

REVISED 1933

[A Simmons-Boardman Publication]

AMERICAN BUILDER

and Building Age

NAME REGISTERED U. S. PATENT OFFICE

SEPTEMBER, 1933

55th Year

Vol. 55—No. 6



AMERICAN BUILDER and BUILDING AGE, with which are incorporated National Builder, Permanent Builder, and the Builder's Journal, is published on the first day of each month by the

AMERICAN BUILDER PUBLISHING CORPORATION

105 West Adams Street,
Chicago, Ill.

NEW YORK
30 Church Street

CLEVELAND
Terminal Tower

WASHINGTON, D. C.
17 and H Streets, N. W.

SAN FRANCISCO
58 Main Street



Samuel O. Dunn, *Chairman of Board*;
Henry Lee, *President*; Bernard L. Johnson, Robert H. Morris, Delbert W. Smith, L. R. Putman, and R. E. Clement, *Vice Presidents*; Elmer T. Howson, *Secretary*; John T. De Mott, *Treasurer*.

Subscription price in the United States and Possessions, 1 year, \$2.00, 2 years, \$3.00, 3 years, \$4.00; Canada, including duty, 1 year, \$2.50, 2 years, \$4.00, 3 years, \$5.00; foreign countries, 1 year, \$4.00, 2 years, \$7.00, 3 years, \$10.00. Single copies, 25 cents each.

Member of the Associated Business Papers (A. B. P.) and of the Audit Bureau of Circulations (A. B. C.)

Editorials	17
Blue Eagles for Builders	
Home Mortgage Relief Now a Fact	
Building Improvements on the Farm	
August Home Building Continues Gain	
Frontispiece	19
Millions for New Cars—But Where Are They Kept?	
Opportunities in Garage Modernizing and Selling	20
How to Get Profits Out of Garage Remodeling	
Quality Garages Make Business	22
Latest Ideas for Garage Design and Equipment	
Garage Pictorial	24
Good Architecture in Garages, Both Attached and Detached	
Blanket Construction Code Filed	26
Full Text of U. S. Construction League Code—List of Supplemental Codes Already Filed	
Home Design Section	29-37
Good Architecture in Small, Inexpensive Homes	
Safety Details Eliminate Home Accidents	38
How to Lay Out Stairs for Safe, Easy Travel	
Something the Boys Can Make	40
Sketches and Dimensioned Drawings of a Dozen Home Workshop Projects in Wood	
A House for \$1500	42
New Idea in Planning Produces a Small House with Five Good Rooms and Garage	
Modernization Department	43-46
Overcoating with Brick	
Renovizing Old Apartments	
Retail Shop Modernizing Brings 100 Per Cent Sales Gain in Three Weeks	
U. S. Backs Big Housing Projects	47
Current News of Federally Financed Housing	
The House of the Month	48
Dimensioned Drawings of Attractive Colonial Home of Low Cost	
Practical Job Pointers	50
Clever Kinks from the Experience of Builders	
News of the Industry	52
What's New in Materials and Equipment	58
Advertisers' Index	66

BERNARD L. JOHNSON
Editor

JOSEPH B. MASON
Managing Editor
H. L. LANE
Washington Editor

E. L. GILBERT
Eastern Editor
L. R. PUTMAN
Marketing Editor

ROBERT H. MORRIS
Business Manager

Here are a few of the many profitable home-remodeling jobs you can sell on the J-M \$1,000,000-To-Lend Plan. You get full cash immediately.~ You take no credit risk.



RE-ROOFING AND RE-SIDING

(J-M Asbestos and Asphalt Shingles)

Get out of price competition. Let others offer cheap roofs. You offer the *perfect roof* . . . J-M Asbestos Shingles. Permanent, unburnable, available in a wide range of colors, styles and prices. First cost is the last cost; not one J-M Asbestos Shingle has ever worn out. (Write for the story of J-M Dutch Lap Asbestos Shingles. They lay fast; reduce labor costs by one-third.)

When you've got to sharpen your pencil to land the business, turn to J-M for the most outstanding values ever offered in Asphalt Shingles . . . durable, fire-resistant, in an unequalled range of colors and blends.

Remember you can sell all J-M Shingles on the \$1,000,000-To-Lend Plan. Get the details. Mail the coupon.

"TILE" KITCHENS AND BATHS

(J-M Asbestos Wainscoting)

Every housewife wants tile walls in kitchen and bath. Many think they can't afford them. Tell them about J-M Asbestos Wainscoting, the "tile wall in sheet form" that you can put up at a price within everybody's reach.

Handsome, sanitary, durable. Available in a variety of colors. A quick, easy, profitable job for you. All the tools you need are a saw, a breast drill and a hammer.

And if the prospect hasn't ready cash, sell J-M Asbestos Wainscoting on the \$1,000,000-To-Lend Plan. For details, mail the coupon.

Johns-Manville

\$1,000,000-to-Lend

AMERICAN BUILDER AND BUILDING AGE

Blue Eagles for Builders

A CODE of fair practice has been drafted for the construction industry—a broad code calculated to cover all branches and all factors, both large and small. This is a basic or blanket code worked out by an impressive committee chosen by the United States Construction League. Under this general code, other detailed codes are to be worked out by various groups within the industry to cover their individual problems. Already 147 such codes have been filed with the Recovery Administrator at Washington. On another page we present the full text of the basic code as submitted, and the names of the groups that have filed supplemental codes. Hearings will be held on each and all of these before they are finally approved and made binding on the construction industry. Readers of this publication should give careful study to this text as well as to the entire matter of code provisions and their probable effect on the building business. Retailers should examine closely, too, the wording of the Lumber and Building Material Dealers' Code.

What the Effect?

Out of the maze of conjecture regarding the numerous codes now being adopted and their probable effect on your business, three things seem certain—

1. Your costs will be increased; but to offset this
2. Your price-cutting competition will be curbed; and
3. The promotion and sale of your goods or service remain your own job to do—a bigger job and a more urgent job than ever before; because it is only through more productive selling that you can balance out your payroll increases under these code provisions.

Increased consumer buying power is the objective of the NRA program. As this buying power comes into the market, the first lines to benefit will naturally be those which appeal strongest to the buyers. Eventually—so we hope—the business revival will be so general and far-reaching that all lines will be in demand; but in the meantime the increased sales will certainly go to those industries and to those firms that are best known and that do the best selling job.

Advertising Favored

Influence of the "New Deal" upon advertising is likely to be strongly favorable rather than unfavorable, according to Howard E. Blood, president of the Norge Corporation. As Mr. Blood's company has been conspicuously successful in the electric refrigeration industry during the depression period, he might be considered an authority on sales trends. The entire publishing business all over the country has been trying to estimate the effect of industrial "codes" upon competitive advertising.

"The social benefits of advertising have always been undeniable," Mr. Blood stated. "Now that the National

Recovery Act throws emphasis upon values and away from price, a great re-education task confronts American manufacturers which makes advertising all the more indispensable.

"It does not appear to be the Administration's intent to curb any company's production, but it will insist that a company shall not dump any overproduction at prices below cost. In other words, a manufacturer must sell whatever he makes by sound sales practice.

"This will tend to increase advertising volume because many companies, who previously have resorted mainly to price and shoddy merchandise, will have to build real value into their goods and will have to make the public aware of this."

HOME MORTGAGE RELIEF NOW A FACT

THE Home Owners' Loan Corporation announced on August 14 that approximately 3,000 distressed home owners had already been saved from foreclosures. Real progress is being made throughout the country in taking distressed properties off the market and thereby paving the way for new building. The first Illinois loan, widely publicized, was for \$5,000 on a house built in 1919 which cost \$5,000. The government appraised it today at \$6,500. The bank holding a \$4,000 mortgage took H. O. L. C. 4 per cent bonds for that amount, leaving \$1,000 to pay off back taxes, accrued interest, repairs.

Such a liberal policy by the government, with loans being made to include repair of the property, will have a far-reaching, beneficial effect on home financing.

The Prudential Insurance Company of Newark, N. J., has announced that it is anxious to co-operate with the Home Owners' Loan Corporation and will accept the corporation's bonds in payment of mortgages in distress. Other large insurance companies are expected to follow suit and the bonds of the corporation are gaining in prestige. H. G. Brunner, Ohio state manager, reported on August 21 that holders of mortgages on small homes in Ohio had already agreed to take approximately \$6,000,000 worth of the corporation's bonds.

Thus the government aid to home owners begins really to function; and, when home owners are helped and home ownership is made more secure and attractive, the home building industry is benefited. Two billion dollars and more are available for this work through the Home Owners' Loan Corporation. New home savings associations are being set up under this act; and the Federal Home Loan Banks are gradually thawing out the finances of their member building and loan associations. All of this puts a decidedly more cheerful look on the home financing picture.

BUILDING IMPROVEMENTS ON THE FARM

AFTER a decade of stagnation, farm building has taken on new life, and today offers a most promising field for the sale of building materials and the employment of building labor. The exact amount of this "potential" is hard to estimate, but it easily runs into the billions. The houses and barns of six million farm families, the village homes and stores which dot the highways, the country estates, and the back-to-the-land cottages of ex-city dwellers—all with their enlarged standards of living and housing and their expanding needs for schools, community buildings and business structures—these are parts of the vast picture of opportunity in the farm building field today.

It is well known that very little has been done in recent years to maintain these rural buildings. Nearly all are sorely in need of paint and of roof repairs, to mention only the most obvious of upkeep jobs. Viewed simply as shelter a tremendous amount of repair work must be done on farm houses and farm buildings. Viewed in the light of modern home convenience standards these rural homes are virgin territory for automatic heating plants, water supply systems, bathroom equipment, sewage disposal and refrigeration.

Farmers have been in a distressed situation economically all through the past decade. They have not been able to keep up their buildings; yet all this time their process of education has been going on, raising their ideas and increasing their needs for those modern home conveniences which they see exploited in the magazines and movies. The Three M's of popular education—motors, magazines and movies—have been working to elevate the standards of farm folks just as they have those of city dwellers.

And now that farm prices are going up the farm market for building materials and equipment looms large on the horizon.

Farm Prices Better

A rapid increase in the prices of farm products is due, according to Prof. F. A. Pearson, head of the Department of Agriculture of Cornell University, and will bring with it a wave of rural buying which will be reflected in greater employment and prosperity throughout the land. Speaking recently in Chicago he said, "There will be a rapid rise in farm prices, more rapid than in retail prices. Wages will go up, but they will rise more slowly. Farmers' needs are great and they are anxious to start buying. Their purchases will be reflected in quickened business throughout the nation."

Retail yards serving country trade have been reporting better business throughout the summer. The farmers have been buying lumber, cement, roofing, paint, fencing and numerous products useful in fixing up and modernizing. This evidently points to an opportunity for contractor-builders familiar with farm building work to render real service in the design and construction of these needed improvements. Some years ago there were thousands of experienced men so employed. Later, many of these got the city urge and migrated from their rural

haunts to the hoped for quick money of speculative suburban home building.

With farm prosperity on the return, farm buildings inadequate, and farmers' ideas *up*—now would seem to be a good time for the building industry to direct its attention toward the open country. Opportunity is there.

AUGUST HOME BUILDING CONTINUES GAIN

RESIDENTIAL contracts for the first half of August, as reported to F. W. Dodge Corporation in the 37 eastern states, totaled \$10,876,000 as against \$8,812,300 for the first half of last August, or a gain of 23 per cent. Total construction figures for the first half of August were \$56,243,600 as compared with \$55,378,500 last year, an increase of 1.6 per cent. Residential construction for the first half of August represented 20 per cent of the total.

Last year a turn occurred in the middle of the month so that the second half of August accounted for 58 per cent of the total for the month. There may be a similar upturn this year which would increase the total. However, assuming a second half substantially the same as the first, we get a total of residential contracts for the month of \$21,500,000 which is 3½ per cent gain over last August—the fourth month in which 1933 home building has exceeded 1932.

Private Construction Looking Up

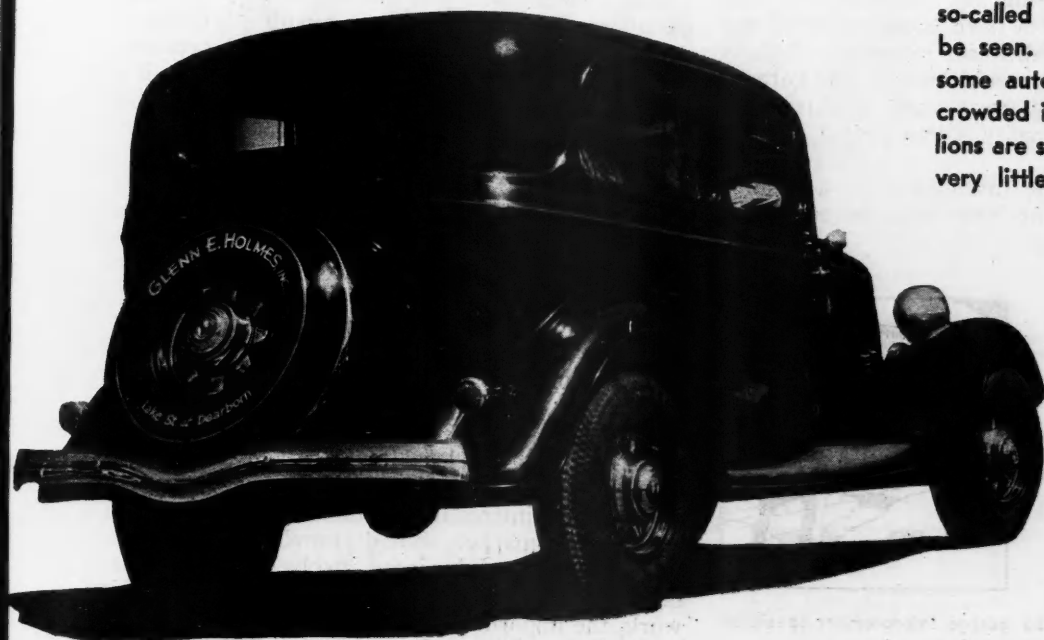
Commenting on the increase of private construction, when so much emphasis is being laid on the Administration's public works program, Ford H. Dow, writing in the August *Dun and Bradstreet Review* said, "Strangely enough, private construction on the surface disconnected with a public works program, is simultaneously improving and this is particularly pertinent considering that a seasonal recession usually occurs during July and August. It is encouraging, too, because, plainly, private construction must take up the burden of building volume where and when Federal public work's support ends."

Price advances of building materials are significant of better business, he believes. Some of these since the inauguration of President Roosevelt on March 4, five months ago, are: copper 65 per cent; tin, 100 per cent; lead, 45 per cent; cement, 17 per cent; lime, 35 per cent; paints, 25 per cent; radiators and boilers, 25 per cent; brass, 25 per cent; framing lumber, 35 to 50 per cent; flooring, 45 per cent; sheathing, 55 per cent; shingles, 73 per cent; steel, 10 per cent; sheet copper, 18 per cent; copper wire, 23 per cent; lead covered wire, 33 per cent; cast iron soil pipe, 50 per cent; and plumbing fixtures, pipe and fittings, 30 per cent. Still other increases are in the immediate offing. Some materials have not changed at all, among them being common brick. The average increase for the entire list would not run more than 25 per cent up to now. Keeping in mind the depressed level at which material prices were a few months ago, this does not appear to be a serious enough rise to discourage investors from entering the market.



Millions for New Cars --- but WHERE ARE THEY KEPT?

ALONG every alley such tumbledown, unsafe, unsightly structures as the so-called "garages" shown above can be seen. They house expensive, handsome automobiles—and other cars are crowded in alleys and back yards. Millions are spent for new automobiles, but very little for good modern garages.



HERE is a market that is crying for attention. Thousands of safe, slightly new garages are needed. Many more thousands of old structures need modernizing. Articles and designs throughout this issue are planned to help you get new garage business this fall and winter.

Opportunities in Garage Moderniz-

AUTOMOBILE SALES have doubled, insurance rates are up—making the need for safe, modern garages greater than ever.

ABIG REPAIR MARKET in garages grows as need for new doors, insulation, re-building, increases.

CONDITIONS in the building industry point to immediate improvement in the market for garage equipment and specialties. Sales of automobiles are mounting, consumer purchasing power is increasing, residential building is on the upward trend. Furthermore, the necessity for economy during the past few years has caused car owners to neglect their garages.

With rising building costs ahead it is certain that a larger volume of garage improvement and building work will be done this fall. With the approach of winter, car owners are facing the necessity for storing and housing their cars. The need for protecting their investment in new automobiles as well as their older cars is greater than at any other season of the year.

All of these considerations are important factors in the garage equipment and repair market. These facts are leading many builders to give special attention to garages, emphasizing the importance of constructing, equipping and modernizing them at this season.

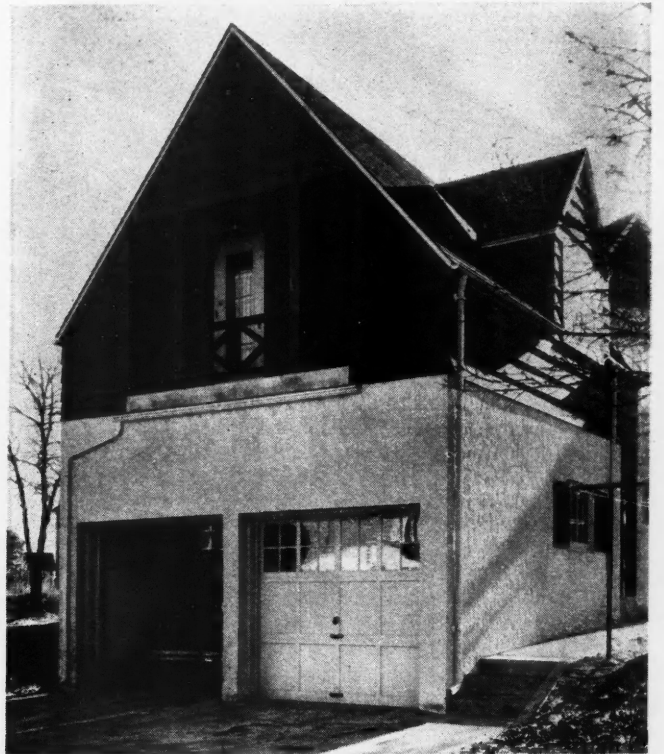
It is estimated that not more than one out of ten automobiles is properly housed in a modern, firesafe, convenient, private garage. The most casual survey in any community shows sagging doors, dilapidated structures, unsightly, unsafe housing for expensive automobiles. It is a common experience to see a paved, concrete alley which cost many thousands of dollars lined with veritable shacks to house cars representing very large investments.

The great opportunity in garage modernizing today lies in the aggressive selling by contractors and dealers of the need for quality housing for quality cars. For a number of years car owners have been getting along with temporary, makeshift shelters, expecting that, as soon as times got better they would build a real garage. Such people, and there are a great many in this class, can be sold on the basis of quality with a proper presentation of facts and figures.

It can be shown that the investment in a quality garage is a practical procedure that pays its own way.



Drawings such as these are used by garage improvement specialists to picture troubles of the old fashioned garage.



An attractive modern two-car garage built into wing of house. Living quarters above.

There is an opportunity in this field for quality contractors who have formerly specialized in larger work to build up a reputation and a lucrative business in garage improvement. Organization for the work, advertising and persistent driving after this type of business have been shown to produce very profitable results even in hard times. One reason this type of work is particularly attractive now is that very little first class selling effort has been expended on it, observers point out. There is a story told of a well to do home owner in a wealthy Chicago suburb who was keeping his two cars in a public garage at a cost of \$30.00 per month. His local lumber dealer suggested one day that he would save money by building his own garage, and roughly figured it out for him. He was interested and asked to have a builder call.

The dealer told two of his contractor friends about the job and suggested that they follow it up. Two months later, the dealer saw one of his friends again and asked him how the garage was coming. Imagine his surprise when he learned that the job had not been followed up. Neither contractor had called or solicited the job. In the meantime the car owner had decided to let one of his cars remain outside, and get along without building a garage.

The public has not been sold on the advantages of satisfactory garage door equipment, and the need for well built, well insulated, good looking garages. Aggressive selling by local builders and dealers, stressing the importance of easily operated garage doors and describing the interesting features of the new equipment now on the market, should stimulate business this fall.

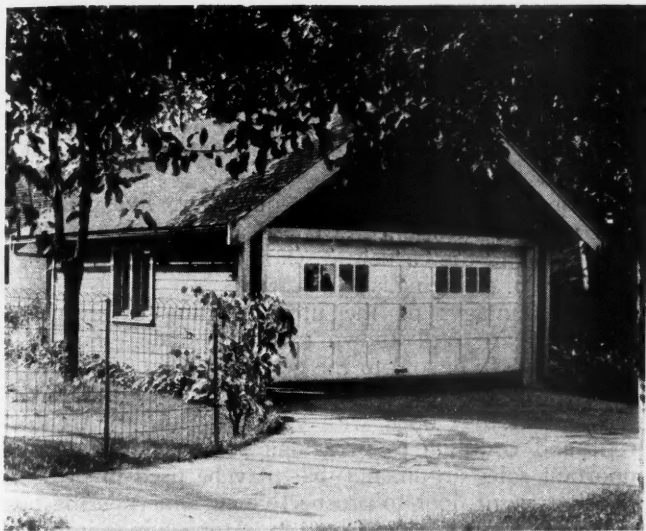
The volume of business involved in modernizing an old garage is well worth going after. In advertising this work, the importance of new concrete floors, new doors, insulation, a tight roof, a new exterior, can be featured.

Modernizing, Repairs and New Doors

By JOSEPH B. MASON

An effective sales argument can be built around photographs taken of local run-down residential garages. A picture of such a garage typical of many hundreds in the community is then published, together with an itemized cost analysis of the work of transforming it into a modern garage.

Testimony of numerous men in the business shows that there is room for one or two specialists in garage work in every community. "There is more than enough business to keep a firm profitably busy in garage building and modernizing alone in ordinary times," says one builder active in a midwest suburban town. "By constant advertising and promotion work, your name becomes identified with this field and it is a large and worth while one."



A conventional type garage modernized with full width over-doors. Center post is left out, making possible a sharp turn at entrance and greater ease in maneuvering cars.

The Mercer Lumber Company, Wilmette, Ill., features frequent advertisements in the local papers, such as shown on this page. "We have several jobs under way right now and find that this advertising more than pays," says Don Lindsey of that firm.

E. D. Gentzen of the firm of Gentzen & Company, garage builders of Chicago, advertises once a week in the local Chicago papers, using the two-by-four inch advertisement shown below. "Advertising is the only way to keep your name before people," says Gentzen. "We built as high as 500 garages a year and expect a large volume of business again when people get money. Residential garages are in terrible shape and need rebuilding and repairs."

Another Chicago firm, City-Wide Builders, located on Grand Avenue, maintains an elaborate and attractive garage display. They feature a double-wall, quality built garage and distribute a folder describing their products to thousands of prospects. O. J. Dewberry, office manager, reports a pick-up in garage improvements to be expected this fall.

The need for quality building and especially quality advertising and promotion by garage specialists was shown by comments of many men interviewed. Persistent, aggressive advertising in which quality construction and high type door equipment and design is stressed more than pays for itself.

One feature of this work is that it is a definite market which can be analyzed and sold. Names of owners of any make car are obtainable from the state license bureau. It is therefore possible to canvass, either by personal calls or telephone or direct-by-mail pieces, car owners of any given make, urging the importance of garage improvement and better door equipment. The market is there, the need for builders' service is great, the customers are easy to locate. All that is needed is first class salesmanship coupled with ability to deliver.

THE LAST WORD IN GARAGE DOORS! NOW!

Make ANY set of Doors Open OVERHEAD

MERCER

Order From

LUMBER COMPANIES

GARAGE DOORS that slide up and completely out of the way easily and quickly are a convenience you no longer need do without. Powerful coil springs lift the door smoothly overhead with only the minimum of effort. No tugging or jerking. This hardware can be quickly installed by any competent carpenter and will last for years.

OVERHEAD HARDWARE and DOOR complete for only **\$49.50**

TELEPHONE **289** WILMETTE
2726 W. Railroad Ave.

Two types of advertisements that are bringing in business. The Mercer Lumber Company of Wilmette, Ill., carries the advertisement above in the local papers. It is 8 by 3½ inches in size. Gentzen & Co. use the advertisement at right in downtown Chicago papers, the size being 2 by 4 inches.

AGGRESSIVE SELLING WILL OPEN THE FALL GARAGE REPAIR MARKET

Frame, Brick and Stucco

GARAGES

NO DOWN PAYMENT

Balance Monthly

Our Own Financing Enables Us to Offer You the Lowest Time Payments. Built complete with cement floor, painted, electric light, water desired.

Summer Homes, Basements, Porch Enclosures, and Attics Built Remodeling

OPEN SUNDAYS

Gentzen & Co. Garage Builders

5139 Agate Ave.
Telephone Pensacola 7463
1853 N. Sawyer Ave.
Telephone Belmont 9294

Quality Counts In Garage Construction

Details of New and Approved Hardware and Equipment

EXAMINATION of new residential garages built in various parts of the country during the past two years shows a marked trend toward quality. While garages which have been standing for years, and were not particularly well built in the first place, grow more and more out of date, the new structures appear correspondingly more modern, both as to equipment, architecture and construction than ever before.

Architecturally, the garage is coming into its own, and is receiving the attention it deserves. Designs such as shown on these and following pages are the result of careful attention to detail. The detached garage corresponds in architecture to the house, and the attached or built-in garage has been solved as an architectural problem and made attractive.

For the builder contemplating specializing in garage construction and modernizing, it is apparent that the quality field is the most attractive, in fact the only attractive field. There still exists much price-cutting in the low cost, built-in-a-day garages that use the cheapest possible materials and equipment, have no design whatever, and are poorly built. Every one loses in this kind of work, the experience of the past few years has shown. By specializing, on the other hand, in quality construction as to design, workmanship and equipment, a reputation for good work can be built up that will endure, and such work can be done at a fair profit without getting beyond the reach of prospective customers.

The attached garage continues to be most popular and in this issue, numerous examples of clever ways in which

the location problem has been solved are shown. For remodeling work, building of an attached garage as an addition to one side of a house and balancing it with a sun porch or open porch on the opposite side is a successful plan. The attached or built-in garage should be studied with care to secure the most convenient entrance to the house. Entrance into the stair hall is usually most practical as this eliminates the necessity for passing through living or service rooms in going to and from the garage, and such an entrance is usually convenient to the coat closet.

