COMING NEXT MONTH—the April American Builder is the 1934 Spring Building Number—an issue attuned to the new building era that opens this year—home building, commercial building, modernization, farm building improvements, indexed Buyers' Guide—all in the April number.

MARCH, 1934

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American Builder, March 1934.
Many Uses For Southern Pine

Seldom before in this country has there existed such widespread and urgent need for Repair, Alteration and Modernization of Homes, Commercial and Industrial buildings as is found today. In virtually every community there is a pressing need for "Better Housing." Proper maintenance and improvement of all classes of buildings have been neglected for the last five years or more. In consequence millions of homes and commercial and industrial structures have fallen behind the times in serviceability, efficiency, comfort and appearance.

The present is a most favorable time to undertake this type of work on a nation-wide scale. Not only will it provide employment for a host of idle men, but also it will greatly stimulate business in the capital goods industry—one of the nation's greatest needs today—and in numerous other lines. A deterrent to starting this work has been lack of adequate financing on reasonable terms. Proper financing must be provided and indications now are most favorable that it will be furnished.

Properties of Southern Pine

There are numerous jobs of repair, alteration and modernization for which Lumber is essential. The exceptional properties of Longleaf and Shortleaf Southern Pine, which for decades have made it the preferred wood for Home Building and Heavy Construction in America and in many foreign countries, also make it unsurpassed for almost every purpose where Lumber may be used in Repair, Alteration and Modernization of homes, commercial and industrial buildings. For many years Longleaf and Shortleaf Southern Pine have held a place of first importance in every kind of heavy construction wherever great strength and endurance are essential. Its exceptional strength, resistance to decay, and superior nail-holding ability make it unexcelled for framing—sills, beams, rafters, posts, joists, studing, sheathing—and for siding, exterior trim, doors, sashes, rails, columns, stairways. Its compact, even grain and smooth, hard surface, resist wear and withstand decay longer than any other wood used for flooring.

Southern Pine's varied, attractive grain, beautiful texture, smooth, satin-like surface and resistance to shrinkage and warping, make it a preferred wood for all interior finish and trim, for cabinet work and fine joinery. It takes paint, stains and varnish perfectly.

For practically every purpose for which Lumber is used in urban homes, rural dwellings and all other farm structures, and for stores, office buildings, factories and industrial plants, Longleaf and Shortleaf Southern Pine will meet every demand in service, satisfaction and economy. Here are some of the specific home repair and modernizing jobs for which Southern Pine is especially recommended:

Southern Pine Recommended

In the Basement—Providing outside entrance and stairs, inclosing inside stairway, fire-stopping around sills, ceiling sidewalls and roof, partitioning off rooms for recreation and children's play, storage bins, fruit closet, shelves, work-bench, laying basement floor.

Interior Improvements—Laying new floors over old, partitioning off additional rooms, closets, dining alcove, breakfast nook; replacing wornout treads on stairs, stairway posts, railing and banisters; for baseboards and picture molding, new linen closet, soiled clothes chute, built-in bookcases, cabinets, cupboards, shelving, window and fireplace seats, additional windows or doors in various rooms for better lighting or ventilation, shutters, storm
Get Home Building Started!

An industry stagnated for lack of credit pleads for help—
A basic industry furnishing one of the three great human needs—food, clothing, shelter—
An industry whose product, comfortable homes and modern home improvements, is sorely deficient in every community, with an estimated present accumulated demand or need for more than thirteen billion dollars worth of its services—
An industry normally employing four million men and 80 per cent of them now out of work and on CWA rolls—
An industry dependent on long term financing, first mortgages, than which there has never been sounder security—

This is the industry which, in the February issue of this publication, made its plea for Federal first mortgage funds in order to get needed home building and repairs started and this great nation-wide industry back to work again.

Whether or not the Administration's recovery policies are to be shaped or reshaped to utilize Federal credit to put the huge home building industry back to work remains to be seen.

Administration Recommends Action

The President has not made known all of his ideas for meeting the financing needs in this field, although he is reported to be considering several, one being to expand the Home Owners’ Loan Corporation to grant new mortgage loans through private agencies. He has recommended to Congress that the Government should guarantee the principal of Home Loan Bonds—a most logical and helpful step—also that further credits be offered the building and loan associations to encourage private building. Loans for home modernizing are also favored. Individual home building now rates superior to slum clearance in Administration plans, according to well informed sources—due to the obstacles to slum clearance and the acceptance of the idea that during the next few years the decentralizing of industry will take people away from the congested centers.

The Duffey and the Ellenbogen Bills still lie undisturbed in the files of the House Committee on Banking and Currency. Representative Steagall, Chairman, has introduced a new bill embodying the recommendations of the President. But as this bill now stands it does not provide for direct loans nor make possible an effective program to supply an immediate volume of money for new home building.

The CWA funds have been increased to nearly a billion dollars; but no one knows where needed and worth while work can be found to employ the CWA gangs.

In the meantime private homes and business buildings are more and more in need of repairs and alterations, and new families are coming into being and need new homes. Here is the "New Industry" which the economists have been seeking, to absorb the nation's excess of labor energy. But it requires financing, easily obtainable and at fair rates.

The opportunities for home repairs as well as for new home building are astounding. A letter just received from a Chicago builder and contractor gives this glimpse:

Repairs and Alterations Needed

"To determine the prospects for spring construction work, we are making a door-to-door canvass in a section of this city among home owners in the $7,500 to $15,000 group.

"One hundred five of the one hundred sixty-nine interviewed to date report as follows:

36 need carpenter repairs or alterations
13 need mason work repairs or alterations
3 need plastering repairs or alterations
16 need plumbing repairs or alterations
18 need roofing repairs or alterations
9 need sheetmetal repairs or alterations
62 need painting
4 need electrical work
26 need interior decorating
4 need heating
16 want iceless refrigerators
15 want furniture and floor coverings
4 want washing machines
2 want awnings
1 wants radio
5 want oil burners
3 want new furnaces

"We estimate the cost of all this work and material at approximately $42,000 of which 60 per cent, or $25,200, is labor, which alone would provide 3150 days of labor at $8.00 per day, and this in the equivalent of only four typical city blocks.

