. MYERS & BRO. CO., Ashland, Ohio.

166-Myers Pumps and Water Supply Systems-Full information regarding this most extensive line of pumps, water supply systems and accessories. Myers automatic cellar drainer is also included.

HENRY WEIS MFG. CO., INC., Elkhart, Ind.

167—Shower Stalls—"Weisway Cabinet Showers," an 8-page descriptive catalog and price list covering seven models of cabinet showers in vitreous porcelain. Specifications, construction, designs. finishes, colors, equipment and accessories, sizes, weights, details and sug-gested applications in homes of every size, summer cottages, apartments, hotels are included.

MILWAUKEE STAMPING CO., 876 S. 72nd St., Milwaukee, Wis. 168—Shower Stalls—"Batherite Show-

; new catalog showing models, specifications and suggested uses.

ELKAY MANUFACTURING CO., 4704 Arthington St., Chicago, Ill. 169—Shower Bath Stalls—Data sheets describing the J-30 Junior shower bath stall of all-steel construction, especially adaptable for low cost homes and other

adaptable for low cost homes and other structures.

"Catalog D, Elkay Sturdibuilt Metal Products," is a portfolio of detailed specifications on cabinet sinks, cabinet tops and sink bowls in stainless steel.

INTERNATIONAL CO., 67 Wall St., New York City. 170—Monel Metal—Complete information regarding Inco Monel Metal and the important plumbing equipment manufactured from it, including kitchen sinks and counter tops, faucets and fit-tings, and automatic water heaters. Elaborate portfolios of designs.

GENERAL PORCELAIN ENAMEL-ING & MFG. CO., 4143 Parker Ave.,

Chicago, Ill. 171-Veribrite Sink Tops-Modern Sink for the Modern Kitchen' design and data sheets in color showing models and sizes in the Veribrite line of porcelain enameled one-piece sink tops.

WILLIAM B. LUCKE, Wilmette, Ill. 172—Leak Proof Bath Tub Hanger—
"The Lucke Leak Proof Tub Hanger" is a 16-page booklet with 26 detail drawings showing how to install bathtub in leak proof way.

WESTERN METAL SPECIALTY CO., Milwaukee, Wis. 173—Badger Septic Toilets—A 12-page

catalog giving detailed information regarding this sanitary sewage disposal system which does not require chemicals, sewers or running water.

HEATING, VENTILATING, AIR CONDITIONING

AMERICAN RADIATOR CO., 40 W.

40th St., New York City.

174—American Radiator Conditioning
Systems—"This New Comfort" tells
how American Radiator conditioning systems provide controlled radiator warmth, ventilation, air circulation, air cleaning and humidification.

175-Arco Convectors - New bulletin describing Arco convectors, the efficient cast iron radiator for concealment.

176-Arco Oil Burning Boiler-New 8page handbook on this new boiler engineered for the smaller home.

GENERAL ELECTRIC CO., Air Conditioning Dept., Bloomfield, N. J. 177—Warm Air Conditioner—"Luxurious Automatic Heat and Air Conditioning in a Single Unit," an 8-page booklet showing the exterior and fullcolor cross section of this equipment.

178—Air Conditioner—"The Home with Air Conditioning Stays Modern," a 12-page booklet with concise description of air conditioning and various mechanical methods

179-G-E Gas Furnace-"General Electric Presents Its Latest Achievement, a Furnace for Gas," a 12-page booklet, fully illustrated, with complete operating features

180—G-E Oil Burning Furnace—"Lux-urious Heat," a 16-page booklet with complete story of operating features.

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DAIL STEEL PRODUCTS CO., Lan-

sing, Mich.

184—Dailaire System, Heating, Cooling,
Air Conditioning — 12-page illustrated booklet with complete specifications and details of equipment. Coal-burning and oil-burning units; also industrial units. Information also available on the Wolverine sanitation equipment, septic

I. MUELLER FURNACE CO., Milwaukee, Wis.

185—Heating and Air Conditioning Equipment—"Mueller Climator"; 1936 edition condensed catalog covering com-plete line of heating and air conditioning equipment.

FITZGIBBONS BOILER CO., 570 7th

Ave., New York City.

186—Fitzgibbons Air Conditioner—Full information describing a new compact boiler and air conditioning unit providing all the functions of air conditioning with domestic hot water and boiler heat.

AMERICAN GAS PRODUCTS CORP., 40 W. 40th St., New York City. 187—Ideal Gas Boilers—Ideal automatic house heating is described in an illustrated folder of 16 pages containing ratings, dimensions, chimney data, control devices, etc.

Automatic storage water heaters are also presented in an 8-page catalog, "The Beauty of Cleanliness." Gas-fired radiators, "Unitors," are also illustrated

and described.

CRANE CO., 836 S. Michigan Ave.,

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188—Boilers and Radiators — "Crane Boilers and Radiators," a 56-page handbook presenting eight different styles of boolers, both round and sectional, plain and jacketed, for hot water, steam, vacuum, and vapor-heating systems, to burn coal, oil or gas. Complete specifications as to sizes, performance, construction, etc.

THE EDWARDS MANUFACTUR-ING CO., Cincinnati, Ohio.

189—Edwards Hot-Kold Heating and Winter Air Conditioning Furnace—

"Why Air Condition Our Homes in Winter?" presenting an illustrated dis-cussion of the co-ordinated design and parts of this equipment. Dimensioned drawings with table capacity and speci-

THE MAJESTIC CO., Huntington,

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190—Majestic Furnaces — Information regarding the Majestic Silver Anniversary furnace, and up-to-the-minute air conditioning job, and of the Majestic standard furnace, satisfactorily presented in a series of 4-page illustrated data sheets.

PEERLESS MFG. CO., Inc., Louisville,

191-Coal Stokers - "Peerless Auto-Fyre, Automatic Coal Burner for Homes," fully presented in a 4-page illustrated specification sheet.

LINK-BELT CO., Stoker Div., 2410 W. 18th St., Chicago, Ill.

192—Coal Stokers—"Automatic Heat with Coal," a pamphlet describing the Link-Belt stokers for homes.

REPUBLIC STEEL CORP., Cleve-

193—Rustless Ducts—"Cut Air Conditioning Costs" showing a number of installations where Toncan rust-resisting iron used in air conditioning systems keeps maintenance costs low.

EMERSON ELECTRIC MFG. CO.,

St. Louis, Mo.

194—Furnace Fans — Emerson furnace fans are illustrated and described in an 8-page specification bulletin showing large range of sizes with specially designed blades and motors. Emerson air washers and filter housings and automatic bonnet control equipment also illustrated.

Emerson exhaust fans for offices and shops also presented in an 8-page bulletin, "For Correct Vantilation."

ELECTRICAL SUPPLIES AND EQUIPMENT

ARROW-HART & HEGEMAN ELECTRIC CO., Hartford, Conn. 195—Arrow Wiring Devises and Safety Switches—Catalog No. 5 is a big looseleaf data book with illustrations, sizes and specifications of all Arrow wiring devices. Catalog No. 6, "Safety Starting Switches for Motor and Lighting Circuits," devotes 48 pages to this im-

portant line of equipment.

196—H & H Wiring Devices are presented in Catalog "V," a loose-leaf book of 70 pages. Valuable for those specify-

ing or installing electric wiring.

197—Radio Aerials — Full information regarding the H & H all-wave multicoupler antenna system which provides efficient aerial for a plurality of radio sets is presented in pamphlet.

GENERAL ELECTRIC CO., Construction Materials Div., Bridgeport, Conn.

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198—Wire, Cable and Conduit—"G-E
Code Wire and Cables," a 28-page handbook; "G-E Conduit Product Catalog,"
102 pages; "Where, When, Why and
How to Use G-E Fiber Duct for Under
Floor Wiring," a loose-leaf portfolio of
data sheets; "Wiring for Electric
Ranges and Water Heaters," 25 pages
of safety specifications; "The New G-E
Radial Wiring System," 14 pages of
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GENERAL ELECTRIC CO., Electric Kitchen Div., Cleveland, Ohio.
199—Electric Kitchen Equipment —
"Planning a General Electric Kitchen," a 32-page book giving complete specifications of General Electric refrigerators, ranges, dishwashers and kitchen waste units.

WESTINGHOUSE ELECTRIC & MFG. CO., Mansfield, Ohio. 200—Electric Kitchens—"You'll Sing at Your Work in a Lovely All-Electric Kitchen," a 24-page portfolio of outstanding beauty and effectiveness presenting electric kitchens designed and equipped by Westinghouse. Old fashioned kitchens researched. ioned kitchens re-equipped and restyled are figured at the small cost per day under FHA easy payment terms.

VICTOR ELECTRIC PRODUCTS Inc., Cincinnati, Ohio.
201—Kitchen Ventilator— "The New Victor In-Bilt Ventilator," a series of data sheets showing the 10-inch and with grille, wall sleeve and shutter as-sembly.

THE EMERSON ELECTRIC MFG. CO., St. Louis, Mo. 202—Emerson Ventilating Fans—"Modern Kitchen Ventilation" shows installations of ventilating fans, both built in and portable models, with speci-fications and prices.

PEERLESS MFG. CO., Inc., Louisville,

-Built-in Heater - "The Peerless Electric Bathroom Heater;" data sheets specifying and describing this piece of equipment.

FRANK ADAM ELECTRIC CO., St.

Louis, Mo. 203A—Electric Heaters—New information regarding the Frank Adam Electric "Quikheter" designed to be built into bathrooms, cozy corners, etc., contained in a new 4-page illustrated folder.

LIGHTOLIER CO., 11 E. 36th St., New

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204—Lighting Fixtures—"The Charm of a Well Lighted Home;" handbook to the selection of beautiful, appropriate lighting fixtures that decorate as well as illuminate the home; 24 pages, 97 photographs.

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City. 205—Telephones — Information regarding telephone installation and service in buildings.

HEATILATOR CO., Syracuse, N. Y. 206—Heatilator Fireplace—"Heatilator, the Fireplace that Circulates Heat," a 20-page booklet that describes the Heatilator and includes complete specifica-tions, installation information and photographs of suggested and actual fire-

BENNETT FIREPLACE CORP., Norwich, N. Y. 207—Fireplace Heating Units—Infor-

mation in attractive illustrated form on the Bennett fireplace construction, built to circulate heat. "What a Modern Fire-place Can Do" is a 12-page booklet with pictures, drawings and details.

THE READYBUILT PRODUCTS CO., Baltimore, Md.

208—Fireplaces — "Readybuilt Fireplaces;" catalog illustrating large variety of beautiful fireplaces furnished complete ready to install in hour's time of handy man, for gas or electricity.

SUPERIOR FIREPLACE CO., Los Angeles, Calif.

208A—Fireplaces—Full information regarding the line of ready-to-install ornamental fireplaces comprising this line.

THE BRECHER CO., 433 W. Jefferson St., Louisville, Ky.
209—Mantelpieces and Fireplace Accessories—72-page catalog showing many attractive mantel designs, together with

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wood and gas burning.

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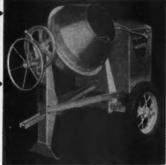
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PEERLESS MFG. CORP., 1400 W. Ormsby Ave., Louisville, Ky.

211—Dome Dampers and Coal Windows -Data sheets giving full information on

these two important items.

THE MAJESTIC CO., Huntington,

212-Majestic Building Products-A 24page catalog on Majestic coal chutes, garbage receivers, package receivers, fireplace dampers, mail boxes, cleanout doors, etc.

MIAMI CABINET DIV., The Philip

Carey Co., Middletown, Ohio.

213—Bathroom Cabinets — The most complete bathroom cabinet catalog offered, 24 pages of illustrations and detail drawings. Also information on dressing room mirrors and the Oxford type mirrored cabinet.

FARLEY & LOETSCHER MFG. CO.,

Dubuque, Iowa.

214—Disappearing Stairs—"Use That
Extra Attic Space," a 6-page folder with
description of operation and installation; also tables showing required space.

FRAZIER STAIR CO., 1817 Banksville

Ave., Pittsburgh, Pa.
215—Disappearing Stairs—"Save Space," a neat illustrated folder presenting the construction details, sizes, etc., of Frazier disappearing stairs.

MARSCHKE CO., 551 University Ave., St. Paul, Minn.

216-Folding Attic Stairs-"Marco Folding Stairs"; illustrated data sheet showing how to add a room to your room with a Marco folding stairway.

KIMBALL BROS., Council Bluffs, Ia. 217—Elevators—Information regarding the Kimball line of elevators.

SEDGWICK MACHINE WORKS, 150 W. 15th St., New York City.

218—Dumb Waiters and Elevators— Complete information regarding residential elevators presented in two interesting booklets, "Sedgwick Mechanical Servants in the Home," and "For Those Who Cannot or Should Not Climb Stairs."

GEORGE KOCH SONS, 2112 Penn St.,

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219—Ornamental Iron and Awnings—
"Metal Awnings"; folder featuring 6
styles of metal door awnings to protect entrance doors on frame, brick or stucco homes.

CINCINNATI MFG. CO., Cincinnati,

219A-Window and Door Screens-Full information regarding the complete line of frameless window and door screens offered.

CLAY EQUIPMENT CORP., Cedar

Falls, Ia.
220—Metal Window Frames and Barn Windows-Full information regarding the Clay line of galvanized metal ventilating windows.

450 Seventh Ave., New York City. 221—Umbrella Cabinet—Information regarding the new built-in "Brella Hangar," a neat ventilated cabinet which Hangar, enhances the sales and rental value of

INSULATION MATERIALS

any home or apartment.

THE INSULITE CO., Minneapolis, Minn.

222-Insulite Insulation-"Make Your Home Comfortable, Convenient and Enjoyable," an interesting discussion of insulation products, with suggestions for their use.

Also a low cost home folder presenting analysis of vital facts regarding home

construction and maintenance.

223—Bildrite Sheathing—"You Get a
Cash Bonus Every Year When You Use
Bildrite Sheathing," a 6-page portfolio relating the story of a revolutionary new sheathing that insulates as it builds.

THE CELOTEX CORP., 919 N. Michigan Ave., Chicago, Ill.

224-Celotex Insulation, Lath and Interior Finish-Full information regarding Celotex board as a structural insulating material. Also a new booklet, "Smooth and Lovely, Always," featuring Celotex lath, an insulating plaster base. "Beautiful Modern Interiors" is a 16-page folder with complete details about various interior finishes with Celotex, wall

and ceiling design.
225—Celotex Sheathing Board—New 8page book on Celotex sheathing board, giving complete information with photographs, diagrams and drawings on this board which builds, insulates and

protects.

MASONITE CORP., 111 W. Washing-

ton St., Chicago, Ill. 226—Masonite Products—"Masonite," 24-page handbook of Masonite products including standard and tempered Presdwood, insulation, standard and de luxe Quartrboard, insulating lath, cushioned flooring and Temprtile. Their many uses in remodeling and new construction of houses, stores and offices described and illustrated.

WOOD CONVERSION CO., St. Paul,

227—Balsam-Wool—"Balsam-Wool Sealed Insulation," a new handbook showing why the careful selection of insulation is necessary, how to judge an insulating material, and the qualities which determine the permanence of insulation.

Also complete information on Nu-Wood structural fiber board insulation.

ARMSTRONG CORK PRODUCTS CO., Lancaster, Pa.

228—Temlok Building Insulation—
"Lock Out Winter's Cold and Summer's Heat," a 12-page booklet illustrating Temlok sheathing, lath and interior forsiches. finishes.

JOHNS-MANVILLE, 22 E. 40th St.,

New York City.
229—Home Insulation—"Fair and Warmer Says the Weather Man," a fas-cinating story of Johns-Manville Rock Wool home insulation for pneumatic installation in existing dwellings to provide year around comfort and fuel economy; 22 pages with questions and answers.