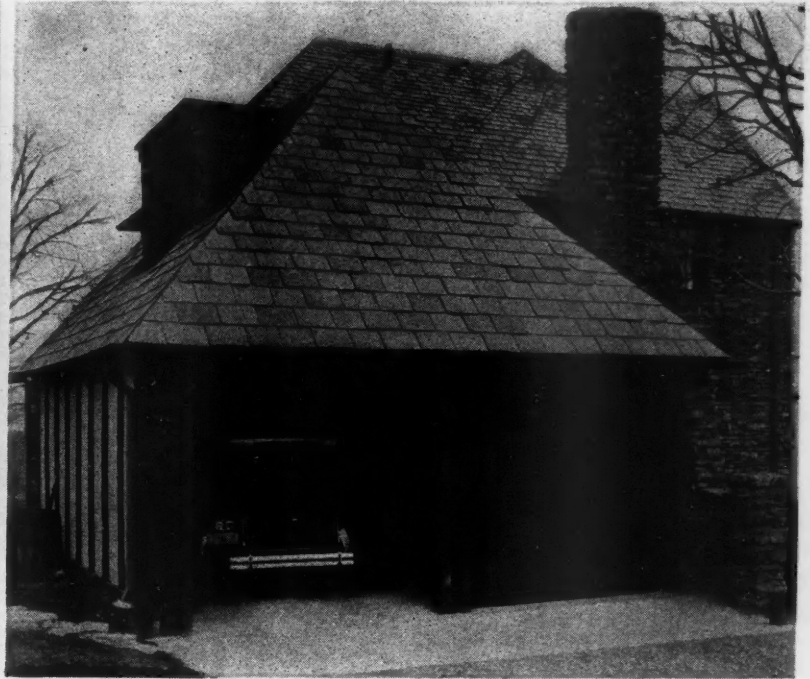
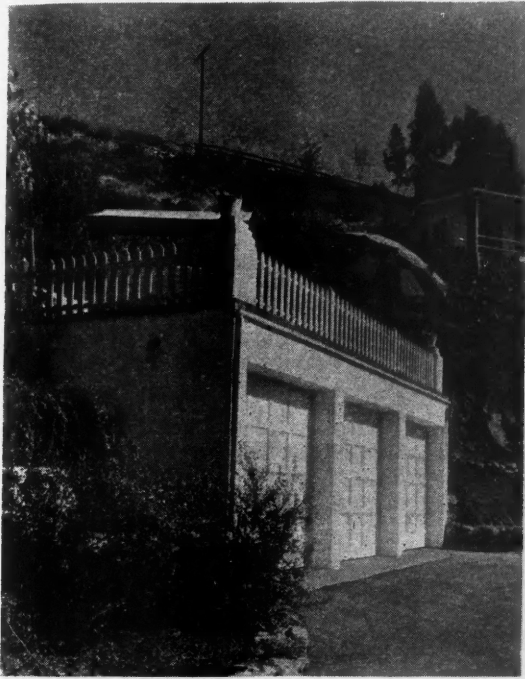
Of paramount interest in the quality garage are the hardware and doors, in both of which there has been marked improvement in recent years. As to appearance, garage doors are now available in any architectural style to harmonize with the house, and the hardware is equally attractive.

In considering garage door equipment, five principal types may be mentioned. These are: 1. upward-acting; 2. around the corner; 3. sliding, folding, swinging; 4. sliding; 5. swinging.

The advantages of the upward-acting or overhead type doors are well known to most builders but have not yet been fully sold to the general public. The latest models have been improved and perfected to a high degree so that they open with extreme ease, are trouble-proof and continue to give long service. One of the important sales arguments that may be used in presenting this type of door to prospective customers is the fact that the doors are not affected by strong winds in open-



This attractive Los Angeles garage designed by Architect Paul R. Williams illustrates how quality can be carried out in garage construction in a simple, effective way. The brick wall at right blends well with the white stucco first floor exterior. Vertical boards of unusual width are used above the first floor.



The hillside garage at left illustrates a new garage architecture of great charm. Located at Laguna Beach, Calif., and designed by J. R. Kibbey, architect. The garage at right is an English type with stone and half timber treatment, designed by Tisdale & Starr, architects, of Nashville, Tenn.

ing or closing, are not influenced by snow and ice, take very little space to operate, do not stick or jam. Several of the well known manufacturers of upward acting doors have brought out lower cost models which make this type of equipment available for practically any priced field. The equipment is also available for old doors, transforming them from the present status to upward acting types at low cost. This is especially desirable for modernizing.

Automatic operating garage doors are the last word in construction, and here again mechanical developments of the past two years have brought great changes. A large number of very efficient automatic door controls are now on the market, and in the more expensive homes this feature is an accepted fact.

The automatic garage door operates in several different ways. One of the most popular is the radio control which permits the door to be opened and closed from the car. Pulling a small knob on the instrument board of the car starts a motor which opens the door. Lights in the garage and along the driveway are also turned on automatically. This interesting mechanism attracted wide attention at the Lumber Industries' house at the World's Fair and will undoubtedly continue to grow in popularity.

Another type of automatic door is the electric release which is operated by pushing a button in the driveway or on the approach to the garage. The doors are counter-balanced so that when the electric button is pushed, they are released and automatically open up. After the occupants of the car have driven it in and gotten out, a light pull closes the door.

Weather-tight installations have received much attention from the equipment manufacturers so that it is now possible to secure garage doors that are tight, warm and dry. This is especially important in the built-in garage where heat is applied by the regular heating plant and must not be wasted.

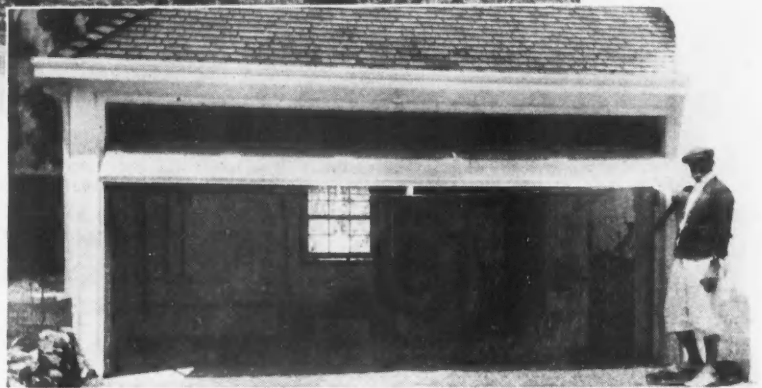
The all-steel garage door of light, strong construction is a new development that many builders are watching with interest. These doors are especially suitable for filling stations, commercial garages, stores, and other buildings where a firesafe, burglar-proof, sturdy door is required. They are also suitable for residential purposes.

GARAGE CHECK LIST OF APPROVED ITEMS OF EQUIPMENT AND DESIGN

- Up-to-date garage hardware.....
- Architecture harmonizes with house.....
- Properly drained concrete floor.....
- Windows placed for proper light but not easily broken
- Thorough insulation to prevent heat losses.....
- Garage doors of pleasing design.....
- Built-in work bench and storage cabinet.....
- Adequate lighting controlled by switch located in house.....
- Garage doors of sturdy construction.....
- Radio control of garage doors.....
- Location well planned in relation to house.....
- Firesafe construction.....
- Tamper-proof locks and door hardware.....



THE ATTACHED GARAGE of this attractive California home is a harmonious part of the architectural design of the building and does not in any way detract from its beauty. The upward-acting door extends the full width across the two car garage, giving a large, unobstructed opening that simplifies entrance and exit. The doors are designed in harmony with the style of the house, are of sturdy construction and are so constructed as to open with only a slight pull of the hand.



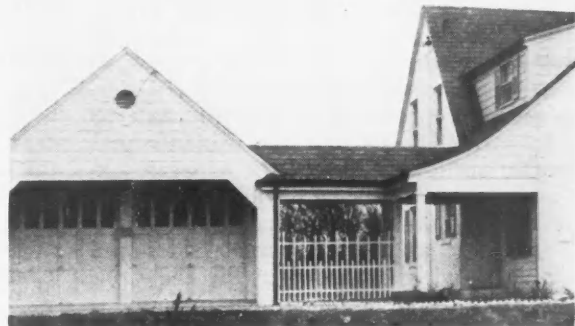
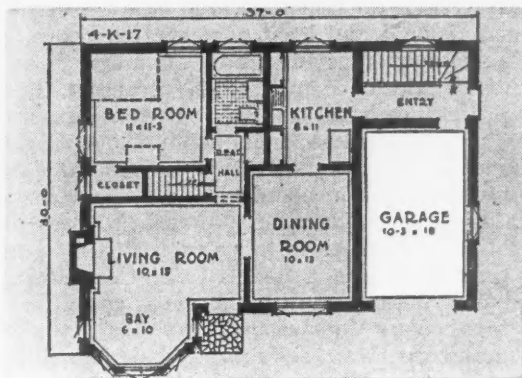
Five Modern Garages



ARCHITECTURAL TREATMENT of the garage may be varied and interesting, as in the case of this old English type structure with its high gable, slate roof, stucco and old brick. The garage doors are given an ancient, weather beaten appearance in conformity with the style of the building, yet they are operated and opened by means of up to date equipment.

DETAILS SUCH AS the dovecote, arched gateway with carved gate, old English lamps and heavy wrought iron hinges give charm to this structure and take it out of the ordinary garage type.

A SOLUTION of the garage problem is given in the design of this small house. The garage is more than "attached"—it is built in as an integral part of the design. Floor level of garage is slightly lower than the living quarters. Doors are of modern type that blend attractively with the architecture of the house. Architects' Small House Service Bureau design No. 4-K-17.



A MODEL HOME in Indianapolis connects garage and house with an attractive walkway in the fashion shown above, tying the two together in an interesting manner. While there is a distinct trend to the built-in garage, the semi-attached type such as this is very popular when carried out in attractive architectural style. An upward-acting door which folds up out of the way at a touch of the finger is installed and its design and appearance form an attractive part of the architectural plan.

IN THE COLONIAL HOME at left, the unusually attractive paneled doors of swinging type are equipped with the latest in modern hardware. The 32-inch hinges are ball-bearing with a heart design tip. Doors are held open by an efficient holder and are equipped with a one-piece hardware unit consisting of bolt, lock and latch. This is another example of a built-in garage handled with skill and understanding of architectural design.

GOOD ARCHITECTURE, MODERN DOORS AND EQUIPMENT

BLANKET CONSTRUCTION CODE FILED

Construction League of the United States Accepted by NRA to Represent Entire Industry

PLANS for the presentation to the National Recovery Administration of a general basic code of fair competition for the entire construction industry, to be supplemented by codes for individual groups within the industry, enabling it to present a united front under the terms of the national industrial recovery act, were perfected at an open meeting of 61 representatives of national trade associations and professional bodies comprising the construction industry held at Washington on July 31 and August 1.

The task of preparing and presenting such a code was placed under the leadership of the Construction League of the United States, organized about two years ago, which had offered its services to the National Recovery Administration for the purpose, which offer had been accepted by Malcolm Muir, deputy administrator of the NRA, at a meeting with the policy committee of the league on July 26. The league then organized a code committee and an advisory council, which had invited each national organization within the industry to send a representative and alternate to the meeting on July 31. The action taken was informal and without specific authorizations of the separate organizations in many instances; but resolutions declaring it to be the sense of the meeting that there should be a general basic code and supplemental codes and that the movement should be headed up by the Construction League were adopted by almost unanimous votes after it had been stated that the need for prompt action was so urgent that the league was prepared to proceed with its plan in any event.

A tentative draft of a basic code, drawn up by the Code Committee of the League was discussed and modified to some extent at the meeting, with the idea that it would serve as a substitute for the provisions of the President's Agreement or "blanket code" which all employers have been asked to sign pending the development and approval of specific codes, and that this would enable the various branches of the industry to place themselves within the terms of law in a short time while the complicated details of the separate supplemental codes are being worked out.

Later a revised draft of the tentative code was endorsed by the meeting and further endorsement was given for the committee to take all necessary steps for the approval of a general code by the President.

This plan was developed by a group within the Construction League after a score or more separate codes had been filed with the NRA by separate organizations but had been held in abeyance because of a general policy of the NRA that it would prefer to deal wherever possible with a comparatively small number of broadly representative national organizations rather than with a larger number of less representative bodies.

The general plan had been outlined in a statement issued after the meeting on July 26 as follows:

"Perfection of, and agreement to, a basic or master code, to which divisional, local and specialists' codes may be harmoniously supplemented, and which when

approved will control the working conditions of upward of four million employees, will be the first objective of the committee. The individual codes, dealing with divisional or local conditions, will then be attuned to the master code through the cooperative efforts of their sponsors, the National Code Committee and a representative advisory council, and submitted to the Administration for approval.

"Mr. Muir told the Construction League that he believed that by the procedure of coordination from within the construction industry itself, it will be possible to have each of the industry's branches operating under mutually acceptable codes at a much earlier date than if the details of the complex intra-industrial relationships were taken up independently at each of the hearings on divisional and local construction codes.

"It was announced that the Code Committee's advisory council would be composed of representatives selected by professional and trade associations that are truly representative of the various subdivisions of the industry, including architects, engineers, general contractors, contractors for mechanical and non-mechanical branches and material supplies. Codes proposed by any group of the construction industry will with their consent be referred to the League's Code Committee."

The personnel of the Code Committee is as follows: Chairman, Stephen F. Voorhees, of Voorhees, Gmelin & Walker, architects, New York; vice-chairman, John P. Hogan, of Parsons, Klapp, Brinckerhoff & Douglas, engineers, New York; W. T. Chevalier, of the McGraw-Hill Publishing Co.; P. W. Donoghue, of P. W. Donoghue Co., Boston; F. P. Byington, of Johns-Manville Corp.; William Steele, 3rd, of William Steele & Sons Co., Philadelphia; C. H. Dabelstein, of S. H. Dabelstein & Sons, New York; and A. E. Horst, of Henry W. Horst Co., Philadelphia and Rock Island, Ill. Secretary J. W. Follin, formerly engineer, Philadelphia Federation of Construction League, 925 Willard Hotel, Washington.

The purpose of the Advisory Council is to set up parallel channels through which related codes for the various branches of the industry may be directed to avoid the confusion and conflict that might result if each presented a code independently.

Representatives of the Construction League had already informally reviewed nearly a score of proposed construction codes from various sources and reported after the meeting on July 26 that although the codes for the most part were drawn independently of each other, they were remarkably free from conflict and show an encouraging uniformity of purpose to improve labor and competitive conditions and relationships within the industry.

S. F. Voorhees, who had been appointed chairman of the code committee, presided at the opening of the meeting and after he had explained the plan was elected chairman of the Advisory Council; J. P. Hogan was elected vice-chairman, and J. W. Follin was elected secretary.

In outlining the plan Mr. Voorhees said the most important objective was to establish the construction industry as a whole and that the major question to be decided was whether self-government can be preserved for the industry or whether it is to be regulated by bureaus in Washington and in the states and municipalities. If the procedure of filing separate codes were to be followed they would be tied together by the administration and he thought it much more desirable that they be correlated through an organization representing the industry. For this reason the code committee of the Construction League had decided to go ahead and do everything possible to sell the government the idea of a general basic code and that those who do not agree may file separate codes.

He then presented the tentative code drafted by the Code Committee but said that the first question to be decided was that of an authorization to proceed with the general plan. After some discussion this was adopted, with the understanding that the votes were not necessarily binding upon any organization.

Several objections were voiced to the provision in the tentative draft of a code for the creation of an Industrial Control Committee of eight members to be selected

by the policy committee of the Construction League, and suggestions were made that this committee be broadened. Those making such objections were asked to draft a substitute provision to be considered in connection with a revision of the tentative draft.

Many of those present said that the chief thing desired by their organizations from the recovery act and the proposed codes was protection against unfair practices, characterized as "bid-peddling" and "chiseling," and a resolution was adopted that there be included in the master code a declaration that all supplementary codes shall specifically forbid the unfair practice known as "bid-peddling" and that the control committee shall submit further recommendations and regulations in respect of this and other unfair practices.

Mr. Voorhees emphasized that the national organization would have neither the desire nor the power to prevent any separate organization from filing its own code with the NRA to be dealt with by the NRA officials in accordance with the policy of the administration, and that any interest would have the right to present its own position at the hearings to be held by the NRA. The supplemental codes, he said, would be the job of each trade association and the control

LIST OF CODES SUBMITTED TO NRA BY CONSTRUCTION GROUPS UP TO AUG. 17

- International Association of Public Works Officials, Detroit.
 River and Harbor Improvement Association, Detroit.
 Pile-driving & Contractors Association, San Francisco.
 Greater Miami General Contractors Association, Miami Chapter, Miami, Fla.
 Northwest Association of Highway Contractors, Portland, Oregon.
 Master Builders Association of Wisconsin.
 National Association of Building Trade Employers and employers in building construction of the National Association of Builders Exchanges.
 New York State Highway Chapter, Associated General Contractors, Albany, N. Y.
 Contractors and Builders Exchange, Reading, Pa.
 Allied Construction Industries, Cincinnati.
 Building Industry in California, San Francisco.
 Colorado Association of Highway Contractors, Denver.
 Association of General Contractors of Connecticut, Hartford, Conn.
 Associated General Contractors of America, Washington, D. C.
 Independent Building Trades Council of New Jersey.
 Master Masons Association, Atlantic City, N. J.
 Hartford Building Exchange, Hartford, Conn.
 United Roofing Contractors Association of North America, Chicago.
 Cement Gun Contractors, Pittsburgh, Pa.
 Home Brick Layers Protective Local Union No. 1, New Orleans.
 New Jersey Brick Manufacturers Association, Sayreville, N. J.
 National Clay Products Association, Chicago.
 American Concrete Pipe Institute, Chicago.
 Cast Stone Institute, Chicago.
 National Concrete Chimney Builders Association, Chicago.
 Mason Contractors Association of the United States and Canada, Washington, D. C.
 Glass Manufacturers of Pacific Northwest, Tacoma, Wash.
 National Building Granite & Quarry Association, New York.
 National Terrazzo & Masonic Association, Louisville, Ky.
 Southern Granite Quarries & Manufacturers Association, Elberton, Ga.
 Miami Tile, Marble & Terrazzo Dealers Association, Miami, Fla.
 Terrazzo Contractors of Southern California, Los Angeles.
 National Lime Association, Washington, D. C.
 Southeastern Soft Lime Rock Association, Washington, D. C.
 Dolomite Refractories Institute, Cleveland.
 Associated Roofing Contractors, St. Louis.
 Clay & Shale Roofing Tile Industry, Chicago.
 National Sand and Gravel Association.
 National Crushed Stone Association.
 Minnesota Natural Stone Fabricators and Producers Association, St. Paul.
 Stone Merchants of Colorado, Denver.
 Ohio Association of Crushed Stone Producers, Toledo.
 National Terra Cotta Manufacturers Association, New York.
 Associated Roofing Contractors of St. Louis, St. Louis.
 Tile and Mantel Contractors Association, Washington, D. C.
 Atlanta Tile Contractors Association, Atlanta, Ga.
 Philadelphia Tile, Mantel Contractors Association, Philadelphia.
 New Orleans Associated Tiling Contractors, New Orleans.
 Denver Face Brick Manufacturers Association, Denver.
 California Retail Hardware & Implement Association, San Francisco.
 National Hardware Association, Philadelphia.
 American Iron & Steel Institute.
 National Association of Automatic Sprinklers, Providence, R. I.
 Southern California Metal Weatherstrip Association, Los Angeles.
 National Association of Ornamental Iron, Bronze & Wire Manufacturers, South Bend, Ind.
 Cast Iron & Soil Pipe Association.
 National Association of Pipe Nipple Manufacturers, Washington, D. C.
 National Association of Heating & Piping Contractors, New York.
 West Coast Sanitary Manufacturers, Los Angeles.
 Steam Heating Equipment Manufacturers Association, New York.
 Master Plumbers Association of Greater Miami, Sanitation and Heating Association, Spokane.
 Association of Tunnel & Water-Line Contractors, Cleveland.
 Retail Plumbing & Heating Association, Omaha.
 National Association of Master Plumbers, Washington.
 Master Plumbers of Tulsa, Okla.
 Michigan Sheet Metal & Roofing Contractors Association, Grand Rapids.
 Minneapolis Sheet Metal Trades Association.
 National Association of Sheet Distributors, Philadelphia.
 Associated Sheet Metal Industries of Southern California, Los Angeles.
 Sheet Metal Workers International Association, Local Union No. 423.
 Metallic Furring & Lathing Contracting Business, New York.
 Rolling Door Institute, Columbus, Ohio.
 Greater Miami Chapter, National Electrical Contractors Association.
 Electrical Contractors Association of Pittsburgh.
 Master Electricians Association, Tampa.
 Electrical Contractors of Maryland, Inc., Baltimore.
 Hardwood Floor Contracting Association of Metropolitan Detroit.
 United Brotherhood of Carpenters & Joiners, Memphis.
 Independent Carpenters Association, Miami.
 Los Angeles District Council of Carpenters.
 Boonmen & Raftsmen of the Tacoma Waterfront.
 National Retail Lumber Dealers Association, Washington, D. C.
 Grays Harbor Shingle Workers, Aberdeen, Wash.
 Wood Preserving Industry, Boston.
 Lead Industries Association.
 Wisconsin Limestone Association.
 Iowa Master Painting & Decorating Contractors Tile Manufacturers Association.
 Paint, Varnish & Lacquer Industry, Washington, D. C.
 American Boiler Manufacturers Association and Affiliated Industries.
 Wood, Wire & Metal Lathers International Union.
 International Association of Bridge, Structural & Ornamental Iron Workers.
 International Brotherhood of Electrical Workers.
 United Brotherhood of Carpenters & Joiners of America.
 Minnesota Building Employers Association.
 Operative Plasterers & Cement Finishers International Association, No. 396.
 International Hod Carriers, Building & Common Laborers.
 United Association of Journeymen, Plumbers & Steam Fitters, No. 196.
 Brotherhood of Painters, Decorators & Paperhangers of America.
 Structural Engineers Society of New York.
 Window Glass Manufacturers Association.
 Sheet Metal Contractors Association of San Francisco.
 General Contractors Association of New York.
 National Building Service Employers Association.
 Seattle Construction Council.
 Chicago Retail Hardware Association.
 Pacific Northwest Division of Brick & Tile Manufacturing Industry.
 National Federation of Building Supply Associations, Newark, N. J.
 Society of Master Painters & Decorators, Casper, Wyoming Chapter.
 National Stone Setting Contractors Association.
 Building Trades of Lexington, Ky.
 Granite Cutters International Association, Concord, N. H. branch.
 Woodsawyers Association of Spokane.
 Westchester Society of Civil Engineers, Inc.
 Hardwood Floor Workers and Contractors of San Diego.
 National Association of Sheet Metal Contractors of U. S.
 Furnace Dealers & Sheet Metal Contractors.
 Providence, Pawtucket & Central Falls Carpenters.
 Master Plumbers & Steamfitters, Durham, N. C.
 National Shower Door Manufacturers Association.
 Pulaski County Plumbers & Steamfitters.
 Independent Association of Bridge & Structural Ironworkers, Inc.
 Plate Glass Manufacturers of America.
 Construction League of the United States.
 Cement Institute, New York City.
 Hardwood Floor Contractors Association.
 Oklahoma City Association of Sheet Metal Contractors.
 Explosives Industry.
 Asphalt, Shingle & Roofing Institute.
 Wood Flooring Contractors Association of East Bay, Alameda and Contra Costa, Cal.
 Lumber & Timber Products Industries.
 Bricklayers & Stone Masons Union, Local No. 2 of California.
 Open Steel Flooring Association, Pittsburgh.
 Masonry Contractors, Houston.
 Wood Flooring Contractors Association, Houston.
 Interrotional Association of Marble, Stone & Slate Polishers, Rubbers & Sawyers, Local No. 85.
 Floor Sanding Contractors, Tulsa, Okla.
 Building Material Dealers Association, Houston.
 Carpenters & Joiners of Stamford, Conn.
 American Institute of Architects.
 Quarry Workers International Union of North America.
 Carpenters & Joiners of Memphis, Tenn.
 Painters, Decorators & Paperhangers of Corpus Christi, Local No. 758.
 Plastering Industry, Chicago.
 Granite Paving Block Manufacturers Association of New York City.
 Bricklayers of Greenville, S. C.

committee would not attempt to write them. On the other hand codes submitted to the NRA independently might be referred to the national organization.

After the general plan had been discussed and approved at the afternoon meeting an adjournment was taken until the following morning to enable the Code Committee to consider further revisions of its tentative draft. A second tentative draft was then submitted at the meeting on August 1 which was endorsed by the meeting in a resolution declaring it to be the sense of the meeting that the action so far taken by the Code Committee be endorsed and that further endorsement be given for the committee to take all necessary steps for the approval of a general code by the President. The general meeting was then adjourned but the code committee remained in Washington to continue negotiations with the NRA.

Speaking at the New York Building Congress luncheon at the Roosevelt Hotel August 16, 1933, S. F. Voorhees, Chairman of the Code Committee said that for the first time all units engaged in construction and building realized that they were parts of one huge industry which should formulate a construction code under NRA for the whole country. The speaker said that such a code was started about one month ago and that after having been approved by the national trade associations comprising the membership of the Construction League, it was submitted to the Deputy Administrator in charge of codes for this and allied industries. Following recommendations made by the Recovery Administration the code was put into final shape and presented to General Hugh S. Johnson, August 11th, for a hearing on Sept. 6 at 10 A. M. in the Auditorium of the Commerce Building.

The code prepared by the Voorhees Committee will be a master code to which codes of other national groups in the construction field will be related. The code defines the construction industry "to mean the designing, the constructing, and the assembling, installing and applying of manufactured parts and products of (a) building structures, including modifications thereof and fixed accessories thereto, intended for use as shelter; and (b) fixed structures and other fixed improvements and modifications, flood control and water power development, reclamation and other similar services required for the public welfare; and the term 'Construction Industry' is further defined to include all persons who perform such functions, including without limitations those persons commonly known and sometimes defined by law, as architects, engineers, contractors, and subcontractors." It includes the provisions covering collective bargaining prescribed by the Recovery Act and states minimum wages and maximum hours. The provision on minimum wage calls for not less than 40c per hour unless the hourly rate for the same class of work on June 15, 1929, was less than 40c per hour. In no case shall the rate be less than 30c per hour. The minimum rate of wages for accounting, clerical and office employees is \$15.00 per week in cities over 500,000 population.

Maximum hours shall not exceed an average of 35 hours per week during a six months' calendar period or 48 hours in any week in such period or 8 hours in any one day excluding professional, executive or supervisory workers, except in cases of emergency requiring the protection of life and property. The maximum hours are 40 in any week for office employees except for those in executive capacity.

The administration of the construction code is placed in the Policy Committee of the Construction League with three non-voting members appointed by NRA.

This committee shall have authority to establish subcommittees and may require any employer, trade association or professional body in the industry to supply information relating to wages, hours and other conditions for the purpose of ascertaining how the code is effectuating the operation of the Recovery Act in the construction industry. Supplemental and collateral codes proposed by trade, industrial or professional groups within the construction industry shall be subject to the general provisions of the master code but shall be administered by committees established by the respective groups. Provision is made for appeal from the decision of the trade administrative committee to the National Administrative Committee and from it, if necessary, to the NRA Administrator.

Adjustments between buyer and seller due to the signing of the President's Re-employment Agreement are provided in the code but due to the customary long-term contracts at fixed prices, such adjustments shall be contingent on similar, appropriate adjustments made by all parties participating all along the line. The practice commonly known as "chiseling" or "bid peddling" is banished by the clause forbidding any member of the construction industry from being a party to the practice and providing that all supplemental codes contain a similar clause with provision to enforce the rule.

Mr. Voorhees said in conclusion that the construction industry had a great opportunity under the Recovery Act to prepare a code which would be fair to all and would re-establish the industry on a sound basis with a minimum of government red tape. He made a strong plea to all elements of the construction industry to look at the problem as national in character calling for much cooperative effort and much patience. Undoubtedly some hardship would be caused here and there but he thought the end possible of achievement meant so much to the construction industry that individual sacrifices would have to be made. He hoped for speedy adoption of the code and a unanimous compliance by the construction industry. He welcomed this opportunity for self-government in industry, holding that its failure would mean supervision by federal or state authority.

Harris H. Murdock, President of the Building Congress, presided at the meeting which was attended by five hundred members of the building industry, most of them from the New York metropolitan district.