Money at Fair Rates the Key

"Doubt as to what the future holds is the main deterrent in proceeding with the work. This obstacle would be overcome to a great degree if it could be financed on reasonable terms instead of the outrageous monthly rate of 1 per cent on the principal, as charged by the —— and like institutions on their occasional loans."

To get the small construction industry back to work caring for a nation-wide need as described by this Chicago builder requires a system of long term credit that will function in time to be a substantial aid in 1934, in the nation's fight for recovery.
THE following letter was written this publication by a prominent manufacturing company executive, a man who has given much time and effort to attempted solutions of building industry problems. It speaks for itself—expressing, we are confident, not only the judgment of this particular manufacturer, but also the feeling of many other far-sighted leaders in this field:

"The February issue of American Builder is a compliment to your organization. It would be great if we could inoculate all branches of the industry with your push and optimism.

"Contrary to many so-called surveys, we think there is a market for new building and certainly a market for remodeling. Thousands of steady folks want to remodel. They are of the kind who have pride in their home and will pay the bill, but they cannot get credit except at a high rate or through red tape channels.

"We hear of this or that big national concern appropriating $50,000 at a clip for radio and direct mail remodeling propaganda. Isn't it too bad these folks cannot get together and pool one-tenth of the cost of their private campaigns to the support of the National Association for Better Housing or some similar organization to do a real job of planning for finance as well as a simple program for better, more economical and quicker remodeling?

"Too many of us are selfishly shooting our wad hit and miss, whereas a barrage of organized co-operative effort would pave the way for effective individual promotion and selling."

This letter points out what is probably the greatest weakness in the small construction industry, namely, its entire lack of organization.

As another prominent manufacturer wrote this publication back in December, pledging support to its proposed February campaign to get the home building business started again through Federal Credit:

"It is not a very nice thing to say about one's own industry, but the blunt truth of the matter is that there isn't one chance in ten million of the construction industry within itself ever getting together even on such a small matter as the purchase of a paper of pins from the ten-cent store. It is a peculiar thing about this price-minded, gangling, far-flung industry that it never seems to get together of its own volition for concerted constructive work in the interests of the whole."

"If the Coat Fits—"

"A paper of pins"—what an indictment! Whether it is merited or not can well be left to the cogitation of those manufacturers who have failed to support the several group efforts of the past two years—the Allied Construction Industries modernization campaign, the National Association for Better Housing, and the February Industry Drive for Federal Funds for new home building and home improvements.

Lack of organized effort to revive the home building industry so that all could get business has rendered futile most of the individual efforts selfishly confined to a single commodity or line of home building merchandise.

In the February issue this publication tackled the basic problem confronting the industry, lack of mortgage money. A number of manufacturers and one dealer association joined with the editors in presenting the "complete case" for Federal financing of needed new homes and home improvements. They helped to bear the cost of putting copies into the hands of five thousand government officials and business leaders, including President Roosevelt and all members of Congress. They supported a distribution of news releases and special articles to every daily newspaper in the United States, so that the general public, through the newspapers, could get the facts. This work is bringing results in a changed and more enlightened attitude toward home building, both at Washington and throughout the country.

The service for the good of all, which these particular manufacturers and dealers have rendered, should be recognized. Their efforts may indeed become "a paper of pins" to prick both government and the building industry itself into action.

NOW UNDER CODE

All operations of the building industry involving contracts of $1,000 or over are now under the control of the Code of Fair Competition of the Construction Industry (approved by President Roosevelt on Jan. 31, 1934) plus the General Contractors' Code (approved on Feb. 17). All contractor and builder organizations of three employed persons or more are subject to the rules and standards set up by these codes. An elaborate system of Code Authority boards, of Planning and Adjustment boards and of Appeal boards is set up within the industry to carry out the purposes of the Code. Forty cents an hour minimum wage for unskilled labor and a forty-hour maximum work week are established. Bid peddling and bid shopping are outlawed. Every construction contract and sub-contract will have to be registered, the registration fees to pay the expenses of administering these codes.

This is an heroic attempt to bring some semblance of order to the chaos of the construction industry. While strange, at first, and no doubt burdensome, these construction codes and the men on the code boards should have the whole hearted loyalty and co-operation of all employers and employees to give this new plan a fair chance to make good.

Of greatest importance is the fashion in which a framework has been set up which provides opportunities for the groups and interests of the industry to get together to discuss, arbitrate, and solve their problems. A National Planning and Adjustment Board has been set up, which will be aided by Regional Boards, all impartial bodies on which labor and employers will be equally represented.

The fact that residential contractors, especially the smaller firms, have taken so little part in writing the Codes and setting up the controlling Authorities is due to their complete lack of a national organization. Perhaps the new Code will speed up the forming of a much needed National Residential Builders League.
N in this war on depression, the President of the United States has mobilized the nation in a great offensive, and industry and workers have rallied to his support in a way that is a tribute to his great leadership.

But one of the nation's most essential industries, home building, has been left mired in the mud—an industry second only to agriculture in importance. Neglecting it is like going to battle without taking along the heavy artillery.

The residential building industry, like Humpty-Dumpty, has fallen off its wall of leadership, but needs more than "the king's horses or men" to put it together again. It requires one thing to help it regain its position of importance: financing.

If the Government of this country can appropriate millions of dollars for work which is a little more than a glorified dole, and for charity which few red-blooded Americans want, why is it impossible to find money to lend the individuals who are not only asking for it, but promising to repay it, with interest?—and by the same gesture lead the way to the fulfillment of a great housing need and the re-employment of millions of men at their own trades? This is the building of new private homes.

The ordinary channels of home construction financing have been savings and loan institutions, banks, insurance and second mortgage companies. Surveys based on actual experience from all parts of the country have proven that these institutions either cannot or will not lend money in needed amounts for the financing of new homes.

Of 5,000,000 men whose employment is directly affected by the building industry, there is a standing army of 4,000,000—standing until they get so cold they must move—ready to fight in this battle on depression. They are asking that their tools be put in their hands—not muskets, hand grenades or other destructive weapons, however, but the tools of construction. They ask for the opportunity to build that which they themselves and their fellow workmen are willing to buy and use—homes.