Also an important book on insulation material, "How to Modernize and Build with Johns-Manville Insulating Board"; 28 pages of photographs and details.

THE RUBEROID CO., 500 Fifth Ave.,

New York City.

230—Ruberoid Mineral Wool—"Genuine Ruberoid Mineral Wool," a folder describing the advantages of insulating a house with Ruberoid Mineral Wool house insulation.

KEASBEY & MATTISON CO., Am-

bler, Pa.
231—Insulation — Full information regarding the Keasbey & Mattison line of fiber insulation for pipes, heating plants and general heat-stop purposes.

THE STANDARD LIME & STONE CO., Baltimore, Md.

232—Insulation, Rock Wool—"The Story of America's Greatest Advance in Home Comfort," a portfolio of data sheets presenting complete information on Capitol Rock Wool insulation for both new and existing homes.

SISALKRAFT CO., 205 W. Wacker Drive, Chicago, Ill. 233—Sisalkraft Insulation—"To Keep a House Snug and Tight"; samples and information regarding Sisalkraft impregnated with a special chemical bath which makes the paper resistant to dry

rot and fungus growth.

CONTRACTORS' EQUIPMENT

THE R. L. CARTER DIV., The Stanley Works, New Britain, Conn.
234—Electric Lock Mortiser, Plane and Butt Router—"Carter Door Set," a folder describing the electric equipment for hanging doors, fitting sash and transoms.

DeWALT PRODUCTS CORP., Lan-

caster, Pa.

236-Power Woodworkers-"The De-Walt Wonder Worker," a 4-page data sheet illustrating the machines and showing the various operations which can be performed with them. "Power in One Hand" and "DeWalt Cutting Machinery" are new catalogs also available, illustrating these machines, their attachments and use.

PORTER-CABLE MACHINE CO., 1721 N. Salina St., Syracuse, N. Y. 237—Speedmatic Electric Hand Saws—"Manual on the Use of Electric Hand Saws in House Building" describes and illustrates actual time savings made on

various cutting operations.

238—Speedmatic Floor Sanding Machines—"Up Go Floor Sanding Production and Profit"; description of modern methods of sanding floors, edges, stairs, etc. All information regarding the etc. All information regarding "Take-About" portable belt sanders.

SKILSAW, INC., 3310 Elston Ave., Chicago, Ill. 239—Skilsaw Portable Electric Tools-

"Skilsaw, and the Job is Yours," a clever 8-page bulletin illustrating some of the many hundreds of uses for Skilsaw portable power hand saws.

Also information regarding other electric hand tools in the Skilsaw line.

WALKER-TURNER CO., INC., Plainfield, N. J. 240-Bench Saws, Band Saws and Woodworkers - Information regarding the Walker-Turner line of power tools presented in Catalog G6, a 40-page handbook of power equipment.

1936 SWEET Z COMPLETECATALOG

Write Today R STRIP Co. WEATHER Street, New Y able territory open for right Quick returns. METAL East 26th 8

CCURATE Jobbers Wanted

\$155.25 for 1936 BOSS



ESTIMATORS

Two

Cost Guides

By Frank B. Gallagher

For those who really

figure a job - or want

enthusiastic users.

DETROIT

to. Labor constant is based on \$1.00 per hour—easily changed to any wage scale. Every cost unit is backed by

ten authentic records and over 2,000

Get this A.G.C. approved 31/2S heavy duty tilter at this exceptionally low price. Other size mixers at comparatively low prices. Send for free catalog and see for yourself what direct from factory prices, quality, and service can do for you.

> \$10.00 Ea. \$19.00 Pr. Your Check Returned if You are Not Satisfied

> > Over

3500

Costs

Not a

"Snap

the Old

"Law of Average"

MICHIGAN

THE AMERICAN CEMENT MACHINE CO., Inc.

P. O. Box 404, Keokuk, Iowa

THE CARPENTER ESTIMATOR

2136 Conner Avenue

IT'S METAL WE CAN SUPPLY IT



IRON RAILINGS METAL GRATINGS METAL GRILLES METAL TRIM ORNAMENTAL IRON STEEL BEAMS AND

SHEET METAL WORK METAL BUILDINGS METAL AWNINGS METAL VENTILATORS METAL DOORS METAL FLOOR

ALSO STAINLESS STEEL MONEL METAL-BRONZE

Send Specifications or Sketch for Prices

GEORGE KOCH SONS

2112-24 Pennsylvania Street **EVANSVILLE, INDIANA**

AAA1 company, 60 years in business, has dealer territory open on a line of automatic coal burners priced to compete in the smallhome market.

Merchandising plan includes financing by the company . . . floor plan dealer plan.

for display stokers . . sales and engineering assistance...participation in local advertising . . . national advertising . . . traveling representatives to help the dealer survey jobs and close sales.

Write for literature and

LINK-BELT COMPANY, Stoker Division Chicago, Illinois

YSMALL HOL

Designed by R. C. HUNTER, Architect

A collection of fifty designs for small and medium sized homes by a leading New York specialist on small homes. Each print on stiff paper shows a photograph or drawing of a house with floor plan sketches and cubic footage. They are popular suburban styles.

50 plates, 81/2x11 inches, in portfolio:

Regular price \$1.50—Special price...\$1.00

Book Service Department

American Builder and Building Age 30 Church Street, New York, New York

STUDEBAKER

Motor Trucks

METRO MODEL STANDARD MODEL

\$595 and up, chassis at the factory

\$565 and up, chassis at the factory

Ideal Transport for the Building Industry

TRADE-MARK REG. U. S. PAT. OFFICE

SAVE SPACE INCREASE YOUR STORAGE SPACE

Install FRAZIER self-balanced, disappearing attic stairs. These stairs are made of clear stock White Pine with fir panel in door. All hardware cold-rolled steel—no weights or pulleys. Nothing to get out of order. SELF BALANCED an exclusive FRAZIER feature. These stairs can be installed in 30 minutes after opening has been prepared in ceiling.

CONSULT YOUR DEALER OR

FRAZIER STAIR COMPANY 1817-19 BANKSVILLE AVE.

PITTSBURGH, PA.



J. D. WALLACE & CO., 136 S. Cali-

fornia Ave., Chicago, Ill.
241—Wallace Portable Woodworking Machines-Information regarding the Wallace Universal saw, 6-inch and 8inch jointers, lathes, band saws, radial cut-off saw and electric shaper-all popular among contractors, lumber dealers, cabinet shops, pattern shops, etc.

WAPPAT, INC., 7526 Meade St., Pitts-

burgh, Pa. 242—Electric Hand Saws--"Cut Construction Cost," a folder describing and illustrating the many ways in which electric hand saws can be used to save money. Also full information regarding the Wappat door lock mortising machine, portable electric plane and portable electric drill.

WODACK ELECTRIC TOOL CORP., 4630 W. Huron St., Chicago, Ill. 243—Portable Electric Tools—Descrip

tive bulletins on the Wodack "Do-All" electric tools, including drills, hammers, grinders, groovers and the famous Wodack "Do-All" combination hammer and drill.

AMERICAN SAW MILL MACHIN-CO., Hackettstown, N. J.

244—Woodworking Machinery—Bulle-tin No. 82 presents the line of belt and power driven combination woodworkers, saw benches, rip and cut-off saws, hoists, etc., comprising the American line. Special information on shop equipment also available.

C H & E MFG. CO., 3849 N. Palmer St., Milwaukee, Wis.

245—Power Saw Rigs and Pumps— "Home Builder Jr. Combination Woodworker," an 8-page catalog with large illustrations giving complete description and specifications of this portable combination woodworker. Also information regarding the C H & E pumps.

PARKS WOODWORKING MA-CHINE CO., 1524 Knowlton St., Cincin-

nati, Ohio.

246—Woodworking Machinery—"Accept These Helping Hands," an interesting broadside illustrating the Park power woodworker and its many uses.

SIDNEY MACHINE TOOL CO., Sid-

ney, Ohio. 247—Information regarding the Sidney line of power woodworkers.

CARPENTERS MACHINERY CO.,

Philadelphia, Pa. 247A—Electric Carpenter—Full information regarding this efficient, labor-saving power woodworker.

HUTHER BROS. SAW MFG. CO., INC., Rochester, N. Y.

248—Patent Groover or Dado Head—
"Huther Bros. Dado Head Fits Any Saw Mandrel," "Directions for Filing and Fitting Groovers and Circular Saws," "Directions for Setting up Huther Bros. Sash Cutters" and "General Catalog 54" are all available, covering this complete line of power saw cutting heads and saw dressing equipment. heads and saw dressing equipment.

CLARKE SANDING MACHINE CO., Muskegon, Mich.

-Dreadnaught Combination Sander —Information regarding the dustless 8-inch sander, giving speed, power and endurance in floor sanding. LINCOLN-SCHLUETER FLOOR MACHINERY CO., 222 W. Grand Ave., Chicago, Ill.

250—Floor Surfacers—Full information regarding the Speed-O-Lite floor surfacing machine and the Improved Schlueter; special folders giving complete mechanical specifications and detailed illustrations tailed illustrations.

THE REID-WAY CORP., 2955 1st Ave., N. E., Cedar Rapids, Ia. 251—Reid-Way Floor Sanders—"Out of Yesterday Comes Today"; illustrated catalog for floor surfacing contractors, paint and lumber dealers and general repair men. Gives specifications and details as to budget payment plan.

TRIMSON MANUFACTURING CO., 5713 Euclid Ave., Cleveland, Ohio. 252—Trimson Sander—"Trimson Time-Saver Sander," an illustrated folder showing 8 illustrations with descriptive material and specifications of this "four machines in one.'

AMERICAN CEMENT MACHINE CO., Keokuk, Ia.

-Boss Concrete Mixers-Full information regarding the A. G. C. approved concrete mixer and the Boss single and double drum contractors' hoist. Each presented in a new 24-page catalog with complete specifications and prices. In-formation also available on Boss roller bearing concrete cart and gravity type dump bodies.

COLORCRETE INDUSTRIES, INC., 500 Ottawa Ave., Holland, Mich.
254—Colorcrete Stucco Spraying Machines and Materials—"Confidential Book No. 6" on concrete stucco spraying, a 12-page illustrated handbook on this equipment and method, with exam-

ples and data on actual work.

255-Concrete Molds and Equipment-Information regarding molds for producing ornamental pottery and garden furniture; also sewer and culvert pipe, available in well illustrated catalog. "Equipment for the Manufacture of Concrete Specialties" is a 24-page catalog showing mixers for handling semidry and plastic mixtures.

CONSTRUCTION MACHINERY

CO., Waterloo, Ia. 256—Concrete Mixers--"The New Wonder 31/2-S," an 8-page illustrated booklet in colors showing the several models of these small trailer type concrete mixers. Also information regarding all-steel wheelbarrows and pneumatic tired concrete and material carts.

E. DUNN MFG. CO., Holland, Mich.

-Concrete Products Manufacturing 257--"Four Keys to Success in the Building Industry" is a comprehensive handbook pointing out the opportunities today in every city for the manufacture of concrete brick. Data sheets describe the Dunbrik line production machinery which makes a new low cost, light weight cement brick.

THE JAEGER MACHINE CO., 521 Dublin Ave., Columbus, Ohio. 258—Concrete Mixers and Truck Mixers—Elaborate catalogs presenting the mechanical features of Jaeger tilting and non-tilting mixers for concrete, mortar, plaster. In sizes ranging from 3½-S to 56-S. Also concrete carts.

Jaeger truck mixers are presented in a 32-page specification book; sizes range from 1 to 5 cu. yds.; information also on the arrangement and set-up of efficient plants for manufacturing readymixed concrete.

Jaeger centrifugal pumps are also offered and fully described.

KOEHRING CO., 3026 W. Concordia Ave., Milwaukee, Wis. 259—Kwik-Mix Mixers—An illustrated catalog of 16 pages giving full mechanical specifications of the Kwik-Mix concrete mixers and accessories offered by

RANSOME CONCRETE MACHIN-ERY CO., Dunellen, N. J. 259A—Concrete Mixers—Full information regarding the extensive Ransome line of concreting equipment.

LANSING CO., Lansing, Mich. 260—Contractors' Equipment — "Lansing Equipment for Contractors" is a 24-page booklet containing photographs and specifications of concrete mixers, hoists, wheelbarrows with pneumatic rubber wheels, concrete carts with rub-ber wheels and other items of interest to contractors.

LAY-MORE TILE MACHINE CO., Crawfordsville, Ind. 261—Interlocking Building Tile—"The Way to a Beautiful Home," a 2-color folder explaining low cost of permanent, insulated and fireproof construction. "You manufacture the tile at less cost-anyone can lay them."

THE T. L. SMITH CO., 2835 N. 32nd St., Milwaukee, Wis. 262-Smith Mixers-A series of bulletins, well illustrated, giving complete mechanical specifications for both small and large mixers, comprise the line of the T. L. Smith Co.

WARREN-KNIGHT CO., Philadelphia,

263-Transits and Levels-The Warren-Knight catalog is 64 pages of pertinent information on transits and levels, including mechanical specifications and drawings illustrating the new models. Wrico lettering guides and Wrigraph drawing devices are also offered; cata logs and charts show 7 styles and 18 sizes of lettering as used by architects, contractors and builders. "No experience required to do perfect lettering with Wrico.'

BETHLEHEM STEEL CO., Bethlehem, Pa. 264—Kalman Steel Column Forms and Floor Pans—Two new bulletins on these important items of contractors' equipment.

D. W. ONAN & SONS, 816 Royalston Ave., Minneapolis, Minn. 265—Complete Electric Plants—Infor-mation regarding the Onan line of alternating current electric plants for contractors' use and for camp and country cottages. Also information on the Onan "Safety Saw," a powerful portable sawing machine for carpenters.

RELIABLE JACK CO., Dayton, Ohio. 266—Reliable Scaffold Brackets—Information picturing and describing these brackets, making clear just how they are used.

"Trouble Saver" BRACKETS



Save You Money

Lyder four Notney
Lyder is costly, and the time spent
in building new staging for each
job soon pays for all the durable
steel "Trouble Saver" brackets you
may need for any contract. One
builder writes: "We could not have
spent our money to better advantage
than to buy Trouble Saver Nail
Attached Brackets."

A Complete Line

Studding Brackets, Nail Attached Brackets, Adjustable Trestles, Lad-der Jacks, Wood Shingles, Single Pole Scaffolds. All time and money savers!

Write for Catalog and Prices

THE STEEL SCAFFOLDING COMPANY

402 East Missouri Street, Evansville, Indiana

THERE IS NO SUBSTITUTE FOR A GENUINE WOOD MANTEL PIECE



Write for our catalog showing 60 Wood Mantels of genuine period design for rooms of any type. Made by craftamen according to the standards of the finest cabinet furniture from selected, thoroughly seasoned poplar—screwed at iointa and sanded to a satin finish ready for decoration. Design shown, (mantel only) No. 688—72" long 52" high, crated f.o.b. Louisville, at a price that will surprise you.

WRITE FOR CATALOGUE The Brecher Company Louisville, Kentucky

COLUMBIA MANTELS

GRADE-MARKED PINE



SUPREME STRUCTURAL WOOD OF THE WORLD

For New Bulletin on Correct Construction Address:

SOUTHERN PINE ASSOCIATION NEW ORLEANS, LOUISIANA

IRON RAILING



BEAUTIFUL **PERMANENT**

For All Interior and Exterior Use

We manufacture iron fence, gates, iron and wire window guards, chain link wire fence, etc. Send us measurements showing your requirements—We will forward suitable illustrations-And quote you prices.

