BETTER HOMES MEAN BETTER BUSINESS.
THE AMERICAN BUILDER ENDorses A
VIGOROUS HOME BUILDING AND RE-
PAIR DRIVE IN EVERY COMMUNITY TO
CREATE THE DESIRE FOR BETTER
HOMES. BUILDERS, DEALERS, ARCHI-
TECTS, REAL ESTATE MEN AND THE
LOCAL DEPARTMENT STORES AND
NEWSPAPERS SHOULD CO-OPERATE TO
POPULARIZE BETTER HOMES.

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BERNARD L. JOHNSON
Editor

JOSEPH B. MASON
Managing Editor

H. F. LANE
Washington Editor

E. L. GILBERT
Eastern Editor

L. R. PUTMAN
Marketing Editor

ROBERT H. MORRIS
Business Manager
RU-BER-OID BUILDS
A NEW ASBESTOS SHINGLE FACTORY

INCREASED SALES OF RU-BER-OID—ETERNIT PRODUCTS
Make This NEW Plant Necessary

During the past five years The Ruberoid Co. has made tremendous strides in the development of new Asbestos-Cement Shingles and allied products. Today Ruberoid offers Eternit Asbestos-Cement Shingles in a variety of attractive textures, styles and colors—tapered Gothics with the beauty of rugged rock and Timbertex with the charm of weathered cypress; sidings giving the appearance of wood or rough textured brick; Newmarble and Newtile Wall Panels, simulating the richness and beauty of marble and tile—all profitable sales leaders that you require to get modernization work.

The increasing popularity of these products made necessary a new Eastern Asbestos factory at Bound Brook, N. J. It is now in full operation to give service on the Eastern seaboard. The full manufacturing facilities of our mammoth asbestos factory at St. Louis, Mo., will now be devoted to giving prompt and efficient service in the West and Southwest.

Check the Ruberoid-Eternit Asbestos-Cement Products that interest you. Use these nationally advertised sales leaders to increase your business. Mail the coupon for samples, and the Deferred Non-Recourse Payment Plan. Join the procession of Success.
The National Housing Act—a Challenge to Private Business

The National Housing Act is the most constructive recovery legislation that has been enacted because it uses government credit to help private business to revive itself.

The decline of private business caused the depression. Only the revival of private business can end it.

A marked revival of private business began in the last one-third of 1932, and again, after the banking crisis, in the second quarter of 1933.

Since then we have been floundering with government experiments—increasing industrial costs and prices; regimenting production and commerce; interfering between debtor and creditor; paying many men more for "relief" than for work; preventing private investment by excessive regulation of securities; spending vast sums of taxes on public works, many of which are not needed or will compete with private industry.

Most of this has been done to "increase employment." Meanwhile, the great construction industries, including home building and modernization, in which most of the unemployment has existed, have been at a virtual standstill. And meantime, because these great key industries have been almost at a standstill, the real improvement in business actually has been less than before all these experiments were begun.

Why has the National Housing Act been advocated and endorsed by the Durable Goods Industries Committee and many business leaders and economists who have condemned most of the other "recovery" policies? Because it uses government credit to (1) help the industries that are most depressed; (2) promote private investment in private property; (3) cause expenditures for housing that sooner or later would have to be made anyway; (4) create tax-paying property instead of tax-eating property; (5) increase business and employment in every community, and in the industries in which there is the most unemployment.

The National Housing Act constitutes a challenge by government to all bankers, and to all manufacturers, contractors and material dealers in the building field. Many of them have criticised other "recovery" measures for hindering efforts of private business to revive itself. This measure will help private business to revive itself just in proportion as bankers and men in the building industry exert themselves to revive their own business.

Will business men in the building industry accept the challenge? They must take the initiative and risks and make the efforts necessary to revive their business if they don't want more of the government extravagance, bureaucracy, regimentation and socialization of which so many business men complain.
SATISFACTORY COSTS AND VOLUME BUSINESS

WITH the enactment of the National Housing Bill, placing Uncle Sam's stamp of approval and guarantee on private loans for new home building and home improvements, and paving the way for ample construction funds at low interest rates, the men affiliated with the building trades and those engaged in supplying building materials should lose no time in satisfying the buying public regarding construction costs, so that this great recovery program can go forward without delay.

The buying public is being constantly told and seems convinced that costs of building are out of line with incomes and other present day costs, and will be slow to invest its money until satisfied that the construction purchased is worth 100 per cent of its cost.

The public believes that building labor wages are too high, and that working men and farmers cannot afford to hire building craftsmen at wages per hour two or three times their own incomes. A lower scale per hour would reduce the cost of building, help increase the volume of it, and thus assure more steady employment for building trades workers, and higher total earnings for them by the month and year; and both building mechanic and home owner would be benefited.

The public believes that building materials are too high in price by the time they are delivered on the job. This cost is made up of manufacturing expense, freight charges and warehousing service. These costs can all be reduced by increasing volume of production which, of course, should be the main objective of all efforts; but the largely increased volume of production essential to restoration of the prosperity of all branches of the home building industry cannot be secured unless persons considering the remodeling or building of houses can be convinced that they will get their money's worth for whatever expenditures they may make.

Consider the Buying Public

Without questioning the fairness of any specific wage scale, price list or service charge which has been or is now in effect in the building industry, this publication proposes an immediate scrutiny of every item of expense making up the cost to the owner and occupant of a needed new house or of repairs or improvements on his old home.

We recommend this as a move to win the support of the buying public, so that the new low cost credit provisions of the Housing Act may be promptly called into use and the home building industry may start off with a volume of activity which will mean more employment for labor and sufficient demand for materials and equipment to justify capacity manufacturing and supply operations, with their resulting lower unit costs.

Such a move for satisfactory home building costs would win general endorsement. It would silence criticism, remove opposition and bring out hundreds of thousands of plans for new homes and improvements wanted and needed, but postponed because costs have been considered too high.

With home building funds available under this new Act at a low interest rate without premiums, bonuses, renewal charges and second mortgage fees, the men engaged in the home building business have a wonderful opportunity to show present and prospective home owners that now is the bargain time to make repairs and improvements or to buy and build. All other costs of owning and occupying a home are down.

Other Home Owning Costs Down

Home buying and ownership costs, as usually set up, include the following:

1. Cost of the lot, including water supply, sewage disposal, electricity, gas, and street improvements.
2. Promotion and sales expense.
3. Construction costs.
4. Legal fees and financing costs, including interest, premium and periodic refinancing charges.
5. Occupancy and ownership charges, such as taxes, heating and cooling, and upkeep maintenance costs.

Under normal conditions in the past, actual construction cost has represented one-half the total first cost of a home, with improved lot, sales expense, financing charges and fees making up the other half. Today home buyers and builders are getting a better break. They find much of these preliminary costs greatly reduced and more of their investment going into actual construction.

Improved lots are away down; present buyers can acquire good home building sites at a fraction of their former cost. Promotion and sales expense, which bulked as large as 20 to 25 per cent in the heyday of speculative building, is today practically eliminated. In the past, home financing costs have been exorbitant, the jerry financing in the late boom period having been even worse than the jerry building.

Thus we see the necessary preliminary costs to home construction reduced from their customary 50 per cent of the total investment to perhaps 20 per cent of the total investment.

Tell the Home Folks How Well and Economically You Can Build

Home building is a local industry, and the efficiency and effectiveness with which any community is served with new home construction and with old home improvements depend largely on the leadership and teamwork which builders, dealers and financing interests are able to develop to plan and build soundly at prices that are attractive. Local effort and initiative are needed to set up the local financing facilities under the new Housing Act. The Government has provided the plan; but it will be the job of men in the building industry to work to it in every local community so that the public will be encouraged to put builders back to work in a big way and secure the better homes and housing that are needed.
A Business Man Heads the Industry

President Roosevelt sidestepped a bunch of trouble for the new Federal Housing Administration when he went OUTSIDE the building industry for the business man to head up this great work. He selected James A. Moffett of New York, former executive vice president of the Standard Oil Company of New Jersey, a $100,000 per year man, for this $10,000 job—48 years old, father of five children, and known to his business intimates as "Square Shooting Jimmie." He looks upon his Housing job as the biggest he has yet tackled; he sees it as mostly financial, that of re-establishing the public’s confidence in first mortgages, especially home mortgages. His known fairness and business ability and the wisdom of his first appointments as Housing Administrator have already called forth a flood of approval.
ITH President Roosevelt’s big new recovery move for stimulating repairs, remodeling and new home building now enacted into law, and with the work going ahead fast of setting up the simple organization machinery to put the modernizing part of the program into immediate operation, the job is now put squarely up to every building contractor, dealer, architect, carpenter and mechanic to get busy at once lining up definite repair and renovizing projects which building owners have needed and wanted done, but have held back because of financing difficulties or uncertainties.

Under Title I of the new Housing Act five per cent money is provided for repairs, alterations, additions or improvements on buildings; three to five years to repay; character credit, one-name paper, no collateral required; your local bank, building and loan, trust company or any other organized loaning agency makes the loans and Uncle Sam guarantees them against loss up to 20 per cent of all funds loaned. An appropriation of 200 million dollars guarantees these loans—enough to insure against loss one billion dollars of private capital.

It is the hope of the Administrator to have at least half of this money out and a million building craftsmen back to work “before snow flies.”

The first loans have already been made and the active men of the building industry are expected to plunge into this job with all their power.

Developments at Washington during the past month show the new Federal Housing Administration in able hands and already organized to make a quick start on both the modernizing and new home building phases of the program.

Mr. James A. Moffett, designated by President Roosevelt as Federal Housing Administrator, is known as an able organizer. As vice president of the Standard Oil Company of New Jersey, he has been in close touch with New York financial interests. He looks upon his job of Housing Administrator as largely financial, and is devoting his thought to the re-establishment of confidence in home mortgages as a safe investment. Mr. Moffett is organizing the work of the Federal Housing Administration in three departments, each under a deputy administrator:

1. Title I of Act covering repairs and modernizing of buildings, particularly homes; Albert L. Deane, Deputy Administrator; Ward M. Canaday, Public Relations and Promotion Director.
2. Organization of national mortgage associations; deputy administrator not yet announced.
3. Mutual insurance of new home mortgages; deputy administrator not yet announced.

New Building to be Speeded

Mr. Moffett expects to name within 30 days the personnel for departments 2 and 3 above. In the meantime, with his staff he is working out the important problems of policy, interest rates, etc., to assure ample funds for new construction and for liquidity of insured mortgages as contemplated in the Act. Contrary to the impression carried by certain newspaper accounts, the Administrator
Ready—Fetch on the Jobs!

Has assured this publication that he is not delaying action on the new home building part of the program but, recognizing the importance of the problems involved, is refraining from making announcements at this time, but is nevertheless hard at work on these problems. It is confidently expected that the entire set-up for new home building loans will be complete and in operation by the time contractors, architects and dealers have their projects definitely planned and ready to start.

In the meantime, the repair and modernizing program is already under way. Mr. Albert L. Deane, the Deputy Administrator, said to a group of journalists in Washington on July 12, "We are rarin' to go and are almost ready to go. A little further brushing up of the campaign materials is all that is needed." This referred to several manuals or bulletins on which Ward M. Canaday and his assistants have been working for some time. These men were called together some months ago by Frank Walker, chairman of the National Emergency Council to help in drafting the Housing Bill and have been continuously at work since in perfecting the details of a nation-wide "Rebuild America" Campaign, and in preparing manuals for property owners, contractors, manufacturers, civic groups, etc. Mr. Moffett has now taken over this entire organization and is making use of work already done to speed the execution of the program.

While Mr. Deane insists that there will be no ballyhoo campaign he is, nevertheless, planning to get 2,000 communities organized by fall for a concerted drive by the local building interests. He is depending on building
contractors, dealers and building mechanics to make the house-to-house surveys and to do the selling and planning work on which the definite loans to building owners should be based. He desires to avoid the so-called patriotic appeal through women’s clubs and civic groups which tends merely to give a man a job at routine maintenance work around the house or grounds. He emphasizes that this campaign calls for the use of private funds (guaranteed by the Government) to be expended on private building improvements, planned and executed in such a manner as to be thoroughly desirable investments. He is depending on the skill and experience of the builders and dealers to handle this work intelligently. Assistance in organizing campaigns will be given, freely on request, to any community.

The contemplated organization for furthering repair and modernizing campaigns calls for a state director to be appointed by the Housing Administrator, the state director to assist in organizing local building industry committees wherever campaigns are to be undertaken. Individual contractors and dealers do not have to wait for community campaigns, however, but can go right ahead under the Act soliciting their own prospects and lining up contracts which will be financed by local private lending agencies through guaranteed loans. Community campaigns will stimulate and assist but are not essential where individual dealers or builders are ready now to go ahead.

Many Federal Agencies Now at Work in Home Financing

While current interest centers on the Housing Administration as the big new fact in the home building and repair picture, building industry men should not overlook the other important agencies in Washington and throughout the country already operating in this field. For instance, the Home Owners’ Loan Corporation, under the leadership of John H. Fahey, originally supplied with $2,000,000,000 with which to relieve distressed home owners, has received an additional allotment under the Housing Act of $1,000,000,000 to carry forward its work of keeping distressed homes in the possession of their present owners and so off the market. The Reconditioning branch of the HOLC has an enlarged fund of $300,000,000 for repair and renovating and remodeling loans at 5 per cent, 15 years to pay. This activity under the direction of Donald H. McNeal is thoroughly organized in 300 district offices.

The shares and deposits in building and loan associations are guaranteed under the National Housing Act, which will make these important savings agencies better able to attract the savings of the people and so better equipped to make loans for home repairs, home buying and new home construction.

The Subsistence Homes Division of the PWA is spending $25,000,000 on some 50 low cost home projects; and the experience so far is so satisfactory that this activity is expected to be very greatly enlarged this fall and winter, both by the Subsistence Homes Division and by the Federal Emergency Relief Administration taking the place of the CWA activities of last winter. The planning and construction of these subsistence homes, while conforming to the standards and regulations set forth by the Washington headquarters, are nevertheless being handled by local building contractors.

Roosevelt’s Trump Card

The entire present outlook in Washington is extremely hopeful from the point of view of the organizations serving the building industry. President Roosevelt has indicated that a stimulation of home building and other needed small construction on a nation-wide scale is now his major recovery objective. Loans will be made at lower rates of interest and on more favorable terms than ever before and they will be based on definitely planned and estimated projects.

The readers of this publication have an important place in the program, according to Administrator Moffett. In a letter from Washington dated July 14 addressed to the editor of the AMERICAN BUILDER, he extended this stirring invitation and challenge:

“To the Men of the Building Industry:

“You contractors, builders and dealers are KEY men in our program for modernizing and new home construction. You will acquaint the public with the building opportunities under the National Housing Act and will plan, specify and build needed homes and home improvements.