The Construction Industry Code as presented follows in full text:

Text of Construction Industry Code

To effectuate the policy or policies of Title I of the National Industrial Recovery Act during the period of the emergency, to induce and maintain the united action of all elements of the Construction Industry under adequate governmental or private sanctions and supervisions, to eliminate unfair competitive practices and to advance the public interest, to reduce and relieve unemployment, to improve standards of labor and living and otherwise to rehabilitate the Construction Industry, the following provisions are established as a Code of Fair Competition for the Construction Industry.

1. *DEFINITIONS*—The term "Construction Industry" as used herein is defined to mean the designing, the constructing, and the assembling, installing and applying of manufactured parts and products of (a) building structures, including modifications thereof and fixed accessories thereto, intended for use as shelter; and (b) fixed structures and other fixed improvements and modifications, flood control and water power development, reclamation and other similar services required for the public welfare; and the term "Construction Industry" is further defined to include all persons who perform such functions, including with-

(Continued to page 62)



Homes for Fall Building

The built-in features on this page and the group of homes shown on the following pages are examples of the modern trend in practical home-building. Although not as striking as the modern type homes of the Chicago World's Fair, they are probably more suitable for the present tastes of home-owners.



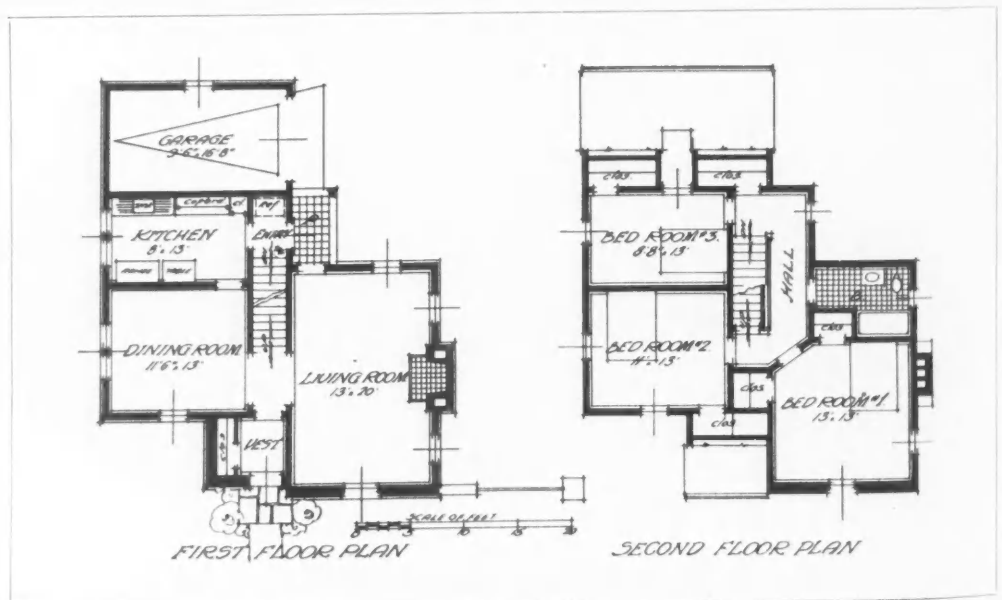
BUILT-IN FEATURES are important. At top are shown unusually attractive bookcases. The fireplace above calls for striking wood craftsmanship. Corner shelves of dining-room at left are easy to make, convenient.

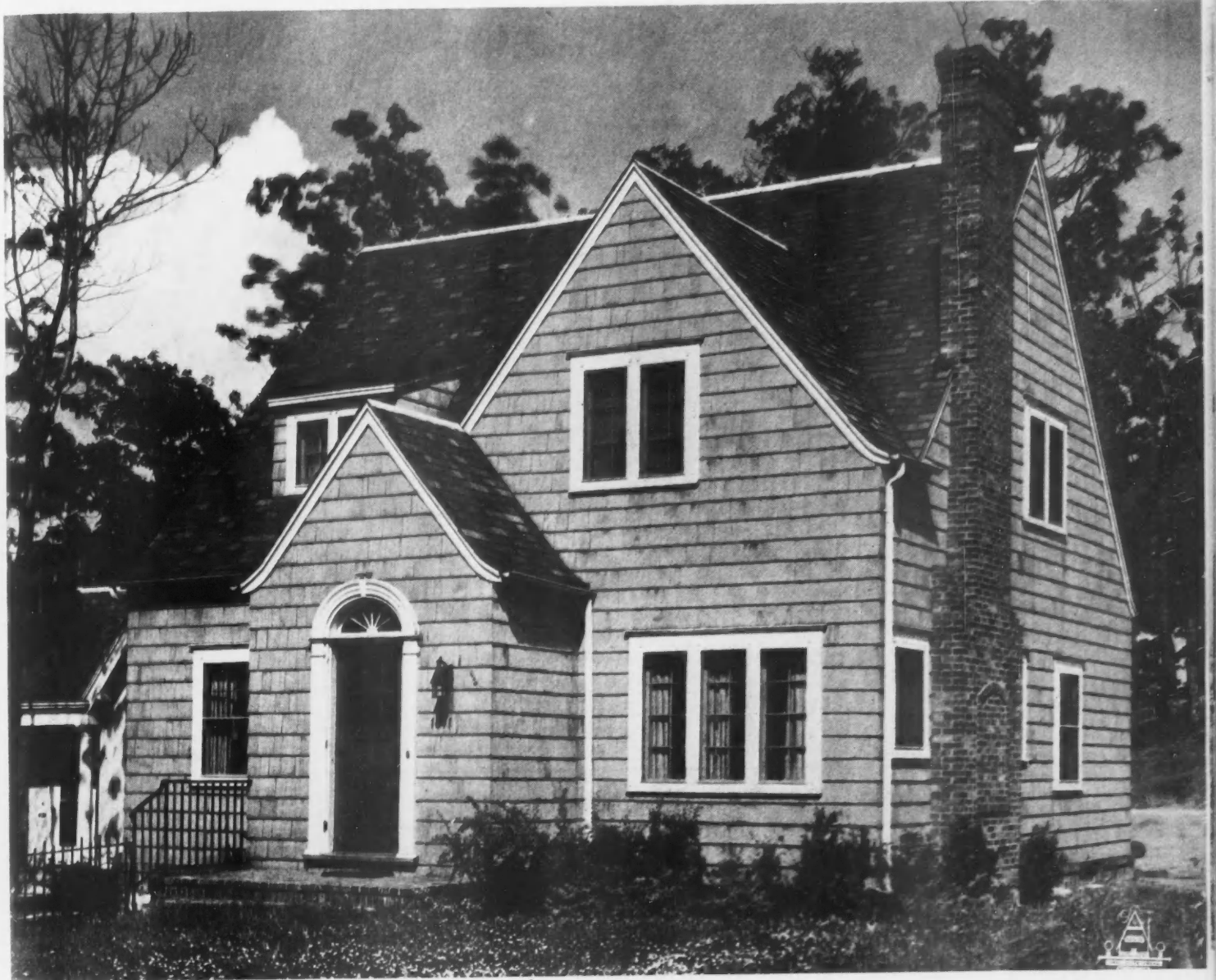


Stone, Stucco, Shingles Combined

R. C. HUNTER, New York architect, has here produced a house of distinctive design which combines the attractive features of several materials. The use of field-stone is practical in certain localities and in this instance gives great charm to the home.

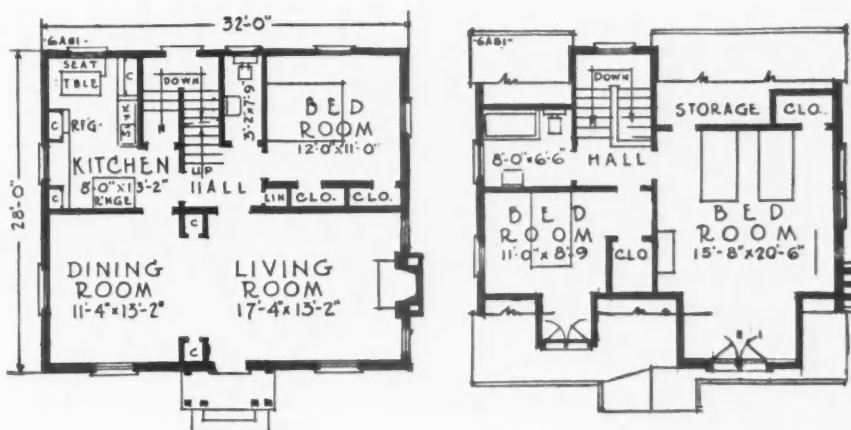
COST KEY of this house is 1.824-144-768-34-26-17.





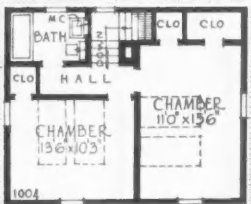
© Architects' Small House Service Bureau, Inc.

Have Many Special Advantages




BECAUSE IT IS a house that has been developed in the Mid-West to meet the practical needs of many people, this house is a popular and tested one. Such features as the first floor bed-room, the arrangement of living-room and dining-room, the convenient kitchen recommend it.

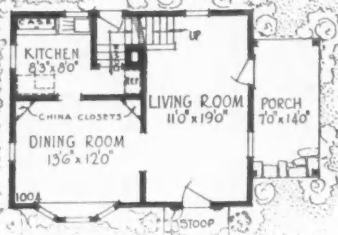
PROPORTIONS OF the gables in this house are very important and determine its architectural success. Cost key is 1.592-128-928-39-19-15.



Second Floor

CUBAGE
 House 15020 Cu.ft.
 Porch 580 . . .
 Total 15600 Cu.ft.






First Floor

NEW ENGLAND ORIGIN


This home offers a most pleasing treatment, an exceptional layout and a design of great economy. The beauty of this Colonial home lies in its simplicity of line.

DIMENSIONS
 Size of Main Building 26'0" x 20'0". Size Over All 34'6" x 25'0".
 Ceiling Height 1st. Floor 8'0". Ceiling Height 2nd. Floor 7'8".
 Ceiling Height Basement 7'0".




China Closet

National Plan Service Design No. 1004-C. Cost Key is 1.173-92-520-23-18-9.



CUBAGE
 House 13100 Cu. Ft.
 Porch 400 . . .
 Total 13500 Cu. Ft.

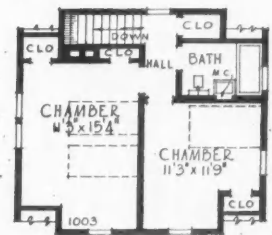


End of Living Room

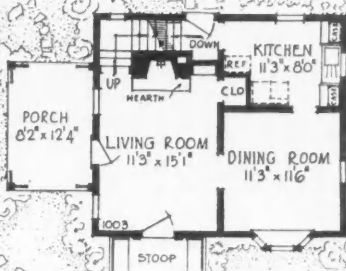
EARLY DUTCH COTTAGE

This Dutch Colonial home is of lasting beauty, simple, homelike and comfortable.

DIMENSIONS
 Size Of Main Building 24'0" x 21'0". Size Over All 33'0" x 27'0".
 Ceiling Height 1st. Floor 8'4". Ceiling Height 2nd. Floor 8'0".
 Ceiling Height Basement 7'0".

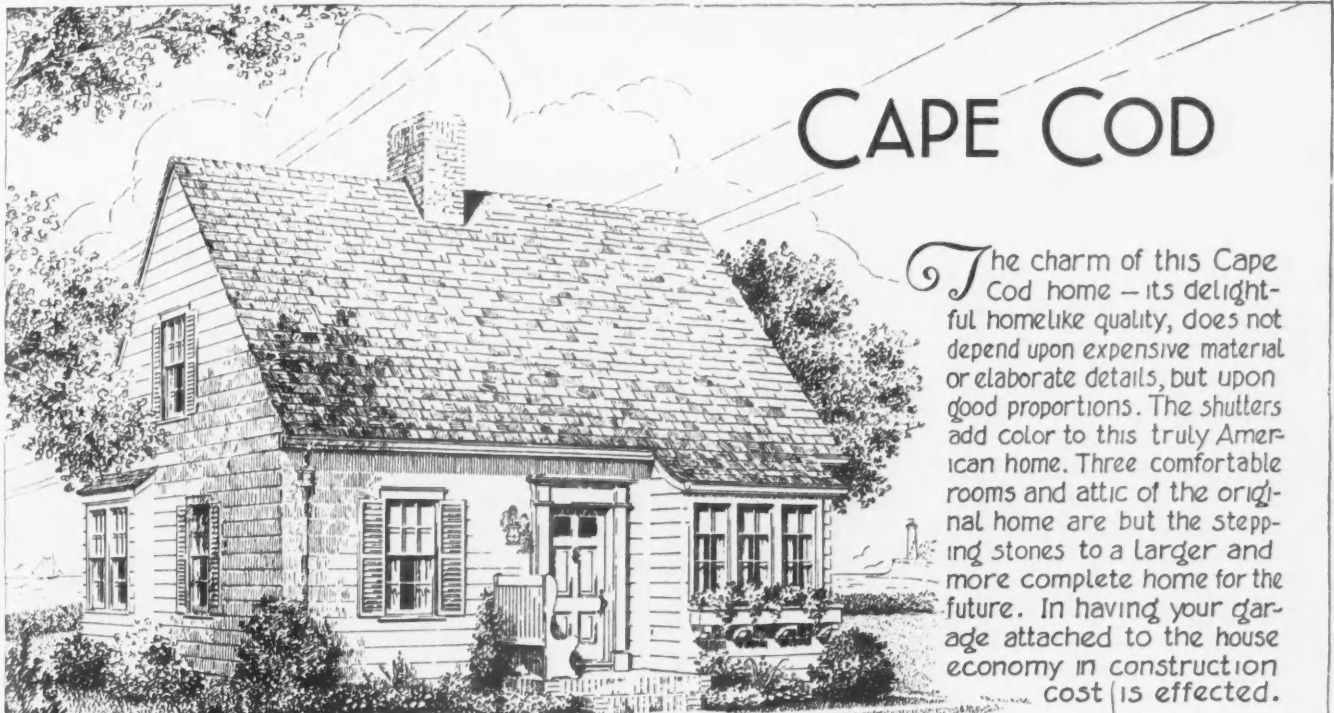


Second Floor



First Floor

National Plan Service Design No. 1003-C. Cost Key is 1.235-90-504-22-15-10.



CAPE COD

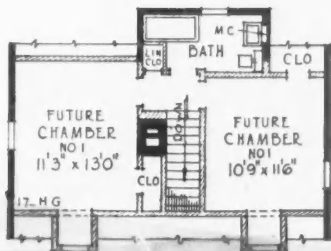
The charm of this Cape Cod home — its delightful homelike quality, does not depend upon expensive material or elaborate details, but upon good proportions. The shutters add color to this truly American home. Three comfortable rooms and attic of the original home are but the stepping stones to a larger and more complete home for the future. In having your garage attached to the house economy in construction cost is effected.

3 ROOMS ORIGINAL HOME SIZE 29'0" x 22'0"

Trim and neat, cheerful and bright this popular home provides a perfect atmosphere to live in. It is surprising to find out just how inexpensively homes of this type can be built. Designed particularly to enable future rooms to be added as required — See Illustrations Below.

CUBIC CONTENTS

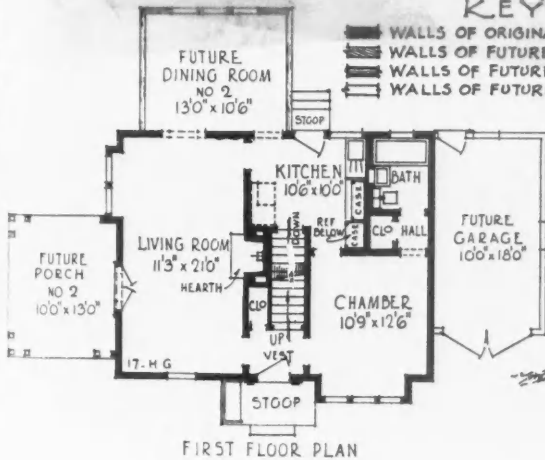
ORIGINAL HOME.....	11500 CU.FT.
FUTURE ADDITION #1.....	5800 " " "
FUTURE ADDITION #2.....	2600 " " "
GARAGE.....	2000 " " "
TOTAL.....	21900 CU.FT.



6 ROOMS SIZE 29'0" x 33'0"
Perspective showing porch at side, roof dormers and rear addition.

KEY

- WALLS OF ORIGINAL 3 R.M. HOUSE.
- WALLS OF FUTURE #1 ADDITIONS.
- WALLS OF FUTURE #2 ADDITIONS.
- WALLS OF FUTURE GARAGE.



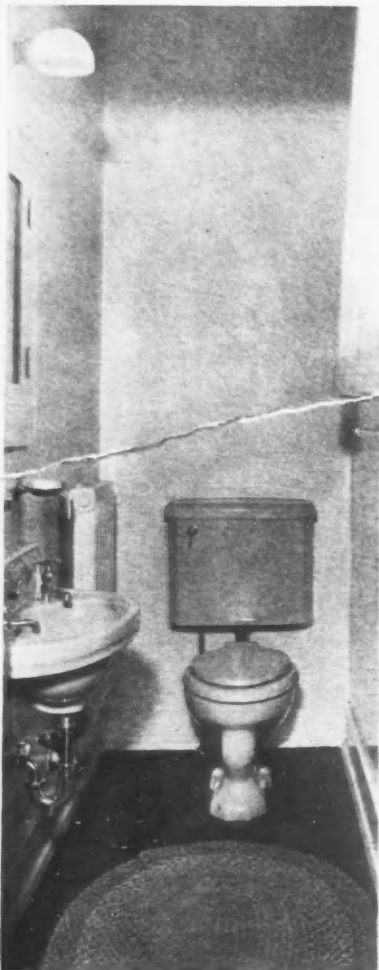
6 ROOMS SIZE 39'0" x 33'0"
Elevation of complete home with garage.

N.P.S. HOMES THAT GROW NO.17 HG

STARTING OUT AS a small, charming Colonial cottage, this house is designed to have rooms added at a later date. Cost Key of original house is .935-110-660-28-13-10. Cost Key of house with addition No. 1 is 1.186-110-660-28-13-11. For house with addition No. 2 Cost Key is 1.457-132-814-34-15-15. With Garage, 1.658-152-814-34-17-17. Costs are if built originally; add extra labor if addition is made later. National Plan Service Design.



THE LIVING ROOM of the Kohler demonstration house is unusually large and pleasant for so small a house. The fireplace is attractive and the built-in book shelves very well handled.



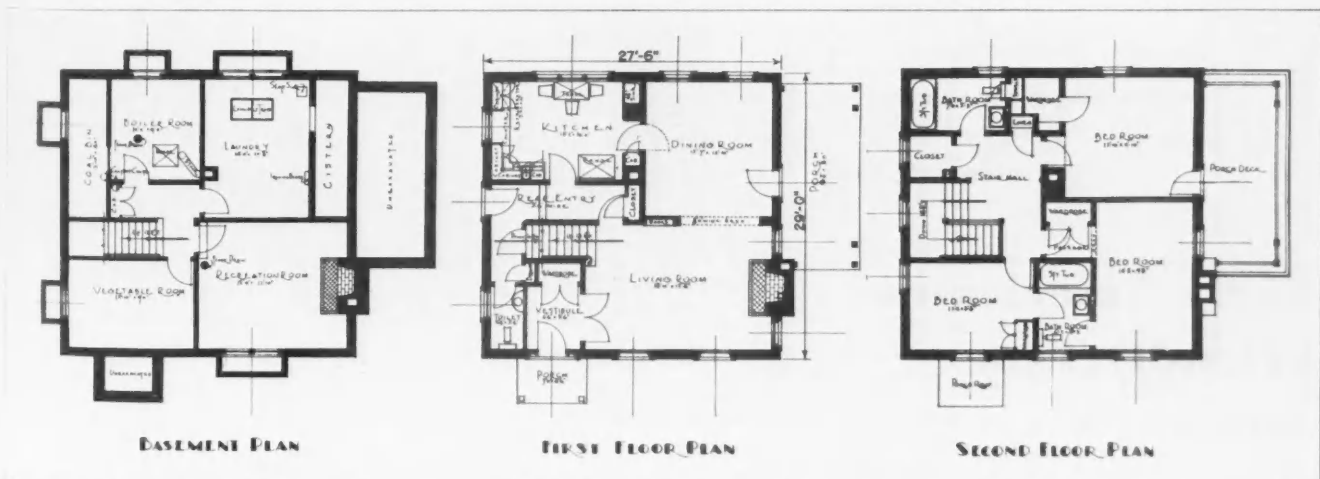
AT LEFT is the small toilet room of first floor, which is conveniently placed and attractively but inexpensively equipped.

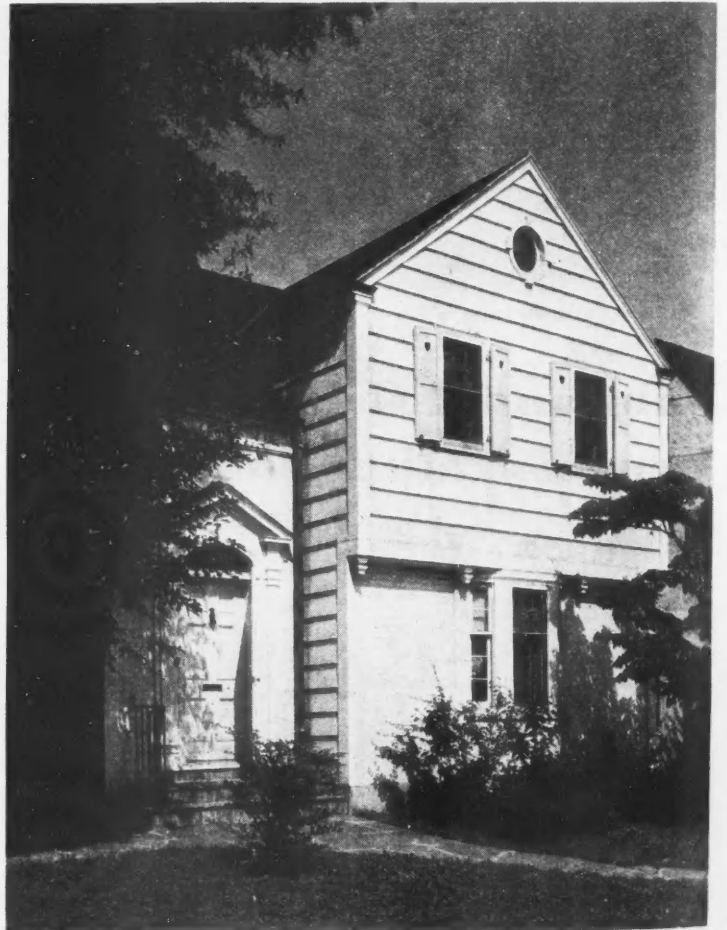
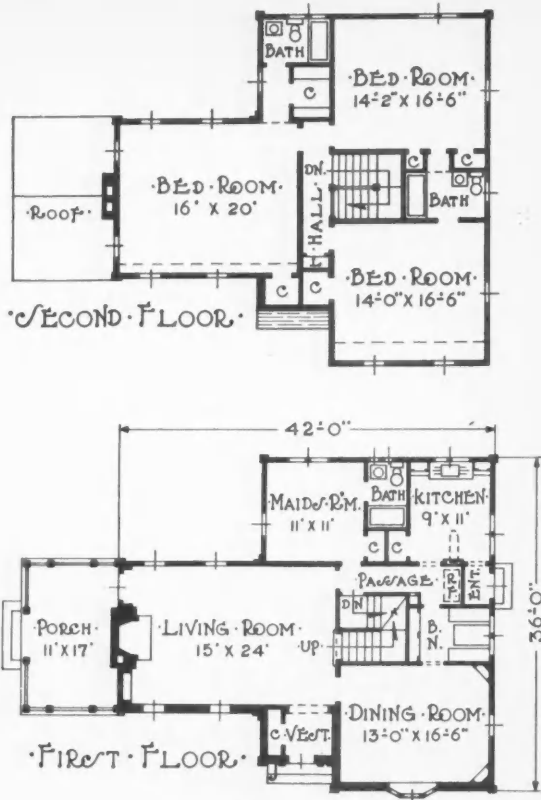
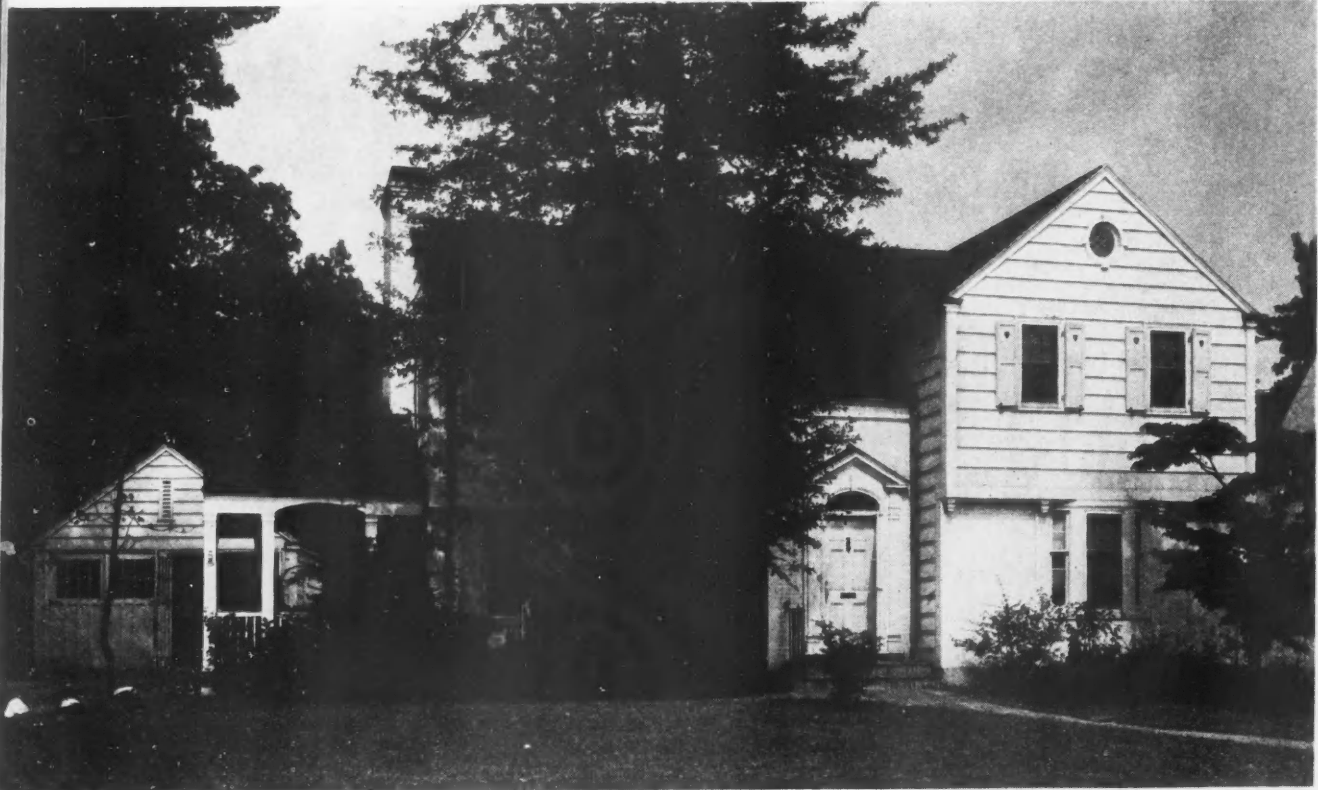
THIS GARDEN VIEW shows how attractive the rear of a modern home can be made. The open porch is very simply handled. In fact the architecture of the house is especially good because of its simple lines and good proportions.