CINCINNATI IRON FENCE CO., INC. 3409 SPRING GROVE AVE. CINCINNATI, OHIO



CONTRACTORS & BUILDING MATERIAL DEALERS

make a substantial profit handling line. You carry no stock. You sell i illustrated catalog printed in colors. Furnished when needed. 100% co-op You can complete our fully

PROMPT SHIPMENTS

includes tile for Bathro fantels. Store Booms, ulkheads, or tibules, Mantels, Store E Fronts, Bulkheads, or any kind of Tile Work. Also Red, Buff. Grey and other colors tile, bathroom fixtures, etc.

CATALOG and Full Information without cost or obligation. Write, We want good representation in every locality.

LLOYD FLOOR & WALL TILE CO.

d 1920 KANSAS CITY, MO.



Full anti-friction bearing. Light weight. Skip shaker. Automatic water tank. Spring mounting. Sizes: 31/2-S, 5-S, 7-S, 10-S.



WRITE FOR LOW

KWIK-MIX CONCRETE MIXER CO. PORT WASHINGTON WISCONSIN

NO MORE HAND SANDING!



Floors, old and new, edges, corners, stairs, railings, trim, doors, under radiators, cupboards, etc., easily and quickly sanded with the Trimson Time-Saver Sander Combination.

Extra Profits on Every Job

Powerful 1 H.P. Motor for good, steady cutting — up to quarter round on both sides. Illumination direct on your work. Easily handled by one man.

Detachable Power Unit and accessories end all hand sanding.

Write for Trimson facts today.

TRIMSON MANUFACTURING CO. 5713 Euclid Avenue, Cleveland, Ohio

QUALITYBILT DISAPPEARING STAIRWAY

Saves Space, Saves Money

SELLS HOMES

Hundreds of new and old homes are prospects for this modern stairway. Guaranteed construction—Highest grade material and workmanship. Strong—Safe—Higid. Easily installed, easily operated.

A REAL OPPORTUNITY FOR EXTRA PROFIT

Let us give you complete information. See your dealer or write us today. AB 436

Farley & Loetscher Mfg. Co. Dubuque, Iowa



catalogs.

THE STEEL SCAFFOLDING CO., INC., 1101 N. Governor St., Evansville, Ind.

267-Steel Scaffold Brackets-Information with specifications and prices on 8 steel scaffolding devices of interest to the small building contractor.
Also information on adjustable steel

trestles for plasterers, piping contrac-tors, general contractors and others. Single pole tubular scaffold, a new type of residential siding scaffold for repair work, stuccoing, weatherboarding, sheathing and applying any type of shingle siding, is also featured.

INTERNATIONAL HARVESTER

CO., Chicago, Ill.

268—International Trucks—A new series of catalogs illustrating and describing the complete 1936 line of motor trucks in several sizes for those engaged in the building industry. "I Drive in the building industry. "I Drive Safely" is a valuable booklet for and about trucks and truck drivers, telling a vital story for anyone who drives. International power units and International tractors for industrial uses are adequately presented in new illustrated

FORD MOTOR CO., Dearborn, Mich. 269-Trucks-Information regarding the new 1936 model Ford trucks for contractors and builders.

CHEVROLET MOTOR CO., Detroit,

270—Motor Trucks—"Chevrolet Half-Ton and 1½-Ton Trucks" is a beautifully presented catalog giving full mechanical specifications, and illustrations of the numerous streamline models of Chevrolet delivery, farm and contractors' trucks now offered.

THE STUDEBAKER CORP., South

Bend, Ind. 271-Motor Trucks - Studebaker 1936 trucks are effectively presented in a color broadside entitled, "A New Kind of Truck. A New Line of Trucks. A New Style in Trucks."

DODGE DIV., Chrysler Corp., Detroit, Mich.

271A-Dodge Trucks-New information regarding the 1936 models comprising the Dodge line of trucks and delivery wagons.

FIRESTONE TIRE & RUBBER CO., Akron, Ohio.

272-Truck and Bus Tires-"Firestone Truck Tire Data Book," a 72-page catalog with 23 detailed drawings to aid in selecting tires, rims and auto supplies for trucks, buses, trailers, tractors and industrial vehicles, giving all necessary data, specifications, charts and diagrams.
Also special folder on "Ground Grip
Tires," the new line of tires that give super traction, eliminating the need for

THE GOODYEAR TIRE & RUBBER CO., INC., Akron, Ohio. 273—Truck and Bus Tires—Full information regarding the Goodyear all-weather tread tires with improved high profile for better traction. Information on extra strong bead construction for heavy, swaying loads.

MECHANICS' TOOLS

THE STANLEY WORKS, New Britain, Conn.

274-Stanley Tools - Full information regarding this very complete line of tools for carpenters and other building mechanics presented in valuable illustrated catalog.

MASTER RULE MFG. CO., INC.,

New York City.

275—Steel Tape Rules—Information giving 8 different uses for the Master inside-measuring steel tape rules, namely, inside-measure, outside and caliper measure, height gauge, depth gauge, flexible measure, radius and layout rulings.

ALBION MANUFACTURING CO., ALBION MANUFACTURING CO., Albert & Martha Sts., Philadelphia, Pa. 276—Calking and Glazing Guns—"The Modernized Pressure Gun," a 4-page folder describing the Albion pressure gun for applying Caulk-O-Seal plastic calking compound, and other aproved calking and clasing compounds. calking and glazing compounds.

PECORA PAINT CO., Philadelphia,

277—Calking Gun—Information regarding the revolutionary high-pressure cartridge calking gun with directions for operating.

J. B. CROFOOT CO., P. O. Box 783,

Chicago, Ill.

278—Screen Tacker — Circular giving full information regarding Crofoot No. 658 screen tacker. "Draw with the claw and tack with a whack" is the principle on which this useful tool operates. Crofoot Perf-O-Matic screen staples also offered.

PASLODE CO., 244 North Bank Drive, Chicago, Ill.

279—Screen Tacker — Information regarding the new thousand load tacker and stapler.

OF SPECIAL INTEREST

E. DUNN MFG. CO., Holland, Mich.

280—Manufacturing Opportunities— Timely information regarding the proved earning power of the Dunbrik machine, products and process. Authorized Dunbrik manufacturers are rapidly being established, each one granted exclusive franchises without cost. Send for "Four Keys to Manufacturing Success"; also for information regarding the Duntex roof tile machine with "Duntex Survey and Manufacturers' Manual."

CORKANSTELE CO., 270 Madison Ave., New York City.

281—Improved Construction Method-

Complete technical and general descriptions of Corkanstele, specifications, illustrations, isometric drawings and Corkanstele merchandising development

FIWALE EQUIPMENT MANUFAC-TURING CO., INC., 64 Reade Street, New York City. 281A—Venetian Blind Hardware—New

ideas in Venetian blinds equipped to operate from the top and providing new 4-way control are brought out in a new

GENERAL HOUSES, INC., 220 S.

State St., Chicago, III.

282—Prefabricated Houses—"General Houses Presents Its Dealer Franchise," an illustrated folder showing four typical models of General Houses designs, together with detailed description and specifications, and offer to contractors and dealers to participate in this grow-

PORTLAND CEMENT ASSN., 33 W. Grand Ave., Chicago, Ill. 283—Houses of Concrete Masonry and of Reinforced Concrete—"22 Low Cost

Concrete Homes" and "Reinforced Concrete Houses—Construction Details." JOHNS-MANVILLE CORP., 22 E. 40th St., New York City. 284—New House Construction—"40

Points You Should Consider in Building

Your New Home."

WEYERHAEUSER SALES CO., St. Paul, Minn. 285—Farm Building Plan Service—"Bet-

ter Farm Buildings for Less Money." CARPENTER ESTIMATOR,

THE CARPENTER ESTIMATOR, 2136 Conner Ave., Detroit, Mich. 288—Estimating Service—Complete information regarding Frank B. Gallagher's two cost guides, "The Carpenter Estimator" and "The Mason Estimator."

American Builder, (April, 1936) 105 W. Adams St., Chicago, III. Please have the following Catalogs listed in this issue sent me-Numbers... Name Street_ State. City_ OCCUPATION* *Please note that occupation must be stated if full service is to be given.

DEALER MARKETING SECTION

A Department of Management Ideas and Sales Helps for Retailers—

Distribution of this Section is to dealers only

Thrill or Shock?

R.E.S. Says: Speaking as one lumberman to another, isn't it time we quit waiting for "The House of Tomorrow" and concerned ourselves with "The House of Today?" Those who insist the modern house should be

changed so completely that you'd never recognize it as a house, have monopolized the stage long enough . . . and got nowhere. Let's get down to the serious business of satisfying the need for homes.

Turn to that section of the Am-

Turn to that section of the American Builder for March which is devoted to home designs and residential architecture.

Can you, Mr. Lumber Dealer, thumb over those pages without experiencing a thrill of pride in

the fact that you are engaged in a business that makes it possible, or at least SHOULD make it possible, for such dreams to come true for many a worthy family in your community?

If these charming homes—these efficient layouts—dont make you actually WANT to go out and show them to everybody in your trading area—then you're in the wrong business!

Somewhere in your neighborhood there are several families that would like to own a home. How eager they will listen to you say: "Here is a house that is beautiful in appearance, ever so livable and efficient. But it's more. It represents the combined thought and experience of some of the country's ablest students of the problem of producing the greatest possible value per dollar in a small house. There is no waste space in it. It is practical, easy to keep, economical to maintain. Built according to specifications, it is more than a lifetime home. Its best recommendation lies in that it will continue to give a feeling of pride and pleasure to its owner through the years."

What merchant in your town has anything to sell that can compete in interest?

What industry anywhere can come within a thousand

miles of offering anything that is more fundamentally necessary to the happiness and well being of the average family?

When you talk HOME you need not take a back seat for any industry, concern or product on the face of the earth.



Here at your finger tips are pictures of glorious little homes—cozy, efficient, economical. Watch Mrs. Prospect's eyes light up as she looks at the attractive living-room, the graceful winding staircase, the dazzling, carefully-planned kitchen, the new ideas incorporated in recreation room, study and bath.

You'll agree, won't you, that it really constitutes a

great selling opportunity?

That's the way we feel about it, too!
And yet within the last week we visited two lumber yards located in a city of more than 200,000 population and in both cases the dealers advised us that they didn't have a house plan in their office and didn't know where to get a good one!

Doesn't that give you pretty much of a shock?—R.E.S.

SAFETY OR SPEED?

WHY all this sudden need for speed in connection with the financing of a home under Title 2?
Everywhere we go dealers are saying, "Too slow."
Is it?

Why isn't it better to go a bit slower—play safer?
Building a home is the biggest single undertaking in
the lifetime of the average family. They wait years
before attempting to start. Then they want to move in
the next day!

(Continued to page 172)

DON'T MISS THIS ADDED VALUE

"R.E.S.," the mystery man who sure knows his stuff—on this page and the next.

MODEL lumber store—it was exhibited at the Northwestern convention and is modernizing hundreds of yard offices throughout the Northwest—maybe YOU could get an idea from it, pages 173 to 175.

LOW cost house plans—are you exposing your customers and prospects to these sales-making designs? Put them to work and they will work for you—pages 176 to 181.

PERSONALITY in your newspaper advertising! Why not try out some of Mrs. Williams' ideas by borrowing some

of her folksy jingles for your own copy—see pages 182, 183.

CORN cribs, new ideas. Build them in spare time; sell them to farmers. Photos and details pages 184, 185.

TREATED lumber on the farm. Here is an idea for a profitable sale page 186.

A. W. analyzes roofs. Good meat in this article—page 188.

LEGAL questions answered. Don't miss these —page 200.

SALES helps for dealers and new catalogs offered—page 204.

ADVERTISERS' index-page 206.

R. E. S. SAYS

(Continued from page 171)

But would they if dealers used "delays" as sales ad-

vantages, which is exactly what they are.

Safety, not speed, should be the controlling factor in the financing and building of a home. Haste makes waste—and mistakes. "Red tape" is another word for protection when it calls for appraisals and inspections.

Safety calls for the slow bell.

When money is invested for any purpose it should be properly secured. No investment deserves greater protection than that made in a home. The losses to borrowers as well as lenders of money for home building has been a national disgrace for years. To eliminate the hazards caused by unsound practices, whether the result of viciousness or carelessness, is one of the first objectives of the Federal Housing Administration.

The borrower is required to comply with certain regulations in order that the building of his home may be a sound venture for him. A set of standards is established which the house he builds must meet. For instance:

It must be located in a good neighborhood—surroundings have everything to do with a home's real value. It must be properly designed and planned-appearance and usability influence value. It must be substantially builta home that has been built of inferior materials and its construction skimped is expensive to maintain and will not stand up in use. It must be in keeping with the builder's income-overspending is not a wise business step and must not be permitted in the home owner's best interests.

It is every lumber dealer's obligation to see that the applicant proceeds in the right manner. It is only good sense to make certain that the home represent sound value, be suited to the needs of the family and within

the reach of the borrower.

Time is required to settle the host of problems that arise. Urge caution and patience. Your customer will have added confidence in you as you help him adapt his plan and program to the regulations established in his interest as much as in the interest of the lender.—R.E.S.

EASY JOB

IIT HAVE the easiest advertising job of any retailer in

A well-known Illinois retailer was speaking. That

statement made us prick up our ears.
"Yes, it's true," he continued. "But it wasn't always the case. I used to run an advertisement about paintor lumber-or cement-or roofing-or scores of other things I sold.

"I got nowhere. Don't suppose a woman in this town ever read a word. I had no inquiries. I-began to wonder if it paid. When the depression hit I quit. In 1935 I

started again-reluctantly.

"Now I have the answer! I've got the interest of the women-and the men-of the town. I've got 'em all talking. They think I'm some pumpkins. And I'm spending less money by far for advertising than I used to spend.

"How?

"Here is a typical ad. It's two columns wide and eight inches long. Notice that attractive house at the top and the two floor plans underneath. What else do you see in the same glance? Why the very thing you want to know—\$32.50 per month! That's what I never could put there before and it's the first question everybody asks-not how much for the house but how much

"Notice I haven't said very much about materials or anything else. I show the picture of the house—the room arrangements—and quote the price in the ONLY LANGUAGE MY PROSPECTS CAN UNDER-STAND-by the month. Just like Ford does.

"But the big thing I really do is to offer to handle all

details-including the financing.

"By the way, I've already sold three houses as a direct result of that ad—not the same house of course—and I've just had another inquiry by phone."

And so we went on our way rejoicing. Mr. Lumber Dealer had found a way to advertise everything in his lumber yard at one fell swoop with a small ad that excited the interest of every one in his town.

Yes indeed it IS an easy job!—R.E.S.

PROOF

HERE is an interesting letter that we just received from a well-known lumber dealer. We pass it on for your consideration because we believe his experience is more or less typical of many other dealers. He writes:

"As a youth I always had a wholesome respect for the construction industry and when I went into business for myself I chose the retail lumber business as being the most important part of it all, for the reason that I felt that the retail lumber merchant had the opportunity to help develop and carry through to completion the plans of thousands of persons whose great ambition it

was to 'Own a Home of Our Own.'

'Many a time I keenly regretted my inability to give the complete service that I felt should be a part of the retail lumber industry; since, to the prospective home owner, the big trouble was finance and this I was not always able to supply. This has been particularly true since 1931. The banks, that had until then been cooperating, ceased to look upon the retail lumber business with as much favor as in previous years. That at least was my experience and we had no outlet where we could take the note of a customer, no matter how good his credit might be, for discount.

"Determining to stay in my chosen field and at the same time meet my obligations, it was quite apparent that with the reduced volume of business I could do now because of the lack of available funds to finance time payment jobs, expenses had to be curtailed and what we did sell had to be sold to customers who had ready cash or at least could liquidate their account within a rea-

sonable length of time.

'This group of buyers began getting smaller as their ready cash dwindled or, as was more frequently the case, it was so much easier for them to buy other things on a time payment basis that more of each dollar was going for things not particularly identified with construction, remodeling, or repairing. I watched this trend and was worried many times because I feared the inherent desire of our American citizenry to be home owners was in danger of being changed to a desire for things of lesser value to our national life.