May I depend upon you for your cooperation in getting this work under way with the utmost speed?

(Signed) J. A. Moffett,
Federal Housing Administrator.

Modernizing Drives Favored

The plans of the Housing Administrator as now formulated are:

1. Concentration for immediate action on Title I of Act, Modernization and Repair of Buildings, more particularly homes.

2. Delay of 30 days or more before any announcements will be made as to policies to control the other Titles of Act, having to do with new construction. It is felt that careful study must be given to these new building policies to assure their soundness; and it is hoped to have all in readiness this fall and winter for a big
new construction season in the spring of 1935.

3. Copy has been prepared for several attractive Government bulletins for the information of property owners, building industry men, bankers, etc. The titles tentatively selected and the quantities talked of are:

- "Property Owners Manual" 20,000,000
- "Local Building Industries Manual" 1,000,000
- "How to Conduct a Local Campaign" 200,000
- "Civic & Social Leaders Manual" 50,000
- "Building Material Manufacturers Manual" 15,000
- "Bankers Loan Manual" 30,000
- "Architects, Contractors & Builders Manual" 1,000,000

The plan is to distribute these booklets free under U. S. frank and by local campaign headquarters.

An immediate objective is 2,000 cities and towns (or counties) completely organized for modernizing campaigns. A central staff at Washington of 250 to 300 is contemplated, a regional sales campaign director in each of the 12 Federal Reserve districts and a state director in every state. The state director is to designate a local chairman in every city or county, picking a building industry man of known leadership ability. The local industry in each community will be encouraged to set up a local headquarters for public information where property owners can come and be referred to reliable contractors and dealers to supply their needs.

Rules Encourage Loans

The regulations tentatively approved provide the following:

1. Cost of renovating loan to home owner is 5 per cent per annum on decreasing balances, plus investigation and service fee of $5.00 for each year note is to run.
2. In case of death of note signer the loan is canceled and repaid out of Government guarantee fund.
3. Repair loans will be granted on several houses owned by one party, provided that if more than two the loans are approved by the Administrator.

Quotations below from the "Home Owners Manual" show the attitude toward contractors:

"Before deciding upon any definite items of work, the entire structure should be inspected carefully to determine the amount of essential repairs which it is advisable to make."

"The employment of a technically trained person for the work is recommended."

"Owner may turn over all details, including negotiation of loan, etc., to an architect, contractor or supply dealer and save himself the time and work involved."

"No detachable or movable equipment (such as refrigerators, etc.) may be financed."

Deputy Administrator Desne stresses the entire absence of "red-tape" in the making of loans. No special forms are required; the bank or other local loaning institution uses its own customary forms. The FHA guarantees the loans after they are made, not before.

Several of the big manufacturings doing a nation-wide business have already gotten out special broadsides to their dealers and contractors urging them to get busy now. Among these is the General Electric Company; its Merchandise Department has addressed to electrical contractors "The Most Important Piece of Literature You Have Received for More Than Five Years!" It tells these men "how you can get your biggest business since the post-war boom with the aid of the new National Housing Act!"

Reading down through this action-getting piece of business-building printed matter we find some excellent advice, not only for electricians but also for all building craftsmen and contractors who want to help get things going:

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**Lumbermen Co-operating With National Housing Act; Lower Prices on Building Materials**

The National Housing Act, designed to put 20,000,000 men back to work by giving home-owners and builders a chance to obtain long term loans at 5 per cent interest for repairs and new buildings, has been signed by President Roosevelt. The Lumber Dealers of the nation are co-operating to the fullest extent with the spirit of the Act by offering an important reduction in the price of all building materials.

**REduced Prices on Lumber Effective July 13**

How the National Housing Act Works:

I. Suppose your home needs a new roof and a repainting job

"Housing Renovation and Modernization"

is provided for in Title I of the Act. You will obtain an estimate from a good local builder for the new roof, and from a good local painter for the paint job. You will take the estimates to the bank and give a note for the amount. When the work is finished, or when the repairs are complete, you may pay back the loan and thereby avoid the rental charges that you would otherwise have to pay on the property.

You will pay the bank equal monthly installments over a period of one to five years, depending on the size of the loan. The installments will include 5 per cent interest to the bank.

Why Will the Bank Lend You the Money?

Because the federal government, through the Housing Administrator, will insure the bank against loss of more than 20 per cent of all remodeling loans made and allowed the bank to collect its 5 per cent interest without the guarantee fund.

II. Suppose You Want to Build a Home for Yourself

"Mutual Mortgage Insurance"

is provided for in Title II of the Act. It works like this:

Suppose You Have a Building Lot

worth $2,000, and want to build a $6,000 home on it. The total value of the house and lot will be $8,000. You may borrow as much as 80 per cent on the total value, or $6,400.

Suppose You Want to Buy a Lot

worth $2,000 and build a $6,000 home on it. You will be able to borrow up to 80 per cent of the total value, or $4,800. Then, by raising $1,200 yourself or otherwise obtaining a contract for the lot, you will be able to go ahead

Where Will You Get the Loan?

You will take your plan, drawn by a licensed architect, and your estimate of building costs as submitted by a good local builder, and go to your local bank. The federal government has insured the bank against loss if you loan conforms to the standards of the Housing Act.

**What Terms Must Your Mortgage Contain to Be Eligible for This Insurance, and What Are the Advantages of Such a Mortgage?**

1. The mortgage must be held by an organization approved by the Administration as responsible and able to service the mortgage properly. (The obvious advantage of this to you is that you will be dealing with responsible people.)
2. The mortgage may not be for more than $10,000. (In recent years too many people demanded smaller loans for expensive homes. The average investment for a home is $20,000.)
3. The mortgage must be a long-term mortgage of from 15 to 20 years. (One definite object of the Act is to throw into the discard short-term mortgages that come due every few years and call for "renewal fees" on every due date.)
4. The mortgage must contain complete amortization provisions. (In other words, your monthly payments will pay off before it ever comes due, so that in less than 20 years you will own your own home CLEAR OF ANY AND ALL DEBT.)
5. The mortgage will bear interest at not over five per cent. (Not over six per cent with mortgage insurance for included. This means NOT MORE THAN SIX PER CENT ON THE AMOUNT OF THE PRINCIPAL. OR LENDER OUTSTANDING AT ANY TIME. Note well that language. It prevents the practice of "pyramid" charges by calculating all interest on the original amount borrowed.)

**BAILEY LUMBER COMPANY**

The Bailey Lumber Co. of Walker, Minn., has jumped right into the Housing Act business by running this announcement in the local newspapers, set to occupy two full columns. It is a splendid example of quick action to inform the local public and start jobs.

The Housing Administrator is counting on Contractors, Dealers, Architects, and Manufacturers to line up the sound projects that need financing.

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"You must start immediately to obtain the many rewiring contracts," the G. E. Bulletin states, "which the first stage, building modernization, of the new National Housing Act can make available for you.

"Thousands of building owners all over the country will renovate their structures with loans provided them with low interest and carrying charges, which they may repay over a period of several years, under the loan guarantee provisions of the NHA. Experts estimate that $500,000,000 will be spent by owners this year.

"This vast modernizing activity means plenty of rewiring of old homes and other buildings—never before possible on long-time payments—at easy rates for the owner—but CASH for the electrical contractor!

"Under the terms of NHA, the local banks or other financial institutions loan the money to the building owner, secured only by his character, without mortgage or bill-of-sale; and the Government insures the bank against loss up to 20 per cent of the total value of all such loans—far beyond any expected losses. Loans to be insured must not be over $2,000 and for not more than one-quarter of the borrower's annual income.

"BUILDING OWNERS WILL BE RECEPTIVE

"You will find your building owners increasingly receptive to your recommendations for rewiring in their structures, to be paid for by them with loans under NHA. Already a gigantic Government-sponsored publicity and promotional program with the slogan, 'Rebuild America,' to sell NHA's modernization phase to building owners, as well as to those in the building trades and to lending institutions, is under way. Newspapers, radio, movies, clubs, schools, and even door-to-door canvassing, will all impress on home owners that they must modernize their properties especially in order to check the rapid depreciation of the properties' value which has occurred during the past five years. These agencies will make your selling job easier.

"Any building owner who wishes to obtain a loan will find his application acted upon more quickly if he knows exactly what modernization work he wants done and if he has accurate specifications and prices for the work. Hence specifications and estimates which you prepare now will help the borrowers to get the loans and you to get the jobs.

"Visit building owners today and suggest and estimate rewiring jobs—explain NHA financing—and help them to obtain loans as soon as your local NHA organization is formed."

The accompanying diagram suggests how a local campaign organization could be set up in any town or local community wanting to put on a general drive for repair and modernizing jobs. The Washington headquarters is ready to assist in getting such local drives started; but local leaders must move first. No "ballyhoo" is going to force campaigns on communities that are not interested and ready. It is expected, however, that two thousand local drives will be in progress by early winter.

As a suggestion for property owners, the following outline instruction sheet has been prepared for use in local campaigns:

1. Determine whether you are eligible or not for loan by consulting your bank or a local lending agency.
2. Decide what work you want done.
3. Select firms or individuals who are to do the work.
4. Get written estimates (in triplicate) covering cost and detailed description.
5. Fill out property owners application form, attach copy of complete estimate and submit with investigation fee ($5.00).
6. Secure written approval on loan.
7. Authorize the work to be done by written acceptance of estimate.
8. On completion, check work according to estimate.
9. Sign note and completion certificate.
10. Make payment for work done by:
   a. Delivery of note and completion certificate to contractor, or
   b. Deliver note and certificate to lending agency and secure proceeds of loan with which to pay contractor.
11. Secure from firms or persons to whom payment is made a "trust agreement" or waiver of liens.
12. Make monthly payments on loan direct to lending agency.

SECURING THE ESTIMATE—There are several methods:

1. Architect: The service of an architect or other competent planner (perhaps the one who designed the building) is valuable where the selection and specifying of materials are concerned or where competitive estimates from contractors are sought. Such service is essential wherever structural changes, alterations in rooms, additions, or changes in design are concerned.
2. General Contractor: The owner may select his own contractor, or take estimates from several contractors.
3. Special (Sub) Contractors: Owner may deal with individual contractors such as painter, plumber, etc., that may be required for the work contemplated. In such cases, the owner must prepare a total estimate of all the items of work to submit to the lending agency. The owner should understand the procedure in this case since the chances of omitting items of essential work and of being involved in unforeseen expense are apt to be great.
4. Building Supply or Lumber Dealer: There may be suppliers of building materials in your community who will be glad to give you a complete estimate on the different kinds of work you wish to do. They will gladly suggest the names of architects and contractors if you wish the job planned and supervised or do not wish to do the work yourself.
5. Owner: May act as his own contractor and purchase materials from dealer and do the work himself or employ craftsmen subject to approval of lending agency.
Clever Mail Folder Sells Repairs

CHICAGO BUILDERS get results from inexpensive mailing piece that goes into ordinary envelope.

As part of a campaign to stimulate home repairs and remodeling, the A. D. Building Co. of South Chicago is sending out an unusually attractive, stimulating folder illustrated on this page. It consists of an 8½x11 inch sheet cut at an angle and folded so that it will go into an ordinary No. 11 envelope.

The folder is so cleverly designed that it delivers a message even before it is opened. As it comes from the envelope (as shown in illustration No. 1 above) it says, “Put Men Back to Work — Repair — Remodel — Paint Now!” When it is unfolded half way, the customer sees a run-down house with suggestions as to what should be done to improve and restore it.

The folder when fully opened, as illustrated below has a very effective message. With the slogan, “Do It Now — Pay Later,” it couples five action drawings suggesting home improvements. The copy is well written and the name of the company and telephone number clearly shown. A return card asking for an inspector to call is included.

The company had 10,000 of these printed at a very nominal cost and has sent out several thousand to date. The balance is being held for mid summer and fall use in connection with the modernizing work expected to get under way under the National Housing Act.

The A. D. Building Co. gets its list of prospects from real estate men, property receivers and various other sources. An active mailing list has been built up which is used for material of this type.
J. C. JENSEN, AGGRESSIVE CHICAGO CONTRACTOR and home builder, says he expects to do a tremendous volume of repair work under the easy financing terms of the National Housing Act. He is already doing the selling, planning and estimating necessary for such loans.

CONTRACTORS who realize what an immediate boon the National Housing Act will be to modernizing and repair work are very busy. They are not waiting for the actual loaning of building money but are getting their jobs lined up in advance to be ready as soon as the funds are available.

Contractors are the key men in the "Rebuild America" program, for every modernizing loan will be based on a carefully drawn estimate or job proposal by a reputable builder.

A splendid example of the kind of aggressive selling that is already creating a great volume of modernizing work is being shown by J. C. Jensen, West Side Chicago builder.

Contractor Jensen is not waiting for anything. He is calling on prospects, making a record of the condition of their houses and, wherever possible, preparing the plans and making a definite estimate as to the cost of work.

Thus when the money is supplied, which should be within a few weeks, he will be ready to start work on a large number of projects. He estimates he will have 200 jobs ready to start either with Housing Act funds or the Home Owners Loan Reconditioning division money.

In addition to lining up jobs for the future, Jensen has been busy for some time on reconditioning work on homes being refinanced by the HOLC. A great many of these jobs have been estimated and will undoubtedly be ready to go very soon under the revised act which greatly liberalizes the amount that can be spent for repairs and improvements.

Like thousands of other building contractors, Jensen is enthusiastic about the possibilities for new business under the National Housing Act. "There is no need for cutting costs and doing cheap work," he said. "What this industry needs is money. Give it money and there will be plenty of work for all."

In addition to the personal calls and selling he and the men he employs do, he sends out sales letters and carries small advertisements in local newspapers. He uses the community paper in his section of Chicago rather than the large downtown papers. His latest advertisement of this type appeared with the caption $1,000,000 FOR HOME OWNERS. His explanation is that this is the amount that will be available for modernizing under the National Housing Act. He urges prospects to let him figure jobs right away so that they will be ready to start as soon as the funds are supplied by the local banks, Building and Loan and finance companies.

This Builder Has

Jobs being lined up in advance, estimates made, to be ready when modernizing money is released under National Housing Act. Loans to be based on contractors' bids.
CONTRACTOR JENSEN uses the forms shown at right and below in obtaining information and carrying out repair jobs. Most of these forms are mimeographed and are very inexpensive.

THE C. H. O. SURVEY form is turned over to salesmen who make door-to-door canvasses of selected residential regions. Jensen has several hundred of these forms filled in and on file. The meaning of the C. H. O. is not made clear, as the men making the calls find they get better attention from the home owners when they are not too specific about the purpose of the survey.

AT FAR RIGHT is the estimate form used by Jensen on repair jobs. Below at right is the card his workmen leave when they call to do a job and do not find anyone at home.