The Government has pumped into various existing institutions vast sums of money through the Reconstruction Finance Corporation, the Federal Home Loan Bank and the Home Owners' Loan Corporation, but in most
instances this immediately became concentrated and con-
gealed in these institutions. It became a frozen reservoir instead of a free-flowing channel of credit.

Why should there be a controversy about the Government entering the loaning field during this time of great need? Why should anyone attempt to impede progress of any sound constructive measure that will firmly fill in the foundation upon which national recovery can be built?

How can any individual or corporation be so shortsighted and selfishly constituted as to try to prevent millions of men from earning an honest living at their own trades instead of being forced to subsist by accepting a modified form of charity which the government is paying for through a future burden to be borne by the people?

Let us ask a few questions.

Where did the insurance companies, the savings banks, building and loan associations get the money which they have heretofore loaned, and which they now refuse to loan for the construction of new homes?

Where did they get the money to put mortgages on the homes which they have foreclosed and repossessed?

Who owned many of these homes on which they foreclosed and which they now want to sell?

To whom do they expect to sell this foreclosed property?

How do they expect to encourage payments on mortgages, or to collect interest and taxes on property not yet foreclosed but in default?

How are rents to be brought to a point where there may be some return to the owner or mortgagee, after carrying charges are paid?

When you answer these questions, remember that directly and indirectly there are about 5,000,000 men affected—and because there is little, if any, child labor in this industry, this figure represents heads of families, 80 per cent of whom have not had any employment to speak of for several years.

Building Workers on CWA Rolls

There are more than 40,000 union men in Cleveland in the building trades, and less than 5,000 are employed. Of this number between fifty and sixty percent are doing CWA work.

Out of every 100 plumbers, there are about 4 working at their trade; of 100 steamfitters, only 3; of 100 bricklayers, 6; carpenters, 8; painters, 8.

Of the 3780 bricklayers registered at the CWA in Cleveland, 1260 of them are working as CWA laborers and only 175 as bricklayers. Of the 5288 carpenters, registered, 1300 are on as CWA laborers and 356 are working at their own trade. There are 2103 painters working as such for the CWA and approximately 2500 of them working as CWA laborers, with 409 listed but not working at all.

And bear in mind that every newspaper comments daily on the uncertainty of CWA employment, pointing in particular to the indefinite and limited time of its workability.

All this unnecessary hardship and suffering when, paradoxically, there are needed over 800,000 residential units a year, according to the Director of the NRA Division of Economic Research and Planning, with an immediate requirement of $4,532,000,000.00 for a two year period, of which amount approximately 80 percent directly and indirectly would flow to labor.

Can there be much doubt that these men, upon whom depend perhaps another 15,000,000 people, have carried—perhaps are still trying to carry—insurance policies; have had savings accounts; have purchased building and loan shares? Can there be any doubt as to the greatest depositors in savings and loan institutions? Was it not the builder and his workmen, along with others of the same class, dependent on weekly wages?

Where do we get the term "industrial insurance" if it is not from the great mass of workmen to whom such insurance is sold on the basis of five, ten, fifteen cents per week?

No. All these systems were built for the men in the ranks—the same men who, to the tune of 5,000,000 in building work alone, are now unemployed.

Can there be any doubt that many of the men engaged in this great industry are among the best prospects to buy these repossessed homes? It is the contention of real estate experts that the existing institutions which have foreclosed homes on their hands cannot hope to sell them to the man who wants a new, modern home—but they can sell to many of the men now unemployed, or whose business is at a standstill because of the absence of prosperity in the building industry. Every new home that is built will provide some of the funds to take over an existing structure. Keep this industry at a standstill and the old homes will remain unsold, as well.

Is there any wonder why rents cannot be raised when there is such a vast army of citizens is so badly crippled, financially?

Is there any hope of increasing bank deposits or encouraging private investment when this great industry, which is such an integral part of the fabric of our commerce, has had no encouragement?

Listen, builders, supply men and real estate dealers—there are those who blame you for the depression. They say they will not allow you to do the same thing over again. They are telling you that you must go back to those who have made no mistakes and who always did finance you—and how!

The industry and the real estate men have been going
back to them for two years now and the answer is universally the same—there are no loans to be had.

Recently, individual lot owners have been requested to recite their experience. One reply to such an inquiry is quoted: "They just laughed at me." It is typical.

The real reason for opposition is expressed in the monstrosity heard so often: "KEEP THE GOVERNMENT OUT OF BUSINESS." "IF THE GOVERNMENT ENTERS THIS FIELD, POLITICS WILL DOMINATE AND THERE WILL BE NO EFFICIENCY." Anyone can get a good laugh out of such cries. The Government could enter this field now and not compete with anyone. It could do a pretty bad job and still be a success by comparison.

The Federal Home Loan Bank Board is attempting, through the new Federal Savings and Loan Associations, to render some help. The trouble with this plan is that there is not enough private capital to finance these institutions to the extent necessary to relieve the situation. According to officials there are several billions of dollars tied up in Savings and Loan Companies in Ohio alone. How much is in the banks—and how much has been lost in other ways? Where is this capital coming from? This solution is not the right answer at the present time.

Begging the issue, there have been advocates for Government financing of home modernization and repairs. Nice to add value to foreclosed properties—the Government taking second mortgages! Another adviser—unofficial—suggests Government financing for the building and repair of summer cottages. Everybody wants the Government to finance the things they never could get anyone else to finance. But the things worth while financing, they want the Government to leave to others.

Old Financing Methods a Racket

John W. Love, writing "Today's Business" in the Cleveland Press, states: "The big lenders who are so powerful in Washington have been willing to compromise on government promotion of rebuilding. This is itself a great industry, though I don't suppose anybody would imagine it was a substitute for new building." Special interests continue to say—building industry, 5,000,000 men, land owners, tax payers, builders—you just sit still for another two or three years until we sell all the old properties we have on hand and then you can come back to us and get money in the same old way.

Regarding this "same old way," Alfred G. Clark, Cleveland realtor, has put it rather well with: "Person-ally, I always considered this more or less of a racket, with their charge of $35 to $75 for drawing up papers, charge of 2 percent for construction money, 1 percent for making the permanent loan, which generally only run about two years and at the expiration of this loan they again charged 2 percent more for a new loan and in addition charged 7 percent interest. They had a good union, as these charges were universal and the way they got themselves into trouble was in their anxiety to out-bid each other, that they over-appraised the houses and made unsafe loans."