"Early in 1933 I noted a change and here is how it was brought forcibly to my attention. One day I noticed someone digging in what appeared to be a field on the edge of our city and was told that a farm had been laid out in acre parcels and that quite a lot of it had been sold. I walked across the meadow and found that a young man and woman were both busily engaged in digging a trench. Upon inquiry I learned that, being

(Continued to page 196)



STOCK doorway serves as model store millwork demonstration.

WITH MUCH ballyhoo the stores of the proverbial "butcher, baker and candle-stick maker," along with the goods that each sells, have undergone radical changes to maintain and increase sales. Experts in each line of merchandising have worked out ideal plans so that the buyer might first be attracted to the point of sale, and then efficiently served. The lumber and building material stores should be no exception in this campaign of modernized selling. Products have been vastly improved and call for a place where they can adequately be displayed.

To demonstrate the possibility of a modern salesroom D. J. C. Parsons, architect of the Northwestern Lumbermen's Association, planned the model store exhibited at

The Open Door To Increased SALES

Model Store Shown at Northwestern Lumbermen's Meeting Has Ideal Layout for Merchandising Today's Market

the recent Association convention in Minneapolis. The important features of the store can be viewed in a photographic tour provided by the illustrations.

First, the entrance way—a well designed stock doorway serves both as a millwork demonstration and gives the prospective customer a good impression of the place of business. Truly an open door to increased sales!

Immediately surrounding this feature are shingled wall surfaces with a pair of neat lighting fixtures flanking it. Front walls to the left (not in the picture) are sided; the side walls extending to the right are covered with two patterns of asbestos siding and a panel of V-jointed, end-matched, vertical siding. The small section of roof showing is of composition shingle and extends down the side to a section displaying raised seam galvanized steel roofing. A single window along this side is fitted with green, louvered shutters; trim is cream.



INTERIOR of model store displayed at Northwestern Convention looking toward the rear from entranceway. The space to be used as an office location is indicated by a blank panel on the end wall.



FRONT end of store shows paint shelves, storage cupboards and wrapping counter on right; cement, shingle and brick displays to left.

Upon entering the store and looking toward the office end, an easel display of flooring is seen at the right. Next beyond this is a cabinet of composition shingle panels. The top takes two panels at one time for display. An easel holding literature on Portland cement stands at the far side of this exhibit. Above, on the wall, various sheet metal products are shown on a panel.

Going farther to the rear of the store, a consultation table is provided for the use of customers looking over plan material and conferring with a sales person. The top of this table is attractively finished oak block flooring. To the right, above the table are three pre-fitted outswinging casements; beyond it, a built-in ironing board.

At the far end, accommodations for a general office and counter, and a door which could lead to a private office, are pointed out by the black painted wood letters. Between the two offices shingle wall construction and samples are shown; to the left, a glass-cutting machine demonstration. Continuing around the showroom, a door to the yard is on right of the hardware case which was built of pine by a local mill. The door panels of this

COMPLETE ROSE BUILDING CARRY AND A STATE OF THE PARTY OF

DISPLAY window is well lighted with six reflectors using 150 watt bulbs. Bulkhead is painted black; the background, orange.

case are removable for easy replacement of hardware samples. Illuminated display of leader items on the sloping counter below the shorter center doors and 27 nail containers, each holding 125 pounds, are handily located. Turning around and facing the front of the store, one gets the view as seen in the illustration at the top of the page. Cabinet, shelf and counter space is laid out so that it can be used for paint brushes, building paper, samples, plan books, and other items which can be arranged according to the dealer's idea of convenience. The paint shelves extend from the top of the three-foot counter to a height of seven feet. Adjustable shelving allows for the best stocking of cans of various sizes; that used in the model store is in three-foot sections, with shelves 11½ inches wide.

All counters are covered with black tempered wood fibre board with narrow strips of the same material for the edges, and applied with linoleum cement and brads. A seven-foot roll of building paper is mounted out of sight behind the wrapping counter in the base section so that it can be unrolled and cut against a projecting strip of fibre board. Square foot sales from heavy rolls are made with less labor by this method. A 2 x 7 foot wrapping and utility counter is placed in front of the paint section; space underneath can be used for paper, string, plan books, and other miscellaneous items. The short section of shelving along the front wall holds a sample case of wall tile. The remainder of the front end of the store is taken up by the show window, an all-important item in any store; a wall board finish demonstration panel stands back of it.

Good lighting is an important feature of window displays since they constitute silent salesmen who work after the store is closed. The window chosen was of the small type with a background, as it is believed that such a window allows for small unified displays which can be changed frequently. However, some dealers prefer a large window without a background so that the store itself becomes the display. The other side of the argument is that it is better to have one attractive small win-

dow than several large ones in which the interest is scattered. An outside view of the window is also shown,

with a display of plan service material.

Note the neatness of the extruded aluminum front, and the simplicity of the background, which is made of 3% inch plywood painted orange and extending 2'6" above bulkhead level. The latter is painted a dull black to eliminate reflection. Six reflectors resting on flush mounting rings take 150 watt clear bulbs. This window attracted the eye from a distance of 200 feet, yet there is no glare inside or out.

Returning to the interior of the store, the lighting there is likewise effective and worth consideration. The six units used to light the main store are moderately priced, semi-indirect commercial fixtures. Equipped with three 200 and three 300 watt bulbs, very good light of nearly 20 foot candles is delivered at table height. A light colored ceiling is desirable when considering light-

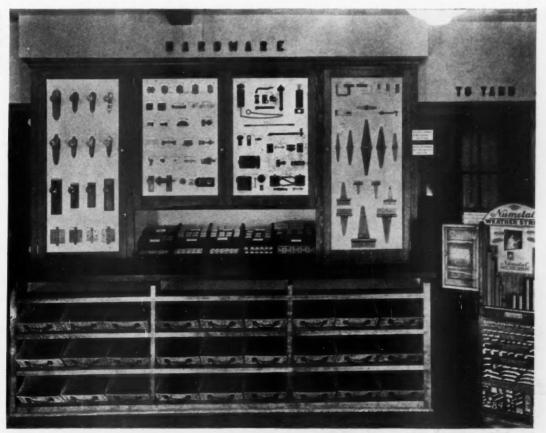
32:0° E W A HARDWARE PRIV OFFICE 0 COUNTER OW CEILING GEN -CEILING BEAMS OFFICE 0 CONS SHINGLE FLOOR PLAN OF LUMBER & BLDG. MATERIALS STORE LIGHT FIXTURES O

ing efficiency. This leads us to further consideration of the walls and ceilings which are, in themselves, excellent displays of various materials in use. The ceiling is divided into three panels by two beams, each section being covered with a different brand of ceiling tile showing these products as applied. The borders were worked out to harmonize the sections.

Starting around at the entrance again the wall on the right is a large sheet of insulating board wallpapered. In the corner a section of the board is left off and the Rock Wool insulation beneath is exposed. A double-hung window in this wall is a pre-fitted, weightless type equipped with weatherstripping and ventilating storm sash. A Venetian blind completes this demonstration. The rear portion of this wall has a wainscot of aluminum surfaced wallboard with insulating planks above. The office end of the room is finished with gypsum wallboard having a knotty pine effect on the surface. Interior woodwork

is a combination of finishes in stained walnut and chamois color paint. While there have been a good many products built into this showroom as demonstrations, the remarkable feature is that, because of careful planning, it all hangs together as a unit, and is not spotty or disconnected. The floor plan shows the relation of these various features as they have been described. It will be noticed that the size of the store itself is 18 by 32 feet. A width of 18 feet was chosen because a check-up reveals that in many yard buildings, a space of this width was available for display room. The 32 foot length represents a minimum and can be increased where more space is needed. However, for a small yard, the layout shown should be satisfactory. Where necessary, the plan can of course be reversed. However, when planning such a store, any changes made should not sacrifice the essential features.

ABOVE, floor plan of model lumber store shows layout of features in a space 18x32 feet which represents size available in average yard.



RIGHT, pine hardware case built by a local mill has removable panels. Display in center is illuminated for leader items. Twenty-seven nail containers below hold 125 pounds apiece.

STOCK PLANS

Through Retail Lumber Dealers

The Low Cost Plans illustrated in this Department are available to Dealers at a moderate cost from the service agencies mentioned

RETAIL DEALERS are offered this additional service of low cost home and farm building designs, illustrated here through the courtesy of well known associations and plan service agencies which are named, with address, in each instance, and from whom complete working plans, specifications, etc., can be immediately secured by dealers on request, the cost of such service being nominal.

THE popularity of this service of selected plans of low cost homes and farm buildings in the Dealer Section of the American Builder is becoming more apparent every month. As the home building season develops and dealers are more and more referring to these plans and making use of them in their talks with prospective customers, the real sales value of such material is demonstrated. There is a freshness and novelty about these designs, selected carefully from the many offered and presented in this attractive way, which dealers are finding to possess a strong sales punch with the home seeking

public. Backed up, as these plans are, by prompt and efficient blueprint service from the most responsible agencies, this department gives dealers a unique business-building auxiliary that they are coming more and more to appreciate.

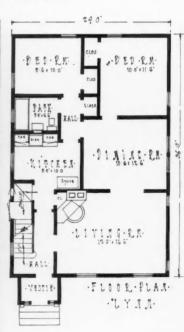
"THE LYNN"—5 ROOMS

HERE is a charming bungalow with a Colonial entrance and window blinds that give it an inviting and homelike touch. The good sized living room with its cheerful fireplace makes a delightful place to entertain friends. The kitchen stove with its chimney connection makes it practical for the country where coal or wood is burned. A stairway is provided for upstairs rooms,

The width of 24 feet makes a bungalow fit nicely into a narrow city lot. A garage opening on the alley will leave a nice backyard garden space.

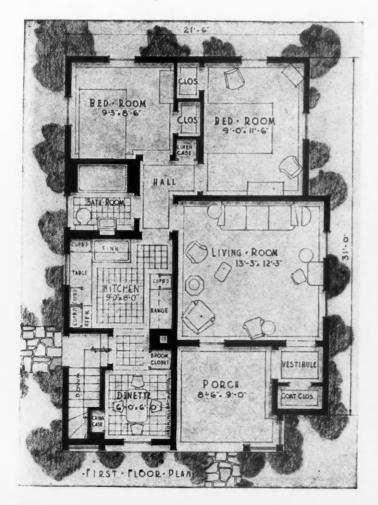
"THE LYNN" is a well arranged five-room cottage 24 by 36 feet, designed by the Architectural Dept. of Brown-Blodgett Co., St. Paul, Minn. This features stained shingles for side walls with white trim. Cost Key is 1.093-128-896-38-14-14.







ONE of the most popular of the "Key Homes" sponsored by the Curtis Companies, Inc., Clinton, Iowa, is this four-room, bath and dinette design (Plate No. 6). It contains 13,850 cubic feet with full basement and 8,386 cubic feet without basement. Cost Key is .987-116-666-29-14-12.

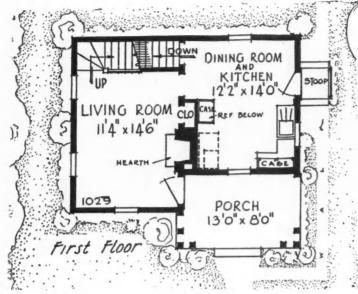


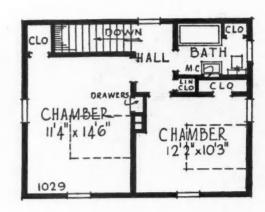
SMALL-BUT OH MY!

Clever Planning Puts a Lot of Usability and Style into this 21½ by 31 Foot House

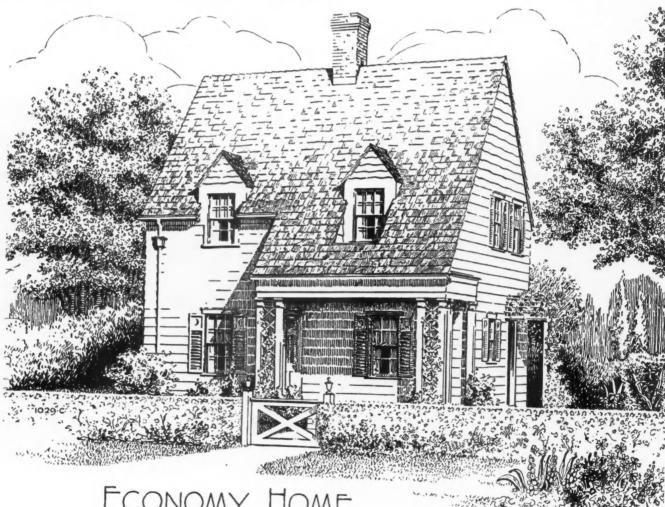
SOMETHING just a little different than the "ordinary run of things" is the semi-enclosed porch of this attractive cottage. Screened during the summer and glassed in for the colder months the porch could truly be made a part of the house. Literally seeming to hug the ground, this home would give the amateur gardener ample opportunity to try his talents at landscaping. Crimson ramblers or Dorothy Perkins on the front trellises would contrast beautifully with the green roof.

The plans give optional treatment for the basement of this little house, one arrangement calling for only the space below kitchen and dinette to be excavated, which is plenty large for a small, modern heating plant or for a cold storage cellar. The other arrangement provides for excavation under the entire structure except for the front porch. If it should be decided to build this house without any basement at all, the space indicated for cellar stairway could be turned into the utility room with concrete floor at grade level to house the heating plant and laundry tub.





Second Floor



ECONOMY HOME

Designed to save space, thus reducing building cost. All rooms are large, convenient and well appointed with modern utilities.



CHEAPER THAN RENTING

Compact 2-Bedroom Home Easy to Own

DESIGN No. 1029-C from the National Plan Service, Inc., Chicago. A very economical house, 25 by 19 feet. Cubic contents 11,600 cubic feet. Cost Key is 1.022-88-427-19-



COMFORT and convenience here for the farm manager and his family.

COMBINATION utility building and home (barn design No. 3001) from the National Plan Service, Inc., Chicago.

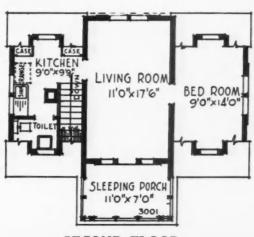
This is a building well designed for a farm or estate office. Cost Key is 1.341-114-0-0-19-12.

APARTMENT ABOVE GARAGE

County Estate, Garage and Office with Pleasant Three-Room Living Quarters Above

HERE is everything under one roof—garage, office, canning kitchen, tool storage, pump room and feed bins on the first floor and a three-room home on the second floor. Just the ideal building with which to make a start on a country place, since it will cost but little more than the general run of small barns. Do not overlook the practical efficiency of this type of building when advising with those planning to get back to the land. Such a building makes a good start toward the farm estate.





SECOND FLOOR

CAMP COMFORT

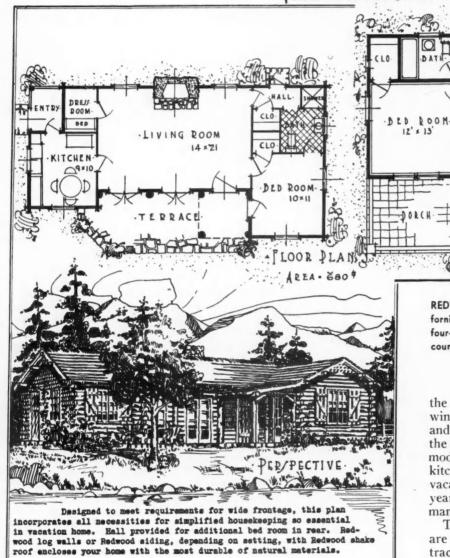
Two Practical Rustic Homes for Vacation Use

THE popular idea in summer cottage designs seems to be to make them rough and rugged, with strong emphasis on log construction. The supply of logs, both of the old fashioned sort and the modern improvements and imitation log siding effects, seems inexhaustible; and that is fortunate for the nature lovers, for no other material or style seems to blend in quite so well with the natural beauty of mountain, lake or shore.