A BILLION DOLLARS TO LEND is the bold statement made by Jensen in the small ad shown below, carried in local newspapers. The billion dollars, it is explained, is the fund soon to be made available through the local financing institutions working under the National Housing Act.
WOM TO SEE ABOUT
LOANS
Local Bank
Building & Loan Assn.
Finance Co.
Home Loan or Finance Co.
Mortgage Co.
Morris Plan Bank
Savings Bank
Home Loan Bank
WHERE TO GET NAMES OF HOME REPAIR PROSCTS
House-to-Home Canvas
Telephone Directory
City Directory
County Tax Office
Dairy Co.
Public Utility Lists
Automobile Owners
Commercial Mailing List
Funeral Directors
Marriage Licenses
Real Estate Firms
Apartment Renters
Names in Newspapers
GUIDE TO HOME RECONDITIONING
(The following list is officially recommended in a folder published by the Reconditioning Dept. of the Home Owners' Loan Corp.)
FOOTING AND SIDE WALLS:
1. Blistering, cracking, or peeling of faced surfaces requiring repainting.
2. Loosened or cracked walls or openings in frame siding requiring repairs or replacement.
3. Masonry walls with large cracks or broken portions requiring filling.
4. Mortar joints or mortar cracks requiring repointing.
5. Fences or leaky walls requiring damp proofing.
6. Leakage around eaves or tops of walls requiring repairs or coping.
7. Efflorescence or scum on walls requiring acid cleaning or special treatment.
8. Cracks, discoloration, or fallen-out portions of stucco walls requiring points, cleaning, or retouching.
9. Cracking around foundation.
WINDOW AND DOOR FRAMES AND SASH:
1. Window caps requiring new flashing or repairing over existing joints.
2. Holes or cracks around window frame requiring caulking or repairing.
3. Defects in window panes requiring repainting or patching.
4. Overhauling screens.
5. Repairs to blinds and shutters.
6. Loose or shaky buntings, slates, tiles, or other material requiring replacement or repairs.
7. Repairs to roof, doors, and windows.
BASEMENT:
1. Large cracks or broken places in foundation walls requiring filling.
2. Smaller cracks or mortar joints in walls requiring point ing.
3. Dark walls and ceiling needing white coatings to brighten the basement.
4. Leaks through the walls or floor requiring waterproofing applications or provisions for drainage.
5. Cracks between wood sills and walls requiring pointing.
6. Spaces between floor joists as the sills and holes around pipes requiring fire stopping.
7. Floor joists sagging or warped, requiring additional support or bridging.
8. Basement floor badly cracked or disintegrated, requiring repainting or new topping.
9. Need for partitions to provide special space.
10. Desirability of ceiling and wall coverings to obtain finished rooms.
11. Floor painting or treatment to meet present appearance.
12. Shelves, closets, cupboards, bins, etc., for storage purposes.
HEATING AND VENTILATION:
1. Clogged smoke pipes or flues requiring cleaning.
2. Boiler coils or baffles requiring cleaning.
3. Grates warped and broken requiring replacement.
4. Cracked fire box requiring repairs.
5. Bolts with cracks or leakages requiring repairs or new parts.
6. Cracks in chimney ma sonry requiring point ing.
7. W ood w ork adjoining pipes and heating system requiring fire protection.
8. Coating on boilers requiring patching or recovering.
9. Heating pipes requiring covering or repairs to existing.
10. Leaky radiator valves requiring repacking.
11. Installation of additional radiators if needed.
12. Proper painting of radiators to increase efficiency.
PLUMBING:
1. Install running water, if lacking.
2. Clogged drains needing attention.
3. Leaky faucets requiring washers, tightening, or new parts.
4. Covering for water pipes or other precautions to prevent freezing.
5. Installing refrigerator ca tron pipe and trap to replace pan.
6. Installall water-heating equipment, water softeners, etc.
7. Replacing worn-out piping.
LIGHTING AND POWER:
1. Wire for electricity.
2. Rewiring with modern system to reduce fire hazard.
3. Exposed wire requiring insulating.
4. Renewal of appliance cords.
5. Installation of additional convenience outlets, such as floor and base plugs.
6. Repairs to doorbells and buzzers.
DOORS AND WINDOWS:
1. Sticking doors or windows requiring cleaning or repairs.
2. Door out of plumb requiring refitting or new hard ware.
3. Defective locks, chains, or bolts, requiring repair or replacement.
4. Broken or defective window cords and pulleys needing replacement.
5. Replacing broken window latches or other window devices.
6. Cracks around window sash and doors requiring weather-stripping.
WALLS AND CEILINGS:
1. Cracks or holes in plaster requiring patching or rep lastering.
2. Installation of partitions, either temporary or permanent, to provide additional rooms or closets.
3. Removal of partitions to afford additional space.
A LIST OF SUGGESTIONS for use in selling jobs to be financed under the National Housing Act. Whom to see, where to go, what to do to get work.
FLORS:
1. Creaking floors requiring resurfacing, additional supports, or bearing to stiffen joints.
2. Cleaning and refinishing.
3. Applying new flooring over old.
4. Repainting or repainting floor coverings.
5. Adjusting or replacing baseboards and molding moved out of position by shrinking or settling.
6. Replacing or repairing broken tile.
STAIRS AND STAIRWAYS:
1. Creaking stairs requiring attention.
2. Replacing worn-out treads on stairs.
3. Providing rubber or composition treads for slippery steps.
4. Rickey cellar stairs requiring additional supports or repairs.
5. Installing railing on cellar stairs to prevent accidents.
6. Replacing old posts and railings with modern types.
KITCHEN:
1. Rearrange for convenience.
2. Lay floor coverings such as linoleum, rubber tile, etc.
3. Install new sink and drain board.
4. Improve lighting and ventilation.
5. Build kitchen cabinets and shelves.
6. Provide built-in ironing board.
7. Provide built-in broom closet.
BATHROOM:
1. Build and equip bathroom with none exists.
2. Replace worn-out tub, lavatory, and water-closet.
3. Lay floor coverings such as linoleum, rubber tile, etc.
4. Provide medicine cabinet, mirrors, etc.
ADVANCE SELLING NEEDED by builders to take advantage of modernizing section of Act. Here are latest ideas and help for developing business.

<table>
<thead>
<tr>
<th>BASEMENT</th>
<th>ATTIC</th>
<th>LIVING ROOM</th>
<th>BEDROOMS</th>
<th>KITCHEN</th>
<th>BATHROOM</th>
<th>OUTSIDE WALLS</th>
<th>WINDOWS</th>
<th>PORCHES</th>
<th>HOME REMODELING—GENERAL SUGGESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Provide towel racks, shelving, built-in conveniences, etc.</td>
<td>Neutral Style Trim and Fixtures</td>
<td>Removing old built-in fixtures</td>
<td>New Stairway Modern newels</td>
<td>Change Doors to Arched Openings</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ATTIC:</td>
<td></td>
<td>Changing Door openings</td>
<td>Baluster</td>
<td>Extra Cabinet Doors</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1. Need for insulating materials applied to walls, floor, or under eave of roof.</td>
<td>Old mantel to useful fireplace</td>
<td>Changing Window openings</td>
<td>New Steps and Risers</td>
<td>New Hardware for all Doors</td>
<td></td>
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<tr>
<td>3. Cracks between chimney and side walls requiring filling or covering.</td>
<td>Wall paneling</td>
<td>Modernize and bring up-to-date by:</td>
<td>Provide Coat Closet</td>
<td>WINDOWS:</td>
<td></td>
<td></td>
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<tr>
<td>4. Fire stopping between studs at floor line.</td>
<td>Ceiling paneling</td>
<td>Replace:</td>
<td>Provide Comfort</td>
<td>Weatherstrip</td>
<td></td>
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</tr>
<tr>
<td>5. Application of wall and ceiling coverings to provide finished rooms.</td>
<td>Beams and Cornices</td>
<td>Replacing Old Closet</td>
<td>Divide Old Closet into sections for</td>
<td>Replaze and Reputty</td>
<td></td>
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<tr>
<td>7. Applying flooring.</td>
<td>Window Seats</td>
<td>Wraps</td>
<td>Storm Equipment, etc.</td>
<td>Storm Sash and Screens</td>
<td></td>
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<tr>
<td>Following is a list prepared by Edward Hines Lumber Company, Chicago.</td>
<td>New Seat</td>
<td>Hall Mirror</td>
<td>New Hardware</td>
<td>New Openings</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>A. Make sure property is structurally sound.</td>
<td>Decorate properly</td>
<td>Hall Seat or Chest</td>
<td>Porch Windows</td>
<td>PORCHES:</td>
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<tr>
<td>B. Study all unused space.</td>
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<td>Change Open Entry Porch to:</td>
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<tr>
<td>C. Combine rooms for more convenience and style.</td>
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<td></td>
<td>Summer Living Room</td>
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<tr>
<td>D. Re-arrange partitions, built-in features, openings.</td>
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<td></td>
<td></td>
<td>Sun Room</td>
<td></td>
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<td>E. Build additions, wings, bay windows, porches, etc.</td>
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<td></td>
<td>Sleeping Porch</td>
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<td>F. Replace or repair leaky defective roofs.</td>
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<td></td>
<td>Extra Bedroom</td>
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<tr>
<td>G. Repaint or recoat exterior walls.</td>
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<td></td>
<td>Breakfast Nook</td>
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<tr>
<td>H. Refinish or replace old worn floors.</td>
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<td></td>
<td>Sewing Room</td>
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<tr>
<td>I. Study every floor level and approaches</td>
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<td></td>
<td>Den</td>
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<tr>
<td>J. Plan everything in correct style.</td>
<td></td>
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<td></td>
<td>Library</td>
<td></td>
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<tr>
<td>BASEMENT:</td>
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<td></td>
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<td>Office</td>
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<td>Partition to produce:</td>
<td></td>
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<td>Glaze in and Screen—French Doors</td>
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<tr>
<td>Recreation Room</td>
<td></td>
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<td>Replace Rot and Decay</td>
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<tr>
<td>Work Shop</td>
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<td></td>
<td></td>
<td>Inclose underneath and</td>
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<tr>
<td>Laundry</td>
<td></td>
<td></td>
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<td>Insulate under floor</td>
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<tr>
<td>Storage</td>
<td></td>
<td></td>
<td></td>
<td>Cover exposed ceiling</td>
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<tr>
<td>Fruit Cellar</td>
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<td>joists and insulate</td>
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<tr>
<td>Trophy Room</td>
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<td></td>
<td>New Floors (hardwood, etc.)—Linoleum</td>
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<tr>
<td>Tap Room</td>
<td></td>
<td></td>
<td></td>
<td>Panel Walls and add New Trim</td>
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<tr>
<td>Extra Toilets and Shower</td>
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<td></td>
<td></td>
<td>Decorate:</td>
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<tr>
<td>Coal Bins</td>
<td></td>
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<td>Brick</td>
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<tr>
<td>Laboratory</td>
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<td>Floors</td>
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<tr>
<td>Gymnasium</td>
<td></td>
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<td>Walls</td>
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<tr>
<td>Separate Furnace Room</td>
<td></td>
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<td>Ceilings</td>
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<tr>
<td>Kitchenette</td>
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<td></td>
<td>Replace old style columns</td>
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<tr>
<td>Apartment</td>
<td></td>
<td></td>
<td></td>
<td>Balusters</td>
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</tr>
</tbody>
</table>
| Line Ceilings and Walls | | | | Railing 

| LIVING ROOM: | | | | Spindles |
| Enlarge by: | | | | Add Venetian Blinds or Bamboo Screens |
| Combining Rooms Arches | | | | OUTSIDE WALLS: |
| LIVING ROOMS: | | | | Repair and repaint |
| Enlarge by: | | | | Replace Stained Shingles |
| Combining Rooms Arches | | | | Rustic Siding |
| New Stairway Modern newels | | | | Brickote Veneer |
| New Ventilator | | | | Asbestos Siding |
| New Colonial Entrance | | | | Repair and Paint Cement Stucco |
| New Closet Space | | | | New Openings—Doors |
| New steps and Risers | | | | New Windows—in e l u d i n g |
| New Attic | | | | Frames |
| New Hallway | | | | Flower Boxes |
| New Staircase | | | | Blinds |
| New Linen Cabinets | | | | New Entrance (complete) |
| DOORS: | | | | Door |
| Provide: | | | | Side Lights |
| New Colonial Entrance | | | | Potty Windows |
| New Front Door for | | | | Caulk Frames |
| Style | | | | Replaced: |
| Combination Storm and Screen Door | | | | Poor Glass |
| French Doors | | | | New Style Windows |
| Mirror Doors | | | | Old Style Windows and Doors |
How Home Improvement Was Dramatized and the Local Building Industry Revived

CONTRACTOR Willard Griffith of Portland, Ore., is enthusiastic about modernizing and home improvements. He has reason to be. He has just performed the most spectacular job of remodeling an old house ever undertaken in Portland—a remodeling job that has revived the local building industry.

The "Renovize Portland" campaign is especially interesting because it points the way to other cities and towns. Contractors, builders and building interests are urged to study the details of this successful campaign for use in Rebuild America drives soon to be started in 2,000 communities as part of the program of the Federal Housing Administration authorized under the recently passed National Housing Act.

The spectacular feature of the Portland drive was the renovizing of a fifty-four year old house which had been vacant for many years. The house was donated, moved to a prominent downtown location on the lawn of the Post Office, and there in sight of thousands of city dwellers and passersby completely rebuilt.

Contractor Willard Griffith gave instructions to workmen to stop at any time to explain to visitors exactly what they were doing and why. And there were many visitors.

Rebuilding the old house on the downtown location was a dramatic but thorough job. The old roof was replaced with attractive hand split shakes. The old siding was used as sheathing and a new eight-inch siding put on. New windows and doors were cut, ceilings lowered, old porches and lean-tos sheared off. Attractive new dentil cornices were built which gave the cottage a charming appearance. Interior partitions were rearranged, special hardwood floors laid, the walls insulated, a modern Colonial fireplace built into the enlarged living room.

As in all modernizing work, the importance of a good contractor who knows the intricacies of modernizing work was clearly demonstrated.

This spectacular renovizing job also illustrates another...
A vivid and timely story of a local renovizing program that sets a practical pattern for American Builder readers to follow in planning Rebuild America drives.

**FINISHING THE ATTRACTIVE modernized paneled interior of the living room. Local building organizations co-operated fully.**

**NEW INSULATING LATH PLASTER BASE was put on over old wood lath after old plaster had been torn away. Many new and interesting materials and methods were demonstrated by Contractor Griffith. At left is shown how the floor plan of the renovated house looked.**

**important point: that no matter who instigates such a plan, the entire building industry benefits. Contractors, builders and dealers should take the initiative where possible; where they cannot, co-operation with those who can lead pays big dividends.**

Credit for the “Renovize Portland” campaign idea goes to E. B. MacNaughton, president of the First National Bank and formerly an architect. The support of the Portland Builders’ Exchange, the Electrical and Plumbers associations, the Lumberman’s association, the local chapter of the American Institute of Architects and many others was secured. More than one hundred firms made donations of materials or services.