Another favorite argument is that no new building is necessary because there are enough home units to care for the population. Surveys relative to vacancies, numbers of families, doubling up, etc., are relied upon. But these surveys are splendid and we need them, but there is only one way to determine demand for new homes and that is to find and talk to the prospect, because we have hardly reached the stage when we can tell a man whether he needs or wants a new home.

There hasn't been any such occasion in the history of this country, except in times of flood, earthquake or devastating fire, when the Government has had to loan the army tents to house the population. There has always been some sort of structure in which families could take shelter from the elements. It is admitted that at the present time there are probably enough roofs under which all the people can crowd. But does that prove there is no necessity for new construction?

Deprives People of Housing Advance

Are we to expect that because there are millions of used automobiles on the market, the automobile industry shall stop production of new cars? Are we to assume that furniture manufacturers are to cease operations until the stocks in the thousands of stores throughout the country have been dissipated, or that the textile industry shall throw all their men and women out of employment simply because there are millions of garments on the store shelves? Is this generation to do without modern dwellings designed to suit their taste simply because of past mistakes, or to wait until the frozen assets of the existing institutions have become liquidated before they have the privilege of purchasing a home?

It seems unbelievable, with all the information at hand, and realizing the importance of construction work, that the Government planners have neglected to open the gate to recovery by supplying the key to the building industry through financing.

Surveys of all kinds, from every section of the country, show indisputable evidence of the demand for new homes. People want to build for themselves; contractors want to build for the market—and both only want to borrow the money to make it possible. But still this in-

YES, THERE ARE ENOUGH ROOFS

THERE ARE PROBABLY ENOUGH roofs under which all the people can crowd. But does that prove there is no necessity for new home construction?

ARE WE TO EXPECT THAT because there are millions of used cars on the market, the automobile industry shall stop production of new ones? Is this generation to do without modern dwellings designed to suit this taste simply because of past mistakes, or to wait until frozen assets in existing institutions become liquidated?

industry must remain paralyzed because the ordinary credit channels have either become frozen through failures or have been dammed up through intent.

In a survey of a high-class residential section of Cleveland, being conducted at the present time, it is being shown that over 35 percent of the lot owners contacted

(Continued to page 56)
Town Planning to Double Values

By WILLIAM ORR LUDLOW
Architect, Chairman A. I. A. Committee on Industrial Relations

THE VOCATIONAL Planning Board at Washington urges every state and every county to lay out a long term improvement plan. CWA experts are available for this work.

INTERESTS of the individual citizen demand detailed municipal planning as a supplement to the state planning programs organized with Federal aid. Direct assistance from state planning boards now can be obtained free and CWA workers are available without expense for making city and town surveys.

Detailed city planning is what most intimately concerns the individual citizen. The value of property he owns may be doubled by the proper running of new streets; by restricting certain areas to business, others to residence; by laying out parks and playgrounds; and by reserving certain streets for through traffic, others for business, others for residence. New streets properly laid out will open up great new tracts of land, and will give direct access to railroad stations, through highways, and business districts.

Because this kind of local planning has seldom been done previously, we now often find it impossible to detour highway traffic around our business sections, to prevent business from encroaching upon residence districts, to find suitable areas for parks and playgrounds, or to keep noisy traffic out of residence streets.

It is the purpose of the Administration to start a planning campaign to try to cut out this kind of inefficiency, inconvenience, and huge economic loss. Two hundred fifty thousand dollars has been allotted by the National Planning Board, advisory body of the PWA, for the use of states that will avail themselves of this opportunity to set up state planning boards.

New York, New Jersey, Vermont, and a number of other states have organized such boards and claimed their portion of the fund to carry on the work.

Each state board is to be composed of the heads of several state departments, such as commissioners of highways, public works, and conservation, together with three citizens. The board will start immediate planning for the development of the state in respect to such matters as roads, transportation, water supply, land planning, housing, public buildings, distribution of industries, social survey, parks, and recreation.

This project is not intended to provide merely emergency employment, although many white collar CWA workers will be used, but is designed to provide for the long time future development of every state along carefully planned lines.

But state planning is just mapping the big outlines of development, and the undertaking will be in no way complete until the details are filled in by the counties and especially by the cities, towns, and villages.

Are we going to go on doing just what we used to do? Are we going to put up buildings where streets and parks will soon be needed? Are we going to allow congestion to choke our business streets and add to the already appalling casualty lists? Are we going to keep our land at 50 per cent of its possible value for lack of proper streets?

Now is the time for cities, towns, and villages to do the thing they should have done years ago. Now, direct aid can be obtained free from state planning boards. Now, CWA workers are available without expense to assist in the initial step—the survey of the city or town to collect the great amount of data that is necessary to give the information upon which all city planning depends.
Above: After Modernization

STORE FRONT modernizing has definitely proved itself profitable, not only to the contractor who executes this type of work, but also to the store owner or proprietor who spends the money. A Pastry Shop in East Haven, Conn., for instance, reports a sales increase of 40 per cent on account of the additional trade attracted by a modernized store front. A Drug Store in Buffalo, N. Y., brings 100 per cent more rent, due to modernization. There are, in fact, a great many reasons why store front and store interior modernizations prove profitable; even businesses which enjoy a good sales volume can usually increase profits materially through a comparatively small investment along these lines.

The pictures above show Mammele’s Paint & Glass Store, Wilmington, Del., before and after modernization. The change in this case speaks for itself.

MODERNIZATION

"which makes buildings of all kinds more cheerful, more livable and more salable"
By WALTER J. KOHLER

1. ESCAPE loss of "rundown neighborhood"

2. PROFIT from present low costs

3. BOOST New Deal recovery

"T O MODERNIZE, or not to modernize," that is the question in the mind of many a building owner.

It might help to resolve his doubts if he realized that he is probably going to pay for needed modernizing, whether he goes ahead with it or not—to paraphrase a saying from the advertising of one of the great motor car manufacturers.