Substantial Brick Demonstration Home

THIS COLONIAL RED BRICK HOUSE was built in the village of Kohler, Wisconsin, as a demonstration home sponsored by the local woman's club as part of the annual Better Homes campaign in that town. It is a practical, economical design which has great architectural charm. Although it is really a small house, only 27' 6" by 29', it is carefully planned to give maximum living space. Cost Key is 1.830-113-798-34-24-13.

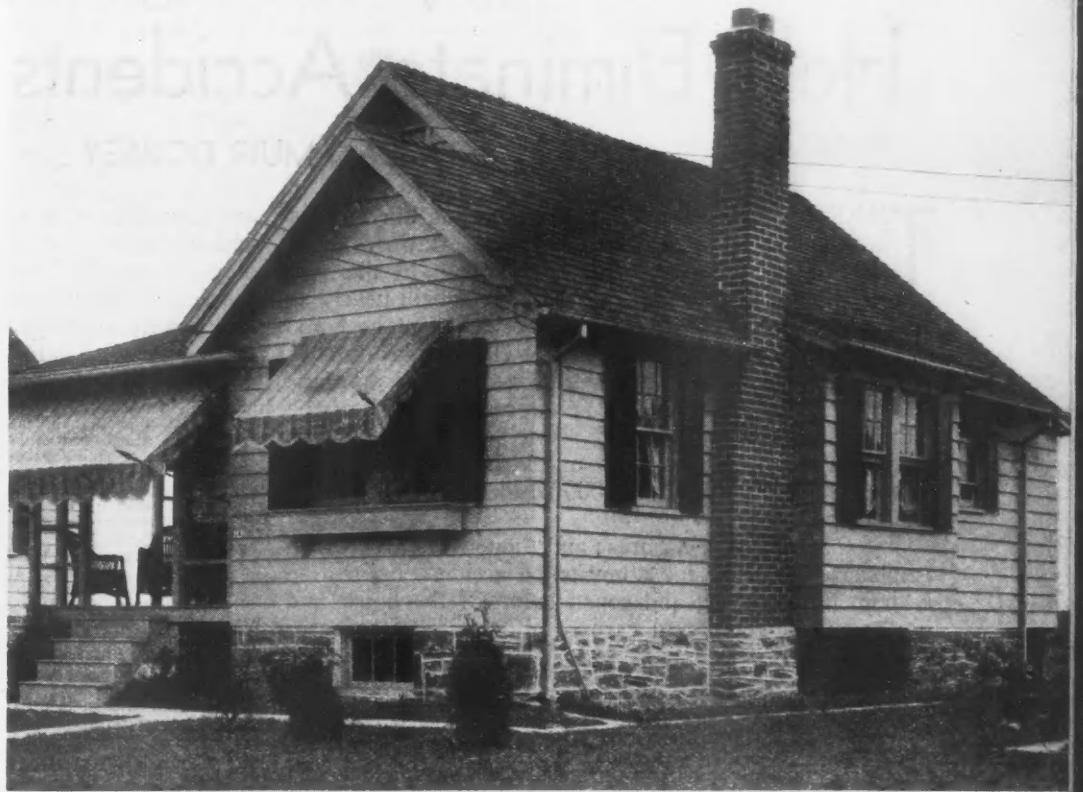
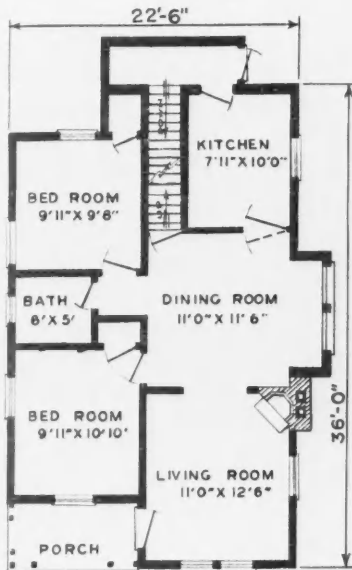




Early American of Friendly Type

LAWRENCE M. LOEB, Architect

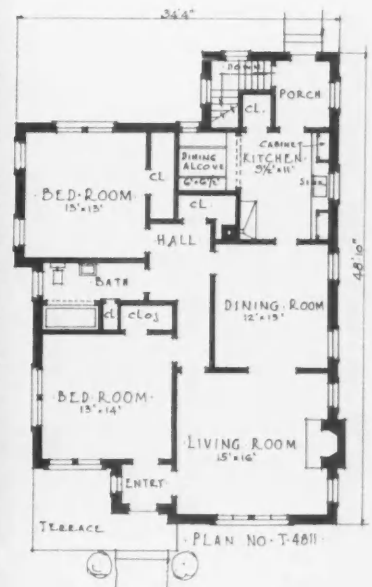
BECAUSE OF ITS interesting entrance, overhanging second story, pleasant bay window, and many other features, this Colonial home located at New Rochelle, New York, is less severe than many early American types. First floor is of white-washed brick. Cost key is 2.437-156-1168-49-32-20.



Time-Tried and Tested

SUBSTANTIAL BRICK is used in this house and it is permanently constructed throughout. The concrete terrace is a pleasant feature. Design from R. M. Williamson. Cost key is 1.711-166-1432-59-23-22.

W. W. READER admired this bungalow when it was published in Building Age in 1925. He kept the design until he found a customer for just this type. He has built a number from this same plan and finds it very good and very well-liked. Construction cost was \$3100. In commenting on the plan Mr. Reader said, "The value of this plan was many times the cost of the magazine subscription." Cost key is 1.103-125-795-34-15-14.



These Safety Building Methods Will Help Eliminate Accidents in Homes

By JEAN MUIR DORSEY

THERE is no place like home for getting hurt. This is what safety experts tell us, and statistics bear them out. According to estimates made by the Statistical Bureau of the National Safety Council, nearly as many people lose their lives from accidents in the home as are killed by automobiles. In 1931 the total number of accidental deaths in the United States was approximately 99,000, of which 33,000 were attributed to the motor vehicle and 30,000 were classed as home accidents. Besides these fatal accidents in the home, it was estimated that there were 4,500,000 accidents of a less serious nature.

These are startling figures; and they are figures which emphasize the need for attention to accident prevention both in the planning and construction of the house and in the management and care of the house after occupancy.

Stairs

In building to eliminate accident hazards special consideration should be given to the construction of the stairs, for statistics show that 40 to 50 per cent of the home accidents are falls, about a third of which take place upon stairways and steps.

The table of safety standards for stairs, which was developed under the direction of the Safety Engineering Department of the National Workmen's Compensation Service Bureau, indicates that there are a number of desirable dimensions for stair risers and treads. The most satisfactory values, however, are 6¾ to 7 inches for the riser and 10¾ to 10½ inches for the tread. Of course slight variations in these dimensions may be made, but in all cases the sum of the tread and riser should equal approximately 17½ inches, exclusive of the nosing,

and the angle with the horizontal should be between 30 and 36 degrees. A nosing of about one inch is desirable. These dimensions which have proved the safest for large numbers of people may well be used as a pattern for the building of safer stairs for the home.

The general safety standards for stair construction recommended by the Bureau are as follows:

1. Stairs should be free from winders. (Fig. 2)
2. The dimensions of landings should be equal to or greater than the width of stairways between handrails (or handrail and wall). (Fig. 3)
3. Landings should be level and free from intermediate steps between the main up flight and the main down flight.
4. All treads should be equal and all risers should be equal in any one flight.
5. The sum of one tread and one riser, exclusive of the nosing, should not be more than 18 inches nor less than 17 inches.
6. The nosing should not exceed 1¾ inches.
7. All stairs should be equipped with permanent and substantial handrails 36 inches in height from the center of the tread. (Fig. 1)
8. All handrails should have rounded corners and a surface that is smooth and free from splinters.
9. The angle of stairs with the horizontal should not be more than fifty degrees nor less than twenty degrees. (See Table and Fig. 1)
10. Stair treads, if used, should be slip proof, firmly secured and with no protruding bolts, screws, or nails.

It is well to remember also, that the more nearly we approach the same dimensions for all stairs in the house, the more safely will the family traverse them and the less adjustment will be necessary in the use of the different flights of stairs.

The adequate lighting of stairways and halls at both the top and bottom of the stairs is another important factor in stair safety. The location of windows at the landings or the head of the stairs to provide sufficient light for daytime use and the placement of ceiling outlets to insure good illumination when artificial light is necessary should be given careful consideration. To insure still greater safety, the control switches for these outlets should be located within easy reach at both the top and bottom of the stairs, so that the passage can be

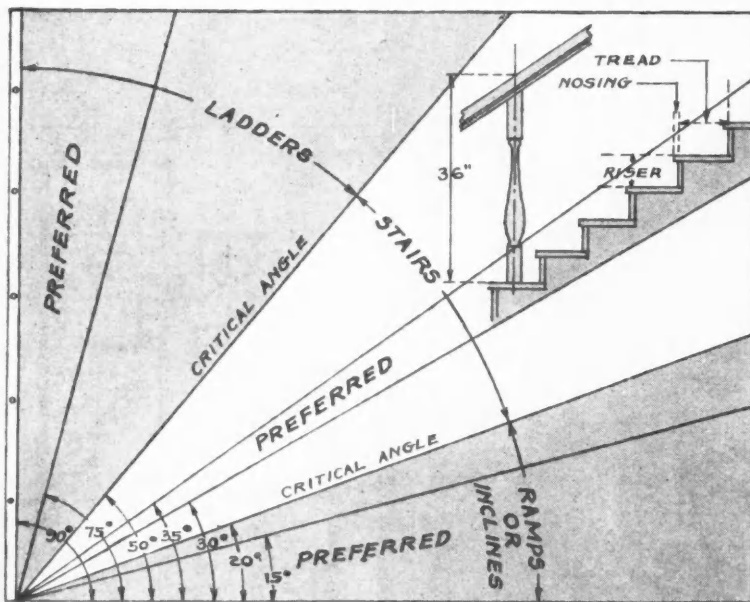


TABLE OF SAFETY STANDARDS for stairs, ladders, ramps and inclines, developed by Safety Department of National Workmen's Compensation Service Bureau.

Table of Risers and Treads for Stairs
Tread + Riser = 17½"

Angle with horizontal	Riser in inches	Tread in inches	
22°-00'	5	12½	
23°-14'	5¼	12¼	
24°-38'	5½	12	
26°-00'	5¾	11¾	
27°-33'	6	11½	
29°-03'	6¼	11¼	
30°-35'	6½	11	
32°-08'	6¾	10¾	Preferred
33°-41'	7	10½	
35°-16'	7¼	10¼	
36°-52'	7½	10	
38°-29'	7¾	9¾	
40°-08'	8	9½	
41°-44'	8¼	9¼	
43°-22'	8½	9	
45°-00'	8¾	8¾	
46°-38'	9	8½	
48°-16'	9¼	8¼	
49°-54'	9½	8	

made with light in front at all times and also so that lights can be turned off without going back to do so. If this principle were observed in the lighting of all stairways, as well as the basement, attic, and garage, there would be fewer accidents in the home.

Outdoor Steps

Stair accidents are not limited alone to stairs within the house. Many falls occur upon outdoor steps and porches. Particular attention should be given to the design and proportions of the steps leading to the house, since unequal risers or treads or surprise steps in the landings are apt to cause tripping and falling. The safety standards for interior stairs should be applied to outside steps as well.

Attention should also be given to the size and shape of the entrance porch or landing at the top of the steps. Either one should be large enough to stand on to open and close the house and screen door without having to

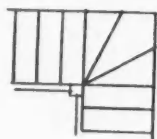


Fig. 2

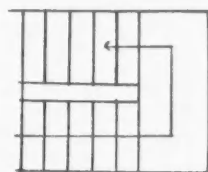


Fig. 3

step off the landing and up again, or without danger of being pushed off the edge in opening the screen door. On porches of any height, railings or some substitute, such as seats or flower boxes, should be used to prevent the possibility of falling off the edge.

Fortunately, many of the outdoor step and porch hazards may be entirely eliminated by setting the house close to the ground and lighting the basement by means of area windows. In case such windows are deep, they may be made safe by covering the top of the opening with an iron grating.

Bathrooms

Next to stairs, the bathroom is the most dangerous place in the house. Far too many accidents happen in this small area—accidents which could be prevented by forethought. For instance, many falls occur because the soap is left in the tub and the bather steps on it and slips. The lack of a suitable place to lay the soap is frequently the cause of this seeming carelessness. A soap dish built into the wall beside the tub is one of the best methods of removing the soap hazard.

A handrail placed just above the soap dish and another about shoulder height under the shower are other much needed safety devices. With the help of these aids one can both stand in a slippery tub as well as step out of the tub with some degree of safety.

The handles of the water faucets should also be chosen with an eye for safety. Cuts from sharp edges and broken handles, and burns from scalding water are frequent causes of accidents. To pass the safety test, each handle must be smooth, durable in construction, easily grasped, and properly labelled and routed.

Defective wiring or lighting fixtures and the use of portable appliances are all too familiar causes of bathroom accidents. Since it is not safe to touch a light fixture or a switch while in the tub, it is important that all fixtures and switches should be installed so that they will be out of reach of the bather. Brass-shell key sockets should not be used in the bathroom or in any other

place where the floor is apt to be damp. Only porcelain or composition sockets are safe under such circumstances. If the use of an electric heater is planned for times when the room may not be otherwise heated, it is advisable to install a built-in electric heater and equip it with a wall switch. A safe precaution to follow at all times is not to use portable appliances of any kind in the bathroom.

Windows

Unfortunately accidents of falling are not all confined to stairs and bathrooms. Sometimes children as well as grown-ups plunge out of windows, especially where the sills are low. Frequently, the lower sash, which must be pushed upwards, sticks and then suddenly gives way, and the person who is raising it lurches forward. Securely fastened screens, bars on windows, and the use of the upper sash for ventilating are some of the ways of overcoming this hazard. The safest way, however, is to build the upstairs windows high enough so that there is no danger of children falling out when left alone or of older persons losing their balance in adjusting windows.

Doors

It is advisable to pay considerable attention to the location and direction in which each door swings, since wrongly positioned doors are often the cause of minor accidents.

The width of kitchen cupboard doors and the direction in which they swing are also important details. There is far less danger from bumps and sharp corners when the doors are narrow and are hung so that they swing away from the sink or working surfaces.

When there are little children in the house, the swinging door constitutes a real hazard. A safety catch which holds the door in place when opened saves many bumps and pinched fingers.

A single master key that will open all outside doors of the house is a very small but exceedingly important safety device. How many of us have fussed and fumed trying to fit the wrong key into the wrong lock! How many of us have had to run around the house in the rain or in the dark to the other door! Many accidents occur under just such circumstances.

Storage Spaces

Indirectly, the lack of suitable storage space in homes is the cause of many accidents. The practice of storing such things as table boards, the ironing board, the scrub pail, empty fruit jars, and what not on stair steps is more often due to inadequate storage facilities than to poor methods of housekeeping or carelessness. Adequate, well-placed storage spaces throughout the house make for orderliness in housekeeping and remove many such hazards.

Such conveniences as the built-in ironing board which quickly and easily disposes of both the board and flat iron, cleaning closets both upstairs and down which provide ample space for cleaning equipment, closets for both the indoor and out-of-door children's playthings which are bound to be under foot if no provision is made for their storage, well-planned storage space in the kitchen which eliminates the necessity for storing food supplies and equipment on the floor or in inconvenient places, and the medicine cabinet which keeps poisons out of the children's reach are all simple devices designed to rid the house of hazard spots.

(Continued to page 65)

Something the Boys Can Make

13 Novel and Useful Articles of Wood Easily Constructed in the Home Workshop

BUILDING MECHANICS, as well as men and boys who are handy with tools, get a great deal of pleasure, and sometimes money profit, from making little knickknacks out of wood during spare time in the home workshop. Bird houses, flower boxes, lawn and porch furniture and other similar items are fun to build and are always appreciated additions to

the home, sometimes also finding a ready sale to friends and neighbors.

The designs and suggestions presented here are some developed by the Northwestern Retail Lumber Dealers Association and distributed in convenient pamphlet form by Ormie C. Lance, secretary, Minneapolis, to lumber dealers. The dealers report a good deal of in-



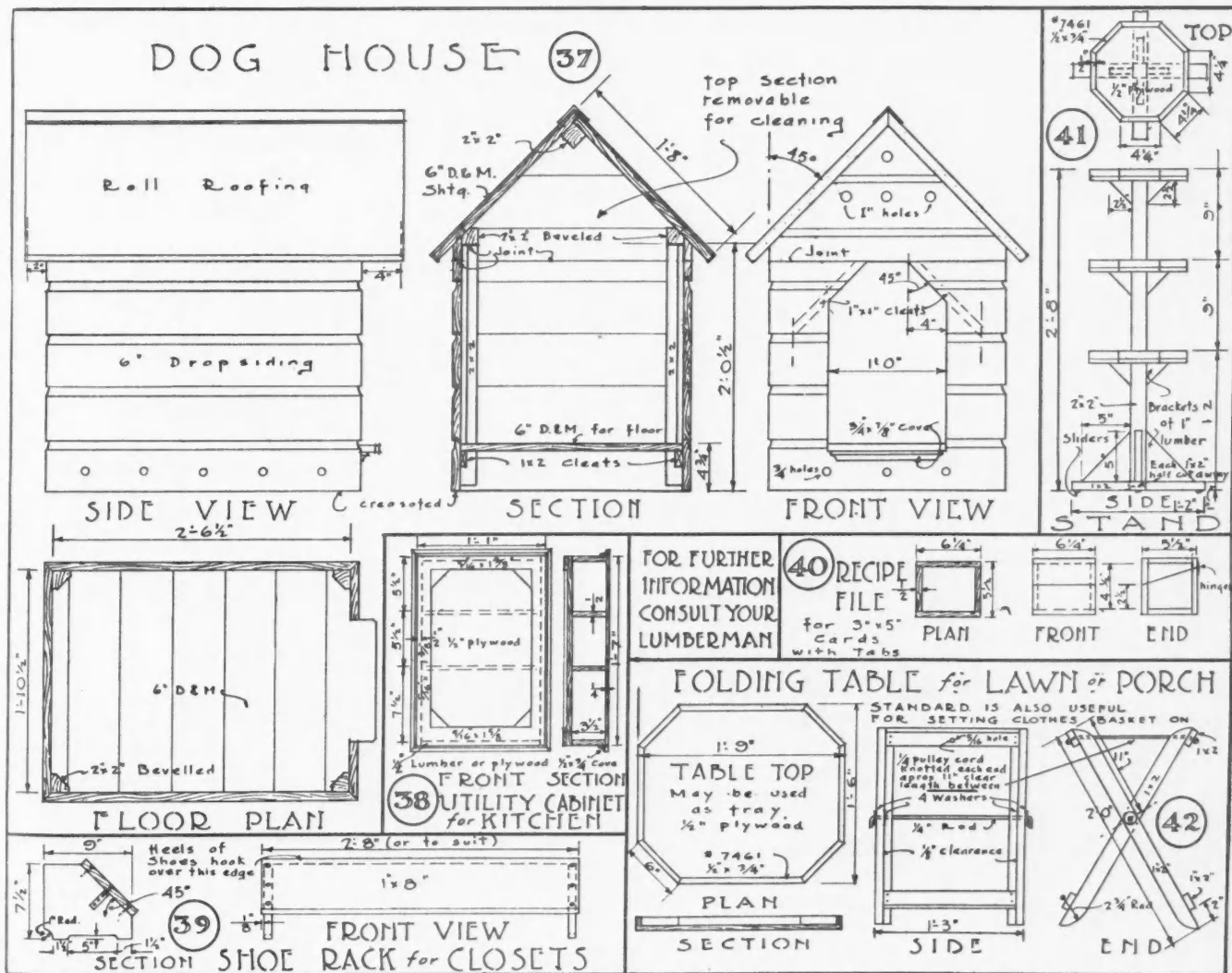
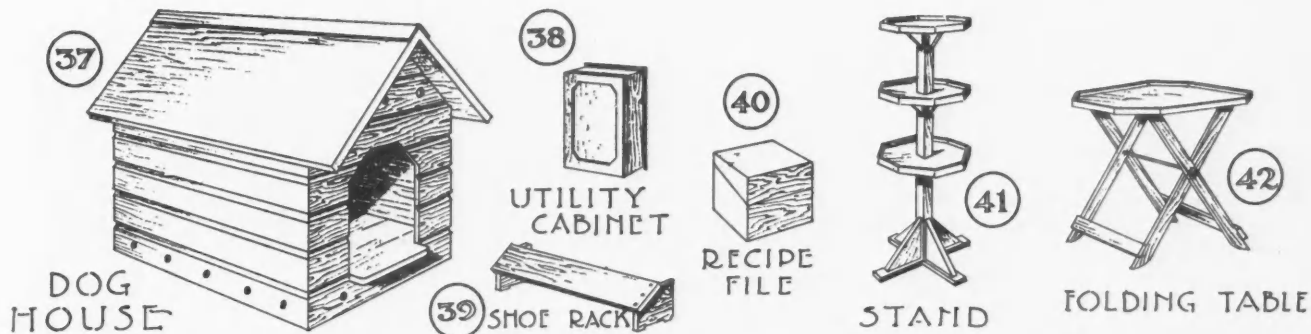
<p>BIRD HOUSES</p> <p>30</p> <p>SIDE FRONT</p> <p>Hinge für WREN</p>	<p>31</p> <p>ROOF PLAN PLAN 1/4 OF ROOF</p> <p>1" Dia Screw eye</p> <p>Bottom Screwed on</p> <p>FRONT SECTION WREN HOUSE</p>	<p>34</p> <p>8" 9 1/2" 5 1/2"</p> <p>Base 6" x 8" x 3/4"</p> <p>SQUIRREL</p>	<p>35</p> <p>10" 1 1/2" 7" 1 1/2"</p> <p>Base 10" x 10" x 3/4"</p> <p>FLOWER BOX</p>
<p>31</p> <p>SIDE FRONT</p> <p>Hinge für CHICADEE OR TUFTED TITMOUSE</p>	<p>32</p> <p>1 1/2" Dia 9" 6 1/2" 6 1/2"</p> <p>Bottom Screwed on</p> <p>FRONT SIDE BLUEBIRD HOUSE</p>	<p>35</p> <p>TO OUTSIDE OF WINDOW CASING</p> <p>10" 1 1/2" 7"</p> <p>FRONT VIEW FLOWER BOX</p>	<p>35</p> <p>Use Zinc Lining or apply asphaltic paint</p> <p>At least 2 holes for drainage if paint is used in place of lining</p> <p>SECTION FLOWER BOX</p>
<p>32</p> <p>SIDE FRONT</p> <p>Hinge für BLUEBIRD</p>	<p>33</p> <p>7 1/2" 8" 6 1/2" 3 1/2"</p> <p>FRONT SIDE SHELTER FOR SONG SPARROWS, CAT BIRDS & BROWN THRASHERS</p>	<p>36</p> <p>3'-0" 1'-4" 1'-10"</p> <p>1x4 Braces</p> <p>SIDE VIEW END VIEW SAW HORSE</p>	<p>36</p> <p>3'-0" 1'-4" 1'-10"</p> <p>1x4 Braces</p> <p>SIDE VIEW END VIEW SAW HORSE</p>
<p>33</p> <p>SIDE FRONT</p> <p>Hinge für R. H. WOODPECKER</p>	<p>33</p> <p>7 1/2" 8" 6 1/2" 3 1/2"</p> <p>FRONT SIDE SHELTER FOR SONG SPARROWS, CAT BIRDS & BROWN THRASHERS</p>	<p>36</p> <p>3'-0" 1'-4" 1'-10"</p> <p>1x4 Braces</p> <p>SIDE VIEW END VIEW SAW HORSE</p>	<p>36</p> <p>3'-0" 1'-4" 1'-10"</p> <p>1x4 Braces</p> <p>SIDE VIEW END VIEW SAW HORSE</p>
<p>YOUR NEAREST LIBRARY SHOULD CONTAIN HELPFUL INFORMATION ABOUT BIRDS</p>			

terest created in this way, and a substantial amount of lumber sales to manual training boys and home workshop hobbyists. The American Builder is glad to help in this good work by passing along to its wider audience these very clever designs with the dimensioned working drawings, making clear just how to build them. With the fall and winter months coming on when work

inside is a pleasure, many will no doubt be fitting up better workshop space in basement, attic or garage, so that real results can be had and good work done.

Architects, builders and dealers are usually "tool minded" and can get a lot of enjoyment out of hand-craft work in wood. These details will give them a chance to perform work that will bring both pleasure and profit.

THESE ARTICLES CAN BE BUILT BOTH FOR PLEASURE AND PROFIT



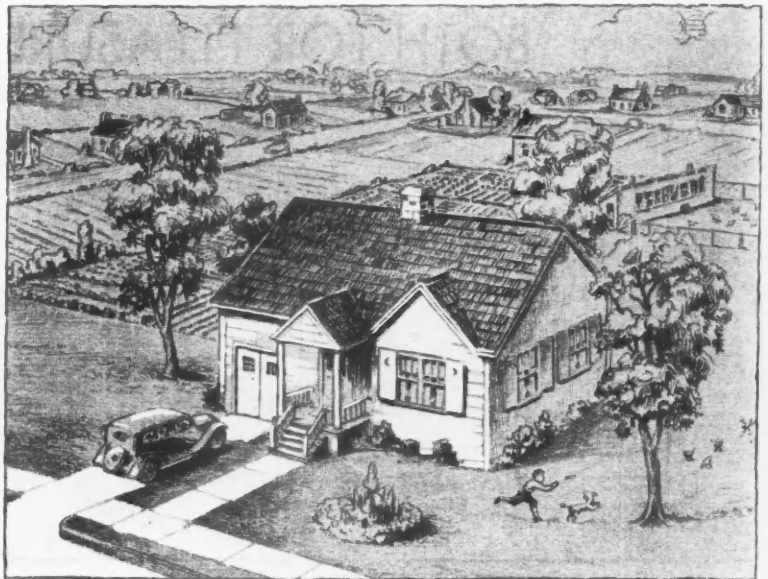
5 Rooms and Garage for \$1500

HARRY M. QUINN, construction expert for the Chicago Realty Finance Company, has developed a really new idea for a small, inexpensive home, and is trying it out with good results on the garden tract which this company is developing southwest of Chicago at 95th Street and Ridgeland Avenue. His design puts five rooms and a garage into a house 28 by 22 feet, with the two bedrooms and bath up a short flight of stairs on the mezzanine level over the garage. This is an idea that has been used in larger houses, and it seems to work out equally well to conserve space in this small garden home.