One striking improvement which present day vacation camps seem to display over



Save this house has both personality and character. The living room and entrance projection is set off with the use of Redwood board and battens with Redwood shingle or shake background. A Redwood thatched shingle roof will conform with hipped construction.



fornia Redwood Assn., San Francisco, is a modern four-room layout suitable for either suburban country or camp use. Cost Key is .909-120-(792)-(34)-11-12.

REDWOOD vacation home No. 15 from the Cali-

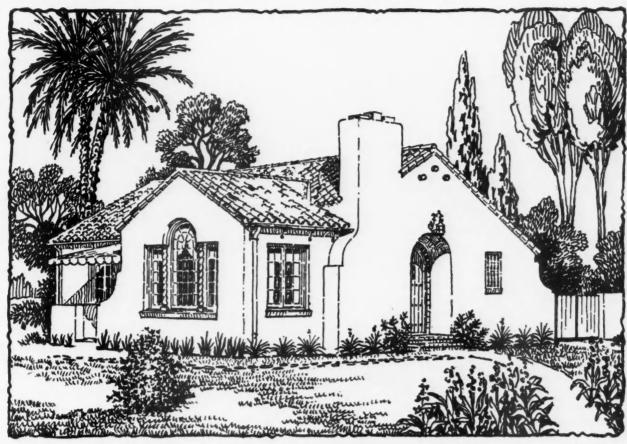
· LIVING ROOM

13' x 22'

the old timers is the abundance of glass in windows and doors to let in the sunlight and to bring those within still closer to the out-of-doors. Comfort conveniences of modern plumbing and adequate heating and kitchen equipment are also supplied in the vacation homes of today in what, a few years ago, would have seemed a lavish manner.

The two designs presented on this page are among the most practical, and yet attractive, of those recently offered. Reports from the innumerable "nation's playgrounds" tell of continuous cottage building without let-up during the recent tough years. Vacation cottage construction is evidently a depression-proof industry. The indications are that now that the turn has come, a veritable flood of such construction will be on.

REDWOOD vacation home No. 13 from the California Redwood Assn., San Francisco, is a broad and low log cabin design. Cost Key is 1.002-130-(722)-(32)-13-10.



DESIGN No. 519 from the Architectural Dept. of the Northwestern Lumbermen's Assn., Minneapolis — one of the best of the popular Spanish type homes. Cost Key is 1.141-140-840-36-15-11.

SPANISH HOME DESIGN

Originated in the South But Now Favored Nationally

WHILE it is usually undesirable to carry out the traditional Spanish floor plan with its inner court or patio, many of the other details so characteristic of this style are well suited to the American home of today. This design incorporates a number of truly Spanish features in a manner which is pleasing and entirely practical.

MATERIALS AND EQUIPMENT

Exterior Walls: Eight inch hollow tile, stuccoed outside, furred inside for lath and plaster.

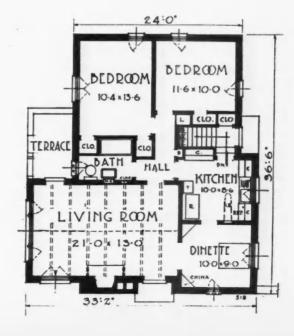
Roof: Red clay tile barrel mission pattern, copper flashing.

Interior Finish and Walls: Birch or gumwood trim in living room and dinette stained walnut, balance of trim enameled. Walls in living room and dinette heavily textured plaster, finished in two tones. Balance of walls smooth and papered.

Floors: Hardwood floors except in kitchen and bath. Linoleum or composition tile in kitchen, ceramic tile in bath.

Mechanical Equipment: Recessed tub, 60 inch with shower; 42-inch sink; laundry trays in basement. Heating, pressure hot water or fan type warm air system, either type to have air conditioning equipment. Number of electrical outlets 60.

Suggested Exterior Color Scheme: Red roof; white stucco; blue trim and sash; grillework stained; gate stained.



LIVING room in this house has an interesting high ceiling with heavy beam rafters exposed, indicated by dotted lines on floor plan.

Dealers Invited

To Try Jingle Copy

THE story of advertising is a fascinating one. It begins back in the old days when old firms had only their names in large impressive black letters in a black edged space resembling a funeral notice and sat back and waited for the magic of that name to begin to work and draw business to them—old stuff which should have been pensioned fifty years ago. It was just a study in black and white, the identical thing which was used by every competitor! Then later, as competition became keener, the dealer timidly added a touch of color, in pastel shades; then on to the colorful

ads of today with human interest, often humorous appeal. Can you picture folks of today pouncing on prim, stilted stuff like the ads of day before yesterday?

The history of the success of our retail lumber business here in Fayetteville, Tennessee, is just another story of friendly informal advertising, couched in homely style, in verse, and often written into these poems are incidents which could have happened in your home, or mine, to you, or to me. I have selected a typical column ad or two for this article, one that created a lot of reader interest and brought us orders.

Which brings me up to the question "How is a fellow going to get his share of the business nowadays in the face of strenuous competition that exists? Of course the answer is, by doing something the other fellow

hasn't thought to do, something to attract business which old timers would call out of the ordinary. The old-time lumber dealer figured that everybody knew him any way, and would come to get his merchandise; and so he wasted little time or money on advertising.

Catch an automobile dealer sitting back on his haunches and saying, as many lumber dealers do, "Quality and Service" in this day and time! Too much humor may be contrary to the accepted standards of good advertising — maybe it's apt to be diverting, but nevertheless, I sit here and scribble foolverse and wise-cracks and folks read 'em and buy! There may be something wrong with my head—"bats in my belfry," as we "uster" say in the old days—but if it works with us, why won't it work with other dealers?

Try some of these ideas — run them in your own newspaper advertising—you're welcome to them—then I'd appreciate your writing me what reaction you get. I'm not not trying to cram a new idea down your throat, but the proof of the pudding is how it affects the

Mrs A. T. Williams (Poetical Peggy, the Lumber Lady) of Fayetteville, Tenn., tells what human, folksey Advertising has done for her business and urges others to try the same

"tummy," so I'm offering you, free of charge, my own pudding, my own very special recipe, or to switch the simile, I'm just the carpenter who builds good will for

your firm and I'm lending you my tools.

An incident will illustrate one of the concrete evidences we have daily of the good-will built by Poetical Peggy's column which appears weekly in a local newspaper. Last summer at the hottest hour of the hottest day of the hottest month in the year, my partner and I decided to go to a very remote community on a little good-will tour. This place lay way back up among the hills, a community where folks were so "pore" that they didn't dare ask for credit, which meant we might dig up a little cash business, which we could certainly use right then. We finally came to a little country store

AS POETICAL PEGGY SEES IT

Woman's mind is cleaner than man's Sez Sammy Such 'n Such The reason is I'm telling you She changes it so much!

(You folks who plan to build this fall why not change your mind and do it now before prices advance?)

We are the folks who put the gain in Bargain when we picked up this Bargain in Hardwood Flooring. Mrs. Joe Faison has it in her lovely remodeled house and is delighted. The John T. Wrights floored their new apartment with it and are they happy? Ask Mrs. J. E. Johnson how she likes hers and she'll tell you she thinks it swell.

Definition of a bachelor—a man who looked before he leapt and didn't leap.

"The Farmer Takes a Wife"—but does he take her to an old run down house with rough floors, leaky roof and Inconveniences? Take it from me, buddy, you'd better come down here and fix it up before you take her, if you want the marriage to take.

We are selling Barrett Shingles for the new roof and for the reroof like nobody's business.

Windows, Doors, Glass, Deadening Felt, Putty.

Oak porch flooring. We had a heck of a time getting it at a low price but we finally did and we're all set for you.

OF ALL SAD WORDS

Here's a tale of a silly old dame
Of course, you'll say it's a shame
But she'd rented I'm told
And was growing quite old
And didn't have a cent to her name!

Folks do a Lot to make your Lot in the Cemetery a Lot more beautiful after you're dead and gone but how about making your Lot in Life better? Build on it!!

Materials bought especially for Sanitary Milk Barns.

Poplar Ceiling — a peach of a grade. Siding, Flooring, Roofing, Framing, Screens.

WISE GUYS MODERNIZE

He bought a little Sheetrock
A pair of new French Doors
He bought some Hardwood Flooring
And a bunch of two by fours!
I could tell you of other things
But don't wanter be a bore
and

I see the truck backin' in Comin'-back-for-more!

(Gosh that was a nice sale 57 squares Roofing plus a little bit of everything else.) Roll Roofing, Metal Roofing.

New house plan books. We keep them for your convenience when you build or remodel. You're more'n welcome to 'em.

Yours for More and Better Homes Poetical Peggy

Williams Lumber Co.

AS POETICAL PEGGY PUTS IT

WHEN-

When the weather man says "warmer" Or perhaps "Continued Fair" And the plumber, like the groundhog, Crawls back into his lair.

When the carpenter looks hungry And the lumber-man looks lank And you've saved your dough thro'

And it's layin' in the bank. When the fishin'-poles and sinkers Have a sly come-hither look And the minnows keep a callin' From the branches and the brooks.

That's the time to call for Plan-Books More truth than poetry, this pome That's the time to get all goin' That's the time to build a home!

(Some more new House Plan Books waiting down here for you.)

By the way, in case you forget, this Hardwood Flooring is going rather fast—hadn't you better get yours before it's too late?

Don't humor the old cow—make her pay her way in a larger milk check. Build your Sanitary Milk Barn Now, before the carpenters all get too busy.

Spring-time is fly-time and screentime. Let us repair your screens or make new ones for you.

DROPPING A HINT

Little drops of water Leakin' over head Makes an awful puddle In a fellow's bed.

(That is, unless he's smart enough to re-roof with the best thing we've ever found in Asphalt Shingles, Old American Thick Shingles, for the new roof—for the re-roof, Asphalt Bilt-up Roofing, Roll Roofing.)

Sheetrock, Ceiling, Pine Flooring. Washington Cedar Shingles.

A LESSON IN FRACTIONS

If one better-half Stays nine-tenths mad Because you pay out rent Would not a Home save interest At an awful big per cent?

(And boy that's not half of it—it saves wear and tear on the lady's disposition and a great big chunk of your peace of mind.)

Poetical Peggy, the Lumberlady

-of-

Williams Lumber Co.

where Mr. Williams got out to inquire the road. I just sat in the car while he went into the store. I waited and waited for his return, grew restless, hot, sorter mad and finally gave a polite honk to remind him. At last he emerged grinning broadly, to tell me that the store-keeper and his wife finding out he was from Fayette-ville, had asked him "Who is this-here Poetical Peggy who writes for the newspapers to advertise lumber?" and upon Mr. W's reply "That's her out there in the car," they launched into a long dissertation on the kick they got out of my column, mom, pop, and chillum and the neighbors, as well, adding that they had gotten together a little money and were going to fix up the house and they were going to do their tradin' with "Poetical Peggy's Lumber Co."!!

Again in a department store in a large city I ran into an old resident of Fayetteville, who had moved away 20 years ago but still owned property back here—property which needed repairs. She told me she read weekly our column—looked forward to it—and when she wanted lumber for these repairs she wrote back to us for it.

Does human interest stuff in advertising pay? The

incidents above have answered you.

I recently read a mighty good book on Advertising called "Slow down the Band-Wagon - the Elephants can't Keep Up," and the gist of it was, Keep your advertising within the mental grasp of the man in the street, the Man in the Factory, the Man on the Farm. Speak his language, the language he understands and uses and he'll listen because you do speak his language. When I feel the stirring of an ambition to write a little better stuff, on a higher plane, this little book tugs at my mental skirts and yanks me back to earth where I belong. In high class literature there's been plenty written for the intelligentsia, but so far as I can find, not enough written to attract Mr. Customer in the corn-field, Mrs. Customer or little Customer, Jr.; and that's why I am seeking new ways to amuse and entertain them, to make them sit up and take notice, step on the gas and stop at Williams Lumber Co. Even in these days of the return of price-cutting, a great big percentage of our business is non-competitive due to a large extent, to the good-will built by our advertising.

> Well, this has been a Long, Long Tale a Winding, but in this old South Land of ours where Men are Men and Women KNOW it here's a little tip to you women folks . . .

> > A little Please
> > A little Dear
> > A little Pout
> > A little tear
> > A little Later
> > A little Hunch
> > Things he likes
> > For Johnny's lunch
> > A little home
> > Before he knew it
> > That's the way
> > The Ladies do it!

The Lumberlady of

Williams Lumber Co.

Yard Built Portable Corn Cribs Add to Dealer's Rural Business

EALERS who are looking for something to interest their farm trade and to further set their yard up as "head-quarters of the building field" will find a dandy item in portable corn cribs. Now that the farmer has some loose change to jingle in his jeans due to better markets and gov-

ernment benefits, this is a timely item to catch his eye and make another sale.

The cribs were designed by Joseph J. Cap of New Prague, Minn., where he manages one of the H. E. Westerman Lumber Company yards. Plans and material lists for two types, oval and round, are shown on the opposite page. The Northwestern Lumbermen's Association has prepared sets of blueprints for their construction and during the Minneapolis Convention early this year displayed a model of one of them built to exact scale, which attracted considerable attention.

The portability of these cribs is their outstanding feature, although other points covered in the design are equally interesting to the farmer. On these, Mr. E. E. Westerman, secretary of the company, made the follow-

ing comment:
"Successful hog raisers have, for a number of years, made it a practice to change feed lots at least once a year, and the portability of this crib plays an important part in the changing of the feed lot. The crib is mounted on skids and can be easily moved to a new location. The old permanent crib has always given the farmer a great deal of labor in transferring his corn to the feed lots and a portable crib eliminates this.

"We have had many favorable comments on the design of the crib in that it looks fine and also keeps the corn very well. It has two vertical vent flues on the inside

Farmers Well Satisfied with Many Advantages of These Cribs—Ready Sales Prove Them Good Side Line

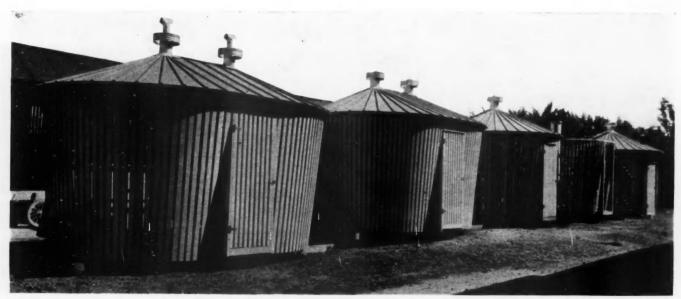
> connected to the ventilators on the roof and the floor is usually made of 1 x 3's spaced approximately about onehalf inch. This feature also has more value than is generally thought of in that any corn crib having an open floor of this type will have no mice nesting in the corn.'

> These cribs can be built in any spare time during off seasons right in the yard and lined up for display as seen in the illustration at the bottom of the page. A farmer catching a glimpse of them is bound to become interested. Attention can be directed to them from time to time during the spring and summer months so that when the fall storage problem comes up or extra capacity is needed, the purchase of one of these cribs will be the answer.

> Mr. Cap sold thirty of them last fall, having had them built in the yard at New Prague by local carpenters. Three sizes were shown-250, 400, and 600 bushel capacities which sold for prices ranging from \$55 to \$90. He reports that all the users are well satisfied and from the standpoint of the yard manager they make a very

nice product to handle as a side line.