In fact, the cost of further neglect will in many cases be greater than the expense of the desirable repairs, replacements, and improvements, including the installment of modern facilities now lacking. The common-sense economics of building maintenance is much the same as in the care of one's teeth or health—prompt attention pays.

There are illuminating examples to show that judicious modernizing is profitable. Some months ago a real estate group in Milwaukee modernized a flat as a demonstration, and found, I understand, that the increased rental that could be realized would pay about 13 per cent on the investment.

Another instance. The General Society of Mechanics and Tradesmen in New York was threatened with a loss of 40 per cent or more on capital invested in foreclosed and obsolescent properties. As an experiment, they modernized a three-story house, over forty years old, rundown and unattractive, in the hope that thus they might get back the money they had put in and possibly even make a profit on the entire investment. They report that they have had bona fide rental offers that would insure this profit. They are of the opinion that, through modernizing, millions of frozen real estate dollars can be salvaged. This view seems to me to be entirely justified, wherever the building is structurally sound and the property represents a reasonable equity.

Modernizing Need Is Everywhere

A graphic and somewhat accurate idea of the extent of the need for modernizing should come out of the real property survey which two Federal bureaus have been conducting in some sixty urban areas.

But even without these government facts and figures, who can doubt that the total of the modernizing operations now urgently needed would be enormous? Surely, the evidence of our own eyes is worth something. Our large cities, and many smaller cities and even villages, have neighborhoods which at all times are dingy, depressing, and sordid. Frequently they fringe the railroad approaches and give the arriving visitor his first impression—a very bad one, and practically ineradicable.

But a motor ride about almost any community today also discovers evidence that "better" sections are in danger of becoming shabby—to put it very mildly.

Economic conditions explain this in part. But let us frankly recognize that, in good times as well as bad, many buildings, many whole neighborhoods, not in the slums and not poverty-stricken, have given evidence of neglect. There is always the danger that shabbiness may reflect a state of mind, with the threat that it will be permanent. Unfortunately, neglected appearance is apt to be more than "skin deep," and the building may be as bad as it looks, or worse.

What must be the effects of continued unchecked obsolescence of buildings?

As regards homes, it would foretell a serious decline in the general American standard of living, never too high. Such progress as was made in living standards in the recent past pertained principally not to food and clothing, but to transportation and shelter. It was largely a matter of better homes, safer, more comfortable, more convenient, more sanitary.

In industries, obsolescence means loss of productive efficiency, higher costs, and a handicap in meeting competition. It takes place at an alarming rate, brought about not alone by wear and tear but by constant technical improvements. Most equipment has to be charged off completely in a very few years for this reason.

Main Street has a vital interest in getting in early on a modernizing program. Attractive stores, effective display, and convenient facilities are powerful aids in successful selling. With so much now at stake in stimulating the public to buy, merchants can not afford to let their premises continue looking dingy and discouraging, as too many of them do today. In suburbs and smaller communities, particularly, where the shopkeepers in this motor age have suffered severely from city competition, the current trend toward decentralization offers a real opportunity, which, however, can be realized only by improving the stores as well as the merchandising methods.

The civic and community benefits from a real modernizing program would be incalculable, restoring values, attracting visitors and custom, enhancing prestige, and contributing powerfully to a better morale, a renewed courage and enthusiasm, which is at this moment one of America's greatest needs. The bearing of modernizing upon health was emphasized in a startling way some months ago when scientific investigation traced a tragic spread of amoebic dysentery to back syphonage and cross connections in antiquated plumbing installations.

The time to modernize is now. Business needs to do it to be prepared for the keen competition in grasping the increasing opportunities as economic conditions move.
IZING NOW

back toward normal. With a continuance of a rising market in prospect, modernizing can be done more economically now than later.

To launch a modernizing program adequate to the need that exists, two things are urgently required.

Better Selling and Financing

One of these is selling. While a certain number of people will undertake building improvement on their own motion, many more will respond to suggestions, reason-why discussion of the need for improvements, an appeal to pride, and particularly figures as to costs and prospective increased returns. Experience in many communities has proved this, and has also proved that the most effective selling is done by co-operating groups including all the building interests, rather than by individual dealers or contractors.

The second great need is adequate financing on reasonable terms. Many a citizen has a substantial equity in his property but no reserve cash on which to draw. Such people are almost invariably the finest of credit risks, yet they have been unable to borrow money for improvements that are needed to protect their investment.

In the case of good business properties, loans for enhancing the value and productiveness of the property would be self-liquidating. Here we have, not dead expense, but investment which should pay returns for years to come.

The Federal government has arrangements for making loans on farms and homes to protect the equities of distressed debtors. This is good, but it does not immediately create new business.

Enormous sums have been poured into civil works and public works. These projects have had the merit of providing immediate jobs for numbers of people. But money made available for modernizing, whether it comes from public or private sources, will equally provide immediate jobs, but will also do something more. Some of it will go into the improvement of homes, bettering the living conditions of vast numbers of people for years to come. Some of it will go for business betterments, speeding the time when private enterprise, restored to normal, will be able to provide the credit and the continuous jobs which are the very substance of prosperity.

Greatly increased building activity is a necessity, not for the benefit of the construction industry alone, but to lift the nation out of the depression. The mere size of the industry and the number of people it involves would make it a tremendous factor in the general business situation. But there is another reason—only through renewed building will it be possible to make a large increase in employment without building up a corresponding surplus of food, clothing, and other consumption goods to embarrass and retard recovery.

The quickest, surest, and most beneficial way to increase building activity would be through stimulating improvement of existing buildings. Common sense tells us that salvaging of present investments must be undertaken if new investments are going to be warranted.

The trouble is that at no time, whether depressed or prosperous, have building owners as a whole maintained and improved their properties as they should to conserve their own interests. If a reasonable depreciation charge, figured on the total value of the sound, worth-while buildings in this country, were expended annually for modernizing, there would be substantial building activity going on at all times, even when new construction fell off. The violent ups and downs of the industry would be very much moderated.
EVERY community likes to attract to itself and hold the trade of its area. Likewise it wants to attract tourist travel.

There is both a spiritual and a material motive in these desires. Every community has a certain amount of local consciousness and pride. It couldn't be otherwise, for it is composed of human beings. Therefore, it wants to be well thought of. It wants to be remembered.