The dramatic modernizing of the old house was made the center of an intensive city campaign to arouse interest. All during the work crowds visited the house at the rate of 5 to 10 persons per minute. As the house neared completion, the First National Bank used large newspaper advertising space to announce a home renovizing competition to extend for five months with $185 cash prizes given for the best letters describing completed remodeling projects in Portland.

A special preview was arranged at which 400 people—civic officials, bankers, newspaper men, contributors, all workers and those who took part in the project—made a trip through the house. Through a radio hook-up, a room-to-room description of the rebuilt home was broadcast “to the entire world.”

When the house was opened the next day, all three Portland newspapers carried special sections in which some 6,300 lines of special advertising appeared. More than 6,000 people visited the house the first day, and during the seven weeks it was open, the total of visitors was 157,654, or an average of 343 per hour for 460 hours.

Continuing interest is being maintained by the Home Renovizing Competition to run for five months. All local building interests report a considerable increase in inquiries and volume of business as a result of this drive. Requests for loans for modernizing have tremendously increased, according to Charles Stidd, vice president of the First Federal Savings and Loan Assn.

The lessons learned by the building interests of Portland in carrying on this drive should be useful in other towns. It is the sort of activity needed in thousands of small outlying communities, in county seats and rural centers. Readers of the American Builder are urged to get in touch with the organizers of this drive with a view to doing the same in their communities.
THE NEW DENTIL CORNICE SHOWN UNDER CONSTRUCTION ABOVE contributed greatly to the charm of the re-
novized house in Portland. Compare the detail above with the old style treatment before rebuilding. (See illustration
on page 28.) Willard Griffith was the contractor.

Modernizing Methods

INSULATION WAS PLACED in the walls by the
contractor's workman. A treated sawdust was
used to provide both insulation and fire protection.

INSTALLING EFFICIENT and attractive built-in
kitchen cabinets in the Portland home, shown at
right. Note the straight line sink and work table
arrangement, all well lighted.
HOW THE REMODELED PANELED LIVING ROOM looked when Contractor Griffith had finished. It is a splendid ex-
ample of good modern design in a small home. The windows, fireplace and panel details are worthy of study for
remodeling ideas, designs and methods.

Six Steps in Remaking 54-Year
Old House at Portland, Ore.

MODERNIZING THE BATHROOM called for extensive work by Con-
tractor Griffith. Here one of the workmen is seen installing the new
door frame. Modern fixtures were placed in the well planned room.

PUTTING ON THE FINISHING TOUCHES of the Portland renovated
home [at left]. The house provides a remarkable illustration of what
can be done with an old rickety structure to make it modern and liv-
able. Contractors and building men are urged to organize similar
demonstrations in their own communities.
Suggestions for Remodeling Interiors

New Materials, Ideas and Methods
For Making Old Rooms Modern

EVERY remodeling job is based on a definite idea. It may be a photograph, an illustration from the American Builder, a pencil sketch or even a clearly thought out word picture. Whatever it is, the idea in definite form must be conveyed to the prospect as a first step in selling him on a job.

The illustrations on this and the opposite page are intended to use for just this purpose. Suggestions are given here for basement and attic improvement, the addition of an extra room, new windows and trim, fireplace details. All of these are suggestions that can be used in selling jobs under the National Housing Act.

Illustrations such as these and others constantly published in the American Builder are being widely used by contractors and architects in creating interest and picturing for prospective customers what can be done to their old homes. Constructive business in selling demands the use of such materials.

Many of the newer products and methods are illustrated in the accompanying pictures. Such a host of new materials and equipment has been developed in the past few years that much effort is required to keep in touch with the changes. Builders interested in new products may get such information from manufacturers direct or from American Builder Reader Service which will supply booklets and literature describing products especially suitable for home improvements and modernizing.

HOME REPAIRS IN NEW ORLEANS

A MESSAGE from John M. Taylor of New Orleans dated July 11 states:

"New Orleans repair and modernizing campaign making great progress. At end of fifth week we have canvassed one-sixth of houses and total amount of work in sight is $5,472,341. Pledges are running about one out of every four prospects called upon."
THE CHEERFUL PLAYROOM shown at left is another suggestion for builder modernizing work. The built-in cupboards for children's playthings are needed by many housewives. New materials, such as linoleum floors and sidewalls, insulating board, plywood and fibre board interior finish are suggestions. At the same time proper insulation of attics, and sidewalls is a good source of business.

KITCHEN CABINETS
Walls & Floors

AN UNUSUALLY ATTRACTIVE suggestion for built-in kitchen cabinets is shown at the right. The remodeling and rearranging of kitchens is a source of much contractor work. New floor, wall materials and equipment are widely installed.

BETTER BASEMENTS

BELOW IS a suggested architectural treatment for a modernized basement room. The beamed ceiling, paneled walls, built-in cupboards, attractive fireplace, offer helpful ideas for improvements.

FIREPLACES—BUILT-IN FEATURES

THE MODERN FIREPLACE ABOVE was built in the spectacular renovated Portland, Ore., house. New fireplaces and mantels, paneled walls, built-in cupboards, cabinets and storage spaces are all of interest today in connection with the national modernizing movement.
THE striking before and after modernizing pictures on this page show a type of work that aggressive contractors and builders have been doing in considerable volume for the past few years. From now on, however, the volume of this type of work will be doubled and tripled, for lack of financing has held up a large percent of the jobs contractors uncovered.

Under the National Housing Act, loans up to $2,000 may be made for remodeling or modernizing all types of buildings, including shops, stores, restaurants, garages and all other types of buildings. The loans may be paid back in five years at only 5 per cent interest.

What easy financing of this type will do for contractors and builders who already have had large experience in modernizing of this kind is not hard to imagine.

A host of new products is on the market which are especially suitable for such shop and store remodeling.

While in many cases the principal item consists of installing a new store front of modern design, past experience has shown that on every such job a large amount of other work is included, such as rebuilding the interior, cutting in new windows and doors, installing concrete steps, walks and runways, installing new equipment.

Building analysts point out that a great volume of store modernizing will go ahead in small towns and outlying regions where it is especially needed and where the responsibility is largely that of the local contractor and carpenter-builder. This is a lucrative field that is worth getting into. A number of the larger manufacturers of store front equipment and materials provide planning and construction service to assist contractors who desire help.

Readers interested in this work may get in touch with the manufacturers direct or write the AMERICAN BUILDER, which will be glad to supply information.
THE MODERNIZED STORE above is another outstanding example of clever workmanship by a contractor—Art Smith of Los Angeles. The old building pictured at right had little character, no class appeal. Contractor Smith gave the old brick exterior a new stucco finish. New fronts with metal grilles above were installed, making the building modern and attractive to good paying tenants.

UNDER THE HOUSING ACT loans will be available for modernizing all kinds of structures, including shops, stores and restaurants. Shown at right is an especially attractive remodeled restaurant at Lafayette, Ind., which was built from the unsightly structure pictured below. Approximately $700 was spent for the new store front which included Carrara glass and aluminum door and window trim. Another $400 was spent for interior alterations, making the total cost of this income improvement $1100.
IN THE REMODELING or modernizing of old houses, such designs as are published on this and succeeding pages have many ideas and practical solutions of architectural problems to offer. Excellent use may be made of these illustrations to picture for prospective home modernizers the improvements that can be made.

THE DESIGN ON THIS PAGE is an attractive Dutch Colonial type built by the Homeland Co. of New York. The large brick chimney, overhanging roof, shingle walls and shutters give a pleasant, substantial appearance. Study of the floor plans shows how large an amount of livability is included in the really very small floor area. The arrangement is an efficient one which uses every bit of space.
ENGLISH ARCHITECTURE with stucco, brick and half timbers and unusually attractive, large windows are features of this home located at Piedmont, Calif. Miller & Warnecke of Oakland, Calif., are the architects. The architectural features are worthy of careful study, either in connection with new work or modernizing of old structures to make them more attractive.
A Nantucket Cottage with Style and Charm

FOR TWELVE YEARS Contractor Elmore Swain of Nantucket, Mass., has designed and built Cape Cod cottages for residents and visitors at the sea. This house is the choicest of the designs evolved by Mr. Swain, and it merits the pride and pleasure he takes in it. Cost Key 1.271-152-{1152}-{48}-17-15.

LOCATED NEAR THE SEA, this house has a floor plan that is well adapted for summer use. The maid's bedroom located off the kitchen is nicely placed, and the balance of the plan is efficient and low cost considering the amount of room provided.

WALLS ARE COVERED with cedar shingles spaced 5" to the weather; asbestos shingles are used on roofs. Hand hewn pine timbers are used in the living room secured with hand made dowels. Side walls were sheathed with varying widths of \( \frac{7}{8} \)" pine and joints covered with \( \frac{1}{2} \)" strip moulding with a small bead on each edge for decoration.

INTERIOR DOORS are of pine constructed with batten cleats. Pine beams and sheathing in living room are left natural. The cost of the house, according to contractor Swain, was under $4,500.
Prize Competition Wins Public Interest

By CARL M. KNAPP
Sales Manager, River Oaks Corporation,
Houston, Texas

THE River Oaks believe rather strongly in restrictions, and one that has been of vital importance to us we call “Architectural Control.”

In brief, this restriction states that before building a home or changing the exterior of a home already built, plans and specifications must be submitted to the Corporation for approval. The depression has resulted in a new group of “architects and builders”—men who prepare a floor plan, perhaps on a piece of wrapping paper, and develop the elevations as they proceed with construction. That is, of course, exaggerated—they are not quite so bad. In order to help in the education of these products of the depression, to emphasize our interest in architecture, to stimulate interest in the building of new homes, to help the deserving but hard hit architect by giving him some advertising which will not violate his code of ethics, the River Oaks Corporation decided to hold an Architectural Competition.

We are indebted to the Cyrus Crane Willmore Organization of St. Louis for a number of the ideas used. (See June '34 American Builder, pages 24 to 32.) First, we enlisted the aid of the members of the South Texas Chapter of the American Institute of Architects. A complete program was prepared and mailed to each prospective competitor with a letter signed by the President of the Chapter. A few extra copies of the setup are available. The first prize will be a flat fee of $500.00 to the winning architect, in return for which he will prepare plans and supervise the construction of his design. A second prize of $100.00, and a third prize of $75.00 will be awarded. Fifty dollars has been paid to each of five entrants to defray the cost of preparing scale models.

A jury was selected, consisting of five individuals—One, the Director of the Museum of Fine Arts; Two, a member of one of Houston’s Garden Clubs (a woman); Three, a member of the Houston Real Estate Board; Four and Five each, practicing architects, members of the A. I. A.

A hypothetical client was created and the architects were asked to design his home. The client was described as a man of about forty, married, with a daughter ten years of age. Both he and his wife were educated in a Texas University, had read and studied consistently since graduation, were members of the Museum of Fine Arts, entertained conservatively and, in general, lived in a quiet and pleasant manner. This man and his wife wished to establish a moderately priced residence in a neighborhood which would remain permanently attractive. He wished provision made for his servant to live on the premises.

In order to give the contestants latitude, both a North and a South front lot were selected. The restrictions were included in the program and the contestants were told that the client might take either a North or a South front site.

You will gather from the description of the client that we wanted a three-bedroom two-bath house, but in order to be sure, we further specified that the client required a room for his daughter and a room for the occasional overnight guest, two baths for the family and a bath for the servant. We, in Houston, have not decided as yet that we should build modernistic houses for sale; consequently, Mr. Hypothetical Client insisted that his house have a shingle roof, although he did not specify that the shingles must be of wood. This provision, together with the description of his tastes, resulted in no entries of modernistic design. Building costs change so rapidly these days that it was thought best not to mention dollars and cents, but in lieu therof, to specify a maximum floor area of 2,400 square feet.

The Preliminary Competition required each architect to submit a sketch drawn to % inch scale, showing the plot plan, first and second floor plans, four elevations and an exterior detail. These were submitted anonymously. The Judges met and eliminated all but five.

These five then entered the Final Competition. Each prepared a scale model showing his lot, house, garage, walks, drives and garden in complete detail. A black and white ink drawing was also provided to show the floor plans of the buildings.

On June 15 these models were placed on exhibition at the Museum of Fine Arts. We first arranged a private showing and mailed invitations to approximately 2,000 individuals on our list. Our guests and the public in general were asked to select the final winner by ballot. We advertised in the newspapers, inviting the general public to see the models on the 16th, 17th and 18th of June. The response was very gratifying. June is a poor month for our Art Museum, and the average attendance on a week day is between 40 and 50, yet the day of our private showing we had 267. On a Sunday in June the average attendance is around 100, but the display of house models increased it to more than 600.

Arrangements were made with the Houston Lighting & Power Company, which has a splendid show window...
on a prominent downtown corner, to display the models there for several days. They were glad of the opportunity and we have been well pleased with the results. At all times there has been a crowd of interested people looking them over. The Judges have canvassed the ballots, and the prize winners were announced in the papers.

The winner will proceed to prepare plans and specifications, and River Oaks Corporation will arrange to have the home built and sold. We expect to do the bulk of our advertising in connection with the matter during the course of construction. Suffice it to say that at the present stage of the game, River Oaks Corporation is well pleased with the results attained. The papers have been generous with their publicity, the architects themselves have without exception expressed their appreciation and are enthusiastic. And most important of all, the public has displayed a gratifying interest.
HEN Congress appropriated $25,000,000 out of the Public Works fund for research and practical experimenting in subsistence homes, a movement was started that gives promise of having far-reaching effects. Already 48 projects have been planned and approved. Construction on a number is well under way with some nearing completion. These projects range in size from 25 units to 200 units, the average being 50. They are widely scattered throughout the country, North, South, East and West. Some are adjacent to large cities, some in the open country, and some back in the mountain foothills.

A subsistence homestead consists of a house with necessary outbuildings for chickens and certain other livestock, together with enough land for a home garden of sufficient size to raise the family's supply of summer vegetables and winter food stock. Before a subsistence homestead project is approved, the soil is tested by a representative of the U. S. Department of Agriculture or by the State Agricultural agent. Its fertility and ability to grow garden crops successfully is proved in advance. One hundred and twenty-five dollars per acre is recommended as the top price for land that is to be used for subsistence homes projects. It is believed by the Department economists that a higher price per acre for the land would put too heavy a burden on the buyers.

With the increasing interest today in country living, the practical working out of the subsistence homes projects is going to be closely watched and, if successful, will be the model for thousands of individual citizens not "on relief" but who prefer the country way of life and want to get out of city congestion. They will set up their own garden homes and further insure their own independence.
If I Were a Contractor!

By FRANK W. BREWSTER
Swarthmore, Pa.