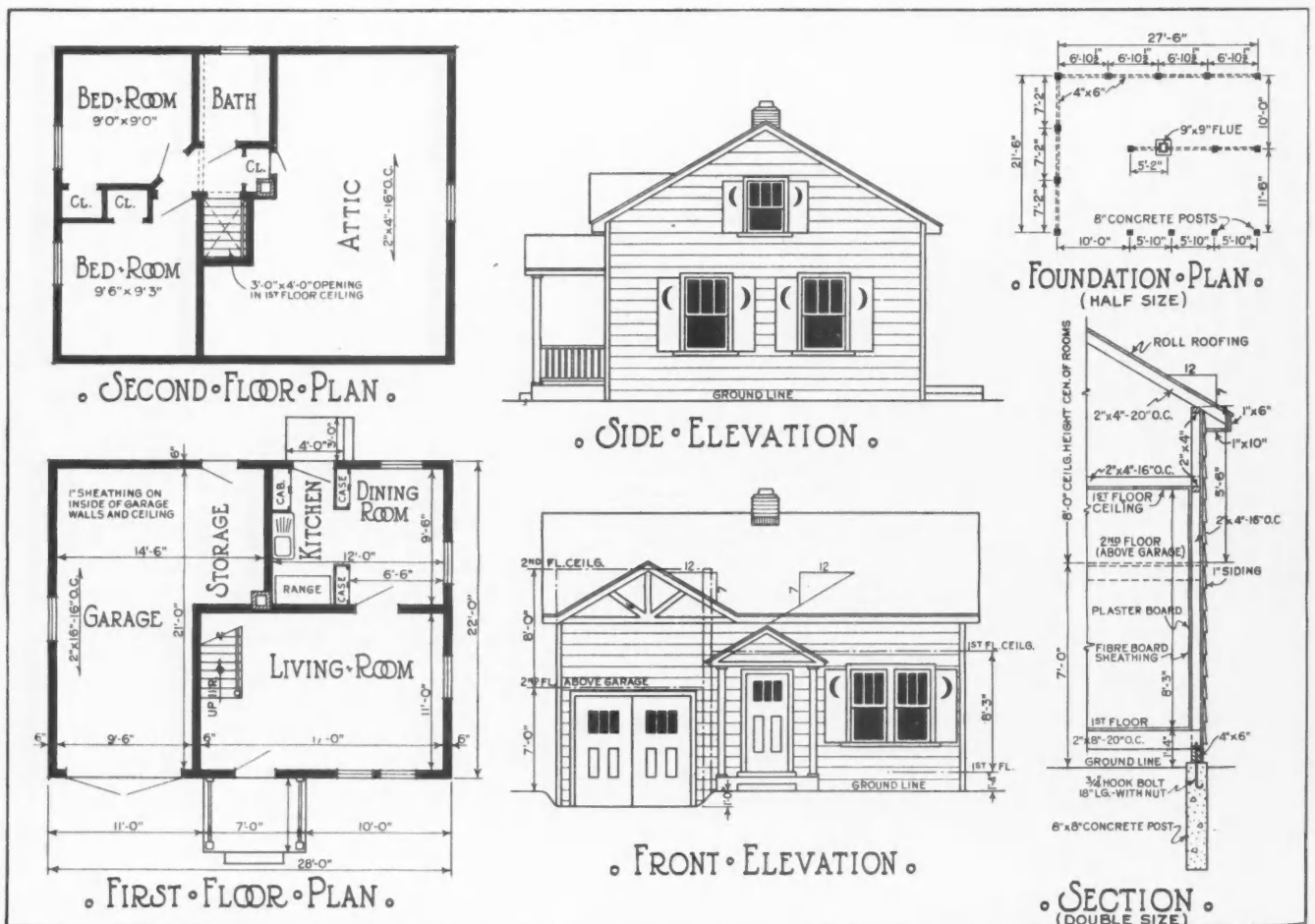
The cost of this house, with complete plumbing, figures under \$1500 at the present low level of wages. With a large building lot 120 by 125 feet of fertile soil priced at \$1000, this offers a really low cost home which can be acquired with a down payment of \$750 and then \$25 monthly to pay out complete in a little over five years. It is an investment which appeals to a great many thrifty persons. A number of these little houses sold and built to order are going up at the present time.

The house rests on 8 by 8 concrete posts with no excavation for cellar. The storage space at the rear of garage accommodates the electric pump, laundry tubs, etc. Outside walls are 2 by 4's, 16-inch centers.

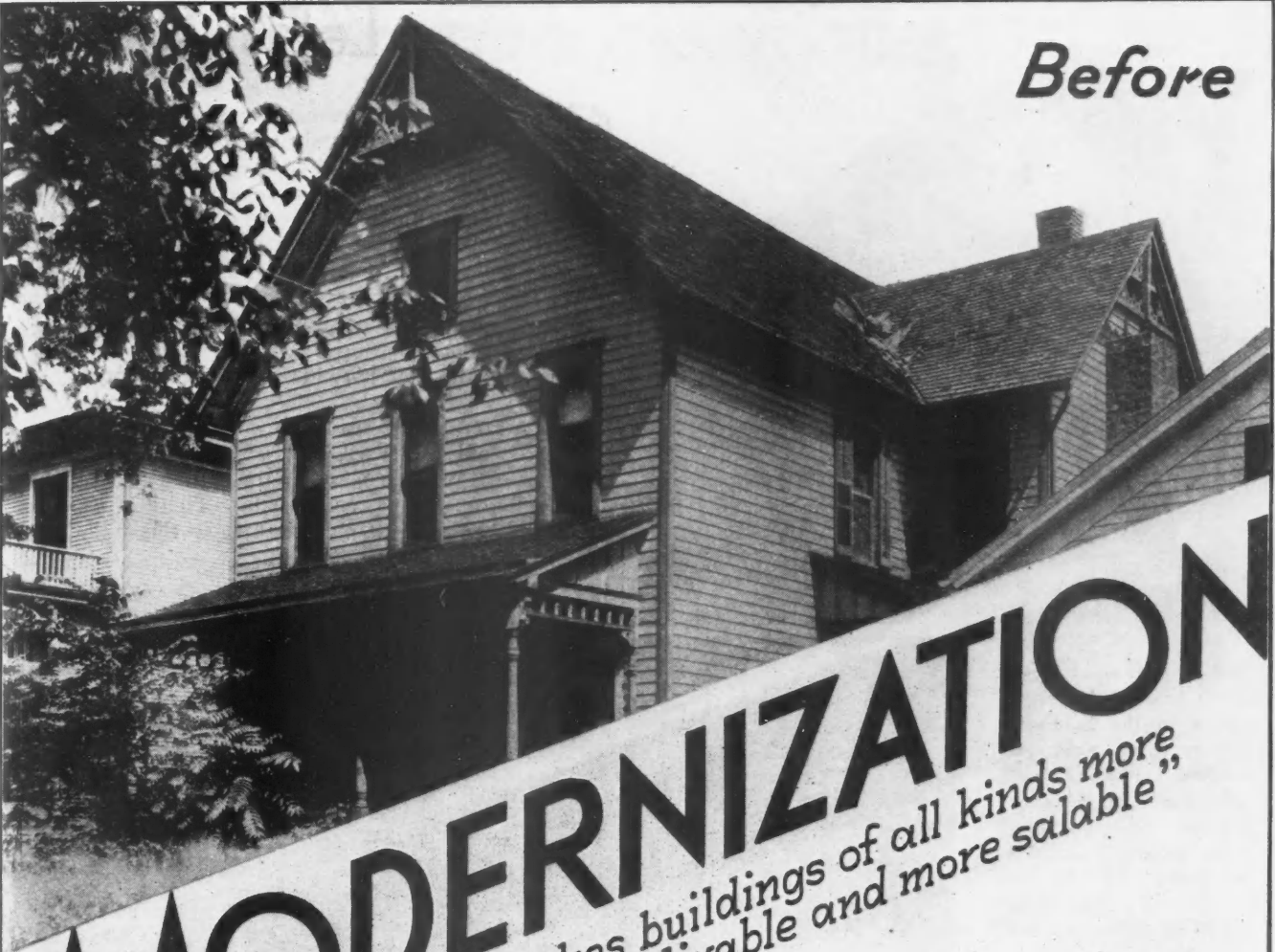
New Idea for Compact, Low-cost Home Puts Two Bed Rooms over Garage



Cost Key is .868-100-0-0-13-9.
If increased to 24'x28': 906-104-0-0-14-10.

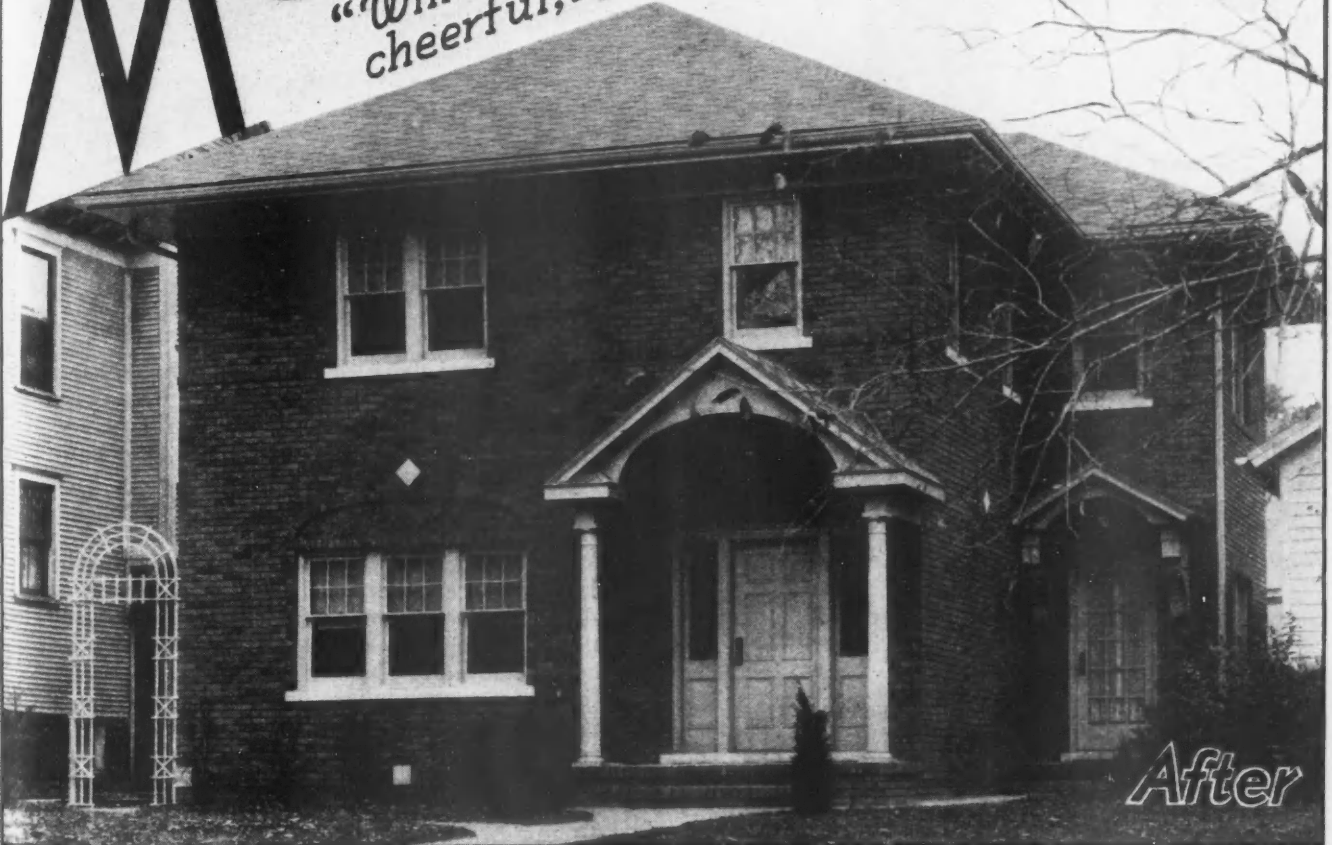


Before



MODERNIZATION

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



After

Latest Renovize Campaign



THE little old shack shown above bears slight resemblance to the handsome cottage at the right; yet they are "before and after" photographs of the same building. While the "Renovize Omaha" campaign was being conducted this old building was moved to the Court House lawn and renovated, step by step, in such manner that the general public could see and appreciate every operation.



COMMUNITY modernization and repair campaigns, involving business, industrial, residential and other types of buildings, have been conducted, are now being conducted, or will probably be promoted, soon, in a large number of cities and towns throughout the country. Latest news from these areas presents a bird's eye view, as well as specific details, of interest to all wide-awake builders, dealers, architects, operators, and others who have to do with building construction.

Atlanta, Ga., May Have Campaign Soon

"We were nearly ready to conduct a campaign in Atlanta," said W. R. Ulrich, Secretary, The Atlanta Chamber of Commerce, "when the banking holiday made us abandon our plans temporarily. There is a possibility that we will have a campaign early this Fall."

Renovize Stunt Draws Thousands

WHEN Omaha, Nebraska, conducted its "Renovize Omaha" campaign recently a total of more than \$1,000,000 in pledges was secured from 2700 property owners who listened and acted when "The Renovizers" told them the story. "In connection with our rather extensive campaign," writes Mr. A. J. Baley of the Omaha Chamber of Commerce, "a ramshackle house was placed on the Court House lawn and renovated, step by step, in full view of the public." Few publicity stunts in Omaha have aroused as much interest as this one.

The old shack was the result of a diligent search for the most worthless cottage in Omaha, this little building being presented to "The Renovizers" by the Koley Plating Company. The Nebraska chapter of the A. I. A. was authority for the revised plan and more than thirty local concerns co-operated by supplying materials. Labor and supervision were furnished by the Omaha Builders Exchange, the Master Painters and Decorators, the Mas-

ter Plumbers and the Electrical Contractors Association.

On June 26, 1933, the renovated cottage was opened to the public for inspection and in four days 13,955 visitors were registered. After the public inspection period the cottage was auctioned off for \$520.

As to how much effect this day-by-day renovation of an apparently hopelessly out of date and dilapidated structure had in the piling up of a million dollars in pledges no one can accurately estimate; however, there can be little question but that it aided materially, in connection with "a relentless barrage of publicity," as the Omaha Chamber of Commerce comments.

The entire campaign was financed by special subscriptions totaling \$2,750, the Chamber of Commerce providing office headquarters and three staff employees. Kirk Griggs was Chairman of the campaign and in addition to the executive committee, a general advisory committee of 50 leading Omaha business men functioned.

Renovize Campaign News From Many Cities

Indianapolis Nearly Doubles Goal

With a special fund amounting to about \$5,000, contributed by business concerns of Indianapolis, a "sales army" of volunteer workers obtained 10,806 pledges for modernizing work to the total of \$4,298,000. The goal was \$2,500,000, so actual results exceeded anticipations by more than 70 per cent. "Just what per cent of the pledges were carried out I am not in a position to say," writes Harmon E. Snoke, Director of Public Relations, Indianapolis Chamber of Commerce, "However, demands on public relief agencies fell off sharply during and following this campaign."

3 Million Industrial Improvements In Memphis

With the exception of a recent "Paint Up-Clean Up" campaign, Memphis, Tennessee, has not had a modernization or renovize drive. However, a Committee on Industrial Rehabilitation made a survey of Memphis and surrounding territory to determine needed repairs,

changes and alterations for nearly 1800 cotton gins, saw mills and other industrial plants. Between \$3,000,000 and \$4,000,000 in improvements, etc., has been reported by the Committee to date, according to C. M. Anderson, Executive Vice President, Memphis Chamber of Commerce.

Obsolete New York Properties Losing Millions

Residential vacancy figures for Manhattan, recently released by the New York Building Congress, show that, at 1933 asking prices, more than \$4,000,000 a month is being lost (nearly \$50,000,000 annually, at this rate) through carrying obsolete properties which, as the Building Congress Bulletin says: "—cannot be rented to poor people even at a time when more people are poor than ever before."

Providence, R. I., Drive Exceeds All Hopes

The State-wide "Renovize Rhode Island" campaign has now come to a close with a grand total of \$6,534,813 in pledges. The original hope and goal was \$2,500,000.

Sharon, Pa., Expenditures Exceed Pledges

"We obtained over \$300,000 in pledges," writes J. F. Bischoff, Executive Secretary of the Sharon C. of C. "and we have found that the large majority made a substantial increase in actual expenditures over the amounts pledged. About 20 per cent more was spent than promised by pledge makers."

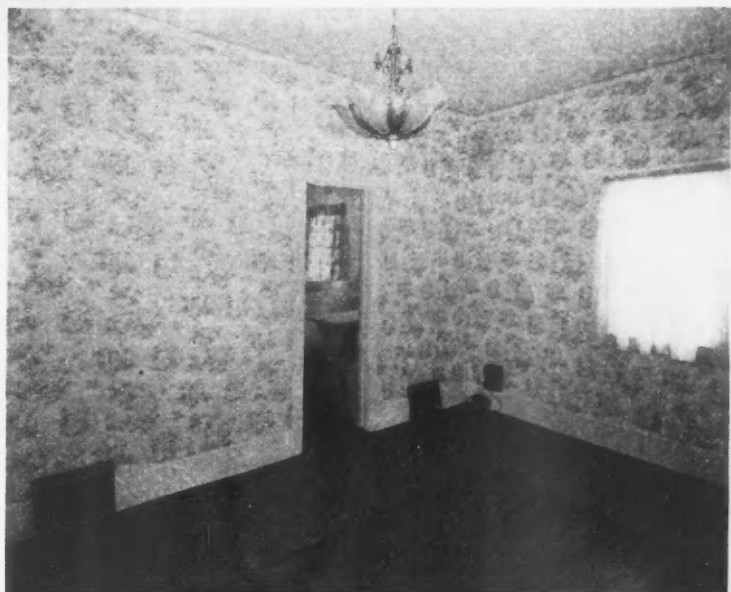
Spokane, Wash., Considering Another Drive

"A committee was appointed some time ago" reports S. A. Rice of the Spokane Chamber of Commerce, "and it is hoped that some sound plan for another community drive will be worked out during the next few weeks."



THE terrible condition of the ramshackle old building shown on the preceding page is amply illustrated by the interior view presented above. Of course, to restore a structure as thoroughly depreciated as this one, would not often be considered commercially practicable; yet the illustration at the right shows very clearly how modern materials and good workmanship can transform a pitiful shack into a modern and attractive home.

THROUGH the co-operation of Omaha material and supply dealers, contractors, craftsmen and architects this metamorphosis was made possible. Equally satisfactory changes can be made in hundreds of thousands of residential structures throughout the U. S., with profit to both owners and the building industry.





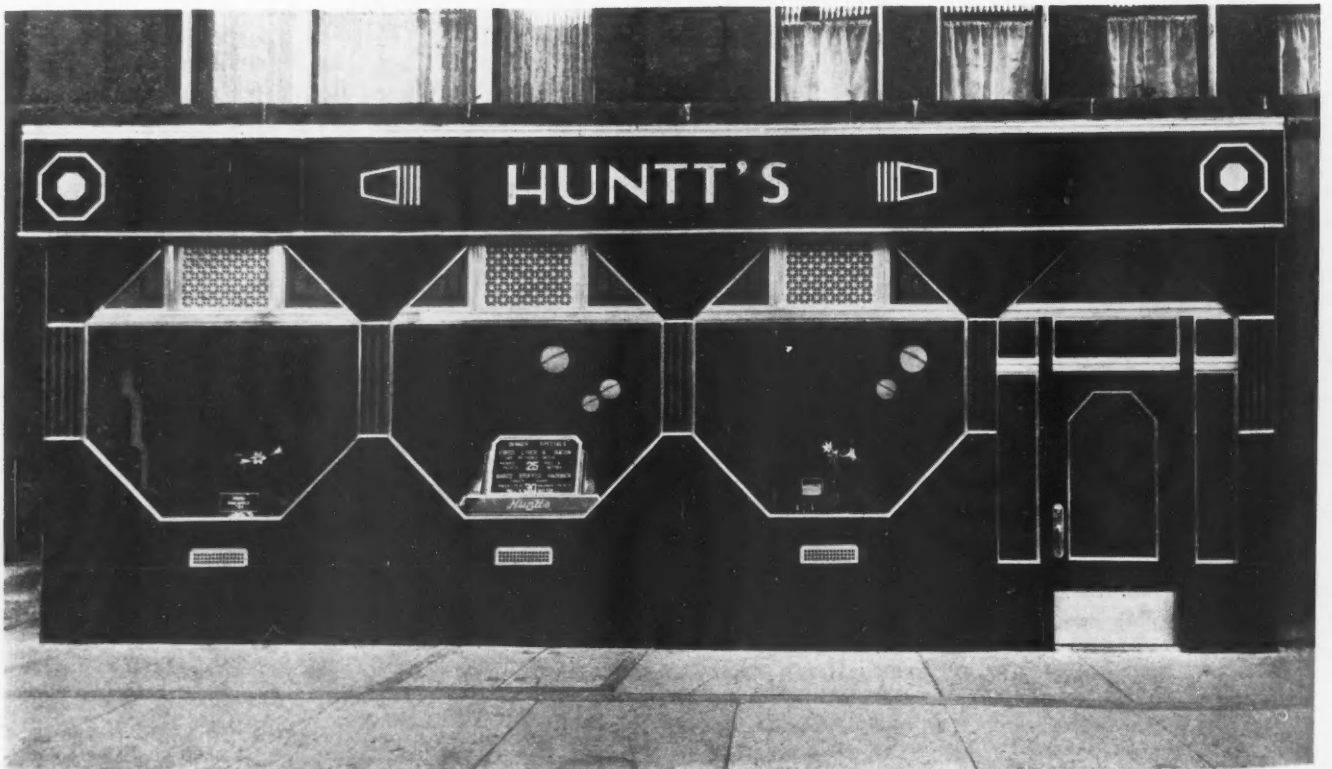
Before

100% Sales Gain In 3 Weeks!

"MODERN business deserves modern dress," declared the owners of Hunt's Restaurant, Salem, Mass.; so they called in local representatives of a prominent plate glass company to see what could be done with the double store front shown above.

The results, shown below, were accomplished by using a special metal store front construction method, utilizing metal grilles, polished plate, tapestry, and black carrara glass. Three weeks after modernization, sales increased almost 100 per cent.

After



Am
U
M
Ad
earl
In
the
and
men
hou
Icke
with
Wo
A
ing
able
rolls
T
by th
tion
on t
they
acco
a po
time
grea
men

To
inson
of th
vidua
two
loan
TH
to a
ect n
have
stead
six n

Te
housi
is to
by of
Full-
trol o
invest
Th
distric
three-
apart
cent
matel
Un
for sp
witho

U. S. Backs Big Housing Projects

Millions Made Available For Construction. Work to Start Soon

MILLIONS of dollars for the construction of housing projects in cities and towns throughout the United States will be loaned by the Federal Administration of Public Works in the near future, and early starting of work on many such projects is indicated.

Immediate stimulus to the building industry will be the result, putting thousands of building men to work and creating a demand for building materials and equipment. Announcement of the first loan allotments to housing projects was made August 24 by Harold L. Ickes, Administrator, subject to a satisfactory contract with the Federal Emergency Administration of Public Works.

Action on the projects was taken with a view to speeding up the program of making public works funds available in as short time as possible to move men from relief rolls to pay rolls.

Thirty-five housing projects are now being considered by the housing division of the Public Works Administration under Robert D. Kohn, Director. Tentative action on the first projects does not in any way indicate that they are better than many others still under examination, according to Mr. Kohn, but they have been inspected to a point that permitted tentative approval. Within a short time it is expected that many more projects of equal or greater importance will be ready for a similar recommendation.

Houses at Hutchinson, Kans.

Tentative approval of a loan of \$40,000 to the Hutchinson, (Kansas), Suburban Housing Association was one of the first announced. The project will provide 20 individual four-room and five-room houses, each situated on two acres of land, renting at \$30.00 per month, with the loan on a 4 per cent basis.

The action is interesting as being the first housing loan to a comparatively small city and providing for a project under the Kansas State Housing Laws, which will have some of the characteristics of subsistence homesteads. The project will give employment to 35 men for six months and twice as much indirect employment.

Philadelphia Hosiery Workers' Apartments

Tentative approval of an \$845,000 loan for a model housing project in Philadelphia was given. The project is to be built by a limited dividend corporation formed by officers and members of the American Federation of Full-Fashioned Hosiery workers which already has control of the land required and is prepared to make a large investment in addition to the government loan.

The site covers an area of 4½ acres in the Kensington district of Philadelphia. The housing will consist of three-story semi-fireproof buildings, containing 292 apartments, totaling 1,074 rooms. On the basis of 4 per cent interest on the loan, room rents will be approximately \$8.40 per month, according to Mr. Kohn.

Union officials reported they had plenty of applications for space and they were assured of filling the buildings without any difficulty.

Elevator Apartments in Queens, N. Y.

A loan of \$3,210,000 was given tentative approval for a project to be built by a limited dividend company, the Dick-Meyer Corporation, under the New York State Housing Law on a site in Woodside, Queens Borough, within 20 minutes of central Manhattan Island.

The proposed housing consists of 10 six-story semi-fireproof elevator apartments, providing, in all, 1,632 residential units totaling 5,644 rooms. On the basis of 4 per cent interest for the loan, rates will be approximately \$11.00 per month, Mr. Kohn was informed. The land coverage is only 27 per cent of the ground area.

The project will give direct employment to 800 men on the job for 18 months and twice as much indirect work.

Model Housing in Brooklyn

Tentative approval of a \$2,025,000 loan to the Spence Estate Housing Corporation for a model housing project in Brooklyn was the first real slum clearance project to be acted upon by the Public Works Administration. The site covers a certain block in Brooklyn adjacent to important transit line and shopping center. Options have been obtained on the land but titles and details have not yet been confirmed. The site is now occupied by 28 four- and seven-story cold water flats and many shacks.

The proposed housing will consist of a six-story elevator building with 508 apartments, totaling 2,150 rooms, of semi-fireproof construction.

The Spence Estate Housing Corporation, which is under the New York State Model Housing Law, is making a large direct investment in the project in addition to the government loan. With the loan on a 4 per cent basis, Robert D. Kohn, Director of the Housing Division of the Public Works Administration, was informed the project would furnish model metropolitan housing at under \$11.00 per room per month.

\$8.50-Per-Room Units for Boston

A \$3,500,000 loan to Neptune Gardens, Inc., for a model housing project in Boston was tentatively approved. This will enable construction of over 3,000 rooms to rent at \$8.50 per room on the basis of 4 per cent interest on the loan, according to information submitted to Mr. Kohn.

The project is to be built on 44 acres of land in East Boston adjoining Marine Memorial Park within a few minutes of the Park Street station. The site is close to a public park and is designed to provide playgrounds for children, a small local library and even a group of small farm garden plots for the use of tenants.

There will be approximately 700 residential units, totaling 3,170 rooms in brick two-story row houses, two-family houses, and three-story apartment buildings covering approximately 17 per cent of the land.

Work can be started on this project in about thirty days, giving approximately 1,000 men direct employment on the job for a year while twice as many men will receive indirect employment because of the construction.