On the material side, trade, whether local, tourist or nation-wide, brings prosperity, helps the community to grow. Nor is such material growth without spiritual results, for without growth, without vigor, no community can progress, raise its standard of living and become year by year a better place in which to live.

What Is Community Personality?

That something which attracts and holds we can call a town's personality. It is that element of which the inhabitants are proud. It is that feature or characteristic which visitors remember. It lies in those elements which the town's name brings to people's minds.

Community personalities, of course, are as diverse as those of human beings. They may be historical, scenic or geographical, or intellectual. The personalities of some towns revolve around a particular institution, public or private, commercial or non-commercial. Not a few derive their personalities from the character of their public improvements.

A potent avenue to a distinctive personality is through community effort. And this is as it should be, for unless a sought-for-personality is truly the expression of community thought and community life, it is false and the effort will come to failure.

There are personalities a-plenty to show what can be done by community effort: Santa Fe is remembered for its Indian-Pueblo architecture; Santa Barbara, a glorious town, is the outstanding example of a city of homogeneous architecture; Riverside, Calif., will never be forgotten by those who enter it through its highway entrance from the west, even though they miss its great glory, the Mission Inn.

Lake Placid today would be unknown, Atlantic City just another seacoast village were it not for community enterprise.

What shall be the personality for our town? No one can answer that but the thinking men of the town itself.

The typical main street is badly in need of planned improvements.

Profits for Home Town Interests

By EDWARD J. MEHREN
President, Portland Cement Association

HOW every town can develop a "personality" worth money to its business interests.

HOW the typical county seat town can become a more beautiful place to live.

They must grasp the elements that can be built into distinguishing marks.

But no matter what personality we select to develop, there is always one element that must accompany it—a good appearance. The finest community effort will fail to enthuse either inhabitant or visitor if the town be dowdy. In very fact, many community personalities rest solely upon physical appearance.

Our towns must modernize, get in the tempo of today's handsome automobiles, become things of beauty in streets and squares, public and business buildings and in homes. We insist on this year's automobile, today's radio, sleek looking refrigerators, gas-stoves that disguise their utilitarian purpose, bathrooms that shame the old Romans, color in the kitchen. Yet we live and do public and private business in homes and buildings that were back numbers in 1900 and haven't had a trowel or hammer put to them since. They barely know the paint brush.

Community movements for modernization of homes, beautification of streets and home grounds, will work wonders if persisted in for years. Some have conducted such campaigns. Fine. They deserve public thanks.

Let's Modernize Main Street, Too

But let's not stop at homes. Let's make our business districts attractive and beautiful. Nothing is more discouraging than the business sections of towns throughout this area. How drab they are! Two-story red brick and metal fronts with the oldest possible type of store architecture. Sidewalks cracked and out of line. Pavements that have laid down from very weariness and become a menace to every rider's spinal column.

Can't we all conceive of a block in such a business center being modernized, the store fronts rebuilt, the red brick given an overcoat of stucco, the sidewalks relaid, the old pavement resurfaced with concrete? Why, the whole town would take on a new lease of life, trade would be attracted and that seedling block would give an impetus to the entire town.

It's truly astonishing what an appeal beauty has to even the coldest of us. It is a fundamental urge.

Proceeding further, every town needs a city plan. No town is too small, too young, to make a start. The fullness of development cannot be attained at once. It has
taken a generation to accomplish the widening of the Strand in London. Over the years, however, any plan can be carried out without too great a burden. The plan must be that of the automobile age. It demands wide streets, adequate parking facilities.

In such a plan a community can find wide range for expression; in the grouping of public and institutional buildings around a square or park, in the use of a type of architecture either indigenous to the locality or particularly suited thereto, in street layout, in street planting, in small parks, or breathing spaces. Always, everywhere, there needs to be charm, distinctiveness.

One element of such a plan offers special possibilities: Good transportation practice now demands that through traffic be by-passed around the town and not carried through it. Here is opportunity for the building of charming and striking entrances from the by-pass into the town itself. Their layout should be liberal. Extra right-of-way might well be bought and controlled by the community. The buildings thereon could be made to conform to definite, artistic style, and the entrances could be made recreational and amusement centers. Tourist camps of real character could be included in the lay-out.

Above all, in all this city planning and modernization, the best of engineering and architectural advice should be sought. We plan for the generations to come. Let's do well by them.

Who Shall Lead?

It is obvious that no matter what the type of personality is to be—whether intellectual, cultural, recreational, educational, or physical—leadership will be needed. Who will give it?

I can conceive of no one force better adapted to take such leadership than the newspaper. It has the public ear. It is in close touch with the community forces which need to be leagued together for accomplishment. Above all, it is able week after week to carry out that long time educational effort which alone can make a project successful.

In drives for modernization, the groups that will do the work and furnish the materials should advertise their services and their wares. The contractors of every variety, from masons to electricians, from bath-room builders to painters and carpenters, the building-supply dealers, the sellers of shrubs and trees—all can build profitable business for themselves by hooking into the campaign through the use of advertising space.

In the development and carrying out of city plans, the widening of streets, the cutting of new arteries, the resurfacing of old pavements, the construction of entrances to the city from by-pass routes, the improvement of sanitation through new water supplies and sewage disposal plants, the development of parks, playgrounds and recreational facilities—the construction group should not only see profitable use of advertising but should be one of the most active allies, as a group, of the newspaper's efforts.

Building Industry Must Be More Sales-minded

The building industry is not sales-minded. It does not realize that it is in competition with the automobile, the radio, the electric-refrigerator and other industries, for the consumer's dollar. Consequently, dollars that it might get if it knew how to sell, go for the purchase of other products.

Here is a great opportunity for the newspaper. It has means of access to these local interests. It has intimate relations with them. It is, or should be, an exponent of advertising. It should be able to teach these individuals the advantages to them of buying advertising space.

The newspaper is in constant touch and meets all the branches of the construction industry. It can bring them together locally, help make them sales-minded, and get them to advertise, with increased benefits to each group and to each individual in each group.

The newspapers in this way can create business for themselves and can make construction advertising the ally of such parts of their personality campaigns as involve modernization and the physical betterment and development of their communities.