This inspiring article was written and sent unsolicited, to the American Builder by a real salesman. It is worthy of the careful consideration of every building man who wants to get ahead — and who now has the greatest opportunity in a lifetime under the New Deal in Homebuilding—The Editor.

T MAY be that some contractors do not yet fully realize it, but the passage of the Housing Bill by Congress has opened to them the greatest opportunity ever presented in the history of our country—an opportunity not only for great financial profit, but for rendering an incalculable patriotic service to their country.

Before the passage of this Bill contractors may have had a good excuse for not getting business; people did not have the money to spend for necessary repairs or alterations, and the banks refused to lend it to them.

That situation has changed, practically overnight. A miracle has been wrought in the building industry! And the contractor who doesn't go out after business today is missing the greatest opportunity of his lifetime. For today the banks will lend home owners money for repairing their homes. It is a government command! And the interest on their loans will be only 5 per cent, and they will have from one to five years to repay them.

Contractors, and contractors alone, by going after this business can restore prosperity to the United States. That giant, The Building Industry, second only to agriculture in the number of men employed, the industry upon which practically all other industries depend, lies flat on his back, and it is the job of building contractors, together with the painting, plumbing, electrical and every other contractor, to get it back on its feet again.

College Trained Salesmen

If I were a building contractor today, I would first go out and get 15 or 20, or even more, young men of college grade, technically inclined, and I would tell them I was going to give them the opportunity to become the Heroes of the Depression. I would tell them that I was going to pay each of them a salary for the first full week of work with me, providing they followed instructions, and that if they made good, there would be no limit to progress in my company.

I would have each one of them read through carefully, before reporting for work, the first six copies of the American Builder for this year, in order to get background. These copies could be passed around systematically from one to another, and it would not be necessary to read them in chronological order. The magazines should be read carefully from cover to cover, including the advertisements. I should also require that each memorize the following introductory talk word for word (or a similar one made up by the contractor himself) before reporting for work. I should also take them around my entire establishment, introducing them to all employees and pointing out to them everything I could think of that would be helpful. If I did not carry a stock of materials I would take them through a big lumber yard and show them as many different items and operations as possible. This could be done in a group.

SALES TALK TO HOME OWNERS
(To be memorized word for word)

"Mr(s). ................ (knowing his or her name in advance). My name is ................ of ................ (firm name). I have been asked to see you in connection with this new Housing Bill which you have probably heard about. (Don't stop or hesitate at this point.) As you probably know, this Bill which was passed by Congress at the insistence of President Roosevelt, provides that home owners may borrow from their bank or building and loan association money for needed repairs or improvements, and repay it in monthly payments, at only 5 per cent interest, over a period of from one to five years.

"This may not seem particularly important to you, Mr(s). .... but when it is considered that if this is done on a national scale, giving work to millions of carpenters, painters and paperhangers, roofers, plumbers, masons, electricians, etc., who make up the majority of the unemployed, and to the workers in all of the durable goods industries, as well as to those in practically every other industry indirectly, it can be seen that this Bill is really the cornerstone of recovery.

"The co-operation of all manufacturers of materials and of labor organizations, in furnishing quality products and skilled workmanship at reasonable costs, assures the success of the movement. I am just one of the many thousands of men all over the country who are now calling on home owners to explain the new Bill.

"I have just started in your section, but everywhere I have been the home owners are interested, (It is a good point to mention several names here, using your notebook, especially after you get a few names in it, or your employer will give you a few before starting out.) and I am wondering if there are not some things in your home that need attending to. (At this point it would be well to suggest a few things.) I shall be glad to have one of our men give you an estimate, without obligation, and I can assure you it will be as low as it is possible to make it and at the same time give complete satisfaction. The work can be done according to the loan plan or in the regular way. The estimate will be the same either way."

This entire talk can be spoken quite rapidly and smoothly in about a minute and a half. It can be delivered at the door. If the prospect shows no interest, or interrupts, or says he no longer owns the house, or doesn't need any repairs, you have only wasted a minute and a half, and you can make a pleasant remark and be on your way, first asking the name of the present owner (if he no longer owns the house). Also ask who lives in the next house. Use no card, either in the introduction or close. In fact, don't have any printed, because there will be a temptation to use them if you have them. What you want to do is to get your story across. He won't forget the name of the firm if he is interested. If he asks for a card tell him the name of the firm again politely and suggest he write it on his telephone book. (If he has no telephone he is a poor prospect anyway.)

First Get the Prospects; Then Sell

Some contractors may question the wisdom of having a memorized selling talk. It is absolutely necessary, however, for the success of the campaign. The reasons would take too long to explain. (Continued on page 61)
The person interested in real estate should be glad that construction costs are mounting rapidly, as every increase in the replacement cost of a building adds value to every building now standing. It is true that this increase is an obstacle to the resumption of new building at the present time. While the Codes have contributed to the increased cost of building we are certain that even if there had been no Codes construction costs would still have advanced sufficiently to retard new building. A large chart comparing the fluctuations of general prices and building material prices from 1800 to the present time shows clearly that each time in the past when the general price level has advanced building material prices have advanced even though there was no building at the time.

Building of dwelling units at the present time in the United States is proceeding at about one twentieth of the 1927 level or one twenty-fifth of the 1925 level. The Government has been trying to stimulate new building since 1931. Renewed efforts are being made at the present time. The Housing Bill passed on the last day of this last Congress, will undoubtedly ease building credits. This will be of considerable permanent value to the real estate industry but will not prove a panacea which many of its advocates expect. The power granted to the Interstate Commerce Commission to authorize freight rate reductions on building materials will not reduce building costs sufficiently to have any appreciable effect. For example if freight rates on building materials were reduced by as much as twenty per cent, and it seems inconceivable that they could be reduced by more than that, this would lower the delivered price in St. Louis of an enameled bath tub, weighing 395 lbs. and costing now with fittings $57.00 by 80 cents. Cement now costing $2.57 per barrel in St. Louis would drop a nickel. Structural steel would drop about two per cent. Lumber and mill work would drop two per cent. The total cost of a residential building would
drop less than one per cent. When it is realized that the cost of building has advanced by more than twenty-five per cent it is quite evident that a one per cent decrease will have very little effect.

Even though the combined results of the easing of credit, a reduction in building costs and all other types of stimulation should result in tripling the present level of residential construction during the next two years, it will only bring the volume of this type of building to fifteen per cent of the pre-crash level.

"Working Up to an Immense Home Building Boom"

We are extremely optimistic, however, for the long range outlook. By 1937 or 1938 we will be in the midst of a building boom in the United States which will equal or exceed the last boom. By that time construction costs will be higher than they were in 1926, but rentals and values on existing buildings will have advanced until a new building, even at the costs then current, can be built in competition with the building then standing. We believe by that time that average residential rentals will have at least doubled and values will have increased by at least 50 per cent.

Vacancies Absorbed at High Rate

The most striking indication of general recovery in the United States at the present time is the very unusual rate of absorption of vacant residential quarters. A year ago vacancy was extremely high, in many cities running from twelve to fifteen per cent. During the past year this vacancy has been more than cut in half. If the present rate of absorption continues a definite housing shortage will develop within less than a year. In greater St. Louis, for instance, with the present rate of absorption there will not be any remaining vacancies in residential buildings left at the end of ten months. This even includes the dilapidated and obsolete buildings which would ordinarily not be considered suitable for dwelling purposes.

One of the principal reasons for this rapid absorption is the increase in the marriage rate during the past year. In every great period of depression the marriage rate drops materially. During this period we build up a reserve in our population of young unmarried people who under ordinary circumstances would have married. As recovery comes the marriage rate advances until it exceeds normal by a large percentage. This continues until the proportion of marriageable but unmarried persons in the population is again back to normal.

Great Reserve of Postponed Marriages

The importance of this factor is not realized unless one appreciates the number of cases of this sort in each large city. In St. Louis at the present time we are more than 30,000 marriages short. These marriages will take place in addition to those which we would normally have during the next five years. There are only 13,000 vacancies in St. Louis at the present time. There are many families doubled up with other families at the present time. When these families again unscramble, and when these 30,000 marriages take place we will clearly have a shortage of 20,000 or more dwelling units in our own city. Our studies in other cities have indicated that on the average marriages are about two and one half years behind.

In order to be certain that the drop in the marriage rate in this depression was not due to a change in sociological attitudes toward marriage we have studied the effect of the great depression of the seventies on the marriage rate in five metropolitan cities. We find that in these cities the marriage rate fell year after year during this depression until it was more than thirty-five per cent below normal, then as the depression mitigated, the marriage rate again turned up until it reached the pre-depression level. It will undoubtedly do the same thing during the next few years.
Fair Barn Viewed as Farm Model
Brook Hill Exhibit Demonstrates Concrete Shell Construction and "Milking Parlor"

For the first time in this country the Zeiss-Dywidag System of shell roof construction is used on a farm building. Brook Hill Farm of Genesee Depot, Wisconsin, in cooperation with Starline Inc., of Harvard, Ill., uses this roof construction on the stable portion of the $75,000 exhibition building located at 33rd Street and Lief Erickson Drive at Chicago's World's Fair. A herd of 30 pure bred Wisconsin cows, housed in the stable, will produce certified Vitamin D milk which the public will see as it passes from cow to bottle.

The Zeiss-Dywidag System originated in Germany and is practical for roofing structures, where a large area of unobstructed floor space is required. Designers of farm buildings will welcome the opportunity to observe this structure and to judge the merits of this roof system. The Zeiss-Dywidag System can be adapted with economy to many buildings which require a large, unobstructed area of floor space.

The barn has an overall dimension of 36 ft. x 72 ft. Walls are made of 8 in. x 12 in. x 16 in. Haydite concrete masonry units. Its roof consists of five double-curved barrels. Each barrel is 14 ft. x 34 ft. Stiffening diaphragms in the gables and edge beams transfer the roof load from the shell to the supporting walls.

Special steel forms were built for the job and may be used repeatedly in similar buildings. The forms for the barrels are supported by a series of curved steel ribs with tension rods made adjustable by turnbuckles. They were spaced 3 ft. 6 in. apart and were fastened at their ends to a curved steel beam running the length of the barrel section, which was required by the double curvature of the barrels. Sheathing spaced about 4 in. apart was laid over the steel ribs. Then sheets of plywood were laid over the sheathing and securely fastened. This operation completed the forms for three barrels. When the concrete had gained sufficient strength the forms were stripped and two sets re-erected for the remaining barrels. By this procedure it is possible to complete a building of any size simply by shifting forms to other sections as units are finished.

Reinforcing and Concrete

Steel reinforcement consisting of 3/8" and 3/4" bars was placed, three layers at ends and two in the center in accordance with stress requirements. Concrete was placed to a thickness of 3 in. One day after placing, the concrete was sealed with a waterproofing material, and after curing for 4 days the forms were removed and the curved reinforced slab became self supporting. A coat of aluminum paint completed the roof. The underside was painted but may be left natural.

Because this building is to be used only during the summer months, no insulation was used other than the Haydite concrete slab. For a building of this type in year 'round use a layer of insulation should be placed over the forms before concrete is placed. The natural bond between concrete and board insulation will hold the latter firmly in place. Then the underside of the insulation may be painted or whitewashed.

Shell vaults are a solution to the problem of economical concrete roof construction in buildings having...
wide spans. This advancement in reinforced concrete design substitutes a shell structure subjected only to direct tensile and compressive stresses for beams, frames and arches which transmit bending stresses and, therefore, are limited as to span length. The thin roof cover formerly supported on rafters, purlins and heavy trusses becomes self-supporting.

Roberts and Schaefer, Engineers, of Chicago, in cooperation with Starline, Inc., designed the barn section of the building; Richard Philipp of Milwaukee, Wisconsin, was the architect. The Brook Hill Farm exhibit was erected by the Continental Construction Company of Chicago.

Practical farmers welcome this new idea in building construction because it eliminates the fire hazard, which is a constant threat in ordinary barns. It will be of particular interest to the breeders of pure bred cattle because it will relieve them of the haunting possibility of losing a priceless herd which no amount of insurance money could ever replace.

Advanced Dairy Practice

This one story building without any hay loft is in keeping with the growing practice of feeding chopped hay. Observers believe that chopped hay is better relished by the cows; the leaves and stems are thoroughly mixed in the chopping process and it is eaten up clean. Chopped hay requires only one third the storage space of ordinary loose hay. The hay is cut into very short lengths by a standard attachment on the silo filler. It can be blown into an adjacent building, stored in a part of the stable, or a silo may be used for that purpose.

The health, comfort, and safety of the cows are taken care of with adequate ventilation and the latest steel stalls, stanchions, and water bowls.

Each cow has an individual stall in which she is protected from being crowded and trampled by her neighbors, the partitions separating the cows being provided with rust shields filled with rust preventative which keep the partitions from rusting off at the floor line.

The stanchions swing freely so the cows may turn to look or lick behind, and provide the maximum of comfort. They are adjustable in neck width to fit every cow and an alignment device permits each stanchion to be instantly adjusted backward so that short cows are kept in line at the gutter. A similar forward adjustment of the stanchion provides the necessary shoulder room so that large cows will not form the dangerous habit of standing in the gutter.

The water bowls have slanting valve levers so the cow just rests her chin on the lever when she wants a drink. The valve snaps shut when the cow stops drinking. This gives the cow a drink whenever she wants it—day or night. It relieves her of discomforting thirst, keeps her in better condition, and enables her to give more milk. Each bowl is equipped with a pressure regulator which permits the flow of water to be adjusted to the needs of the cow.

These cows at the Fair never get out-of-doors so the lack of natural sunshine is made up there by the liberal use of electric sun lamps in the stable.

A constant but gentle and even flow of fresh air is provided, drafts being avoided by having intakes distributed about the walls. Foul air, excess moisture, and the excess heat of sweltering days, is drawn off by the ventilators on the roof.

Three times a day each cow is released from her stanchion in the stable and goes to an adjacent room known as the milking parlor where she enters a Starline milking stall. In the presence of the visitors looking through a large plate glass window, the milk is drawn from the cow with a De Laval milker and passed along to the strainer, cooler, bottler, and refrigerator, to be served later in the luncheonette which is a part of the exhibit.

Fair visitors marvel at the degree of safety and comfort this new type of stable affords the cows; and practical farmers are interested because it heads off depreciation and eliminates fire and wind risks.

The special steel forms used are easily set up and taken down and are loaned to responsible builders.
Low-Cost Steel Units Introduced

New "Steelox" Method Demonstrated
at World's Fair—Farm Use Emphasized

The home of the American Milk Goat Association at the World's Fair is an insulated, fire-safe, steel farm building built to demonstrate a new interlocking, self-framing system of construction by the Steelox Company of Chicago. This method can be used to build all types of farm buildings, commercial buildings, and other structures where economy of construction and maintenance is essential. The use of all rafters, studs and joists is eliminated. Buildings of this construction may be taken apart and moved with practically no loss.