THE HOUSE OF THE MONTH

Colonial Type Home of Five Rooms and Basement Garage

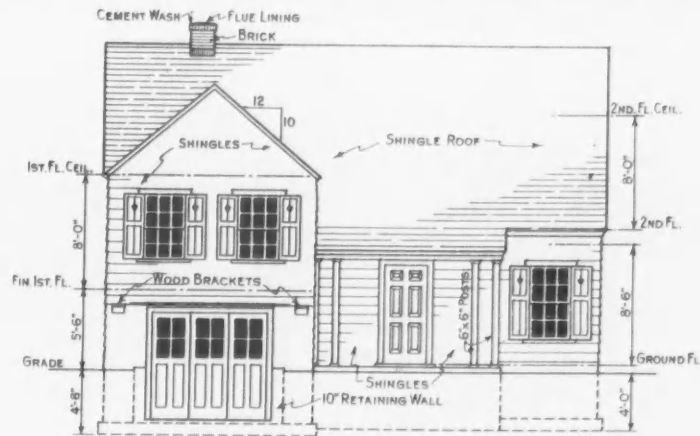
Bemis Lester
Evanston, Ill., Architect

Cost Key 1.395-133-940-40-19-15

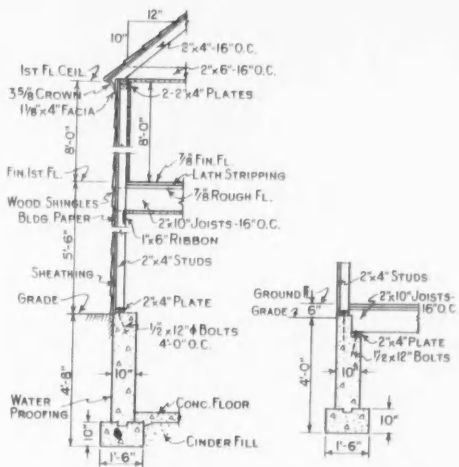
COST TABULATION

Foundation	\$ 360
Lumber, Millwork, Roofing, Glass, Hardware and Carpenter Labor	1,235
Plaster on wire lath	300
Painting and Decorating	310
Heating (steam plant and 320 ft. radiation)	325
Plumbing	425
Electric wiring and fixtures	110
Landscaping	120
Permits	25
	—
	\$3,210

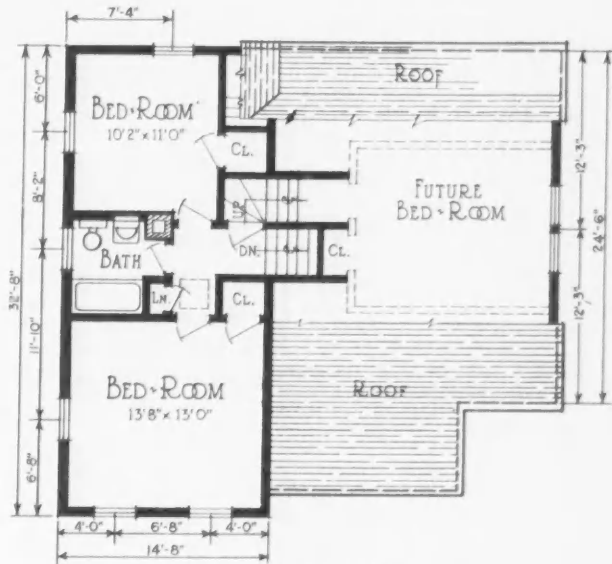
A VERY SATISFACTORY place to put the motor car is in the basement of the house, and architects have finally worked out the way to do this so that it costs very little. About half of the basement space is excavated, carrying the garage floor down about $3\frac{1}{2}$ feet below grade. The garage space is at the front and the heater room and laundry at the rear with a stairway up to the kitchen hall consisting of seven risers. A concrete ramp at the front leads from the sidewalk down to the garage doors. These, of course, are strongly built but easy to operate with the new style hardware. No excavation is made under the living room half of the house, the front porch and entrance being 6 inches above grade. Working this plan through, we find the two bedrooms and bath conveniently placed above the garage, the bedroom floor level being 5 feet 6 inches above grade, and reached by a short flight of stairs from the living room. This arrangement is well liked because it gives the privacy to the sleeping rooms of a two-story house while preserving the step-saving convenience of a bungalow. In fact, it is a two-level plan that is a happy compromise between the bungalow and the regulation two-story house. A high ceiling can be given the living room and dining room unit, or if desired, a third bedroom can be worked in above in the living room wing by going up another half-flight from the main bedroom level. The economy of the plan and construction as illustrated is shown by the cost tabulation herewith. Figures are for house built outside of Chicago at bottom building prices.



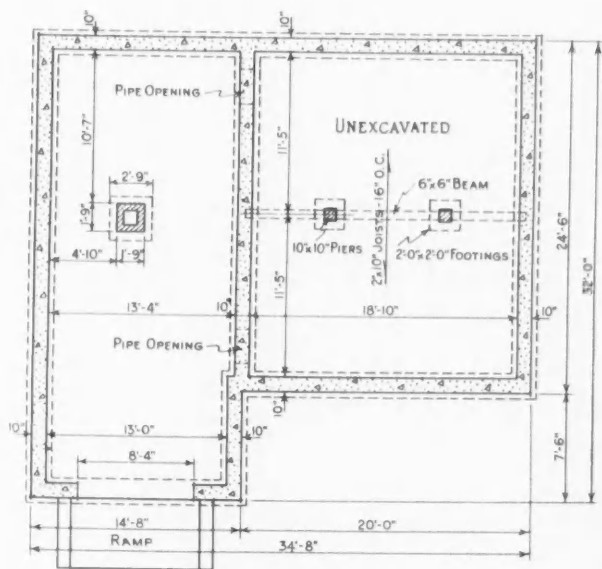
◦ FRONT ELEVATION ◦



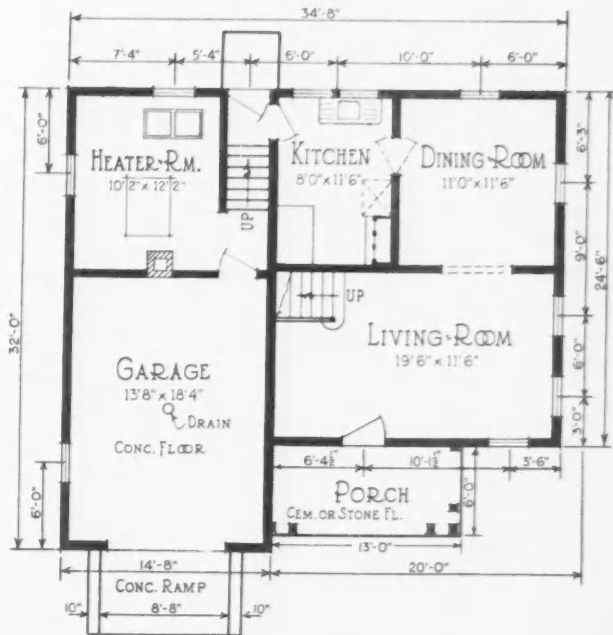
SECTION THROUGH GARAGE WALL SECTION THROUGH LIVING ROOM WALL



◦ FIRST FLOOR PLAN ◦



◦ FOUNDATION PLAN ◦



◦ GROUND FLOOR PLAN ◦

Working Drawings of Moderate Cost Colonial House Designed by Bemis Lester, for Construction at Elmhurst, Ill., by the Chicago Realty Finance Corp.

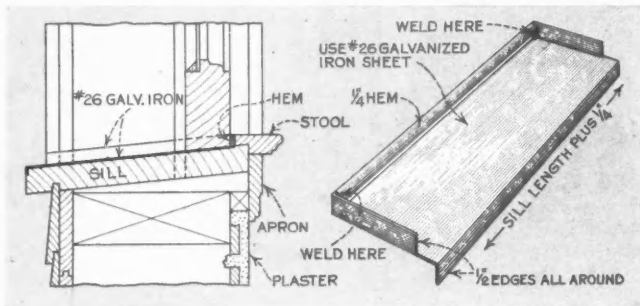
PRACTICAL JOB POINTERS

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 contribution published.

Stops Window Leaks

I HAVE a job pointer here which has helped me many times and will pass it on for your practical job pointer page if satisfactory.

In my sketch I show a plan and elevation views of a window sill. Many times in remodeling work we have been called on to stop window leaks from sills which run on plaster walls and have worked it this way: cut a piece of galvanized iron No. 26 gauge, bend it as you see in the elevation view, bend the hem and bottom up, other down, bend the ends up by pulley stiles, cut the pulley stiles $\frac{1}{8}$ inch to receive the $\frac{1}{2}$ -inch edges of galvanized iron, force in tight and solder the two corners at stool. At bottom point of sill cut to receive metal. This will stop the leaks at stool if loose or away from sill and also stop leaks from and along pulley stiles. Stool must be cut to receive metal $\frac{1}{8}$ inch; also cut bottom of parting strip to receive metal.—FRANK E. HAWKINS, Sheet Metal Contractor, Los Angeles, Calif.



Insertion of special metal piece stops leaks.

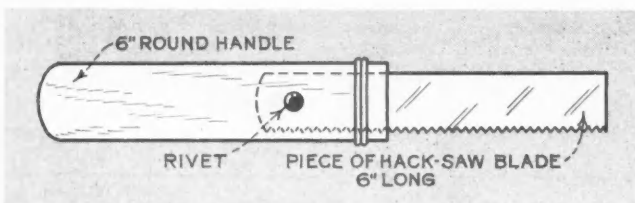
Loosens Sash

I HAVE been an interested reader of your magazine for several years, and have profited by several suggestions in your "Practical Job Pointers." I recently had the job of making full length screens for large 2-light windows, with instructions to "make all top sash work." They had been painted over several times inside and out without moving.

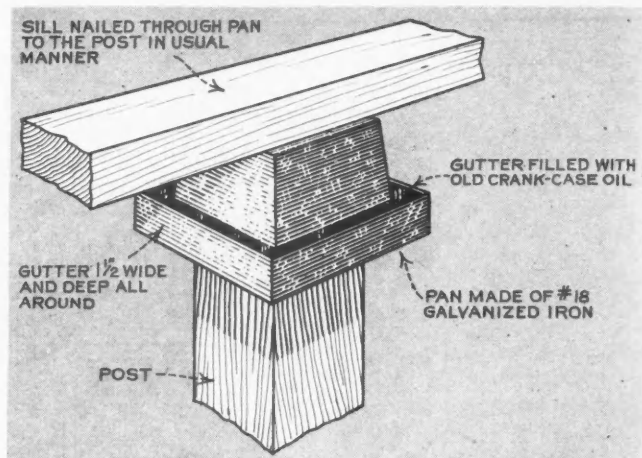
After cracking one trying to loosen with putty knife, I thought of the following:

I took a piece of hard wood broom handle 6 inches long, made saw kerf in end 2 inches deep, took 6 inches of used hack-saw blade, inserted it in handle, put rivet through hole and at end of handle put 2 strands of soft wire, twisted tight.

After starting this between sash and parting stop, it is easy to follow all around. It not only removes paint but gives clearance to sash so it works easily.—C. C. MILLER, Carlinville, Ill.



This handy tool quickly loosens sash.



Pan turned upside down keeps ants from crawling up post into cottage.

Ant-proofing a Cottage

THE ant-proofing of a vacation-time cottage in the woods may be accomplished thus: set it on posts, three feet off the ground. After cutting off the tops of the posts put over the top of each a number eighteen gauge galvanized iron pan like that shown in my sketch. This consists of a square bottomed pan with flaring sides 6 inches deep, with a turned down gutter an inch and a half wide and deep all around it.

Place the pans upside down on the tops of the posts, line them up and place the sills, spiking the latter through the pans to the posts in the usual manner. If a nail is misdriven and has to be drawn the hole should be plugged as tiny sugar ants eventually find the smallest hole.

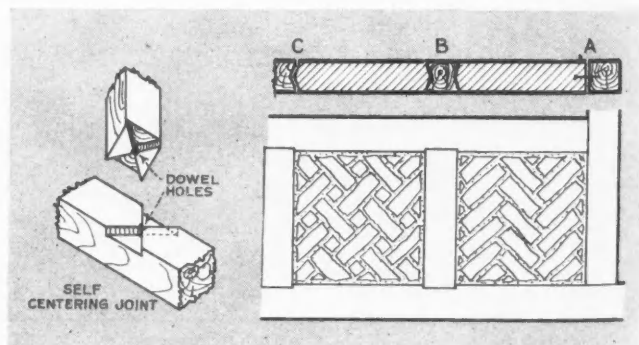
Fill the gutters around the pans with old crank-case oil, thus providing each post with an impassable barrier to all crawling insects. Steps or other means of ingress should be placed an inch and a half away from the building. Pipes entering the building should have cone-shaped cups brazed about them, and be filled with oil.—E. H. TRICK, San Antonio, Tex.

Better Half-Timber Work

WE came upon some porch work that was being done in half timber and brick as at A in the sketch. Naturally, the brick work was being laid up solid against the timber, but the result of shrinkage would create an open space after a while that would allow light through as indicated.

So we suggested that the work be installed as at B in the sketch. Then, when the shrinkage occurred, the resultant opening would be as at C and prevent a straight view between the wood and the brick work. This type of joint would also tend to hold the work in alignment.

To improve the work further, the jointing of the timbers themselves were changed from ordinary butted work to a self-centering joint, as in the drawing. When the timbers shrink under this type of union, the result will be a shrinking in toward the center and therefore a balanced appearance all around and from every viewpoint. The joint is easily made with a couple of saw cuts and a chisel.—ERNEST O. BROSTROM, Kansas City, Mo.

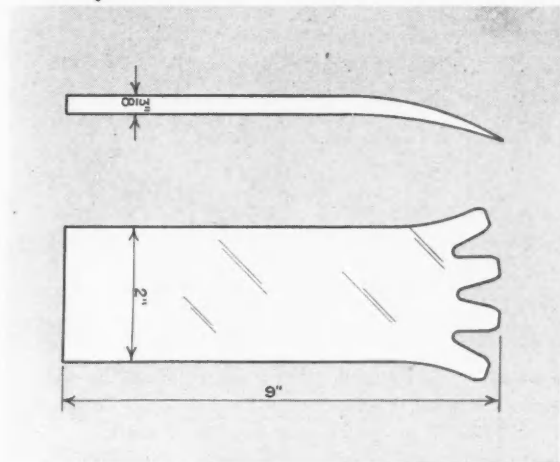


Details of half timbering insure better job.

Removes Siding Without Damage

I HAVE RECEIVED the first number of the AMERICAN BUILDER sent to me by Walter Dodge, and it surely is full of good information. After the year is up, I must take it again.

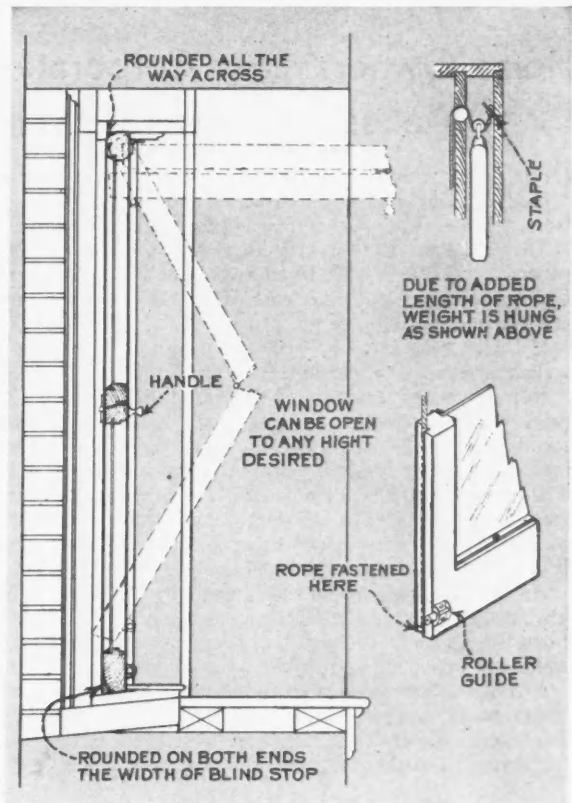
I am enclosing a picture of a tool I made and sold for use in wrecking a building here for a new Post Office. The owners wanted to save all the lumber possible. It is practically impossible to take lap siding off without destroying part of it, but with this tool, we saved it all. By driving the tool up under the board so that the notches straddle the nails, it is possible to start them so the hammer can draw them out. This keeps the nail from pulling through the board or splitting it.—A. C. BRUNDAGE, Rochester, Minn.



At right is shown method used to rehang awkward basement window.

Tool at left is used to remove old siding without breaking it.

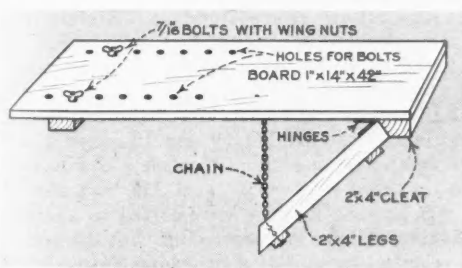
meeting rail in center to facilitate raising.—EUGENE F. MARTIN, Paterson, N. J.



DUE TO ADDED LENGTH OF ROPE, WEIGHT IS HUNG AS SHOWN ABOVE

Handy Window Jack

HERE is a window jack which I have made and it beats any yet. Take a board 1x14, 42 inches long, and to the under side hinge a pair of 2x4's cut and braced as shown, with a heavy cleat across bottom, through which fasten the chain with a heavy staple and also at center of board at point about 22 inches from end. Next bevel a 2x4 cleat to fit against ends of supports and nail to end of board; at other end of board bore holes for bolts and use 7/16 bolts with wing nuts and you have the handiest folding window jack made for any size window or wall. It is very useful for washing windows, painting, glazing, etc.—C. J. MILLER, Chambersburg, Pa.



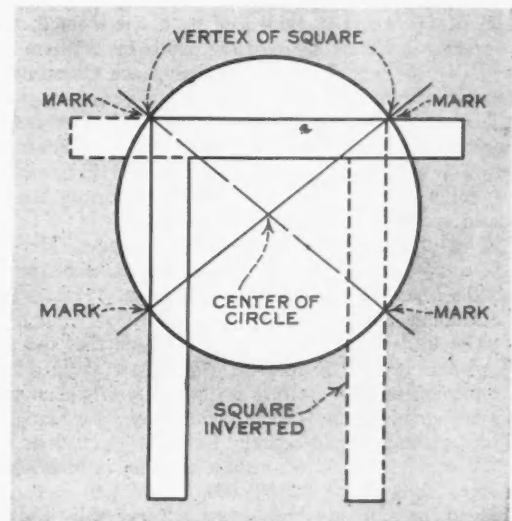
Window jack saves time and trouble.

Sketch at right shows quick way to locate center of circle with a square.

Circle Center—Lowering Vat

TO find the center of a circle: Place your framing square on the circle so that the vertex of the angle is exactly on the circumference of the circle. Mark the two points where the blades of the square cross the circumference and draw a line through these two points. This line passes through the center of the circle. By shifting the square, another line can be drawn in the same way. Where these two lines intersect is the center.

Another handy idea: We were building an ice plant and had a steel vat 40'x80' and 4' deep. It was easy enough to get the vat two feet above the place where it was to rest finally, but to lower it on its cork base and get all the timbers out was another question. The vat had to be kept level as it was lowered. We took about twenty 300-lb. cakes of ice and spaced them under the vat, removed our timbers and let the sun do the rest. If one cake seemed to be melting slowly, we built a fire over it.—LEWIS DAVIDSON, Ardmore, Okla.



Rehanging Basement Window

HERE is my method for rehanging an awkward double hung basement window:

Due to its odd size (3'6" x 3'4") and a 12-inch sill, it was very hard to raise. With this arrangement I can have practically the full opening of the window.

I use the same sash, and rabbit them all the way down to allow freedom for rope. The rope is fastened on lower end of lower sash. The inside pulley is taken out and the hole plugged to allow window to swing in. The parting strip is left out and a guide which is fastened on to the lower sash slides in parting strip groove.

For a lock, a barrel bolt is fastened on meeting rail which fits into a hole bored in parting strip groove. A handle is put on

NEWS—building activities of the month

Home Owners' Loan Corporation Makes First Loan—Saves Home

IN EVERY state of the Union, Home Loan headquarters have been established and the work of making loans to save distressed home owners from foreclosure is going ahead.

The first loan made in Illinois, widely publicized by the newspapers, was made August 19 on a house at 10628 Avenue F, South Chicago, built in 1919 at a cost of \$5,000. The government appraised it at \$6,500 and granted a loan of \$5,000 which will be paid back at the rate of \$40.00 per month for the next 15 years, including principal and interest.

In many states, granting of the first loan was given wide publicity with newspapers showing pictures of the house and its owners. In the Illinois house shown on this page, the bank holding a \$4,000 mortgage accepted H. O. L. C. 4 per cent bonds. The new federal \$5,000 loan therefore covered the original mortgage and left \$1,000 to pay back taxes, accrued interest, repairs, etc. The complete cost of making the loan, including the appraisal and title examination, was only \$35.00.

Applications running into the hundreds of thousands have been filed at the various state and regional offices of the Home Owners' Loan Corporation. (A list of regional offices, managers and their addresses was published in the August AMERICAN BUILDER.)

A comprehensive report of the progress of the various regional offices made August 14 shows the definite work that is being done, and indicates that invaluable assistance will be rendered in the saving of distressed properties.

Bonds Attract Interest

MUCH interest has been aroused by speculation as to the popularity with which the Home Owners' Loan Corporation bonds will be received. One of the first Chicago firms planning to handle the bonds reported that an analysis indicated a tentative quotation of 90 bid, offered at 100. The first recorded sale was in New York Aug. 29 at 85. The bonds are guaranteed by the United States Government as to interest, although not as to principal. They are to be acceptable as collateral by the Reconstruction Finance Corporation at 80 per cent of par and will be in denominations of \$50, \$100, \$500 and \$1,000.

Insurance companies in Illinois are permitted to invest funds in the bonds of the Corporation, according to a ruling by Attorney General Kerner. Insurance companies in other states have also signified their interest in the bonds and willingness to accept them.

Renovize Campaigns Sound

THAT the idea behind renovize and modernization campaigns to increase employment by promoting property improvements is basically sound is evidenced by a check on the results of the campaign in Philadelphia, made public by William A. Law, president of the Penn Mutual Life Insurance Company, who was its general chairman.

The Renovize Philadelphia Campaign, designed to promote employment by remodeling, restoring and otherwise improving business and home properties, was held last winter. Property owners were asked to sign pledges indicating the amounts they would spend within the next six months.

A careful check of the campaign pledges, Mr. Law said, revealed that more than \$20,000,000 had been spent within five months after the close of the campaign. This is 93 per cent of the amount pledged.

"The leaders of the campaign believed that the great majority of pledges would be fulfilled," Mr. Law said. "However, since the movement was entirely voluntary, we had no means of proving to ourselves and to the community how many of those who signed pledges would actually have the work done.

"A careful check of nearly all the residential and business pledges shows that \$20,000,000, or 93 per cent of the amount pledged, has already been spent. Surveys by the United States



The above Chicago house was the first home in Illinois on which a mortgage loan was made by the Home Owners' Loan Corporation. The \$5,000 loan can be paid back in 15 years.

Chamber of Commerce show that of the money spent in a community for renovizing work, 70 per cent goes directly into the pay envelopes and pocketbooks of wage earners. Therefore our campaign increased the pay of these wage earners by some \$14,000,000. Getting this money into circulation had a very beneficial effect on business in the community."

Better Housing Association Progresses

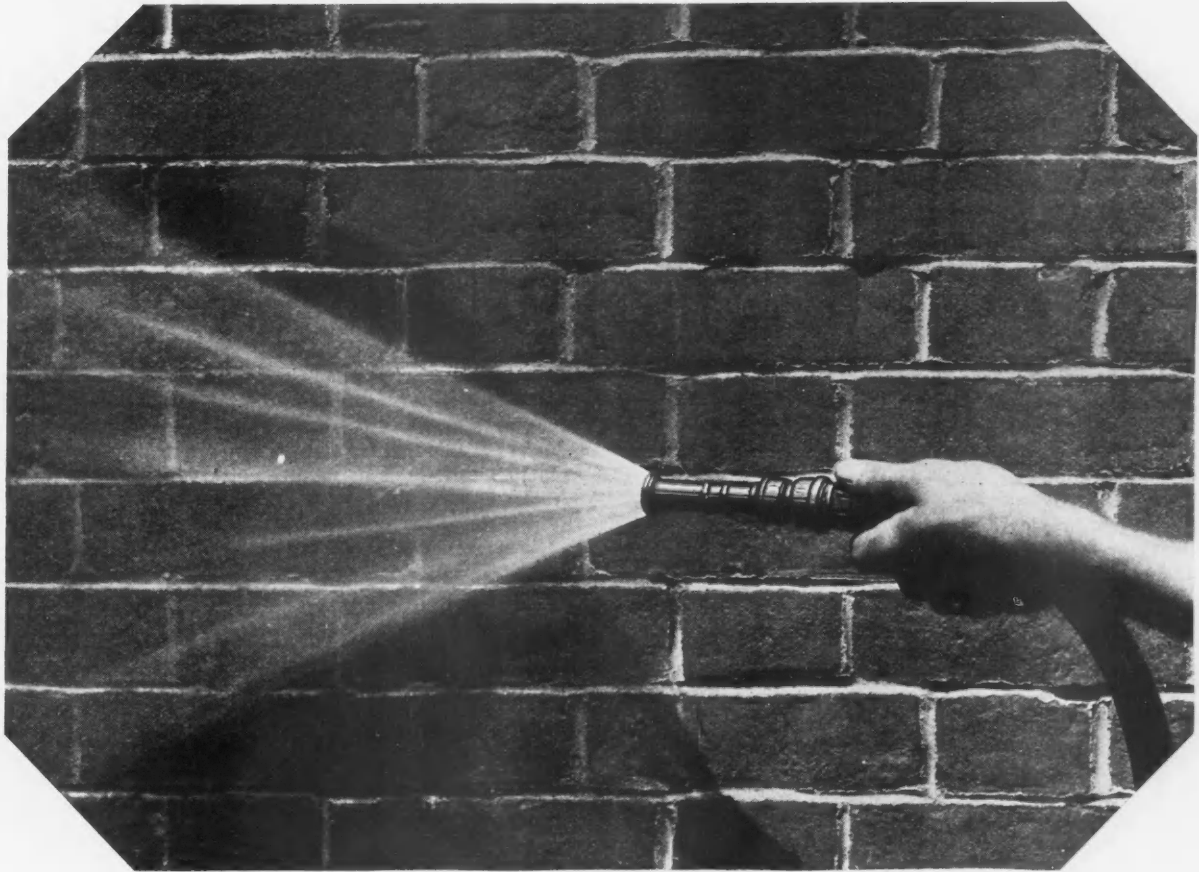
TWENTY-SEVEN men, prominent in their respective lines, have organized the National Association for Better Housing, it has been announced by J. Soule Warterfield, vice-president of the Starrett Building Company, and chairman of the National Conference on the Renewal of Home Building. Architecture, finance, real estate, city planning, research, social welfare, government, building materials and equipment are all notably represented.

"This is the real climax of our conference of more than five hundred people held in Chicago on May 9 and 10, when I was authorized by the committee on resolutions to name a continuation committee of 15 to carry on this work," said Mr. Warterfield. "So much interest was aroused that we were forced to augment this number considerably, and we are proceeding with the utmost care to build up a practical organization of leaders in the housing field."

U. S. Gypsum Buys Plant

THE expansion program of the United States Gypsum Company has moved a step farther with the acquisition of the Sifo Products Company, St. Paul, Minn., manufacturers of asphalt shingles, roll roofing, built-up roofing, and accessories.

Two months ago U. S. Gypsum announced the purchase of the McHenry-Millhouse Manufacturing Company, South Bend, Ind., also makers of asphalt roofing products. The latter concern has since been operated as a division of Gypsum. Sifo Products has been in business since 1865 and gives U. S. Gypsum an important distribution system in the north central and northwestern states. The company will be operated as a Gypsum division with the present operating personnel in charge. Several exclusive Gypsum products will be added to Sifo's line.



BRIXMENT IS ... WATER-PROOFED

BRIXMENT furnishes as great protection against leaky brick walls as can be had from any kind or type of mortar material.