In the development of a personality for a town, there is, therefore, a great opportunity for the newspaper to build prestige, to build revenue.

In this effort, it will, of course, ally with it all the constructive forces of the community—the Chamber of Commerce, the women's clubs, church organizations, the service clubs, the parent-teachers' association, the garden club and other civic groups. It will urge that expert advice be sought, that the plans be broad, that they be, above all, sound and courageous. It will not be discouraged if progress be slow—so long as it be sound it will fight all the harder for the goal.
Lighting Can Renovize Business

By KENNETH CURTIS

President Electrical Association of Chicago
First Vice President Artistic Lighting Association

MIRACLES in merchandising are being wrought by modern lighting in the revamping of retail stores.

HOW TO LIGHT show windows; how to advertise with light; how to illuminate store interiors—Expert advice from an authority.

"NO"—has been the automatic answer which has been so easy for the merchant to give during the past few years to any request for capital investment expenditures that unless he wakes up and rubs his eyes to the new economic order of things he can easily "NO" himself out of position and take a back seat in the Progress Parade.

The brain trust has recognized the merchant's need for dolling-up, modernizing, rejuvenating—or what I like to call "renovizing" his store, and is endeavoring to get some of the easy money into the merchant's hands so as to make "YES" an easier answer.

The metropolitan cities, the large and small cities are now, and have been during the past few years, undergoing very rapid changes. The depression, hard roads, automobiles and the super-power hook-up of the entire country on an interlocking network of power lines have been the forces that have accelerated these changes.

Statistics are beginning to point to the decentralization of our largest cities—the moving of many industries to smaller centers where living expenses are lower, resulting in lower labor costs—to locations nearer the raw material required—and to market centers. The old requirement of being near to coal supply is being eliminated by the changing of coal into electricity and sending this over the wires.

The city of between 1500 and 5000 population is having a hard time, and seems to be getting the worst of these changes, and is losing population to its more aggressive largest near-neighbor. The mobile, automobile owning public is buying in the largest nearby city, or at the other end of the home city.

Main Street is not what it used to be, and perhaps it's not where it used to be—or possibly one side of it is more popular than it used to be.

Let's pause here for a moment and think back over the past few years as to just what has happened to our city and how it has changed, and ask ourselves "What can I do about it; granted that great changes are taking place, I am probably tied up on a long lease—and anyway, as an individual, I feel helpless against these powerful and mysterious forces which are rapidly making these changes."

When we get down to brass tacks on these matters, we can agree that these forces have been really set up by our fellow citizens, and possibly with a little co-operative effort and planning "I" can put into effect some forces which will react to the benefit of "my" community—to "my" part of the city, and more especially to "my" side of the street—and most especially to the benefit of "my" business enterprise.

You can remember when a certain merchant put on a new front, built in attractive windows and installed such a high intensity of lighting in his windows that it made everything in the near neighborhood look dull; and how the immediate reaction to this of his neighbors was antagonistic, because they saw the live one getting the play and they, begrudgingly, were forced into brightening up the windows and the interiors of their enterprises in order to hold their own; and how these changes gathered momentum over quite a period of time until the street actually livened up, more people began to use it for window-shopping at night and as a shopping district by day; and, finally, the city had to fix up the street and
better the street lighting, and a new main street of activity was born.

This has happened thousands of times in the past, and is going on this minute at a more accelerated pace as we climb out of the depression. The local Chamber of Commerce has, in many cities, guided such an undertaking, not from the point of view of one neighborhood, but with a view of inter-city competition in creating a live city—a buying center, which would not only cater to its own citizens but draw from other communities, resulting in growth and prosperity.

The most powerful tool in this renovizing—this dolling up—rejuvenating and livening up is modern lighting. The brighter the bright lights, the bigger the crowd, the more the prosperity.

It is also interesting that the greater visual change per dollar spent in renovizing a street, a show window, a store interior can be made with lighting.

Well, what to do about it? Why not call a meeting of all the merchants in your community; point out to them the cumulative powerful effect of each one brightening up his store window, signs, and store interiors. Ask them as a group to promote brighter street lighting. This co-operative effort is powerful; it will pay big dividends quickly.

Assuming that this program is adopted, how to do it effectively? What constitutes lighting that pays dividends to the user?

The answer is that controlled lighting produces the best results. Light, like any other force, must be harnessed to accomplish the desired effects. The effect desired is different for each problem.

Real illuminating engineering skill is needed properly to diagnose a lighting problem. An illuminating engineer should be consulted and his recommendations followed. I have seen many a good layout ruined by substitution of equipment after the engineering report had been received. This resulted in a small initial saving, but ruined the desired results.

Let us analyze specialty and department stores from a lighting point of view, as this gives a great variance of problems. Approaching the store in the daytime or at night, the first impression may be created by an attractive front. A new collar and tie on an old shirt and

Globe Shoe Company,
Savannah, Georgia
Levy & Clarke, Savannah
Architects
H. J. C. Pearson
Lighting Engineer

This transom area is illuminated by 60 and 100-watt Mazda lamps in mirrored glass reflectors made by Curtis Lighting, Inc. These are placed at the back corner of the space behind the glass and pointed directly toward the front. In the show-windows proper, on the street side, are 500-watt Mazda lamps in concentrating type mirrored glass reflectors on 17-inch centers. Running back the length of the window are 200-watt units of the same general type on 15-inch centers.
the renovizing of the front of the building can do a great deal toward creating that important first impression.

At night, if the form of the building permits, an even more imposing impression can be created by floodlighting—not the whole building which may be too costly, but certain features of the building. Floodlighting is one of the most emphatic advertising mediums. It establishes the location of a structure much more convincingly than the street designation. At night the competition of near-by structures is eliminated which individualizes the floodlighted building. The old building with the set back type of architecture, or a tower, can, with little expense renovize the entire public attitude towards the structure by the use of floodlighting.

Picture the increased importance of your street in the minds of the public, if a number of the buildings were partially floodlighted; this, together with the combination of electric signs which add to the pulling power of a well-lighted street, creates that spell of glitter and flash which makes the window shopper choose the street for a peek in to the windows.