The new method is extremely simplified. One typical unit is used to make the walls, partitions, roof, and even the floor. This unit is a channel-shaped panel, sixteen inches wide and three inches deep with flanged sides so the flange of one panel slips into the flange of the adjoining panel. The sides, or legs, of the interlocked panels serve as structural members, while the bottom of the channel acts as a web for bracing the interlocked members. When interlocked in the wall, the average weight per square foot is 234 pounds. All of the panels come to the job insulated with one inch of celotex board stuck in place with "stikum," a special adhesive. This insulation also sound deadens the structure. Where it is desired to finish the interior walls, the panels have a furring strip attached to the flange. Not only does this serve as a nailing strip, but it also destroys thermal conductivity through the interlocked members.

When additional strength either as a column or a beam is necessary, the panels may be made deeper or of a heavier gauge.

The barn erected at the Fair is made of 20-gage galvanized Armco ingot iron. If desired, the panels may be furnished with a permanent porcelain enameled surface.

Field assembly was very simple and required no special equipment or skill. A channel of 14 gage ingot iron was bolted to the foundation. Then a corner panel—a typical panel bent longitudinally at right angles—was set in place. The wall panels were then quickly interlocked. Short panels were inserted where door or window openings occurred. A hook bolt secured the interlocked members to the foundation channel. Heavy gage angles were used as top plates at the roof line, and to them the tops of the panels were fastened with hook bolts. The angles used on the sides were folded over on the same pitch as the roof, to receive the roof panels.

The same typical panel forms the roof. A specially designed self-supporting ridge, with a short protruding flange on either side to receive the roof members was set in place. Then the roof panels were passed up and interlocked. Since all the roof units were of the same length, it was only necessary to align them at the eaves. Joints between all panels were sealed with "stikum," a waterproof calking material. The roof panels were secured with hook bolts to the ridge and to the top plate on the wall.

After the roof members were in place, the panels were placed in the gable ends. Specially formed galvanized sheets were used for trim and drip boards.

So strong and rigid was the structure that it required but little bracing.

Engineers who visited the demonstration job believe that this new simplified construction will be of particular interest to those who may want to purchase the formed units and erect their own steel buildings. As the usual multiplicity of parts is entirely eliminated, the Steelox panel becomes a commodity which may be stocked by the regular sources of supply of the building industry.
“Of course, you’ll want Barrett Roll Roofing for your barn.”

“Yes, sir, those Barrett Shingles you sold me for the house back in ’18 have certainly given complete satisfaction.”

SELL a man one Barrett product and, depend upon it, his complete satisfaction in that purchase will bring him back for other Barrett products when the need arises.

This is particularly true of Barrett Roofings. They provide sure, dependable protection to homes, barns and other buildings—safely guard them against the ravages of all weathers.

There are ten types of fire-safe Barrett Asphalt Shingles in ten attractive colors. These, with Barrett Roll Roofings—mineral-surfaced or smooth-surfaced—in a variety of weights and prices meet every customer’s every roofing requirement.

Highest quality materials and expert manufacturing skill have made Barrett Roofings the kind of products on which good reputations and sound businesses are built.

RECOVER RIGHT WITH

THE BARRETT COMPANY
40 Rector Street New York, N. Y.
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Birmingham, Alabama
In Canada: The Barrett Company, Ltd., 5551 St. Hubert St., Montreal, P.Q.
New Floor Patterns for Modernizing

Floors in 30 rooms of the U. S. Forest Products Laboratory at Madison, Wis., have been laid with a varied and colorful assortment of American woods to demonstrate and test the merits of different patterns and finishes, as well as to acquaint the general public with the attractions of different species and types of grain. The materials range from straight-grained quarter-sawn western hemlock laid up in conventional lengths to walnut laid in 8-inch built-up squares.

Three main types of flooring are now in place throughout the Forest Products Laboratory as a whole—wood flooring strips and blocks, pressed wood fiber tile, and linoleum, the last-named qualifying very appropriately among forest products because of its large content of cork, wood flour, and forest-produced resins and oils. All of the floors were laid over concrete of average flatness.

One bank of Laboratory offices has been floored herringbone style with a group of hardwoods including selected beech, selected birch, bird’s-eye and brown maple, unselected maple, cherry, red gum, tupelo gum, quarter-sawed black gum, quarter-sawed sycamore, pecan, and white ash.

The blocks and strips of which the other hardwood floors are made up are built up as units and joined to each other by a number of different methods and devices. Some of the blocks are built up of short 2½-inch strips held together by glue and glued dowels, some by spring-steel splines let into the back, and some by saw-toothed splines inserted in grooves on the edges—all in combination with ordinary tongues and grooves. The blocks are joined one to another in the floor by a similar variety of methods.

Both hot and cold mastics were used in laying the block and herringbone floors, sound-deadening materials being added in some cases. Some of the strip floors were laid on steel channels held to the concrete by screws, the strips being secured to the channels without nails by special clips. In still other cases the flooring was held by nails driven into wood plugs inserted in the concrete. Standard varnishes, bakelite varnishes, penetrating floor varnishes, and waxes were used for finish.

Striking wood floor patterns laid at the Forest Products Laboratory, Madison, inspire floor modernizing: top (left) red oak squares, (middle) bird’s-eye and brown maple herringbone, (right) southern pine checkboard; bottom (left) white ash herringbone, (middle) walnut tile pattern, (right) cherry. These materials available through lumber dealers.
Six-cylinder valve-in-head design ... the most economical truck engine built

Chevrolet trucks have earned their popularity—their unchallenged leadership as America's fastest selling trucks. Truck owners who keep cost records say that Chevrolet six-cylinder valve-in-head trucks are the most economical trucks you can buy—costing less for gas, for oil and for upkeep. Most owners who have tried different makes of trucks standardize on Chevrolets—convinced that Chevrolets stand up better and last longer. Many Chevrolet trucks have never lost a day in 100,000 to 200,000 miles of hauling. The 1934 line of Chevrolet trucks is bigger and huskier throughout. Load capacity in some units has been increased 20 to 30 per cent. The six-cylinder valve-in-head Chevrolet engine is more economical than ever. As always, you can haul more and save more with Chevrolets—the lowest-priced six-cylinder trucks.

160,468 Miles ... 11/2-ton Chevrolet truck, in service eight years, hauling loads of paper averaging 2 1/2 tons. Averaged 20 miles per gallon of gasoline on trips to Philadelphia under same load. One valve grind, new distributor points, new spark plugs only mechanical expense in 160,468 miles.
Joshua Rollman, Lititz, Penn.

115,000 Miles ... Owner so pleased with 1932 Chevrolet truck that he bought a 1934 Chevrolet truck. The 1932 truck covered 115,000 miles in wholesale grocery hauling—average load 6 tons over mountain and desert country. Total operating cost, including depreciation, only 4.3 cents per mile. Gasoline mileage averaged 12 miles—no oil needed between changes at 1800-mile intervals.
C. B. Griffith, Ontario, Calif.

125,000 Miles ... 1932 Chevrolet truck. Two valve grinds and one brake relining only repair expense in 125,000 miles. Averages 10 miles per gallon of gas, covering 8,000 miles per month with semi-trailer.
William Emmons, Los Angeles, Calif.

200,000 Miles ... 144,218 Miles ... 1931 Chevrolet 157-inch truck has covered 200,000 miles—still in first-class condition. Another Chevrolet 131-inch stake truck, purchased in 1930, has been driven 144,218 miles—operating costs about 50 per cent less than other makes of trucks in the same class and in the same service. These trucks will be replaced with 1934 Chevrolet trucks. Owner is standardizing on Chevrolets—plans to add two more to fleet soon.
Highway Express, Perry, N. Y.
PRACTICAL JOB POINTERS

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

To Cut Galvanized Iron

WHERE a power saw is not available, this device is very handy for cutting galvanized iron:

Take two 2 x 4's and have 1½" angle irons screwed on one edge of each; then place them flat on a pair of saw horses with the ironed edges together. Then pass a 3" bolt through each end, using one or two washers for spacers, as shown in my sketch. I use a 24" 10 pt. saw which is quite stiff, not a metal saw, and find that it seems to cut as well dull as it does sharp.

Quick Way to Find Radius

I AM enclosing a sketch (above) and rule for finding the radius of an arc when the chord and rise are known. I have been following "Practical Job Pointers" in the American Builder a long time and haven't seen any method for finding the radius of an arc quite as simple and convenient as this one.—HAROLD W. GATZ, Carpenter & Contractor, Lyons, Ill.

Homemade Plywood Door

SEVERAL months ago I did a repair job for a local mortgage company which included replacing several inside doors that had been kicked apart by the local offspring while having some innocent sport. The idea being to keep the cost low, we made the doors ourselves in this manner:

We obtained 2 x 4's, 2 x 6's and 2 x 8's and three-ply veneer from the lumber yard. The 2 x 4's were used for the top and sides of the door, the 2 x 6's in the middle between the two panels, and the 2 x 8's on the bottom. While at the lumber yard, we had the 2 x 6's grooved on the 2" sides about ½" deep. The 2 x 4's and 2 x 8's grooved the same on just one side. We took the lumber to the job, cut it right lengths, glued the veneer in between and nailed the whole business together.—G. W. McMULLAN, Home Builder, Merrick, L. I., N. Y.

Door built from plywood (at right) made on job at low cost.
GOOD NEWS FOR CONTRACTORS

No truck in America is lower in price or higher in quality construction

NOW you can get V-8 performance with PROVED four-cylinder economy at the lowest truck price in America. The price reduction recently announced on the New Ford V-8 Trucks and Commercial Cars is a GENUINE price reduction. Ford did NOT raise prices last spring and then lower them again to the old level. In fact, Ford truck prices were reduced last December as well as on June 15th. Go see this New Ford V-8 Truck. Ask your Ford dealer to arrange an “On-the-Job” test for you, with your own loads, over your own routes, with your own driver at the wheel. You’ll be convinced!

101 IMPORTANT FEATURES IN ALL

Get This FREE Book from Your Ford Dealer

THE ONLY TRUCK AT ANY PRICE THAT GIVES YOU ALL THESE FEATURES...

Although it sells for the lowest truck price in America, the New Ford V-8 Truck gives you 101 important features every truck owner wants and needs... including:

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Load carried on reinforced axle housing. Axle shafts have nothing to do but turn the wheels—can be removed without jacking up the truck.

LOW-COST ENGINE EXCHANGE PLAN

After thousands of miles of economical service, you can replace your original engine with a block-tested, factory-reconditioned engine for less than an engine overhaul and without tying up your truck.

80-HORSEPOWER V-8 TRUCK ENGINE

Uses no more fuel than a “four.” Dual carburetor. Copper-lead connecting-rod bearings of heavy-duty type for heavy-duty service. Full-length water-jackets.

FULL TORQUE-TUBE DRIVE

Torque tube and radius-rods take all driving and braking stresses. Springs are free to perform their intended function of cushioning the load against road shocks.
MARSHTILE is a permanent, glazed-surface wall-finish which comes in easily-installed large sheets. Show samples and explain Marshtile economy and cleanliness to enough women, and you will find yourself doing a tidy business in bathroom and kitchen remodeling jobs as well as in new homes. For complete description write the exclusive manufacturers, MARSH WALL TILE COMPANY, Dover, Ohio.

**Pressure Drilling**

I am sending you my emergency method of drilling holes in strap-iron which I have found a time and labor saver when out on the job with nothing but a brace and bit with which to do the work.

With an expansion bit I bore halfway through the lever "A," to take the breast block on the brace. The end of the lever is slipped under a block nailed to upright fastened to the end of a saw-horse or bench. The greater pressure supplied by the leverage speeds up the job and the work is much easier than the ordinary way of using a brace and bit.—E. A. ANDERSON, Builder, Anamosa, N. D.

**Laying Out Glass or Lumber**

On large jobs I make up a piece of cardboard and square the different sizes to be cut on it, marking the pieces required in every different square. Then I lay the glass to be cut on it and follow the outline with the cutter. To tell where the glass is supposed to go, I mark the window numbers (screen numbers) on the cardboard as well as on every glass cut with crayon. This trick applies likewise for laying out lumber, plywood and the like.—WERNER KRAATZ, Better Home Service, White Plains, N. Y.
Good Estimating Books

New Building Estimators’ Handbook
By William Arthur

The data in this book applies to all classes of building construction. A complete set of tables covers all phases of estimating. Use of a flat rate of a dollar per hour for mechanics and sixty cents per hour for laborers enables the estimator to readily adapt these tables to any local rate.

1930. 15th edition. 1056 pages, 480 illus., 600 tables, 31-page index, 5x7/4 inches, flexible binding, gold edges, $6.00

Building Estimators’ Reference Book
By F. R. Walker

Data is given on a basis of work done, the same as in Arthur's book. Walker analyzes examples of larger structures so that this book may be more helpful to the city estimator. The book covers every operation from excavating to electric elevators. The condensed vest pocket supplement formerly sold for $2.50 but is not now sold separately.

1931. 7th edition. 1800 pages, illustrated, 41/2x61/2, flexible. Vest pocket supplement, 200 pages, 3x6. $10.00

Estimating Building Costs
By Frank E. Barnes

A practical handbook planned to aid the contractor and estimator in determining the amount of labor required and to supply prices of labor and materials useful in checking estimates. Where possible the data is put into tables for quick reference. Includes appraisal of buildings.

1931. 3rd edition. 656 pages, 203 illus., 41/2x7 inches, flexible, $5.00

Estimating Building Costs
By William Arthur

This is a digest of the author’s “New Building Estimators’ Handbook”, designed for beginners and others who desire a less technical and shorter work. It is confined to smaller buildings and gives a fair idea of what others have accomplished in a certain number of hours and what amount of material is required for the different parts of a building.

1928. 3rd edition. 239 pages, 29 illus., 91 tables, index, 41/2x7 inches, flexible Fabrikoid, $2.00

Appraisers’ and Adjusters’ Handbook
By William Arthur

The material in this book is a continuation of the author’s “New Building Estimator’s Handbook”, designed primarily for insurance appraisers and investment company valuers. The first part covers the square and cubic foot costs, percentages of the various kinds of work, comparisons and approximate estimating. The second part shows how the detailed costs may be found, and explains the calculation on a basis of hours and quantities. Numerous tables are given for quick reference.

1924. 633 pages, 68 illus., tables, 41/2x71/4 inches, flexible, $5.00

Estimating Building Costs
By Charles F. Dingman

A practical manual showing how to analyze the construction job, apply cost data adjusted to existing conditions and arrive at an accurate cost estimate. It covers costs for material, labor, haulage, overhead, equipment and all operations from excavation to roofing on all kinds of building construction.

1931. 2nd edition. 277 pages, 23 illus., 138 tables, pocket size, flexible, $2.50

The above are “guaranteed books”—money back if returned within five days of receipt.