It is permanently water-proofed by the addition, during manufacture, of calcium stearate—the most effective water-proofing agent known.

Leakage through Brixment mortar itself is impossible. More important still, the calcium stearate gives the

mortar a *high water-retaining capacity*. This keeps the brick from sucking the moisture out of the mortar too fast, and helps prevent shrinkage cracks *between* the brick and the mortar.

Further protection is furnished by the extreme plasticity of Brixment, which allows a more thorough bedding of the brick, and insures a greater area of bond between the brick and the mortar.

LOUISVILLE CEMENT COMPANY, *Incorporated*, LOUISVILLE, KY.

District Sales Offices: 228 N. La Salle St., Chicago; 600 Murphy Bldg., Detroit; 101 Park Ave., New York . . . Mills: Brixment, N. Y. and Speed, Ind.

BRIXMENT

A Cement for Masonry and Stucco



First Hearing on Construction Codes To Be Held in Washington Sept. 6

THE National Recovery Administration has announced that public hearings will begin at 10 A. M., Wednesday, September 6, and continue until complete on the Code of Fair Competition for the Construction Industry as submitted to the Administrator on August 7, 1933, by the Construction League. The following supplemental codes will also be considered:

1. General Contractors
2. Architects
3. Master Painters
4. Electrical Contractors
5. Marble
6. Plumbing and Heating
7. Heating & Piping Contractors
8. Cement Gun Contractors
9. Building Granite

Ample facilities are available in the Auditorium of the Commerce Building to provide for all who wish to attend, J. W. Follin, secretary of the Code Committee, reports, and says this is a splendid opportunity for firms and individuals to get a clear insight into the problems confronting the Administration and various divisions of the industry in drafting these codes.

Copies of the above codes may be obtained from the National Recovery Administration, Room 4519, Commerce Building, Washington, D. C.

Persons or groups who can show a substantial interest as workers, employers, consumers, or otherwise, in the effect of any provision of the proposed basic master code and sub-codes, will be given an opportunity to be heard, a written or telegraphic request for which must be filed before noon on Tuesday, September 5, 1933, with the Administrator, Room 4422, Department of Commerce, Washington, D. C. Written or telegraphic statement may also be presented.

Other supplemental codes are in the mill and will be scheduled for public hearing at a later date. Every effort is being made to hasten the completion of these codes, according to Mr. Follin.

Arthur Edgecumbe Dies

ARTHUR EDGECUMBE, who had charge of the manufacture and distribution of stained shingles for the Weyerhaeuser Sales Company, died August 22 at Minneapolis. Mr. Edgecumbe spent most of his life in perfecting, manufacturing and merchandising stained shingles. He came to the Weyerhaeuser Sales Company at the time that the machinery and patent rights of the Edham Company were bought by the Twin City Lumber & Shingle Company. Although his health had not been good for a long time, he continued to work hard and faithfully up until a few weeks ago. His sudden death came as a great shock to his many friends in the building industry and he will be greatly missed by numerous personal and business associates.

National Gypsum Expands Service

THE Macoustical Engineering Company of Cleveland, Ohio, has been purchased by the National Gypsum Company of Buffalo, it has been announced, which is another step in the firm's program to provide a complete line of products for wall and ceiling use. The need of acoustical correction in larger buildings is a matter that has been receiving continually increased attention of late years, according to R. F. Burley, vice president. The demand has grown until now it represents a highly developed and profitable market. The governmental building program is looked to to open up a large additional volume of immediate business for acoustical plaster.

Reading Iron Appoints Wolfe

THE Reading Iron Company, Philadelphia, recently announced the appointment of William Craig Wolfe as vice president in charge of sales. Mr. Wolfe brings to his new position a wealth of experience in the marketing and merchandising of iron products, and was a moving factor in the organization of the Wrought Iron Manufacturers' Association.

Oxholm Appointed Chief of Forest Products Division

DR. WILLARD L. THORP, recently appointed director of the Bureau of Foreign and Domestic Commerce, has announced that Axel H. Oxholm has been made chief of the Forest Products Division of the Bureau. Mr. Oxholm succeeds L. H. Peebles, who has been commissioned as a liaison officer between the National Recovery Administration and the Commerce Department.

Building industry men who have been informed of Mr. Oxholm's appointment regard it as a happy solution of the problem which arose in the course of the reorganization of the Department. When the National Committee on Wood Utilization was discontinued in July, it was feared that Mr. Oxholm's long experience as a public official would be lost to the public and the industry, but in returning to a position which he capably filled from 1921 to 1925, he is so situated that his broad experience will have wide opportunity for application. The Forest Products Division is at present closely co-operating with the National Recovery Administration in the accumulation of information regarding the forest industries.

Weyerhaeuser Adopts Zone Method

A ZONE METHOD of handling dealer orders permitting closer contact with customers, which has proved so successful in the speeding up of deliveries and simplifying business relations in a number of industries, is being instituted in the lumber business by the Weyerhaeuser Sales Company, according to an announcement by Mr. I. N. Tate, general manager.

On July 16 the Weyerhaeuser Sales Company opened three zone offices, each of which handles for its zone all accounting, invoicing, receiving of remittances, and all matters pertaining to credits. The eastern zone office is at Newark, N. J., that of the central zone at Saint Paul, Minn., and of the western zone at Tacoma, Wash.

"Not only do we look for an improvement in shipping service," said Mr. Tate, "but we also feel that all business matters will be simplified by this closer localized contact. Of especial interest to lumber dealers will be the fact that invoices for all purchases will be in the name of the Weyerhaeuser Sales Company and will originate in the zone where the dealer is located. Heretofore invoices have come to the dealer from the individual mill making shipment, and this has necessitated the dealer's keeping a separate ledger account for each of the mills in the group from which he received shipment."

Information on Housing Loans

TWO useful publications of interest to men in the building industry have recently been issued by the Federal Emergency Administration of Public Works. The first of these is Circular No. 1 entitled, "The Purposes, Policies, Functioning and Organization of the Emergency Administration." It lays down the rules described by President Roosevelt in connection with public works and construction.

Circular No. 2 is entitled, "Information Required with Applications for Loans to States, Counties, Municipalities and Other Public Bodies." This booklet summarizes the necessary procedure in obtaining loans for housing and construction projects.

New Plant at Corpus Christi

AFTER substantial expenditures on properties and construction during the last two years, work is being actively pushed to complete the alkali plant at Corpus Christi, Texas, the joint project of the Pittsburgh Plate Glass Company and the American Cyanamid Company. This part of the chemical program, contemplated by the two companies for Corpus Christi, will represent an investment of several million dollars. These capital requirements are being financed by the Pittsburgh Plate Glass Company and the American Cyanamid Company. This new plant will manufacture basic alkalis used extensively in glass, soap, oil refining, chemical and other industrial fields. The location was selected because it is on tidewater, the raw products needed in the making of alkalis are available, labor is plentiful.

"Come on Old Man—
do your derndest"



● Let old Father Time do his worst—trot out all his bag of tricks; decay, winter, fire, storms. A concrete house is proof against 'em all.

THE CONCRETE HOME IS A SAFE BET!

WHAT'S THAT MEAN TO YOU? JUST THIS:

- ✓ There's a premium on what people regard as a "well-built house." A concrete house offers the honest values that people demand today.
- ✓ Hence, it makes a satisfied owner—a customer that roots for you, instead of pestering you for maintenance.
- ✓ It means a house that will be a credit to you for years to come—a standing advertisement that tells the world you're a good contractor.

The concrete house is simple to build. Construction technique is time-tested and easy to learn—materials are always available—plans . . . ask us for suggestions—talk it over with your local architects.

Want more information? Drop us a line today for complete building data.

It pays to own a fireproof home

PORTLAND CEMENT ASSOCIATION ROOM 159, 33 W. GRAND AVE., CHICAGO
CONCRETE FOR PERMANENCE

The Cement Service Man

PORTLAND CEMENT ASSOCIATION, Room 159, 33 W. Grand Ave., Chicago

Please send me your book on the design and construction of low-cost, fireproof concrete homes.

Name..... City.....

Address..... State.....



These Pages**COMMAND THE ATTENTION**

The American Builder is the business journal of the active men of the building industry

What more convincing proof could one want that practical building men read the AMERICAN BUILDER than the more than 7500 requests that were received for catalogs listed on two pages of a recent issue? This flood of letters, continually increasing, is a definite index also of the rising interest in home building. Does this not demonstrate the opportunity that exists for manufacturers of building materials, products, tools, etc., to lay the groundwork now for the highly competitive market of tomorrow?

HOME BUILDING INTEREST IS AROUSED

OF THE MEN WHO COUNT

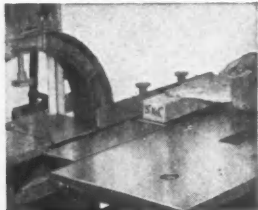
Your sales message in these pages will command the same attention from thousands of readers of the AMERICAN BUILDER—Contractors, Dealers, Architects and Financial Men. These are the MEN WHO COUNT. These are the men who specify, warehouse, install and finance materials used in the building industry. These are the men who must be fully informed as to the merit of your goods to assure your share of the business which is developing as a result of generally improving business condition.

The American Builder gives a broad coverage of the active men of the building industry at low cost

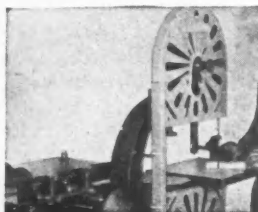
ASSURE YOUR SHARE OF THIS BUSINESS

"..No One in the Building Business Can Afford to be Without this Machine"

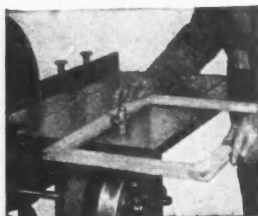
Wilmington Manor Builders



JOINTER



BAND SAW



SHAPER



SAW TABLE



MORTISER



LATHE

Take the word of hundreds of enthusiastic carpenters and builders who are making money with the Electric Carpenter. Here are a few:

Price Smith Company, Rockingham, N. C.

".. it saves us many trips to the shop as well as much labor on the job."

Albert O. Hess, Long Beach, N. Y.

".. the biggest little machine that can be moved into a carpenter shop. Worth far more than I paid for it."

Merlin E. Troy, Kingston, Pa.

".. Cut my costs on light work at least 40%."

Maher & Wilkinson, N. Y. City

".. it cuts the actual working time in half . . . a great saving to us."

B. O. Short, Pierce City, Mo.

".. My machine paid for itself on one job alone."

H. Lay & Co., N. Y. City

".. every carpenter should have one. It is a big money saver."

Semple & Clark, Boston, Mass.

".. we have saved the price of the machine on every job it has been used."

7 MACHINES IN 1 A Complete Wood-working Mill

In the carpenter shop or on the job, this modern machine does all that seven separate machines are usually required to accomplish. It is as accurate as it is swift, flexible, versatile and compact. Requires only a connection to the regular light circuit. Built for long use and rough service. The only combination machine that will handle full size lumber with ample power for quick work in so little floor space.

Double or triple your carpenter's productive work and your profits by making the small investment involved in putting this machine to work for you. Write for particulars.

ELECTRIC CARPENTER COMPANY, Inc.,
Packard Building
Philadelphia, Pa.

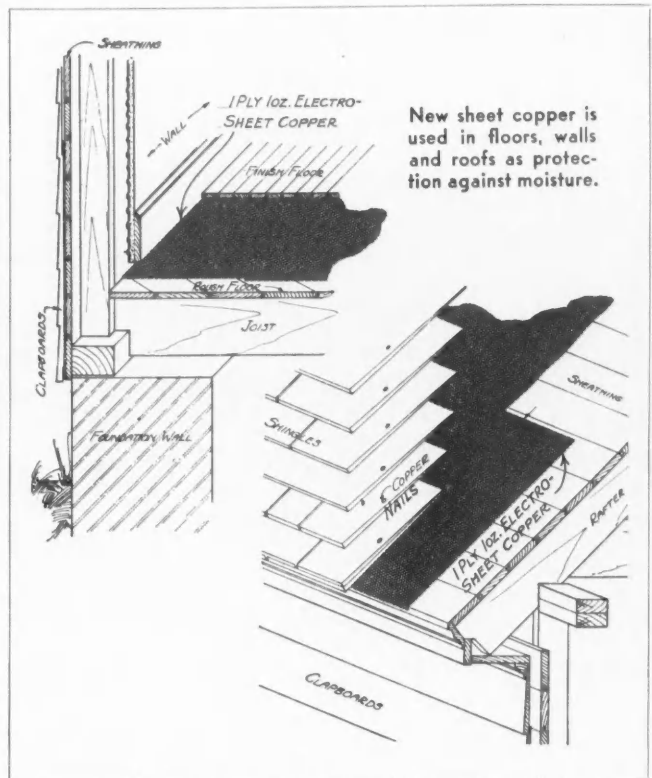
Electric
CARPENTER

NEW PRODUCTS

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

Sheet Copper for Building

A RECOGNIZED need for wide, thin copper sheets in long lengths, at a moderate cost per pound, has recently been met with the perfection of a process of electro-deposition. The new sheet copper, in 30-inch widths and weights of 1 and 2 ounces per square foot, due to the method of producing it, is relatively inexpensive. Because it is rustproof, fire-proof, strong and ductile, its use as an efficient dampproofing and weather-proofing material for houses and buildings is suggested. Among the many important uses are dampproofing foundation floors and cellars, protecting walls and roofs, fire-proofing wood shingles. The new sheet copper is furnished in rolls 30 inches wide, consisting of one or two pieces. Individual packages weigh approximately 25 pounds and, in the case of 1-ounce material, contain about 150 running feet (375 square feet). A package of the 2-ounce material contains approximately 75 running feet (187 square feet).



New sheet copper is used in floors, walls and roofs as protection against moisture.

1 1/2" Insulating Board

AVAILABLE for the first time in a single thickness, fibre-board insulating lath one and one-half inches thick has been announced by a large cork and insulation company. This new thickness is the latest addition to the line of insulation products distributed by the company through retail lumber dealers. Insulating board for use as sheathing, interior finish, and miscellaneous construction also will be furnished in the solid one and one-half inch thickness.

"Due to long manufacturing, research and engineering experience, we realize the need for more adequate low cost insulation for residences and general building construction," said an official of the firm. "Lumber dealers will be especially interested in view of the fact that the use of thicker insulation will enable them to increase their total volume of board foot sales with the same number of jobs, reduce inventory, speed up turnover, and maintain more satisfactory stock sizes."

Fibre Screw Anchors

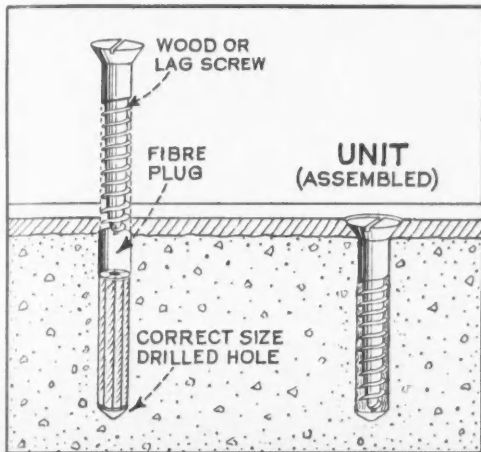
A NEW building specialty of great interest is a highly efficient screw anchor which consists of a small tube built up of stiffened strands of tough jute fibre cemented together by a patented process.

In spite of its light weight and simple construction, this anchor possesses great holding power and durability.

Used in a hole into which it fits rather snugly, the fibres of the plug are compressed when the screw is turned home in much the same manner as the fibres of wood are compressed when a screw is turned into it. Tests made with a No. 12 wood screw of which 1½ inches was engaged by a plug in a ¼-inch hole showed ultimate tensile loads of 1525 lbs. in concrete, 660 lbs. in brick masonry and 1150 lbs. in limestone.

Because of its fibrous construction, the plug absorbs vibration and shock and will not work loose. It is especially practical for making fastenings in plaster.

The smaller hole makes a neater, stronger job and is easier for

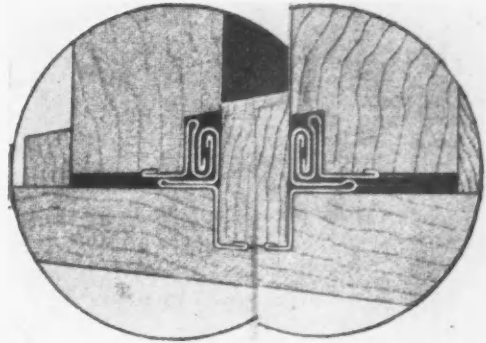


Interlocking bronze members fit together tightly in new weatherstrip shown at right.

Fiber tube acts as anchor to hold screws in concrete or plaster.

Unique New Weatherstrip

A UNIQUE new weatherstrip is now on the market which will greatly interest builders. Its outstanding feature is the effective fashion in which two members of interlocking bronze fit together on the outside edge of the wood sash. The interlocking feature works in two directions—parallel to the window pane and at right angles to the sash.



This important principle gives a flexibility to meet all conditions that might arise in the window. It does not matter how much the sash shrinks or warps or gets out of line—a constant and even contact is maintained, causing the window to slide up and down easily on two surfaces of metal.

The flexibility and locking feature of this new weatherstrip increases with the tension brought on the strip by the natural shrinkage of the wood.

CLERESPAN TRUSSES

(PATENT APPLIED FOR)

for Unobstructed Floor Space

“Clerespan” Trusses are standardized and designed primarily for floor construction but are widely used for roofs of auditoriums, garages, large service stations, gymnasiums, armories and similar buildings where an unobstructed floor space and the elimination of objectionable columns are desired. “Clerespan” Trusses are made of heavy hot-rolled structural steel angles. They are in reality box type lattice girders having a double web system thus providing the most economical and efficient distribution of metal and resulting in the most rigid type of structural unit.

CLEAR SPANS
UP TO 60 FEET

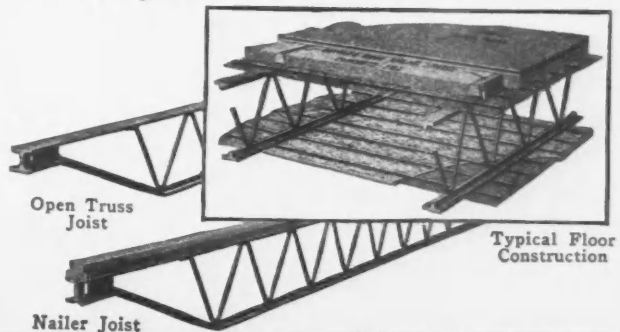


STEEL JOISTS

for Firesafe, Economical Floors

OPEN TRUSS JOISTS: Light in weight and permanent. Shop fabricated, ready to install. No cutting or fitting. No wastage or shrinkage. A high degree of soundproofness. Freedom from plaster cracks. All joints electric welded. Open web permits passage of wires and pipes.

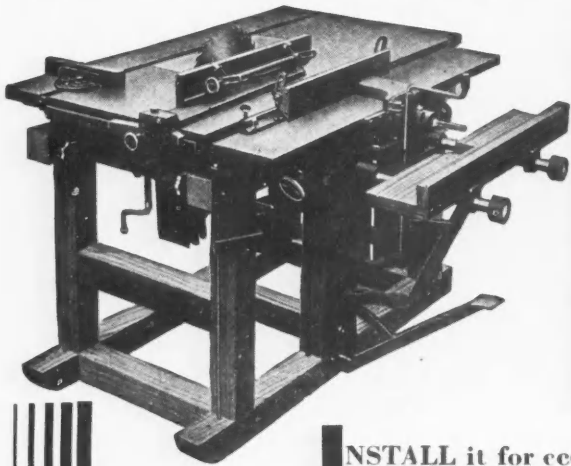
NAILER JOISTS: They are similar to Open Truss Joists except they have a wood nailing strip attached to the top chord which permits wood flooring to be nailed directly to the steel joists.



TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO. SALES OFFICES IN PRINCIPAL CITIES
Consult Telephone Directories for Addresses

MONARCH

VARIETY WOODWORKER



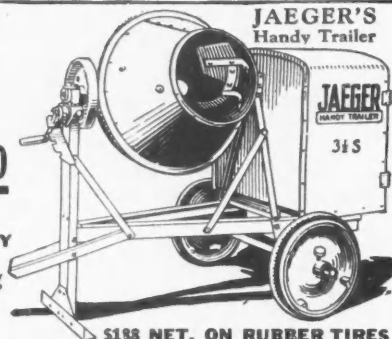
INSTALL it for economy and efficiency. Does the work of four ordinary machines—cut off and rip saw with boring attachment, mortiser and jointer. Enjoy the benefits of this famous machine which four men can use at once.

Send for descriptive booklet and 1933 prices on our complete line of woodworking and saw mill machinery.

AMERICAN
SAW MILL MACHINERY CO.
60 Main Street Hackettstown, N. J.

LOOK
ONLY \$171⁰⁰

NET CASH, F.O.B. FACTORY
buys this half bag trailer, complete



JAEGER'S
Handy Trailer

\$138 NET, ON RUBBER TIRES

Get Jaeger's complete catalog, prices and terms

THE JAEGER
MACHINE COMPANY
521 Dublin Ave.
COLUMBUS, OHIO



with loaders tool

PROVEN EARNING POWER

BIG FUTURE FOR CONTRACTORS



LIGHTER WEIGHT
STRONGER BOND
BIG SAVINGS IN
CONSTRUCTION

Get Set For Big New Building Program with this machine. Makes a better brick at lower cost—used in the finest and largest buildings wherever made. Investment only small fraction of that ordinarily required for any other process.

Kalamazoo Haydite Tile Co. sells at 100% mark-up. Orders exceed a million units in one month. Bayer & Brice, Flint, just received order for over half million for brewery. Wichita firm supplies brick for large group oil stations.

Learn about This Automatic Machine and process. Exclusive Franchise. Send for free book "4 Keys to Success."

W. E. DUNN MFG. CO.
450 W. 24th St., Holland, Michigan.

NEW PRODUCTS

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

New Vogue in Closets

A NEW LINE of modern closets that are beautiful in design and quiet in operation has been announced. Among the many unusual features of these closets are the following:

Integral construction—tank bolted directly on bowl (bolts not exposed to water). Not necessary to fasten to wall; can be placed anywhere in room as back of the tank is highly glazed.

When seat lid is raised, it fits in depression in front of tank permitting front of closet to be closer to wall, saving space in the room. Only metal parts exposed in water are stem for ball and parts of ball cock. No metal flush valve—rubber ball rests in seat ground in the bottom of the vitreous china tank. Overflow chamber integral in tank made of vitreous china the same as tank.

Less than a pint of water in tank when flushed. Tank can be entirely drained of water by holding tripping device just an instant which is an advantage in freezing weather and in cleaning sediment out of tank. If bowl should become clogged nothing can enter the tank because bottom of rubber ball is above top level of bowl. Should it be necessary, the tank can be removed from the combination without disturbing the bowl.



New type closet is of one-piece construction which can stand free of wall.

Two Color Shingles

IN KEEPING with the modern demand for color on the roof as well as in the home, a new shingle which may be laid either side to the weather has been announced.

On one side there is a pleasing blend of red, black and gray; on the other side the conservative plain Newport gray. The red and black oxides are part of the shingle itself and not merely pressed on the surface after the shingle is made. These colors are embodied in the shingle during the process of manufacture and will not rub off or brush off.

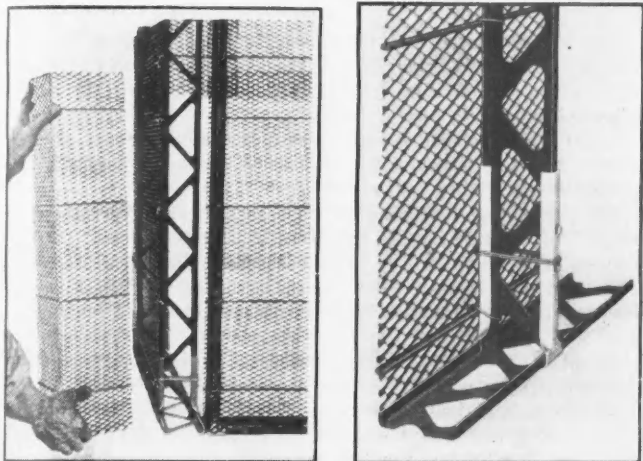
The advantage of this new shingle is that it offers two color choices at the same price as the standard gray. It is a rigid, durable, fireproof asbestos shingle which presents a cheerful color blend and which in price meets all competition. The colors will not fade or wear out. The shingles are fireproof and stormproof, being made of asbestos fiber and portland cement.

Light Weight Partitions

ONE of the newer products of interest is a simplified method of building light weight fire-safe partitions to meet the modern demand for steel frame construction at low cost. Studs, track for floor and ceiling, shoes for attaching the studs to the track, and reinforcing metal lath are the four simple elements that go into the construction of the partitions.

The studs are full 16 gauge and are "well formed" with substantial flanges and are perfectly straight. They are punched out to form a truss-like design to retain practically all of the strength of the original channel.

The studs provide openings for tying the metal lath on both faces of the partition, which would not be true if they were solid. The great rigidity of the studs makes it practical to place them 24 inches on centers and the real feature of the partition begins at this point. This is a reinforcing diamond mesh lath, which has solid steel ribs welded to both sides of the lath 7 inches center to center. By means of these ribs,



Light weight partitions are easily and quickly installed.

a rigid plastering base is obtained which will span the 24 inches from stud to stud without the necessity for a thick coat of plaster. This reinforcing lath is tied to the studs at the point where the reinforcing ribs of the lath intersect the studs. Extension shoes provide for irregularities on the floor and ceiling, making cutting and fitting quite unnecessary.

Partitions are furnished in various widths ranging from two to six inches. This new construction, in the short period of time it has been on the market, has proved practical and is another step forward in the development of fire-safe construction, particularly for residential buildings, at low cost.

Electrocoated Sandpaper

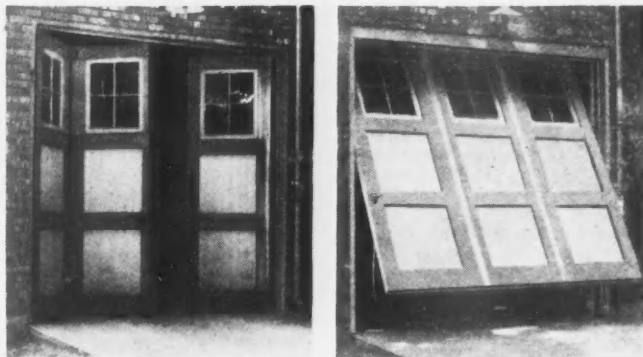
THE builder and contractor uses coated abrasives for so many purposes in his work that announcement of a newly perfected electrocoated sandpaper is of great interest. Made by leading manufacturers, the new sandpapers do more work in less time, save labor, last longer, and produce a better finish than was formerly possible.

Electrostatic force is used in making the new abrasives, as a method of spreading the grits over the glued surface of the paper. This electrocoating sets all the particles in the backing with points up and gives the maximum cutting surface. It also distributes the grits so that they are evenly spaced, avoiding the bunching of grains and insuring the finest finished surface to the work.

Because of these improvements, the products give much better results than were formerly possible, the manufacturers state. Depending on the work being done, increases in efficiency ranging from 20 to 60 per cent have been noted, with the average gain falling between 30 and 40 per cent.

In order that all needs may be met, these sandpapers are being made with various abrasives, including garnet, aluminum oxide and silicon carbide, and with backings of paper, cloth or combination.