When one realizes that this part of the country is not the biggest market for such an item, this volume of sales shows the possibilities that these cribs have. In the corn country a good promotion of the line should make it possible for dealers to build up an even better market for them.



DISPLAY of portable corn cribs designed by Joseph J. Cap, manager of H. E. Westerman Lumber Company's yard at New Prague, Minn., where they were built. Material lists and construction drawings of oval and round types are shown on the opposite page.

WESTERMAN'S CORN CRIBS

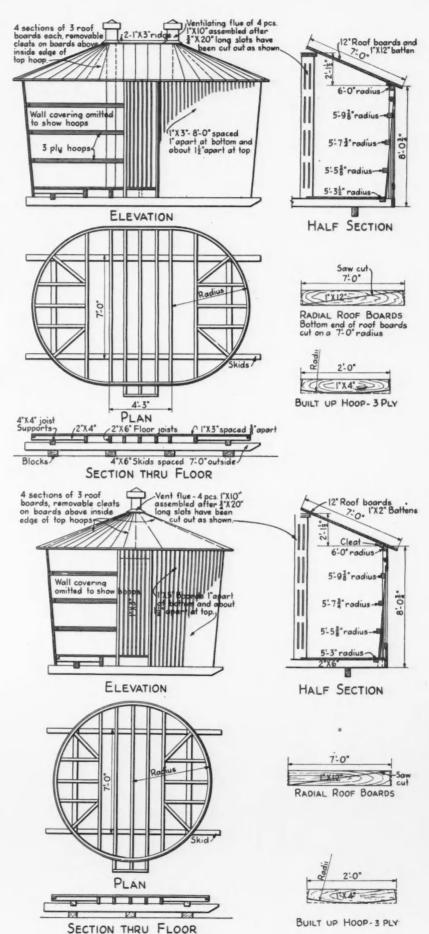
Designed by Joseph J. Cap New Prague, Minn.

MATERIAL LIST FOR OVAL CRIB

FOR OVAL CRIB	
2-4x6-16'-0"Skids	
2-4x4- 7'-0"	
5—2x6—12'-0"Joists	
2—2x6—10'-0"Joists	
5-2x4- 6'-0"Joists	
1—2x6— 6'-0"Joists	
I-2x4- 2'-0"	
2-2x4- 8'-0"	
2—1x2— 8'-0"	
120 Bd. ft. 1x3 (5/8" apart) Floor	
660 Lin. ft. 1x4	
160 pcs. 1x3—8'-0" (1" apart	
at bottom)Walls	
8 pcs. Ix10—10'-0"Ventilating Flue	
33-1x12-7'-0" (radial cut	
diagonally)Roof	
54—1x2—7'-0"Battens	
7—1x3—7'-0" (spaced)Door	
I—Ix4—I2'-0"Door Battens	
2 pcs. 1x3—4'-0"Ridge	
2 lbs. 10d com., 20 lbs. 8d coated nails	
I pr. 3" T-Hinges	
I Hasp and padlock	

MATERIAL LIST FOR ROUND CRIB

FOR ROUND CRIB
2-4x6-12'-0"Skids
2—4x4— 7'-0"Joist Supports
3-2x6-12'-0"Joists
2-2x6-10'-0"Joists
5-2x4- 6'-0"Joists
1-2x6- 6'-0"Joists
I—2x4— 2'-0"
2-2x4- 8'-0"
2—1x2— 8'-0"
80 Bd. ft. 1x3 (5/8" apart) Floor
540 Lin. ft. 1x4
130 pcs. 1x3-8'-0" (11/2"
apart at top)Walls
4 pcs. Ix10—10'-0"Ventilating Flue
23-1x12-7'-0" (cut
diagonally)Roof
44—1x2—7'-0"Battens
7—1x3—8'-0"Door
I—Ix4—I2'-0"
2 lbs. 10d Com., 15 lbs. 8d coated
I pr. 3" T-Hinges
I Hasp and Padlock



Treated Lumber Is Truly Rural

Farms Offer Big Undeveloped Market Where Treated Lumber is Needed Most

Fourth of Series on Treated Lumber

By LYMAN M. FORBES

ARMERS need treated lumber, but do I not get it until someone sells it to them, or at least makes a stock available where they can pick up small quantities whenever they want it. A retail dealer who serves farm trade recently bought a carload of pressure-treated posts. They laid in his yard for a year. He finally set one of the treated posts in the ground in front of his office, with an untreated one beside it, and connected the two with a sign that read: "This post is treated. It will last three times as

long as his untreated one." By that simple, inexpensive bit of advertising he quickly moved the car of posts, and since that time has

sold several additional cars.

Each farmer buys five times as much lumber as his city neighbor. Most farm buildings are subjected to more exposure and decay factors than are ordinarily encountered in urban buildings. The farmer needs treated lumber but is not getting it-not because he doesn't want it, but because he has found it hard to buy. He is a good prospect whom only the dealer can supply profitably and economically in small quantities.

Treated lumber, so far as the farm market is con-

PRESSURE-TREATED creosoted posts and barn lumber assure long life of this attractive farm property near Rockford, III. Shown through courtesy of the American Wood Preservers' Association.

cerned, is like a wheelbarrow. It is of little use until somebody pushes it. A number of things probably have deterred dealers from "getting into" treated lumber more actively. Perhaps they were told at the start that it would enable them to sell highway jobs, state work, government, railroads, and large industrial, only to see this quantity business gobbled up by organizations that

habitually sold direct, or could not meet competition and include a dealer profit. Possibly dealers have been confused by the quarrels, claims, and counter-claims of various treating methods and materials. Perhaps some dealers feel that there has been too much talk about termites. Possibly they were told, or decided for themselves, that they could get more for treated lumber than

later competitive conditions permitted.

The mad scramble for attractive treated lumber markets during the past ten years may have disturbed the dealer until he decided that treating is "bad medicine" and that he would have none of it. On the other hand, experience has shown that dealers can and do sell treated lumber when it is readily available. There is, for instance, one treating plant in a city that serves a considerable trading area. It handles carload orders for mills, and small orders for dealers, who bring in truckloads of untreated lumber of the species, grades, and sizes they want treated. Their loads are immediately replaced from stock by the treating company. In this way many thousands of feet of treated lumber are being distributed each year by dealers in lots of 500 feet or

The natural farm markets are found in sales of treated lumber for barns, silos, stock sheds, shelters, pens, poultry and hog houses, gates, cribs, feed racks and boxes, farmsteads, and other buildings. The post market is normally very good, but at present is said to be disturbed in some parts of the country by a competitive situation. Properly treated fence posts ordinarily show up so favorably from the standpoint of both price and long life that they become a best seller whenever a dealer encourages their use. Agricultural schools are rapidly educating progressive farmers on the advantages and proper

use of treated lumber in their buildings.

Dealers who have been most successful in the sale of treated lumber have put in small stocks of posts, and Number 1 common 2 x 4's, 2 x 6's, 2 x 8's, 2 x 10's, 2 x 12's, rough 4 x 4's, 6 x 6's, 6 x 8's in 14- to 20-foot lengths. They have found it necessary to have the lumber on hand in order to cash in on their recommendations that it be used for sills, joists, floors, and other parts of farm buildings that come in contact with the ground. In this way they have been able to preach and demonstrate quality that more than justified the added price, and have developed well pleased customers who come back for steadily increasing quantities of treated lumber.



sulating job and finally placed an order for \$550.

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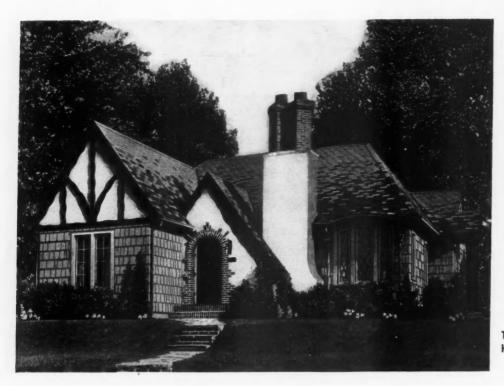
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Analyzing and Valuating Houses



By A. W. HOLT

Director of Service

Merchandizing Council

of Dealer Associations

THE PROCESS of estimating this house by the Valuator method is explained in this lesson.

REGARDLESS of the method anyone uses in estimating the cost of any building, the first essential is to analyze the plan and ascertain certain necessary facts. Thereafter it is simply a matter of procedure as in solving any problem. It's just like a musician learning to play a new song-hit—regardless of the instrument played, the better he can read music, the easier it is to play the piece. Picture plans are the "music" that every dealer must learn to read in order to sell homes successfully.

There are only three TRUE instruments for estimating building costs—detailed list of material or quantity survey, figuring by the square such as Holt Bid, and "valuating" with the House Valuator (available through any lumbermen's association) which is also the basis of Cost Keys shown with *American Builder* plans. Cubical content and square-foot-of-floor methods estimating are "bazookas" that make a noise as does beating on a tin pan when serenading newly weds.

Before taking off a list from plans, it is necessary to compute the actual surface of each floor, the ceiling area, roof, outside walls, linear feet of partition, cornice, baseboards, etc., and the number and size of doors, windows and other "opening units." Then figure "in pieces," such as board feet of lumber, sacks of cement, etc. The same procedure is entailed when figuring by the square, except that costs are calculated "in units" of squares, linear feet, openings, etc.

The House Valuator has eliminated a large portion of that detailed figuring and reduced estimating to the simplest routine possible at this time and, in all probability, for all time. Hundreds of dealers KNOW this to be a fact. They will find this entire article instructive. Others will be benefited by the analysis of the plan, plus a general idea of the simplicity of valuating plans with the House Valuator.

Analyzing the Plan

In order to understand the following explanation, refer to pages 150 to 158 of the March issue and read my roof lesson, if you have not already done so. Then, refer to the floor plan and picture (repeated here for your convenience) as you fill in the basic information required for any method of estimating.

The Cost Key was not given for that plan, but it can be inserted as 1.516-170-1234-52-17-22.

Total Rooms. There are a total of 14 rooms, which are easiest counted to the left and right of the partition be(Continued to page 190)



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SHORTLEAF AND ARKANSAS SOFT PINE Finish, Mouldings, Lineal and Package Trim, Flooring, Ceiling, Siding, Boards; LONGLEAF Timbers, Dimension, Boards, Flooring: Lineated Dimension, Log Cabin Siding; SOUTHERN HARDWOODS: FROSTBRAND Oak Flooring, Oak, Gum and Cypress Mouldings, Lineal and Package Trim, Lumber, Wagon Stock; Cedar Closet Lining; X-ilated Lath.

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PLANTS: Franklin, Ohio-Chicago, Illinois-Fulton, New York Logan-Long on the lable means Long life on the roof

A. W. HOLT

(Continued from page 188)

tween the living room and bedrooms. Starting with the front bedroom as one and count its closet, the hall, bath room, linen closet (unless it is to be casework), closet, rear bed room, dining room, kitchen, rear entry and cellar stair (no door at head of stairs), toilet, living room, vestibule and closet. Insert this in the proper place on a blank valuation form.

Roof Pitch. As explained in my March article, enter "5/12-7/12" in this space on the form to indicate two different pitches.

Cornice. The picture shows a 12-inch cornice at the eaves and C & F (crown and frieze) in the gables, so enter "C&F-12"" in the next space of valuation form.

House Units. Since the main unit of any plan is the largest unit of the same story height, the main unit in this case would be that portion behind the front wall of the living room extended to the left wall, in front of the rear wall of the rear bedroom extended across the dining room and kitchen, and to the left of the right wall of the living room extended across the rear entry. Its size is quickly determined as follows:

The depth would be 36' 6", given to the left of the plan, minus 15' 0" for the 14' 6" front bedroom plus the wall, or 21' 6" deep. The width would be 13' 0" bedroom added to the 23' 6" living room, plus 1' 6" for two walls and one partition, or 38' 0". Enter 21' 6"x38' 0" in space for size of main unit.

Call the front bedroom an added room 15' 0"x14' 0" to indicate it projects 15' 0" out from the main unit.

Call the vestibule an added room 4' 0"x8' 0" and imagine its closet is located in the main unit. These cost rates provide two walls 4' 0" long between the vestibule and bedroom, instead of the partition. This could be considered to make the partition for the closet so will be very slightly liberal.

Compare the width of the rear projection of dining room and kitchen with the 23' 6" living room and call it 20' 0" wide. Enter on valuation form as an added room 7' 0"x20' 0"

The foregoing make three added rooms which deducted from the total of 14 rooms leaves 11 in the main unit. As all House Valuator tables are for an odd number of rooms, figure the main unit as a total of 11 rooms and call the rear entry a projecting room 3' 6" (41' 6" minus 38' 0") by 10' 0".

Although the plan calls the porch a "stoop," since it has porch posts and a roof, it really is a porch. It is the projecting or open-three-sides type, 3' 0"x5' 0" in size.

With all the units of this house listed in their proper places on a valuation form, the cost-rates are quickly given by the House Valuator book or by "Holt's Rapid Estimator" which contains the same tables.

Valuating or "Rating" the Plan

The first thing to keep in mind is that all tables for main units are based on plain gable roofs. This always provides gable walls of the same width as the first dimension in the size column. These gable walls cancel the extra cost of hips for hip roof houses. In this case part of these gables will be required for the front gables and the one over the rear entry. Therefore, figure as though all cornice was 12" projection. Since this is a "50-50" roof of 10" and 14" rise per foot, as explained by March article, call it all ½ pitch or 12" rise per foot of run. Accordingly, the cost-rate is always given in the last column opposite 12" cornice.

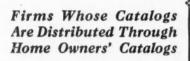
Refer to page 50 of *House Valuator* book and use cost-rate of .987 for the main unit.

(Continued to page 192)

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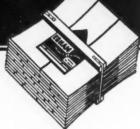
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A. W. HOLT

(Continued from page 190)

Index "Proj. Rm." and find cost-rate of .045 for the projecting room 4' 0"x10' 0". Technically, it is half-way between .032 for 3x10 size and .045 for 4x10, or .039. It is a matter of judgment which to use, but even feet is recommended.

Index "Add Rm." and on page 41, find cost-rate for 14x14 size is .194 as compared to .207 for 14x16. Therefore, .200 would give the cost-rate for the front bedroom. Technically, this provides only 14' walls (first dimension given) at each side, whereas 15' is required. In this case, the "doubled-up" wall between the bedroom and vestibule will take care of this slight deficiency. In other cases such trifles can be disregarded.

On page 40, the cost-rate of .076 is given for the 4x8 vestibule. Also, the rear added room would have a cost-rate of .163 for 8x20 size, minus half the difference between it and .187 for 10x20 size. Therefore, .163 minus .012 gives .151 to insert on valuation form.

Adding the foregoing gives total cost-rate of 1.459 to multiply by the cost of the Basic House to have the cost of this house above the foundation without the variable features of plumbing, heating, lighting, cabinetwork, and fireplace, except for the following equalizations:

The interior door check, because it is impossible to "circle through two or more rooms." The plan shows two outside doors which are ALWAYS provided by main cost-rates. An extra charge must be made for the circle top front door, unless this is the kind included for the Basic House.

The plan shows 22 windows, whereas the cost-rates used provided a total of 18—12 by main unit and two each by the three added room cost-rates used. Projecting room tables do not include windows. Therefore, an extra charge must be madefor four extra windows. These would be a special price in view of the segment-topped triple sash in front.

The porch cost-rate is given on page 31. It is .360 for 4x6 size, but could be called .300 or .320, in view of the difference of .051 between .385 for 4x8 and .436 for 5x8 szes. Multiplying by your cost of the basic porch gives your cost of this one.