FREE—Book Guide

A copy of the “Building Age Book Guide”, brought up-to-date with a mimeographed supplement, is free upon request. A William T. Comstock 1933 catalogue of architectural books is also free on request.

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JOB POINTERS (Continued)

Jointer and Template

HERE is my way of making a saw jointer from a 3½" block. (See sketch at left below.) After trimming the block in a mitre box, I bore a 3½" hole, then set block in box and saw to the hole. With keyhole saw, cut slot for piece of 8" mill file 1½" to 2" long. Make 5½" round plug to slip in on top of the file and you have the best saw jointer made.

My lock template (illustrated at right) varies from Edwin A. Larson's, shown in the January issue of AMERICAN BUILDER, in that I use sheet metal. I punch the hole with an awl or nail; this leaves it rough so you may tap the template with a hammer and the place to start your bit is plainly marked. The notch in the back shows the proper height for lock on panel doors.—R. J. BEEHN, Builder, Newfoundland, Pa.

Makes Sledge into Tamper

I AM sending a new idea on how to make a stone hammer or sledge into a dirt tamper in a few moments. Merely take a plank piece about 10 inches square and drive one spike in the center of this piece and nail directly into the wood handle in the center of the stone hammer head.—ALEXANDER HUDSON, Hudson Construction Co., Worthington, Minn.

10-inch piece of plank makes sledge into tamper.

Practical Suggestions

I AM sending you some pointers I have tried and found practical: No. 1—When building frame houses to be stuccoed I paint the sheathing outside thoroughly with crank case oil or some similar cheap product before putting on the metal lath and paper, and by so doing I prevent cracks in stucco due to sheathing swelling and buckling.

No. 2—I have found that by building my mortar boxes on 16" legs, a man can mix half again as much mud as in the old way with box on ground.

No. 3—When wanting to produce imitation tile walls in bathrooms, I proceed as follows: Give wall a priming coat of aluminum paint and two coats of enamel of desired color. Use an automobile body paint striper to stripe it with block enamel in the size blocks desired; when dry give one coat of clear shellac. This gives a very pleasing appearance at low cost and it lasts.—ARCH DUNN, Building Contractor, Clayton, N. M.
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Buy direct from us at Wholesale. We sell to Builders—Tile Setters and Contractors.

The government plan for modernization of homes is under way. Ample financing is assured. Get your share of this new business. Modernize kitchens, baths, vestibules, mantels, store rooms, entrances, store fronts, bulkheads, porches and decks. We carry a complete line of tile for every purpose. Our high quality and low prices assure you of getting the jobs. Prompt service on all orders, large or small.

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AMERICAN BUILDER AND BUILDING AGE
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Need for Small Homes Shown

OFFICIAL reports received from 59 of the 64 cities surveyed by the U. S. Government in the recent Real Property Survey reveal the fact that:

291,883, or 16 per cent of the 1,811,462 dwelling units in 1,383,491 structures enumerated, are either crowded, overcrowded, or greatly overcrowded;

225,649 residential structures, or 15.6 per cent of the total structures, are reported to be in need of structural repairs;

618,413 structures, or 44.7 per cent, are reported to be in need of minor repairs;

32,442 dwellings, or 2.34 per cent, are reported as unfit for human habitation.

The survey also shows that there are 1,860,294 families living in the 1,725,212 occupied dwelling units, of which 135,082 are extra families occupying quarters with other families; in other words 7.6 per cent of the total number of families are "doubled up," having no independent homes of their own.

They also disclose a very apparent opportunity for improvement of sanitary facilities in many sections, the figures for the 59 cities showing that:

184,578 residential units, or 10.2 per cent of the 1,811,462 units covered, were without indoor running water;

370,278 units, or 20.4 per cent of the total, were not provided with private indoor water closets;

479,909 units, or 25.3 per cent, had no tubs or showers.

The construction of dwelling units in the past five years has dropped to one-half of the reported amount of construction for the five pre-depression years ending with 1929, according to the Real Property figures.

The survey also shows that American citizens prefer the "single-family" type of dwelling. In the new residential construction for the past ten years the percentage of the single-family type was 87.8 per cent while apartments built amounted to 8.5 per cent.

In view of the fact that the 64 cities covered by the Inventory were carefully selected on a sampling basis in an effort to reflect national conditions, it appears from the percentage given for 59 cities that there is an obvious dearth of small homes, and the average American citizen today has by no means lost his traditional interest in individual home ownership.

It also appears from the statistics showing crowded and overcrowded conditions, the need of structural repairs, both major and minor, the relatively large number of dwellings which are considered unfit, and the opportunity for better sanitary facilities, that a great many deserving citizens are in a position to benefit from the efforts of the Administration to aid the small home owners and renters by loans for building and remodeling through the new Housing Administration.

288,000 Aided by HOLC

MORE than 288,000 American home owners in financial difficulty have applied for reconditioning loans through the Home Owners' Loan Corporation, it was announced July 8.

The amount involved exceeds $55,000,000, an average of nearly $200 in reconditioning expenses for each home.

Seeing in this a desire of home owners to put their properties in sound condition, the Corporation announced that as a result of recent amendments to the Home Owners' Loan Act, $300,000,000 is now available for advance for maintenance and reconditioning. The Corporation makes loans only to owners who are unable to obtain financing elsewhere.

Under the direction of Donald H. McNeal, an entire reconditioning organization has been set up by regions, states and districts.
The purpose of the reconditioning division is to pass upon reconditioning loan applications, and to approve the bids and supervise the actual construction work, which will be carried out by private contractors.

Within recent weeks, an increasing proportion of applications for reconditioning loans has called for extensive remodeling projects rather than merely urgent repairs.

Following is the list of Regional Reconditioning Supervisors:

Paul Doty, 3-A Atlanta, Ga.
Alabama, Florida, Georgia, North Carolina, South Carolina
L. Bay, 3-B St. Louis, Mo.
Missouri, Arkansas, Louisiana, Kentucky, Tennessee, Mississippi.
Maine, Massachusetts, New Hampshire, Vermont, Rhode Island
Arthur Goodwillie, 4-A Chicago, Ill.
Wisconsin, Illinois
Luther R. Hoffman, 4-B Detroit, Mich.
Michigan, Indiana
Robert T. Jones, 5-A St. Paul, Minn.
Minnesota, North Dakota, South Dakota, Nebraska, Iowa, Colorado
Charles W. Oliver, 5-B Houston, Texas
Oklahoma, New Mexico, Texas, Kansas
Albert C. Perry, 1-B New York City
New York, New Jersey, Connecticut
James W. Thomas, 2-B Columbus, Ohio
Ohio, West Virginia, Western Pennsylvania
James T. Twoby, 6-A & 6-B San Francisco, Calif.
Washington, Montana, Idaho, Oregon, Wyoming, Utah, California, Nevada, Arizona
Jefferson M. Hamilton, 2-A Philadelphia
Pennsylvania (except Pittsburgh), Maryland, Virginia, Delaware

Knisely Promoted

STANLEY A. Knisely of Cleveland has been appointed advertising and sales promotion manager of Republic Steel Corporation, with headquarters at Youngstown, Ohio. He succeeds L. S. Hamaker who was recently made vice president and general manager of the Berger Mfg. Co., Republic subsidiary, of Canton, Ohio.

New Factory for Ruberoid

THE Ruberoid Company now has in operation a new Asbestos Shingle factory at Bound Brook, N. J., to supplement its large plant at St. Louis, Mo.

Builders Fly to Buy Conditioning Units

FRED P. Tosch and Benjamin F. Crosby, well known builders of homes in Rochester, N. Y., made their first airplane flight June 22 when they flew to Springfield, Mass., to visit the factory of a manufacturer of air conditioning units.

"All of our houses will be equipped with air conditioning units from this time forward," declared Tosch. "Air conditioning has passed the experimental stage and soon houses without air conditioning will be considered as obsolete as the old Model-T Ford."

420 Savings Associations

ANNOUNCING that 420 Federal Savings and Loan Associations have now been chartered in 35 states and the Territory of Hawaii, the Federal Home Loan Bank Board reports that dividend action has already been taken by the directors of four of these recently organized mutual thrift and home loan institutions.

The First Federal Savings and Loan Association of Chicago, the First Federal Savings and Loan Association of St. (Continued to page 30)
NEWS OF THE MONTH
(Continued from page 59)

Petersburg and the First Federal Savings and Loan Association of Wisconsin, at Milwaukee, have declared semi-annual dividends at the annual rate of 4 per cent, while the First Federal Savings and Loan Association of Long Beach, Calif., has declared a dividend at the annual rate of 4½ per cent.

Cupid Busy—New Homes Needed
Marriage licenses for June this year showed a large increase over June 1933 and previous years, reports from several cities show. This means more home building business, economists declare.

Couples engaged for two or three years are getting tired of waiting, Harry Wilcox, license clerk of Milwaukee County, Wis., said. His total of 841 licenses in June compared with 570 in June, 1933, and 510 in 1932. Omaha, Neb., marriage figures were 280 against 185 in June, 1933.

Chicago helped Cook County reach the highest total since June, 1929. It was 5,145 against 3,754 last year. Sidney Sumnerfield, chief clerk, credited the World’s Fair with its millions of visitors for the uptick.

Not even the recent heat wave prevented establishment of a new June record in Indianapolis, Glenn Ralston, Marion County clerk, said. The total surpassed by three the high record of 561 in June, 1928. Ralston said the new deal ended the depression in the marriage business.

Baltimore’s total went from 616 to 890, the most since 1929, and the first six months of 1934 showed more than any similar period since 1927.

Subsistence Homes Cost $4,880
SECRETARY of the Interior Harold L. Ickes announced July 15 that 43 families are now occupying newly completed subsistence homesteads at the Reedsdale, West Virginia Experimental Village. In all, 50 homesteads there are complete and the remaining houses are to be occupied soon.

Meanwhile, it is planned to get the construction of 150 additional houses under way shortly.

We have managed,” said Ickes, “to produce fine homes of 4, 5 and 6 rooms with full basement, modern plumbing fixtures, well with electric pump supplying running water, a septic tank built to meet high sanitation requirements, together with supplying approximately five acres of good soil, landscaping and, in some cases, barns and other outbuildings for from $4,296.34 to $5,570.86, with the average running at $4,880.00.”

For the highest priced homestead on the Reedsdale project, a model unit, Secretary Ickes supplied the following figures:
Cost of house, including foundations and full basement, hot air heating plant, plumbing, fireplace, electrical wiring and fixtures, and rough grading, $3,369.82; septic tank (amount for each of the 50 homesteads the same), $290.31; well, with pit, $256.66; barn and outbuildings for from $4,296.34 to $5,570.86, with the average running at $4,880.00.

Schmidt Heads Realtors
WALTER S. Schmidt, Cincinnati, chairman of the Association’s committee on real estate finance, and a member of its executive committee for the years 1928-1934, was elected president of the National Association of Real Estate Boards for the year beginning January, 1935, at the recent convention in Minneapolis. Mr. Schmidt is the founder and president of Frederick A. Schmidt & Co., one of the largest real estate firms in Cincinnati.

Other officers and directors of the Association elected at the Minneapolis meeting and to take office with Mr. Schmidt at the annual business meeting in January, are as follows: First vice-president, J. Clyde Nichols, Kansas City, Mo.
It is assumed that the salesman will have the ability to get enough information from the prospect, if he is interested in having work done, so that the estimator can call later on the prospect, at which time the details and agreement can be gone into. The salesman's job is to get prospects, and he'll be worth the small salary you pay him. A salesman should be able to see 20 home owners a day, or about 100 his first week. The only equipment carried by the salesman is a notebook, and pencil or pen.

If I were a contractor, I would make every effort to carry out this plan. I would not spend one cent on advertising of any kind whatsoever in connection with this plan. The only cost would be a week's salary to every salesman started, no salary to be paid if salesman worked less than a week (unless the Comer demanded it). Salesmen should make a daily report each night, in writing, stating names and addresses of interested prospects, and the subject interested in, and the time for estimator to call. He should also give the section he worked, and the names of customers he made. Daily reports could be handed in the following morning before starting out, but no regular sales meeting should be held, nor should salesmen be encouraged to talk things over with each other, or meet during the day. Each should go to a different section of the town or city. After the first week plans could be arranged for a weekly get together, but not at first. (Salesmen should never use automobiles for soliciting, nor wear sport clothes.)

If I were a contractor, and I didn't have even a few hundred dollars to get my men started and be sure I could pay them at the end of the week, I would go to my banker with this article and tell him I wanted to try it, and ask him for a loan sufficient to cover salaries. When the business comes in—and it is sure to if the contractor really carries out the plan—he can get further loans on his signed orders for work (business paper).

I am assuming in this article that a general contractor would carry out the plan, taking orders for practically any kind of repair work, and turning over the painting or plumbing work to a sub-contractor. Nevertheless, any specialized contractor could carry out the same plan if he wished and have salesmen solicit simply painting work or plumbing work or whatever it happened to be.

The fall season is coming on. The earlier the plan is started, the better. Everyone wants to see the painters' ladders up against the houses this fall, and hear the sound of the carpenters' hammers and saws. It will be contagious if we get started early. When one man on a street starts to paint, several of his neighbors generally follow suit. The funny part about the Government's loan plan will be that so few will take advantage of it, because many home owners will find the cash somehow elsewhere. There is a tremendous amount of hoarded money in the country. The savings banks are overflowing, and I am not complaining about my business) I would "get going" on this plan today. I envy you contractors your opportunity. Heroes in the making! The nation looks to you for salvation after five long years of hardship and suffering. Contractors, go out and restore prosperity to America! You and your men can do it!

P. S. And remember that every bit of business you do will be CASH business. The Housing Bill provides that the money loaned for repairs and building is to be paid TO THE CONTRACTOR.
In old homes or new, whether for renting or selling, "PERFECTION" BRAND Oak Floors give service and satisfaction. The greatest value for the money.

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

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

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

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

Easy to Clean Window

A NEW window has been developed by a Chicago builder which has many unusual advantages and is suitable for either new work or modernizing of old structures.

The equipment consists of simple metal attachments which transform an old window or a standard type new window and completely change its operation. Either sash can be pulled in from the bottom, as illustrated below, and cleaned without the necessity of removing screens or getting to the outside with a ladder.

Another feature permits the lower sash to swing in at the top to give ventilation without draft or admission of rain.

The attachments are unobtrusive, positive in their action, and eliminate sticking, rattling or leaking.

The economy of his type of equipment is most clearly understood in connection with high buildings where expensive window washers formerly had to be hired. With this window, the regular maid can do the work from the inside.

Window is easily cleaned from inside, reducing cleaning costs.

At right is shown how window fastens partly open, letting in air without draft.