Go After These PROFITS! MODERNIZE Garage Doors!



● BEFORE

● AFTER

Here is a field of PROFIT that proved a "life saver" for many a builder this year. With "Over-the-Top" Door equipment you can modernize any set of vertical garage doors to open "overhead." Install it on OLD doors or new, in a few hours. No other "overhead" type equipment offers all its advantages. Low cost, simplicity and convenience do the selling. Write for information and name of dealer in your city—he will share profits generously with you on installations you sell.

FRANTZ MFG. CO.

STERLING, ILL.

**"Over-the-Top"
Door Equipment**

AMERICAN STEEL SHEETS

FOR ALL KNOWN USES



KEYSTONE Copper Steel Sheets
Excel in the Building Field

Use sheets of recognized reputation and value. For roofing, siding, gutters, spouting, air conditioning systems, and general sheet metal work—Keystone Copper Steel gives maximum rust resistance.

Insist upon AMERICAN Black Sheets, Keystone Rust Resisting Copper Steel Sheets, Apollo Best Bloom Galvanized Sheets, Galvanized Sheets, Heavy-Coated Galvanized Sheets, Formed Roofing and Siding Products, Teme Plates, etc. Write for information.

This Company also manufactures U S S STAINLESS and Heat Resisting Steel Sheets and Light Plates for all uses to which these products are adapted.

AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa.

SUBSIDIARY of UNITED STATES STEEL CORPORATION

CORNELL DOORS | WOOD & STEEL

NOW you can get what you WANT

NOW At last, a steel door as light as wood. Cornell galvanized tubular steel Float-Over Doors are patented. There is nothing like them. Priced to compete with wood. Designs and Equipment are the finest. Strong—Fireproof and burglar-proof. Proven performance.

NOW Cornell 2 3/4" rugged wood Float-Over Doors. Four times as strong and at the same price as ordinary 1 3/4" doors. Sag and windproof.

NOW Cornell patented Self Sealing Weatherstrips are exclusive equipment. Keep out all wind and weather. Keep garages warm in winter and save plenty of fuel.

HAVE YOU SEEN CORNELL ROLLING GRILLES?

Send for CIRCULAR and SPECIFICATIONS

CORNELL DOOR WORKS, Inc., Long Island City, N. Y.



Makers of famous Cornell Rolling Doors and Rolling Grilles

Increase Business
with Parks' Planing Mill Special
—8 full-sized machines in one.

Send for complete catalog.

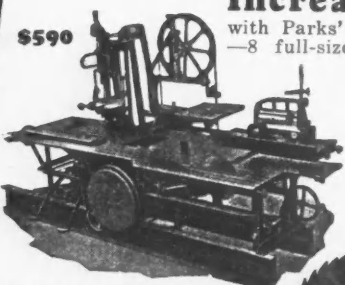
THE PARKS WOODWORKING MACHINE CO.
Dept. BL-9,
1524 Knowlton St.,
Cincinnati, O.

Canadian Factory:
338 Notre Dame East,
Montreal

Planing Mill Special
Rip and cross-cut saw, 22" band saw, 12" jointer, tenoner, hollow chisel, mortiser and borer, swing cut off saw, reversible shaper and sand disc.

PARKS
WOODWORKING MACHINES

\$590



Building Age Book Guide

A 48-page, 6 x 9 inch catalog of books on Houses and Gardens; Plan Reading and Estimating; Steel, Timber and Concrete Construction; Excavation and Masonry; Carpentry and Joinery; Interior Decoration; Real Estate, etc. A supplement showing price changes, new editions and books out of print since the catalog was issued is enclosed. This catalog will be sent free upon request.

Book Service Department

Simmons-Boardman Publishing Company
30 Church St. New York, N. Y.

Construction Code

(Continued from page 28)

out limitations those persons commonly known and sometimes defined by law, as architects, engineers, contractors, and sub-contractors. The term "person" as used herein is taken to mean a natural person, partnership, company, trust, trustee in bankruptcy, association, corporation or agency. The term "employers" shall mean all persons who employ labor in the conduct of any branch of the Construction Industry as defined above. The term "employees" shall mean all persons employed in the conduct of any branch of the Construction Industry as defined above.

2. PROVISIONS INCORPORATED FROM NATIONAL INDUSTRIAL RECOVERY ACT.

(a) Employees shall have the right to organize and bargain collectively through representatives of their own choosing, and shall be free from the interference, restraint, or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection.

(b) No employee and no one seeking employment shall be required as a condition of employment to join any company union or to refrain from joining, organizing, or assisting a labor organization of his own choosing.

(c) Employers shall comply with the maximum hours of labor, minimum rates of pay and other conditions of employment, approved or prescribed by the President.

(d) This Code and all provisions thereof are expressly made subject to the right of the President in accordance with the provisions of Section 10 (b) of the National Industrial Recovery Act from time to time to cancel or modify any order, approval, license, rule, or regulation issued with respect hereto under Title I of said Act.

3. MINIMUM WAGES—Employers in the Construction Industry shall pay wages

(a) Not less than the minimum rate of wages for unskilled labor hereby established which shall be not less than forty cents (40c) per hour unless the hourly rate for the same class of work on July 15, 1929 was less than forty cents (40c) per hour in which case the hourly rate shall be not less than that of July 15, 1929 and in no event less than thirty cents (30c) per hour, and furthermore, in any event

(b) Not less than the minimum rate of wages for accounting, clerical or office employees hereby established as follows: \$15. per week in any city of over 500,000 population, or in the immediate trade area of such city; \$14.50 per week in any city of between 250,000 and 500,000 population, or in the immediate trade area of such city; \$14. per week in any city of between 2,500 and 250,000 population, or in the immediate trade area of such city; and \$12. per week in towns of less than 2,500 population. Population shall be determined by the 1930 Federal census.

(c) Nothing herein contained shall be construed to apply to employees whose rates of wages are established for specific projects by competent governmental authority in accordance with law or with rates of wages established by contracts now in force.

4. MAXIMUM HOURS—Employers in the Construction Industry shall not employ any employee

(a) In excess of the maximum average of thirty-five (35) hours a week during a six months calendar period, or forty-eight (48) hours in any week in such period, or eight (8) hours in any one day, excluding employees engaged in professional, executive, administrative or supervisory work; those engaged in cases of emergency work requiring the protection of life or property, and those in establishments employing not more than two persons in towns of less than 2,500 population, which towns are not part of a larger trade area. Population shall be determined by the 1930 Federal census.

(b) Employers shall not employ accounting, clerical or office employees in any office or in any place or manner for more than forty (40) hours in any week, excluding employees in managerial or executive capacities and those in establishments employing not more than two persons in towns of less than 2,500 population, which towns are not part of a larger trade area. Population shall be determined by the 1930 Federal census.

(c) Nothing herein contained shall be construed to apply to employees whose hours of labor are established for specific projects by competent governmental authority acting in accordance

with law or with hours of work established by contracts now in force.

4-A. AREA AGREEMENT FOR HOURS AND WAGES
—Minimum rates of wages and maximum hours of labor may be established nationally or for a region or locality by mutual agreements reached through bona fide collective bargaining between truly representative national, regional or local groups of employers and employees. In no event shall such minimum rates of wages be less than those established in Section 3 hereof, nor in any event shall such maximum hours of labor be more than those established in Section 4 hereof, excepting such minimum rates of wages and such maximum hours of labor as are established for specific projects by competent governmental authority acting in accordance with law.

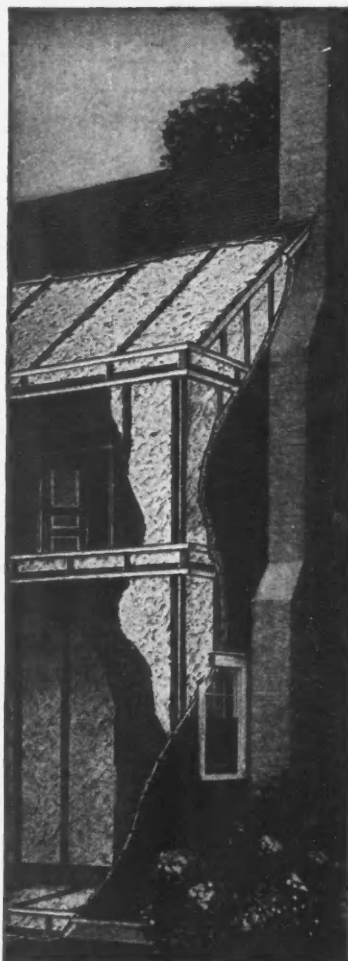
5. MINIMUM AGE—An employer in the Construction Industry shall not employ any minor under the age of sixteen (16) years or under any greater age specified by law or competent governmental authority.

6. AMENDMENTS—Amendments to or revisions of this Code may be proposed by the National Administrative Committee or any national trade association or professional body representative of any recognized functional division within the Construction Industry and when approved in accordance with the provisions of the National Industrial Recovery Act shall become binding upon the Construction Industry.

7. ADMINISTRATIVE COMMITTEE—To effectuate the purposes of this Code and of the National Industrial Recovery Act and to provide for administration and coordination within the Construction Industry, there is established a "National Administrative Committee" which shall consist of the Policy Committee of the Construction League of the United States, as that committee is from time to time constituted, and three non-voting members to be appointed by the Administrator of the National Industrial Recovery Act. This committee shall have authority to establish such sub-committees and state, regional or local committees, sub-committees or agencies with such delegated powers, as it may deem necessary, and this committee may at any time and from time to time require of any employer, trade association or professional body in the Construction Industry any information relating to wages of employees, hours of labor or other conditions of or in the Construction Industry pertaining to the provisions or the operation of this Code, and may, and at the request of the Administrator shall, from time to time present to him such information or reports as he may require; and this committee may, and at the request of the Administrator shall, present to him such recommendations, as to conditions in the Construction Industry as they may develop, as he may specify, together with such other recommendations as in the opinion of the committee may tend to effectuate the operation of the provisions of this code or any supplemental code proposed or made a part of this Code or the policy of the National Industrial Recovery Act.

8. SUPPLEMENTAL CODES—It is intended that this Code for the Construction Industry shall be amplified and expanded by supplemental codes prepared and proposed by trade or industrial associations or professional bodies within the Construction Industry representative of the various functions of the Construction Industry or sub-divisions thereof. Such supplemental codes shall, so far as possible, and subject to the general approval of the Administrator, be administered by administrative committees or agencies therein respectively established. Such administrative committees so established shall have the power to hear and to recommend adjustments or reconciliations of any controversy between or complaint made by any employers or associations thereof, who shall be subject to the provisions of any such supplemental code or codes. In the event that any such adjustments or reconciliations so recommended shall not be accepted by such employers, or associations thereof, such administrative committees shall, at the request of any party directly concerned, refer any such controversies or complaints to the National Administrative Committee hereinabove established, for appropriate adjustments by it. In the event that the adjustment or reconciliation recommended by the National Administrative Committee shall not be accepted by any party to the controversy or complaint, the National Administrative Committee shall, at the request of any party directly concerned, refer the matter to the Administrator who, at his option, may hear and determine any such controversy or complaint. Any adjustment or reconciliation

(Continued to page 64)



INSULATE WITH U.S. MINERAL WOOL

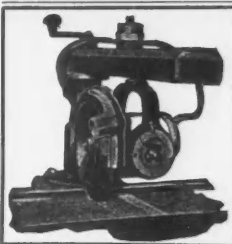
Draftless rooms, cool in summer and warm in winter, are assured in homes insulated with U. S. Mineral Wool. This extra living comfort can be added at an actual saving in winter fuel expense that will pay for the installation within a short period of time.

No other insulating material offers a like protection from cold, heat, fire, sound and vermin—five points of vital importance to every home owner.

Sample and folder sent on request, address nearest office.

U. S. MINERAL WOOL COMPANY
280 Madison Avenue,
New York

Western Connection
Columbia Mineral Wool Co.
South Milwaukee, Wisc.



BUY NOW

DEWALT
MACHINES CUT WOOD—METAL—STONE

Write for full particulars on machines and prices

Advanced prices on several models become effective soon.

DE WALT Products Corp.
230 Fountain Ave., Lancaster, Pa.

3 NEW WAYS TO PROSPERITY

New Modernizing Process Pays Big Returns. It renews all masonry surfaces in permanent color at the amazing low cost of 10c per square yard. Big repeat business. Scores of jobs await you in every locality. Up to 200% profit. Simple, electric, portable spray machine does the work—furnished at low cost.

Pottery, Garden Furniture with this color process opens up another profitable business. We supply molds for casting new and beautiful designs that sell at 3 to 5 times cost. Further expansion offered by our modern equipment for the production of various building products in color.

Learn About These Profitable Enterprises and the small investment required for equipment. Investigate. Write for complete information and the opportunities offered right in your own locality.

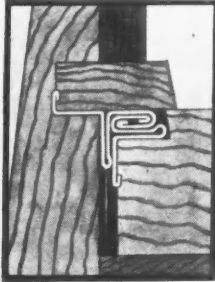
COLORCRETE INDUSTRIES, Inc.
500 Ottawa Ave.,
Holland Michigan



A Profitable Side Line

New PROTEX

METAL WEATHERSTRIP FOR WOOD SASH



LOWER SASH

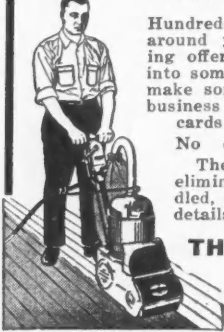
This new metal weatherstrip can be installed in old or new homes. The interlocking feature assures a weather tight job. No matter how much the sash shrinks or swells or gets out of line, a constant even contact is maintained. Start now before cold weather sets in. Sell and install this new strip.

Write for our proposition. Our line of weatherstrips is complete.

PROTEX WEATHERSTRIP MFG. CO.
2306 West 69th Street Chicago, Ill.

AMERICAN FLOOR SANDERS

MAKE BIG PROFITS



Hundreds of old floors all around you needing resurfacing offer you a chance to get into something for yourself, and make some money. We supply business getting circulars and cards that bring in the jobs. No experience necessary.

The New American Spinner disc edging machine eliminates hand work on edges. It is easily handled, compact and powerful. Write quick for full details, sent without obligation.

THE AMERICAN FLOOR SURFACING MACHINE COMPANY

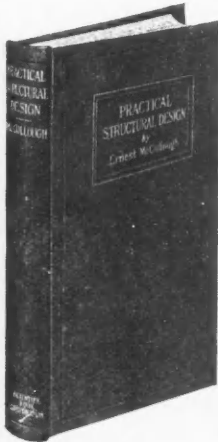
511 South St. Clair St., Toledo, Ohio



American Spinner
Disc Edging Machine

Practical Structural Design IN TIMBER, STEEL AND CONCRETE

By Ernest McCullough



For the practical man this book gives a clear working knowledge of every detail of the subject. It is a practical treatise on the mechanics of materials, mechanics of structures and structural design. It explains the latest developments in non-technical language, with the formulas expressed in simple arithmetic.

The problems of building construction are treated fully, from the design of floor joists and small posts to long span trusses and the largest columns. The material has been carefully selected and arranged for use as a text or for reference. Everyone engaged in designing buildings should possess this volume. For the self-tutored man, no better book has ever been written.

CONTENTS BY CHAPTERS

External Forces—Internal Forces—Problems in Design of Beams—Girders and Trusses—Joints and Connections—Graphic Statics—Columns and Structures—Semi-Rigid Frames—Miscellaneous Data—Reinforced Concrete.

Third Edition
Revised and Enlarged

6 by 9 Inches, Cloth, 416 Pages, 224 Illustrations
PRICE \$4.00 POSTPAID

AMERICAN BUILDER AND BUILDING AGE
30 Church Street New York, N. Y.

Construction Code

(Continued from page 63)

of any such controversy or complaint determined by the Administrator shall be final and shall bind the employers, or associations thereof, involved in any such controversy or initiating any such complaint.

It is the spirit of the foregoing provisions that, so far as possible, controversies or complaints arising within any of the functional groups or sub-divisions of the Construction Industry covered by a supplemental code shall be fully determined and adjusted by the administrative committees or agencies established in such supplemental code, and that, whenever the adjustments or reconciliations recommended by such administrative committees or agencies are consistent with reasonable compromise, recourse shall not be had or appeal made to the National Administrative Committee or to the Administrator.

Any such supplemental codes submitted by such functional groups or sub-divisions of the Construction Industry shall provide for minimum rates of pay not less than and for maximum hours of work not more than the limitations established therefor in this Code.

Supplemental codes prepared by national trade associations or professional bodies within the Construction Industry may be submitted to the National Industrial Recovery Administrator by the National Administrative Committee herein established when consistent with this Code and other rules and regulations promulgated by the President and when within the spirit and purpose of the National Industrial Recovery Act, but nothing herein contained shall be construed to prevent a trade association or other representative group or body within the Construction Industry from submitting a code directly to the National Industrial Recovery Administration.

9. **ADJUSTMENTS**—In the event that any buyer subject to this Code shall have contracted before June 16, 1933 to purchase goods, structures, or parts thereof at a fixed price for delivery during the period of the President's Reemployment Agreement, he shall make an appropriate adjustment of said price to meet any increase in cost to the seller caused by the seller's having signed the President's Reemployment Agreement or having become bound by any code of fair competition approved by the President; provided, however, that in view of the fact that construction operations customarily involve the furnishing of various goods and structures, or parts thereof by a continuous series of independent long-term contracts and agreements at fixed prices between various parties, such as owners (including governmental departments), builders, contractors, sub-contractors and others, such adjustments shall be contingent upon similar appropriate adjustments to be made by all other parties thus participating, from and including the initial vendor of such goods and structures or parts thereof to and including the owner of the works or structure upon which they are used.

10. **BID PEDDLING PROHIBITED**—No one in the Construction Industry shall be a party to the unfair practice commonly known throughout the industry as "Bid Peddling." All supplemental codes before receiving the approval of the National Administrative Committee shall contain provisions to enforce this rule.

11. **ADMINISTRATIVE EXPENSE**—All employers and persons as defined in this Code shall bear their equitable share of the expense incident to the administration of this Code of Fair Competition under such rules and regulations as may be approved by the President under Section 10 (a) of Title I of the National Industrial Recovery Act.

12. **EFFECTIVE DATE**—This Code shall become effective on approval by the President of the United States and shall be applicable to all construction work undertaken pursuant to contracts entered into or otherwise commenced after approval.

Garity to Handle Federal Purchases

THE Tennessee Valley Authority has appointed Charles H. Garity of Catonsville, Md., its director of purchases and procurement. Mr. Garity has had a wide experience in the hardware, mill supplies and general machinery lines. During the World War, he served as procurement officer in the hardware and metals division which later became the General Supplies Division of the Quartermasters Corps.

Safety Building Methods

(Continued from page 39)

In a similar manner, built-in features—such as the clothes chute which does away with the unsafe practice of putting clothes on the steps; the dumb waiter which serves as a temporary storage space for articles that must be transferred from the kitchen to the basement and vice versa, thus keeping the steps free from such articles; the dust chute and incinerator which take care of the kitchen waste in the safest and easiest manner; the package receiver which keeps milk bottles and packages off from the floor and out of the line of traffic; an outside icing door, if ice is used, and a permanent drainage connection to carry away waste from the refrigerator, both of which decrease the possibility of a wet and slippery floor—all minimize the number of home accidents.

As an added safeguard, storage spaces should be properly lighted. Inadequate light naturally encourages disorderly habits, and where there is disorder, there is always the danger of stumbling or knocking articles off from shelves and causing serious injury.

Electric Wiring

For safety's sake home builders should make sure that their wiring specifications comply with the local ordinances or with the provisions of the National Electrical Code of the National Board of Fire Underwriters. All specifications should call for supply lines of sufficient size not only to provide for present usage but also for future requirements, and for plenty of well-insulated, properly placed light, switch, and appliance outlets.

Outlets should be so placed that the use of long extension cords will be unnecessary. Long extension cords should be avoided, not only because they wear out rather easily and become unsafe, but because they are the frequent cause of tripping and bad falls.

From the standpoint of safety, it is desirable to have the wall switch to control the lights at the point of usual entrance to the room. In rooms, such as the kitchen and dining room, which are frequently entered from more than one door, control switches may well be placed at both entrances.

The luminous switch button which is plainly visible in the dark is one of the newest electrical accident prevention devices. This and the radium pendant that can be attached to any pull socket chain helps one to find the light both quickly and safely.

A new type of switch which may be regulated to turn the light out automatically after a certain time has passed is another interesting safety device. With this type of switch the entrance or garage light may be left burning while one closes the door, steps in and drives away.

The new low-watt electric lamp which can be regulated from full strength to a bare glow is a further safeguard.

These are only a few of the hazard spots in the home, but they are sufficient to show that safety in the home, after all, depends largely on the good judgment of the home builder. Most of the dangers to both children and grown-ups can be eliminated rather easily.

New Executives for Holland Furnace

THE board of directors of the Holland Furnace Company has elected an entirely new executive staff, according to a recent announcement at a meeting of divisional managers.

H. W. Thorne is the new president and treasurer, succeeding C. H. Landwehr, former president. Others elected were P. T. Cheff, vice president in charge of production; P. W. Burns, vice president in charge of sales; William Tahaney, secretary, and G. B. Tinholt, assistant secretary and treasurer.



EDWARDS STEEL CEILINGS

Speed Business Recovery

Progressive building contractors everywhere are cashing in on the demand for modern, sanitary, fire-resistant, decorative steel ceilings for stores, restaurants, offices. As usual Edwards offers the best selling designs in widest range of selection and priced to get the business at a good profit.

Send measurements of your next ceiling job. Get our new low prices, freight paid.

Write today for Ceiling Catalog No. 178

THE EDWARDS MANUFACTURING CO.
542-562 Eggleston Ave. Cincinnati, O.

BRAND NEW

and a peach of a looking outfit too

Type T-3 TAKE-ABOUT Sander

PORTER-CABLE

rounds out line of TAKE-ABOUT Sanders with new model T-3. Perfectly balanced, you get a fine finish without effort, 5 to 10 times faster. Eliminates tedious planing, scraping and hand sanding on doors, sash, trim, tables, edges of floors, closets, cabinets, built in furniture and many other jobs, saving hard work and money that will make your T-3 pay for itself in jig time. Plug into wall plug, the belt does the work. One owner says, "Two men sanded 1200 lineal feet of casing in 4 1/2 hours. I nearly paid for sander on this job alone." Four other models to choose from. Get the thrill that comes with the "feel" of this 3" sander. You will be proud of the job it does. Write for a free demonstration and descriptive bulletins.

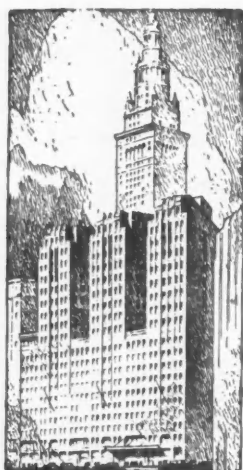
DECKS

SASH & DOORS

PORTER-CABLE MACHINE CO.
1721 No. Salina St., Syracuse, N. Y.

The **N**EW PRODUCTS Area AT THE BUILDING ARTS EXHIBIT

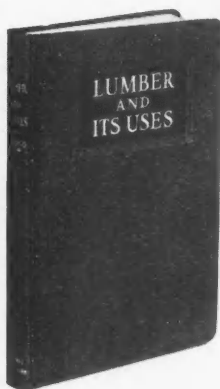
In times like the present, many manufacturers are adding new products to their lines and alert builders and architects are keeping closely in touch with these new developments and the advantages they offer. • In the Cleveland territory, the New Products Area at the Building Arts Exhibit affords an excellent opportunity for actual inspection and study of new and approved products in the building and allied fields. It will give you new ideas and worthwhile suggestions. • Make it a point to inspect this, and other features of this Exhibit, when in Cleveland.



**BUILDING • ARTS
EXHIBIT • INC.**
BUILDERS EXCHANGE BUILDING
CLEVELAND . . . OHIO

A UNIT OF THE CLEVELAND TERMINAL GROUP

Whatever you want to know about LUMBER
You'll find at a glance in this new book



LUMBER AND ITS USES

By
Royal S. Kellogg

20 Chapters — 378 Pages — 100
Charts, Tables and Illustrations.
Instantaneous Fact-Finding Index.

Price \$4.00 Postpaid

Every user of wood should have this book and keep it handy to refer to. It has had perhaps the widest sale of any book of its kind ever published. It explains in clear non-technical language every operation from the actual cutting of the tree to the finishing of the wood.

Chapter Headings: The Structure of Wood—Physical Properties of Wood—Lumber and Log Measurements—Lumber Grades and Sizes—Structural Timbers—Shipping Weights—Seasoning of Timber—Wood Preservation—Paints and Wood Finishes—Fire-Resistance—Forest Products—Lumber Distribution—General Construction—Planing Mill Products—Factory Uses of Lumber—Commercial Woods—The Timber Supply—Lumber Operations—Wood and Its Competitors—Lumber and Timber Information. Index.

Send your order today to

AMERICAN BUILDER AND BUILDING AGE
30 Church Street New York, N. Y.

ALLMETAL

**WEATHERSTRIP
REWIREABLE SCREENS**

WHY NOT WORK ALL FALL AND WINTER ?

GET YOUR share of the weatherstrip work in your community. Our twenty years experience in manufacturing *Consistently Good* metal products is your guarantee of highest possible quality at economical prices. Write for prices and free sales kit showing standard material and installation.

ALLMETAL WEATHERSTRIP CO. — 231 WEST ILLINOIS STREET — CHICAGO, ILLINOIS .

INDEX TO ADVERTISERS SEPTEMBER, 1933

A		Page	K		Page
Allmetal Weatherstrip Co.		66	Kalman Steel Corp.		13
American Floor Surfacing Machine Co.		64		L	
American Saw Mill Machy. Co.		60	Libbey-Owens-Ford Glass Co.		3rd Cover
American Sheet & Tin Plate Co.		61	Louisville Cement Co.		53
American Telephone & Telegraph Co.		4		N	
	B		National Manufacturing Co.		4th Cover
Brown Co.		3		P	
Building Arts Exhibit, Inc.		66	Parks Woodworking Machine Co.		62
	C		Pittsburgh Plate Glass Co.		14
Colorcrete Industries, Inc.		63	Porter-Cable Machine Co.		65
Cornell Door Works, Inc.		62	Portland Cement Assn.		55
	D		Protex Weatherstrip Mfg. Co.		64
De Walt Products Corp.		63		R	
in Mfg. Co., W. E.		60	Ruberoid Co.		11
	E			S	
Edwards Mfg. Co.		65	Sisalkraft Co.		2
Electric Carpenter Co., Inc.		53	Stran-Steel Corp.		10
Eternit, Division of The Ruberoid Co.		11		T	
	F		Truscon Steel Co.		59
Frantz Mfg. Co.		61		U	
	I		U. S. Mineral Wool Co.		63
International Harvester Co.		12		W	
International Nickel Co., Inc.		16	Wood Conversion Co.		15
	J				
Jaeger Machine Co.		60			
Johns-Manville Corp.		6-7			

NOTICE TO ADVERTISERS

Forms for the October Number of the American Builder and Building Age will close promptly on September 15. New copy, changes, orders for omissions of advertisements must reach our business office, 105 W. Adams St., Chicago, not later than the above date. If new copy is not received by the 15th of the month preceding date of publication the publishers reserve the right to repeat last advertisement on all unexpired contracts.

AMERICAN BUILDER AND BUILDING AGE.