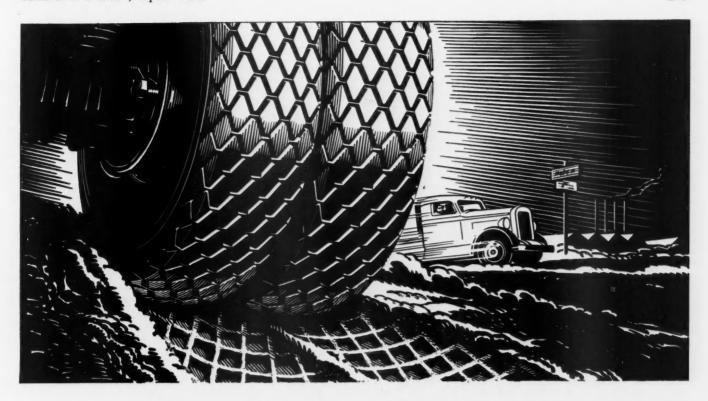
The cost-rate given by the Cost Key, 1.516, includes the extra windows and the porch. In using it, it is only necessary to multiply by the cost of the Basic House and add for changes in specifications, such as the special front door and an extra charge for the diamond-light sash. In ail cases, each user governs specifications—the Cost Key simply includes the necessary number of doors, windows and porches shown by the plan.

Following down the valuation form, you will add for attic flooring and attic stairs, if wanted. These are always extra. The next item is:

Foundation. Adding the extreme width of 41'6" to the extreme depth of 43'6" and doubling gives 170 linear feet of foundation to multiply by your price per linear foot.

Basement Floor. A glance at the top of the valuation form shows the size of each of the house units. The main unit is 21½x38 feet or 817 s. ft. to which is added 35 for the projecting room, 210 for the front bedroom, 32 for the vestibule, and 140 for the rear projection. This makes a total of 1,234 sq. ft. of basement floor PRO-VIDED a full basement is wanted. This is based on outside dimensions and deduction can be made for floor saved by thickness of foundation (lin. ft. multiplied by feet thick), unless this gain is considered to cover the cost of the cellar sash as most users of House Valuator do.

(Continued to page 194)



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The Improved High Profile Goodyear Truck Tires are bigger, sturdier, tougher. They bring to Building Supply trucks longer, more dependable, more economical service.

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There is activity in the building field. Homes are going up. Repairs are being made. There is action on every hand. Lumber dealers aren't dead on their feet, either. Many of them have modernized their establishments and have modernized their selling.

Our field men report an increasing interest in Western Pines. This interest, of course, is reflected at the mills. A steady stream of more and larger orders arrives daily by wire and mail. It is pleasing, too, to receive reports of satisfaction with the output of our mills. Never before has greater care been exercised in milling, seasoning, grading, and other operations that go to make a quality product.

Even when building was at its lowest ebb, our laboratory and experimental work was going forward steadily. Result: A better product and greater knowledge of our woods than ever before. Those dealers who are not familiar with Western Pines, or who have not stocked them lately, should do something about it right away.

The Western Pine Association is launching an educational and promotional campaign which all aggressive dealers will want to tie in with. Write for booklet telling all about Ponderosa Pine. Idaho White Pine and Sugar Pine. It's called "The Western

WESTERN PINE ASSOCIATION

B-1 YEON BUILDING, PORTLAND, OREGON

A. W. HOLT

(Continued from page 192)

Excavation. To excavate a foot larger all around, as is generally done, simply add the 170 lin. ft. foundation to 1,234 sq. ft. of basement floor for 1,404 sq. ft. area to be excavated. Dividing by 27 gives practically 52 cubic yards per foot of depth, as shown by the fourth figure

of all Cost Keys.

Wall Surface. It is not necessary to determine this when valuating a plan, unless a different wall covering is wanted from that included with the Basic House. But, it's always easy to do so, as in this case by multiplying the lin. ft. foundation by height and adding for gables. If eight-foot studs are used on top of the first floor, the walls will be about 9' 6" high including the plates. If the rafters are nailed on top of the ceiling joist instead of plates the walls would be 10' high. In this case, 170 multiplied by 9' 6" gives 1,615 sq. ft. to the plate. Add 56 for the front bedroom gable (8'x14' divided by 2) about 16 sq. ft. for the vestibule gable 4'x8' and about 20 sq. ft. for the rear entry gable which is about 4' high and 10' wide. Therefore, 1,707 sq. ft. which is listed in even squares since it only refers to DIFFERENCES in cost per square of special wall covering as compared to that included with the Basic House.

Roof Area. If you followed my suggestion to figure the roof area in the March issue, your figures should be

something like this:

for 5/12 pitch, or 42%...... 600 sq. ft.

Total ACTUAL roof surface..........2,028 sq. ft.

The Cost Key gives the roof area as 22 squares to provide for the waste for the hips and valleys, quickly figured after the approximate length of one hip is deter-

mined in this way:

Common rafter of main roof is 11' (run) plus 30% (5/12 pitch) or 14.3 feet. If both roofs adjoining hip were 5/12 pitch, the hip rafter would be 26% longer, or approximately 18 ft. long. Referring to roof plan shown in March issue, you could compare all hips and valleys with this length, thus: Front gable valley and hip equals one, vestibule valleys another, four for rear projection and total of three for balance of hips and valleys of main unit. This makes a total of nine to multiply by 18 feet in length for 162 linear feet hips and valleys. Adding at the rate of one square foot more roof surface per linear foot (as though shingles projected six inches beyond hip or valley) gives 162 sq. ft. to add to 2,028, which is called 22 square in the Cost Key. In actually figuring this house as a reshingle job, the following must be considered:

If wood shingles are used, add one square foot per linear foot of hip OR valley. In other words, the difference between the two. In this case, there would be practically NO WASTE, because the hips and valleys are about equal. The part of the shingle that is ordinarily wasted by the hip will start the valley. This sometimes is true with asphalt or other equal-width shingles that require lining up joints. It depends on the width of the shingle and pitch of the roof. In most cases, however, estimators add one square foot per linear foot of hip

AND valley.

Then there's the starting course of shingles to consider. In the case of wood shingles, add about half as many square feet of surface as there are linear feet of eaves, which is at the rate of 6" per linear foot or like (Continued to page 198)



... the result of Pioneering and Continued Improvement

THIS company was the first to develop, thru scientific research, specially prepared linseed oils for the paint and varnish industry. Since the beginning in 1894, our aim has been one of continual progress—the development of new oils and the constant improvement of the old.

Improved Boiled was one of the first Kellogg Special Oils. Since its introduction, it has been the *standard of quality* for linseed oils for outside painting use.

Continued improvement has made Kellogg's Improved Boiled the product it is today—the linseed oil that leading master painters everywhere depend upon to give lasting protection and lasting beauty to the homes they paint.

Nearly 2 million barrels of *Improved Boiled* have been sold—and the demand is always growing. A thousand painters a year ask us where they can buy it. We will be glad to tell you about the selling plan other dealers are using to make consistently good linseed oil *profits*.



131 DELAWARE AVENUE

BUFFALO, NEW YORK

Paint material dealers have the advantage of warehouse service in 40 important cities, covering every market in the United States.

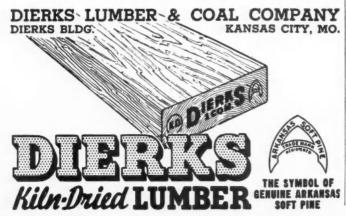




Shrinking, swelling and other structural failures of lumber are usually due to improper seasoning. In other words, it is imperative that the moisture content of lumber should be IN BALANCE with average atmospheric-moisture conditions.

DIERKS LUMBER IS BALANCED LUMBER—pre-shrunk to conform to the moisture content that normally prevails in the atmosphere. It is scientifically seasoned in modern dry-kilns, where heat and humidity are maintained in proper proportions.

DIERKS offer a distinguished line of lumber products manufactured from Genuine Virgin Arkansas Soft Pine and Ozark Mountain Hardwoods.



R. E. S. SAYS

(Continued from page 172)

dissatisfied with paying rent, they had purchased an acre of land and were planning to build a home of their own.

"We talked about their plans and decided on a cottage such as they desired to build. Their available funds permitted them partially to carry out their original plan and they lived in the house, although it was incomplete, through 1933 and 1934, moving in with their folks in the city during the winter months. They were very much disappointed that they could not complete their home and I was sorry too that we could not finance them for the amount they needed because the monthly payment they were able to make meant that at least three years would be needed to liquidate the account.

"Then late in 1934 I found just what I had been looking for ever since I started in the retail lumber business—a finance plan set up on such a fair basis to the borrower, but devoid of all red tape and still effective enough to weed out the black sheep, that at first it seemed untrue. It was Title 1 of the N.H.A.

"With this plan made available by a manufacturer we had little difficulty in getting our young friends to qualify for a Title 1 loan. The home was completed and they now have the chicken coop, too.

Only a Starter

"This was only a starter. With the experience gained in this deal we got busy on a long list of prospects we had developed over a period of years—prospects who, like the one cited, we could not sell on a time payment basis. It was gratifying to find how many really honest folks there were on that list just waiting for the same things I had been looking for. Another line of prospects immediately became apparent. They were the home owners who had had to neglect repairs to their homes because it took too much money at one time to do what they wanted to do. We found plenty of these and to our great joy the plan worked here as well as it did in the other cases.

"As a result of the sales made with what we call our F.H.A. Plan, we have made sales to other persons we didn't even know were interested. They were prompted to act by seeing what their neighbors were doing. In every case our experience has netted us a 100 per cent satisfied customer and what is equally pleasing is the number of other orders that have come to us because of the good will these satisfied customers bear toward us.

"You cannot write that into your assets as a dollar and cents item, but we have seen what it can do in dollars and cents to the total of sales at the end of our accounting period. It meant an average increase of \$2,000.00 per month cash sales in 1935 over 1934, and a grand total of 50 jobs in 1935 and we didn't get started until the cold weather ended in March. We already have deals pending for 1936 totaling one-third of all we did in 1935. This is how Title 1 installment selling is working for us.

"Title 1 will go a long way in cleaning up the shoddy home market by making homes out of houses and Title 2 will give us all the money needed for new homes. But these shoddy houses will not be made into homes, neither will the new homes be built unless we retail lumbermen prove ourselves to be better salesmen than we have so far shown ourselves to be."—R.E.S.

COMMANDS

ATTENTION

One reason why Time is so effective a medium for advertisers in the building field is that most Time readers, in addition to being prospects for home building, are also prospective customers for office, factory, institution, or one of the many other major branches of building.

And the main reason for TIME's strength in the field is that TIME is important to its readers and commands their attention.



In an advertisement in TIME, readers were offered for \$1 an issue of the Architectural Forum containing plans for 107 houses. In three weeks 3,367 TIME readers replied, enclosing \$1 in cash or check. Soon the total reached 7,000.

This tangible evidence of building activity supports the judgment of manufacturers of building products who, for the past four years, have bought more advertising pages in TIME than in any other general magazine.





Dozens on dozens of subscriber checks show that TIME is read by 20% to 50% of the officers and directors of any U. S. company. And every magazine preference survey in recent years shows that TIME is the favorite magazine of business executives, department store executives, etc., etc.

NGELINA UALITY

AND SUDDEN SERVICE



Get what you want when you want it. Your open order will always take our lowest current prices.

Every stick grade marked and carefully loaded for safe delivery.

Shipped in straight or mixed cars.

WOLMANIZED WHEN SPECIFIED

VIRGIN

SOUTHERN PINE - HARDWOODS Five Fine Plants

Kurth Lumber Mfg. Co. Conroe Lumber Co. Clarksville

Conroe

Trout Creek Lumber Co. Angelina Hardwood Co. Kirbyville Keltvs

SALES OFFICES AND MILLS Angelina Company Lumber Company 49 YEARS AT KELTYS-TEXAS

A. W. HOLT

(Continued from page 194)

pulling the starting course down six inches so as to cover the same as other courses. This starting course is frequently sold per linear foot for asphalt or other shingles, so is not included in the squares of shingles.

In case your figures are about the same-or you involved the same principles-your judgment has been verified so you should feel confident of your ability to figure practically any re-roofing job. In case you erred, you will have profited by your mistakes and will be less likely to repeat them in actual work which may cost money in the form of loss on some job, if too low, or a lost sale if too high. Checkups are very important.

This plan has been used as a subject plan the past few months in instructing more than two hundred dealers who attended classes conducted by lumbermen's associations in Minnesota, Iowa and both Dakotas, as well as several private schools. All agreed that if they could handle this cut-up house, all houses should be easily figured. That is true. If you have read these two articles with your mind-studied them-all roofs and houses should be simple. Confidence in your ability to serve, plus a genuine willingness to do so, is bound to make good, profitable sales.

NO-D-K Now in Cans for Shelf Sales

SALES-MINDED dealers will find that the new one-gallon can in which NO-D-K Wood Preserver is now packaged has good display value. The package is designed in two colors, brown and cream, which is litho-

graphed directly on the can.

Formerly sold in 50-gallon drums and tank car lots only, the Tennessee Eastman Corporation, Kingsport, Tenn., decided to package this product in an attractive container which can be merchandised over the counter like paint. In addition to the can, the manufacturers have prepared a complete set of folders, booklets and other sales helps for use by the dealer.



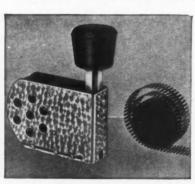


New Staplers for Office and Yard

NEW vest-pocket size stapler, the Paslode Palmgren 1000 A NEW vest-pocket size staples, the rasione ramed by the Load Tacker is one of two new machines introduced by the Paslode Company, 244A North Bank Drive, Chicago, Ill.

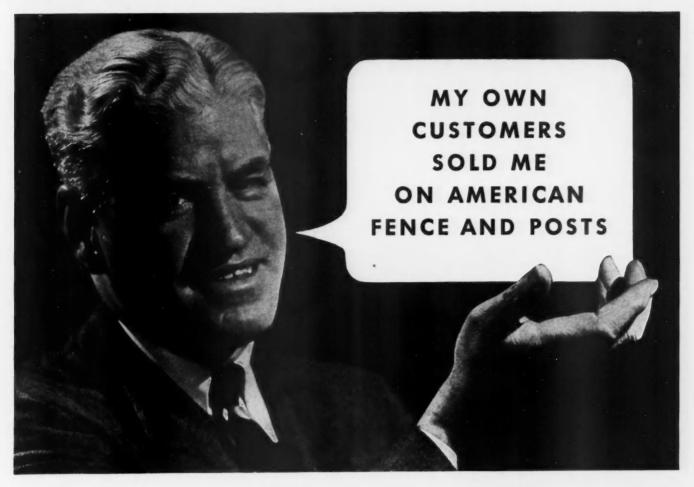
The small compact size of this tacker makes it extremely convenient for use where the device has to be carried around by the operator. It has proved ideal for the great proportions of stapling uses, such as tag-tacking, sign-tacking, etc.; special attachments are available for shade and screen tacking. The device will drive staples into everything from cardboard to the hardest wood.

The second device is Paslode's new inexpensive tool for



stapling of the flaps on corrugated and fiber shipping containers. It eliminates the glue problem, speeds up sealing, produces a better package, reduces damage - in - transit losses. This tool is an entirely new type of stapler, called the Paslode Carton Sealer.

VEST-POCKET Stapler



A which fence to stock he went out and asked a lot of farmers for their opinions on fence. He logically figured that if anybody knew how fence should stand up it would be those who actually used it.

"Well," this dealer said, "the good things those farmers voluntarily told me about American fence and posts didn't leave any doubt in my mind as to which fencing I should handle. That was some time ago and I am certain now that I chose wisely."

We are sure you will feel the same way about genuine American. It has every money-saving feature your farm trade wants. Every roll is guaranteed full weight, full gauge, full length. It is well advertised. American is America's largest seller—you can't stock better, more profitable fence and posts.



AMERICAN FENCE AND POSTS

AMERICA'S LARGEST SELLING FENCE

American Steel & Wire Co., 208 S. La Salle St., Chicago Tennessee Coal, Iron & R. R. Co., Birmingham, Ala.