Flat-Faced Cowl Truck

AN INNOVATION in motor truck practices has been announced by a large automobile manufacturer, with the introduction of a flat-faced cowl offered as optional at no extra cost. The new design permits the use of standard chassis with any custom body built for a flat cowl. The new construction is designed for the benefit of contractors and other business men using special truck bodies, such as dump body, and other types that do not utilize separate cabs.
New Roof Deck Construction

IDER purlin spacing than was formerly possible is now permitted through use of a new metal section just placed on the market. The new sections have been developed for use in the construction of steel roof decks, insulated floors, walls, partitions, ceilings, and also steel house framing, joists, rafters, etc.

The steel roof deck is designed with the idea of using one standard size section which will be cold rolled from No. 16 gauge hot rolled copper bearing strip steel into various stock lengths.

In roof deck construction, sections are either welded or clipped to the purlins at right angles. Upon the sections are either nailed or welded 24 gauge corrugated sheets having 1/4-inch corrugations. This affords a base for insulation and waterproofing which can be stuck to the sheets with hot asphalt or nailed in place by driving nails through the insulation, the sheets, and into the sections. Nails can be driven into the sections due to a special nailing feature consisting of a slit cut into the sections at the time they are formed.

The new metal sections with flanges turned in can be used in any non-bearing partition by spacing them at distances sufficient to carry the necessary side load. Then metal lath, plasterboard or any other similar material can be nailed to both sides to give a finished wall surface.

New metal sections for use in steel roof decks, walls, partitions.

Prevents Color Bleeding

A NEW color sealing product has been put on the market which is to prevent “bleeding,” or the staining or discoloration of a paint or enamel coat applied over unstable stains, dyes, etc. The new product permanently stops bleeding, and is applied as the first coat over mahogany stain, asphalt or other surfaces that normally give trouble.

Multi-purpose Floor Machine

A MULTI-PURPOSE floor machine which sands, steel wools and polishes floors is now on the market, representing an advance in economical floor care. The regular sanding drum is becoming more important, due to the popularity of penetration or steel finish floor treatment. A 1 H.P. 110 volt A.C. or D.C. motor drives a 9" drum at a speed of 1000 R.P.M. The machine has a vacuum dust collector, "V" belt drive, adjustable handle, weighs only 125 pounds.

It Costs No More to Use Dependable Weather Strips

The Success of a weather stripping business depends greatly on the reliability of materials used. Customer satisfaction cannot be gained by using inferior materials. You can supply ACCURATE Metal Weather Stripping Non Rustable and Fully Guaranteed at no greater cost than you would pay for cheaper grades. Accurate strip can be supplied in the highest quality for every opening and can be guaranteed. Write for new improvements and details.

ACCURATE Metal Weather Strip Co.
Box 107, 216 E. 26th Street, New York

MAKE GLAZED CONCRETE POTTERY

AT LAST! True glazed concrete pottery! New, everlasting, colorful, tough, glossy, smooth finish for concrete pottery and all concrete and brick surfaces. Washable; will not chip, crack or peel. No tools, equipment, experience needed to make. Complete pottery plants, using no molds, power or costly tools, making 2,500 different designs bird baths, vases, jars, etc. Coast less than one mold by old methods. Use only sand and cement. Money saving side line or full time business. Pottery booklet, color plate, etc. 10c.

NATIONAL POTTERIES COMPANY
1115 Hawthorne Ave., Room 5.
Minneapolis, Minn.

Painting for Profit

The Government has made it possible for you and the property owner to talk business again. Modernizing money is now available so why not cash in on BONDEX Waterproof Cement Paint? BONDEX is the masonry paint that makes a $5,000 stucco house look "like a million".

The June issue of the American Builder carried specifications for the prize winner in a "Perfect Home" contest in St. Louis. Specifications call for two coats of BONDEX over common red brick. BONDEX will help you capture that elusive prize called profit. Ask your paint or supply dealer for a BONDEX color chart or write your nearest Reardon Factory for complete information.

THE REARDON COMPANY
St. Louis — Chicago — Los Angeles

ATTENTION DEALERS!
BONDEX business is profitable because there are always repeat sales. You are invited to write your nearest Reardon Factory for the BONDEX proposition.

BONDEX is the masonry paint that

ATTENTION DEALERS!
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NATIONAL POTTERIES COMPANY
1115 Hawthorne Ave., Room 5.
Minneapolis, Minn.
Selected List of Manufacturers' Literature

For the Service of Builders, Contractors, Architects and Dealers

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

Carpentry Helps

The Insulite Co., Minneapolis, Minn.

900—Insulation—"Building Greater Farm Profits with Insulite" is a pocket size handbook of 40 pages illustrated with working drawings of numerous practical farm structures which need insulation. Principles of farm building design are discussed.

The Sisalkraft Co., 205 W. Wacker Drive, Chicago

901—Reinforced Waterproof Paper—"Fibreen" is a new lightweight packaging material for products needing protection against moisture, rust and damage in transit. Samples and descriptive data are offered.

Andersen Frame Corp., Bayport, Minn.

902—Log Cabin Siding—Andersen "Naturalog" white pine log siding with the bark on is illustrated and described in a new leaflet; log cabin design suggestions with corner construction details.


904—Garden Structures—" Beautifying the Home Grounds" is a new booklet containing several hundred different designs with detailed working drawings and photographs of pergolas, trellises, plain and ornamental lattice panels and fences, garden gates, entrance arches, summer houses and garden and lawn furniture. Price 25c.

The Ruberoid Co., Eternit Division, 500 Fifth Ave., New York City

905—Asbestos Shingles—"A new Asbestos Shingle Factory to Serve You" is an unusual brochure in maroon and black illustrating the new plant at Bound Brook, N. J., and presenting its wide line of asbestos shingles, siding, sheet marble and newtile.

American Builder, August 1934.

Red Cedar Shingle Bureau, Seattle, Wash.

906—New Roofs Over Old—"Your Old Roof Is Valuable Insulation" is a consumer folder to be imprinted with dealer’s name, to interest home owners in modernizing their old roofs with red cedar shingles. Many styles and types of work are illustrated.

Tennessee Eastman Corp., Kingsport, Tenn.

907—Wood Preserver—"Perfect Protection with NO-D-K" is an interesting leaflet describing unusual treating material for lumber for all purposes.

Holmes Eureka Lumber Co., Eureka, Calif.

908—Redwood— "Guaranteed for the Life of the Building" is a folder recommend- ing H-E Foundation Guaranteed Redwood for all construction below the first floor, including sills and underpinning. This type of redwood is specified to resist decay termites. Each piece is identified with a burned in brand.

The Pacific Lumber Co., San Francisco, Calif.

909—Septic Tanks— "Palo Redwood septic tanks in section knock-down form pre-fabricated are illustrated and described in a 4-page folder.

Sectional poultry feeders are featured in a separate bulletin.

Knapp Brothers Manufacturing Co., 605 W. Washington Blvd., Chicago

910—New Way to Lay Floors— "Loxit Method of Laying Wood Floors without Nails" is a 20-page handbook with many detail drawings and isometric views making clear the use of the Loxit system for attaching flooring, exterior siding, suspended ceilings, etc.

Home Equipment

Allmetal Weatherstrip Co., 231 W. Illinois, Chicago

911—Weatherstrip Opportunities —A weatherstripper’s sales kit is offered to ambitious carpenters and builders who want to push weatherstrip selling and installing this fall.

Geo. D. Roper Corp., Rockford, Ill.

912—Gas Ranges— "Roper Modern Gas Ranges by Master Craftsmen," a 24-page booklet devoted to a discussion of modernized kitchens, present day gas cookery and illustrations of the new Roper models.


913—New Angle Bathtub— "Standard Presents Neo-Angle" is 12 pages in color, telling the story of the new style square bathtub. Bathroom floor plans show how it saves space.

King Ventilating Co., Owatonna, Minn.

914—Winter Air Conditioning—The King "Sunaire" winter air conditioner which can be added to any present furnace installation is explained in a 4-page circular.

915—Cooling and Humidifying—The King Unit System which cools, circulates, washes and humidifies air with practical engineering considerations is explained in an 8-page pamphlet, illustrated.


916—Health and Comfort— "Air Conditioning Brings Health and Comfort to the Home" is an unusual brochure in popular terms describing the Westinghouse air conditioning equipment. 16 pages, illustrated in aluminum on black.

Barber-Colman Co., Rockford, Ill.

917—Temperature Control—A bulletin of equipment for electric systems of temperature control presents thermostats, hygrostats, motor operated valves, solenoid valves and control accessories available from this company.

United States Radiator Corp., Detroit, Mich.

918—Concealed Radiation— "Capitol Finest Radiators" in a complete series are presented with details of installation in a 16-page booklet. Typical piping connections and enclosures are included.

Paints—Lighting

Aluminum Co. of America, Pittsburgh, Pa.

919—Aluminum Paint— "Aluminum Paint, Its Uses, Utility and Application" is a pocket size handbook of 40 pages giving all essential information for those with painting problems. Aluminum paints for many industrial uses as well as for building are covered.
**American Builder, August 1934.**

**ALUMINUM CO. OF AMERICA**

920—Specifications—Aluminum painting specifications in condensed form covering a wide variety of uses.

**THE LOWE BROTHERS CO., Dayton, Ohio**

921—House Paint—"101 Questions About Painting & Decorating" gives detailed information on the cause of different paint failures and the method to be used in avoiding them; answers questions often asked regarding application and use of paints and varnishes.

**THE NEW JERSEY ZINC CO., 160 Front St., New York City**

922—White Paint—"White Paint for Profit" is a unique booklet of 20 pages discussing heat reflection and heat radiation as related to paint. Illustrations from many types of industry are shown.

**WESTINGHOUSE ELECTRIC & MFG. CO., East Pittsburgh, Pa.**

923—Modern Service Station—A brochure on gasoline service station design and equipment by Westinghouse is entitled "Contributions to the Modern Service Station." Modernistic lighting and display are outstanding features.

**CONCRETE AND METAL**

**PORTLAND CEMENT ASSN., 33 W. Grand Ave., Chicago**

924—Home Designs—"Portfolio—Suggested Designs for Small Fireproof Homes" presents 8 designs, 10 x 16", each with floor plan, details of construction and alternate exterior treatment, one with flat roof and one with sloping roof, each fully estimated and with an outline specification.

**UNIVERSAL ATLAS CEMENT CO., 208 S. La Salle St., Chicago**

925—White Cement—"Terrazzo" is a 12-page brochure in full color illustrating many beautiful terrazzo designs with block samples analyzed as to their ingredients. Complete specifications for terrazzo work are included.

**STONHARD CO., 401 N. Broad St., Philadelphia**

926—Concrete Floor Repairs—"Over the Rough Spots" is a 24-page booklet telling how to repair holes, ruts and breaks in factory and industrial floors; also how to preserve, waterproof and harden floors.

**REPUBLIC STEEL CORP., Youngstown, Ohio**

927—Sheet Metal—"Republic Galvannealed Sheets" is the title of a 4-page folder covering the properties, weight and uses of this material.

928—Stainless Steel—"Enduro 18-8" is an 18-page brochure describing Republic's perfected stainless steel. An interesting table of laboratory corrosion data shows the resistance of this material to various chemicals.

**THE INSULATED STEEL CONSTRUCTION CO., 125 Curtis St., Middletown, Ohio**

929—Metal Cover Molds—How to apply porcelain enamel on building exteriors by the use of the frameless steel clip-strip is made clear in a 4-page folder. Suggestive designs in modernistic style are included.

**THE DOW CHEMICAL CO., Midland, Mich.**

930—New Light-Metal Data—"Dowmetal—Its Properties, Shop Practice, Specifications, Availability" is a handbook of 64 pages devoted to this lightest of structural metals. A limited quantity of these books is available for engineers and designers.

**LABOR-SAVING EQUIPMENT**

**THE JAEGER MACHINE CO., Columbus, O.**

931—Power Pumps—"Jaeger Sure Prime Pumps" is a 12-page broadside presenting pumps in 2", 3", 4", 6" and 8" discharge sizes; capacities ranging from 10,000 gallons to 125,000 gallons per hour, with both electric and gas engine power.

**CHAIN BELT CO., Milwaukee, Wis.**

932—Pumpcrete—"Concrete by Pipe Line" is a big rotogravure portfolio of 24 pages showing photographs of Boulder Dam and other interesting public works projects of a spectacular nature on which concrete is being placed by pipe line. Details of the mixing and placing equipment are given.

**INTERNATIONAL HARVESTER CO., Chicago, Ill.**

933—Mobile Power—"Powertrax—McCormick-Deering Power in Industry" is a 24-page illustrated magazine issued serially, showing the utility in industry of McCormick-Deering tractors. Land clearing, excavating and grading are features of particular interest to builders.

**BUCKYRUS-ERIE CO., South Milwaukee, Wis.**

934—Power Excavators—The new 3/4 cubic yard light weight power shovel developed by Bucyrus-Erie for building contractors is featured in a 16-page illustrated catalog, giving capacities, mechanical specifications and types of jobs handled.

**THE B. F. GOODRICH CO., Akron, Ohio**


**CATERPILLAR TRACTOR CO., Peoria, Ill.**

936—Elevating Graders—The Caterpillar elevating grader driven from power take-off from Caterpillar tractor is featured as a labor-saving outfit in a new broadside. It is a unit of tremendous earth-moving capacity.

**E. I. DU PONT DE NEMOURS CO., INC., Wilmington, Del.**

937—Explosive Ditch Digging—"Blasting Ditches with Explosives" is a 48-page pocket size hand-book presenting a complete course in use of explosives for drainage ditching.

**INGERSOLL-RAND CO., Phillipsburg, N. J.**

938—Air Hoists—Ingersoll-Rand single drum and double drum "Utility" air hoists and their uses are presented in a new 32-page catalog.

939—Air Compressors—"A Better Portable Compressor" is featured by Ingersoll-Rand in a new catalog suggesting many cost-cutting methods for a contractor.
LET THIS HAPPEN?

WOLMANIZED

LUMBER WILL PREVENT IT

NOW a 20-year home loan is safe, at an extra cost of only 75 cents per month.

At that slight extra cost, this house could have had Wolmanized sills, lower joists, sub-floors, studs, siding and porch work.

Wolmanized lumber is easier to sell because it lasts five to ten times longer, keeps out termites and is dry, clean, odorless and takes paint and other finishes better than untreated lumber.

Your local lumber dealer can furnish Wolmanized fence posts and lumber in any size or quantity.

Certified against:—

Decay (rot)—Termites (white ants)
and it’s hard to burn—

Ask us for information

Fordyce Crossett Sales Co.
80 E. Jackson Blvd., Chicago
Southern Office—Fordyce, Ark.

American Lumber & Treating Corp.
Arcade Building
St. Louis, Mo. 25 Broadway
New York, N.Y. 332 Michigan Ave., Chicago

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Forms for the September Number of the American Builder and Building Age will close promptly on August 15. New copy, changes, order 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.