Columbia Steel Company, San Francisco, Cal. Export Distributors: United States Steel Products Co., N.Y.

UNITED STATES STEEL



The OPPORTUNITY of the YEAR

with 5 Special Deals

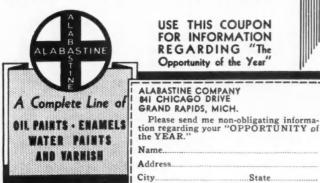
that will assure you the Greatest Paint Profits in years

The 1936 merchandising program back of ALABASTINE'S great new line of oil paints, enamels and varnish, is definitely and specifically designed to do a LOCALIZED business-building job for the individual agent.

It includes 5 special deals that are fresh and powerful in their sales-producing appeal, and that are at the same time thoroughly sound and exhaustively tested.

If you want your paint department to make more money, with less effort, and with lower inventory; if you want to establish your store as paint headquarters in your community; if you want a strong promotional program tailor-made to fit your needs and ready to start work for you IMMEDIATELY—a program that will enable you to cash in handsomely on the most promising paint season in years—then fill in and mail the coupon below.

ALABASTINE COMPANY GRAND RAPIDS . MICHIGAN



Signature....

Title

LEGAL HELPS

for Lumber Dealers

Trade Custom as Part of Contract for Purchase of Lumber

By LESLIE CHILDS

IN A contract for the purchase of lumber, the legal effect of the existence of any trade custom that may apply is deserving of careful consideration. This is true because, unless expressly excluded, such a custom may be read into and held as much a part of the contract as the contract itself.

Consequently, in the event of a dispute, a failure of either party to substantially comply with the custom may prove the deciding factor in the controversy. In other words, a party to a contract, that is colored and governed by an established trade custom, acts at his peril in ignoring the latter if the courts are resorted to.

The application of this rule of law is illustrated in a long line of cases that have arisen in almost every field of industry. And, as an example of judicial reasoning thereon in a dispute involving a contract for the purchase of lumber, the following will serve.

Lumber Buyer Fails to Comply with Trade Custom

Here the defendant ordered four cars of lumber from the plaintiff that was to be delivered at a certain point in Montana. When this contract was entered into, there was a trade custom in the lumber field, known to both parties, that obligated a lumber buyer to furnish the seller an intelligent report of any claimed defects in a shipment, within a few days or a week at the outside. The parties then would abide by the outcome of an official reinspection, if initiated by the seller.

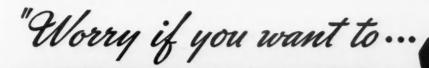
All right. The shipment here involved was received by the defendant on or before September 1st, and on the latter date the defendant wired the plaintiff a complaint concerning the contents of one of the cars. Plaintiff wired back, in effect, asking for an official reinspection. Plaintiff followed this by a letter in which it went into details. Defendant made no reply.

Following this the plaintiff made repeated efforts to get intelligent information from the defendant as to the basis of the latter's complaint. But not until November 23rd did the defendant comply. On that date, it appears, the defendant did furnish plaintiff details of the claimed defects in the lumber.

Plaintiff thereupon, it seems, declined to entertain the claim, no doubt considering it stale. Anyway, the dispute culminated in the plaintiff filing the instant action for the contract price of the shipment. In defense the defendant counterclaimed for damages in the sum of \$1,241.47, alleging a breach of implied warranty of quality in the lumber.

On the facts as they have been outlined, the trial court directed a verdict for the plaintiff for the full amount of its claim. This apparently upon the ground that defendant's failure to comply with the custom, in respect to furnishing a detailed report of its objections to the

(Continued to page 202)



... but you CAN rely on

GLIDDEN for Sales and Profits!"

Why get your forehead full of permanent wrinkles? Why lie awake nights? Why make yourself a nervous wreck worrying about your business? There's a simple way out—if you'll only take it—at least as far as your paint business is concerned.

It's simply a matter of having the right line—and the right sales and merchandising plans behind it.

We believe the Glidden proposition will put an end to your paint worries. And thousands of successful Glidden dealers will tell you how profitable it is! Glidden helps you make money. Glidden shows you how to get big jobs, and get steady repeat business. In short, Glidden will put you in the paint business—help you build it up—and prove to you that you can make a lot of money out of it.

If you'll gamble a little of your time against a little of our time, we can turn your frown into a grin. Are you on? Then drop us a line and tell us so.

THE GLIDDEN COMPANY . Cleveland, Ohio

GLIDDEN PAINTS

Paints
Varnishes Everywhere on Everything Enamels

Why not pick up Agricultural Lime Sales?

Most dealers are near enough to country estates, farms, orchards and truck gardens to work up a profitable business in Banner Lime for agricultural uses. Compile a list of likely prospects and try out this field. You may already be selling construction materials to some of these people. Sell them lime for other uses, too. You may include Banner Agricultural Limes in mixed car shipments, so there will be no price penalty for small quantities. We'll be glad to offer suggestions for getting this kind of business.

NATIONAL MORTAR & SUPPLY CO.

PITTSBURGH, PA.

GIBSONBURG, OHIO

Banner Finishing Lime-Hydrated Banner Base Coat Lime-Fibered Superior Masons Lime-Hydrated Banner Boy Household Lime— 5, 10, 25 lb.

Banner Agricultural Lime-Hydrated

Banner Superfine Spray Lime

Banner Quick Limelump and pulverized

Banner Pulverized
Agricultural Limestone

Banner Pulomite Limestone for asphalt filler and coal mine rock dusting

Raw Dolomite Stone

AGRICULTURAL LIME USES

Neutralizing acid soil and increasing size and quality of crops...Treating lawns...Fungicides and insecticides...
Whitewash...Deodorizing and disinfecting buildings, poultry runs and barn yards...Treating dirt roads.

Banner sime famous ohio dolomite





price on record.

Write or wire for details and prices today.

ALLITH-PROUTY MFG. CO., Danville, III.

LEGAL DEPARTMENT

(Continued from page 200)

lumber, barred it from asserting any counterclaim. The defendant appealed from this judgment in favor of the plaintiff, and the higher court in reviewing the record and in affirming the judgment, in part, said:

Custom Held Part of Contract

"The evidence compels the conclusion that the parties contracted with reference to certain trade customs, well known to both of them. * * * Witnesses for both parties agree, in effect, that, in the case of a buyer's claim of defective quality, the 'contract by custom and trade usage provision, required the seller to call upon the buyer to agree and to abide by an official reinspection * * * and if the buyer be unwilling to agree and abide by such official reinspection for the seller to then consider the buyer's complaint, if any, to have been withdrawn.' * * * "

Following the foregoing statement, the court directed its attention to the record of the defendant's failure or neglect to meet the requirements of the trade custom, in the matter of furnishing an intelligent report of its claim within a reasonable time. Here the court noted that while defendant's initial complaint was made on September 1st, it apparently let the matter rest until November 23rd, despite the fact that plaintiff had repeatedly called its attention to the necessity for a report and an official reinspection. In the light of the above, the court in stating its conclusions in the matter, among other things, said:

"A verdict against defendant was imperative. * * * Defendant utterly ignored the requirement that there be an 'intelligent report' of the items rejected and an official reinspection to settle the amount and the kind of defective lumber. (If there had been such an official reinspection, the cost of it would have been borne by the party in error.) That requirement by the usage of the lumber trade, known to both parties at the time the contract was made, was as much a part of the contract as though it had been incorporated therein. * * *

"Without compliance with it defendant had no counterclaim or offset for damages for breach of the contract, arising from the delivery of lumber below the grade of or different in quality from that called for by the contract. There is some claim for defendant that plaintiff waived its demand for reinspection. The record fails to indicate that any such claim was made to the trial court.

"But it appears that, as soon as plaintiff was notified that defendant was objecting to some of the lumber, it demanded detailed information as to the ground of complaint, and also that there be an official reinspection. That position it maintained to the end. The judgment is affirmed." (257 N. W. 656.)

The foregoing case constitutes an apt illustration of how a trade custom, known to both parties at the time a contract is entered into, may operate upon the contract rights. And, as we have seen, it can no more be ignored, in the absence of a waiver, than the terms of the contract itself, if all rights thereunder are to be preserved. A nice case on the point involved, and one that lumber dealers may with profit have in mind when confronted with situations similar to the one herein reviewed.

Legal Questions will be answered for American Builder subscribers.



New. Different. Better. A marked improvement in house paints. The intense, enduring whiteness (or color), the dirt-defying smoothness and lustre of Foy's B.B. (Best-Bodied) Enamelized House Paint, sets a new standard—but at no added cost! One job will convince any master painter or home owner that here at last is the kind of paint he has always wanted.

a Sensation!

Amazing hiding power—average 450 square feet per gallon, two coats.

Write for prices and full details of the Foy dealer franchise.

THE FOY PAINT CO., Inc.

Cincinnati, Ohio

Owners of The Cincinnati Varnish Co. - Established 1865

The Building Cost Calculator

By J. R. Smith, Architect

By using tables giving costs of all materials and labor for all types of construction, on the basis of the decimal system of measurement, the author says that estimating costs can be reduced 75%. His book contains 160 tables showing material and labor costs at any material price and wage scale. The Material Cost Tables give the cost at a glance, per unit of materials in place, with all waste and extras included. The Labor Cost Tables give the cost of the labor required for placing a unit of the different materials, at any wage scale.

Surface areas are measured in squares of 100 square feet. Linear measurement is based upon units of 100 linear feet, and cubic measurement upon units of 100 cubic feet. When areas are once determined it is unnecessary to refigure for the different materials entering into the construction, as all materials and labor costs are based upon the same units of measurement.

For the convenience of the estimator the book is divided into sections covering the different types of construction and materials, with each section multigraphed on different colored paper. Estimating blanks itemizing all materials and labor within each section, with marginal reference to the different tables, are provided With a summary sheet listing the totals of each section and all additional charges that should be included, oversight or omission of important items is prevented.

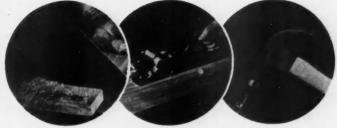
1934. 168 Pages, Tables, 8½ x 11 Inches Imitation Leather, \$10.00

Money Back if Not Satisfied

Book Service Department

AMERICAN BUILDER AND BUILDING AGE

SOUND EFFECTS



that mean BUSINESS

WELCOME are the sounds of the saw, the plane and the hammer. Especially welcome are they to the ears of the retail lumber dealer. They proclaim that homes are being built and modernized—that lumber is being used.

Simply because it is more suitable and more economical for home building, a large percentage of the lumber used is Arrow Brand Tidewater Red Cypress. This all-purpose lumber adapts itself efficiently to both exterior and interior construction. It assures the dealer diversified outlet, increased sales and quick turnover—three features that make for increased profits.

With five mill connections, the Florida Louisiana Red Cypress Company is, at all times, your most dependable source of supply for thoroughly seasoned, trade and grade-marked Arrow Brand Tidewater Red Cypress, the true species of "The Wood Fternal"

FLORIDA LOUISIANA RED CYPRESS CO.

JACKSONVILLE, FLORIDA



NEW HELPS FOR DEALERS

Literature featuring new products and sales plans

The selected trade literature listed below may be obtained without charge by using the coupon, listing the numbers of the catalogs desired and mailing to American Builder, 105 W. Adams St., Chicago, or by writing on your dealer stationery to the manufacturers direct, in which case kindly mention this publication. This catalog and campaign review is an editorial feature for the convenience of our readers.— Editor, Dealer Marketing Section.

KITCHEN PLANNING GUIDE

290—Electric Kitchens have caught the popular fancy and lumber and building material dealers are finding that the desire for modernized all-electric kitchens is creating considerable remodeling activity calling for many items which they have in stock. The Westinghouse Kitchen Planning Dept. has brought out a new 24-page handbook which dealers will find very useful. It will put them in touch with the latest ideas in kitchen planning and electric kitchen equipment. It is offered as a complete manual of practical information for executives and salesmen.—WESTING-HOUSE ELECTRIC & MFG. CO., Mansfield, Ohio.

TRUCK AND TRAILER REGULATIONS

291—"Truck and Trailer Size and Weight Restrictions," 1936 edition, is a pocket sized handbook of 54 pages giving in tabular form the truck and trailer regulations in each of the 48 states. This compilation was first made in 1933 and proved such a handy help to all truck operators that it has been revised each year since. Material dealers and other truck users and operators, especially those doing interstate business, will find this a very useful handbook. Copies can be obtained from THE FOUR WHEEL DRIVE AUTO CO., Clintonville, Wis.

CONCRETE FLOORS

292—"Simplified Design of Concrete —TRIMPAK C Floor Systems" will be a useful addi- New York City.

tion to the dealer's reference library in these days of increased interest in rigid fireproof floors. This handbook of 88 page's, fully illustrated and replete with tables and formulas in common use, gives simple, understandable directions for figuring problems involved in the design and construction of concrete floors. Copies may be had without charge, upon request, from THE PORTLAND CEMENT ASSN., 33 W. Grand Ave., Chicago, Ill.

DEALERS' DISPLAY RACKS

293—The Marvel line of display racks, for screen wire, wire netting, paper rack and rotary shear cutter, rope racks and wire dispensers is presented in a new portfolio for the service of enterprising building supply dealers. Details of the Marvel window glass cabinet are also presented.—THE MARVEL RACK MFG. CO., Inc., Minneapolis, Minn.

PACKAGED INTERIOR TRIM

294—Lumber dealers are learning what grocery stores found out a generation ago—that packaged goods are better than bulk goods because cleaner, more distinctive and more satisfactory to the purchaser. Trimpak interior finish is the modern example of packaged building materials in the retail lumber yards. A new illustrated catalog, "Inside Information on Trim" contains some interesting letters from prominent retail lumber dealers about their success with Trimpak. A detailed description of the Trimpak merchandise is also presented. —TRIMPAK CORP., 44 Whitehall St., New York City.

State

(April, Dealer, 1936)

OCCUPATION*..

City.....

American Builder,

105 W. Adams St.,

*Please note that occupation must be stated if full service is to be given.

STEEL WIRE FENCE PROFITS

295—A good many retail lumber dealers are making such profits in their wire fence department that other dealers wonder how they do it. A 16-page planographed booklet outlining plans for sales, contests, advertising, etc., all calculated to stimulate steel wire fence sales has been prepared and is ready for mailing to dealers.—MID-STATES STEEL & WIRE CO., Dept. S, Crawfordsville, Ind.

CONSUMER INTEREST IN ALLOY STEEL

296—Of moment to all dealers in building materials is the spectacular advertising campaign designed to reach 125,000,000 potential buyers and users of alloy steel, namely, the American public. This is the current campaign of the REPUBLIC STEEL CORP., Cleveland. Double page advertisements in full colors in national weeklies carry the story. Helpful selling literature and merchandising helps for dealers are also available.

"PROFIT DAYS ARE HERE AGAIN"

297—This is the title of a sensational Audivision talking slide film production prepared by The Barrett Co. for its salesmen in presenting its 1936 advertising and sales program to jobbers and dealers. Backing up the salesmen on this campaign is a complete barrage of direct mail advertising, farm building mail campaign, and sales manuals for consumers as well as a new manual for dealers, "Barrett Roofings and Other Building Products."—THE BARRETT CO., 40 Rector St., New York City.

PAINT PROMOTION

298—Announcement is made of an extensive advertising campaign for the purpose of increasing dealer sales of Mural-Tone. Metropolitan newspapers, paint trade publications, builder and architectural publications and publications reaching the owners and managers of large buildings are being used to spread the gospel of Mural-Tone wall paints. A special bulletin of selling helps for dealers has been prepared. Also complete stock of color cards and new painting and wall finishing information.—THE MURALO CO., INC., Staten Island, N. Y.