In the last analysis, when the public has been led to the window the pulling power of the street has done its work, and the real test of display selling is at work. Show windows—the eyes of the store—give the passer-by an impression of the values, styles and qualities which can be had inside.

I would like to know what percentage of sales are made in creating the desire at night when the store is closed but the silent salesman of the well-trimmed and lighted window is hard at work.

Show windows are most valuable in the day time. Frequently, due to disturbing daylight reflections, much of their value is lost and the passer-by uses the window to see if the nose needs a little more powder, or if the hat is on straight. One merchant friend of mine, after installing super-lighting of his windows to bring up the intensity of light on the goods on display, found that the reflections disappeared and that by actual count an increase of 93 per cent in the number of persons stopped to view his displays. The cost of the current for the daytime lighting was computed at 1/25 of a cent for each person who stopped. This merchant believes this to be cheap advertising, and he is right.

Need Efficient Reflector Equipment

Nowadays every merchant, whether he can afford the elaborate front or just the plain type of window, believes in lighting his displays so that they will sell. Keen competition makes it necessary to have the most permanently efficient reflector equipment, with flexibility in the wiring.
for increasing intensities. This is important in planning the lighting, because it saves the expense of re-wiring when the street steps up to a higher intensity of window lighting.

The standard method of lighting the modern window is by the use of x-ray reflectors, mounted near the front glass. It is advisable to use, or provide for one or more interior spot, or floodlights in each window. These can be used with the regular window lighting, or independently, according to the requirements of the window displays.

In entering the store interior, we are confronted with quite a more complicated problem of lighting which requires specialized study in conjunction, not only with the architecture of the store interior and the layout, but with a study of the merchandise to be sold.

**Must Eliminate Glare**

Better light makes better sight. Better sight quickens decision, resulting in increased sales.

Our sight is impaired with glare, and the American public is at last sold on this important fact. Henry Ford, in a recent article on the modern home, stressed the value of glareless, indirect lighting in the small home.

The new aluminum railroad cars are stressing the value of glareless, indirect lighting in the modern railroad coach; and the up-to-date merchant is eliminating glare, making seeing easier with glareless lighting units which put the light of proper intensity on the merchandise, rather than in the eyes of the customer where it not only causes confusion, irritation and headaches, but actually makes seeing harder.

I look back with a great deal of interest to an evening in October of 1908, when as a lad I had helped my father, Augustus D. Curtis, the pioneer of indirect lighting, demonstrate the first installation of glareless indirect lighting to the local section of the Illuminating Engineering Society and the Ophthalmological Society. The great developments which have been made in the mazda lamp furthering the necessity and practicability of indirect lighting, together with many recent advancements in the development of the lighting units themselves, making them more efficient and bringing the cost of indirect lighting down to the average pocket-book, has given this form of lighting a tremendous popular acceptance. I prophesy that the day is not far distant when the only light source visible will be used as a decorative feature only. Enclosed glass units will be as out of date as the welsbach gas mantel, and the kerosene lamp is today.

**Store Interiors Need Renovizing**

Store interiors are vulnerable for a great rejuvenation in lighting. Equipment considered ample five years ago is now out of date. Progress has been at work, not only in the automotive field where a car ten years old attracts more attention than last year's model; but the same is true with lighting. Yet today store-owners are driving or guiding their customers through the store with lighting equipment, which, if lined up with an automobile of the same vintage, would surely bring a laugh.

An interesting fact about lighting is that it is about the last thing purchased in the erection of a new building, and in a great many cases equipment of inferior grade is purchased because the bank roll is about exhausted. Once this capital expenditure equipment is installed, no matter how inadequate and out-of-date it may be, it is difficult to motivate the owner to renovize the interior with modern equipment.

I repeat the interior can be dolled up, renovated, rejuvenated cheaper through modernizing the lighting equipment than by any structural change. Redecorating should go hand in hand with relighting, especially with indirect lighting which uses the ceiling as the light source and should be finished in a flat white or light cream for best results. The color of the walls is also important, and they should be kept light in color.

The intensity of lighting should differ for different goods displayed. White goods require less light than rugs, furniture and other dark goods which thirst for high intensity lighting in order to be properly seen.

**New Science of Seeing**

The science of seeing is rapidly coming to the foreground in human understanding, and in its wake is better lighting. The light meter is doing a big job in this accomplishment, and many people who have been blind to renovizing with light have, by its use, discovered that they are still living in the age of candle light in that they are seeing under four-foot candle intensity or less, when they should have fifteen or twenty, which is low when compared with 10,000 foot candles which is the maximum daylight intensity.

![Image of show window displays with good and poor lighting](https://via.placeholder.com/150)
HOW MODERNIZATION STOPS

a message to
PROPERTY OWNERS
and
INSTITUTIONS

From the time that Times Square was a great pitch-right up to 1929, population and land values in New York City increased without interruption. Real Estate had always been considered a safe, profitable, worth-while investment. Since 1929, however, rental values and equity items have been so staggering that they have become not only a local but a national gesture. The era we are to blame in all as the depression—but this is NOT the whole story. The underlying difficulty is the disease of decay.

East side, west side, all over our city you can find today as always outdated line of obsolescence, undermining, outdated buildings and apartments which mean will have in any year. These structures would remain unoccupied even if there were no depression. They are old-fashioned, poorly equipped, unsanitary large-unit apartments, unattractive and unbroken line of obsolete, deteriorating, outclassed and outdated buildings and apartments which mean will have in any year. These structures would remain unoccupied even if there were no depression. They are old-fashioned, poorly equipped, unsanitary large-unit apartments, unattractive and unattractive.

But there is no modernizing on this point—the only alteration that ever is an honest alteration. Half-hearted changes are matters. The point of an alteration is to compete with modern construction and therefore only a thorough job will do. To remove the equity and income value of a property you have to lift it from its lowest level to the highest standard, from inferiority to equality if not superiority. Do less than that and the case will remain hopeless.

An alteration to be efficient and effective must include a modernized heating system, sanitary, well-appointed bathrooms, brass plumbing, sensible and attractive kitchens with the latest equipment, refrigeration, complete re-arranging and illuminating systems, incipient, modernized or new elevator cars and cages, modernization and re-lighting of hallways and hallways, modernization of the entire entire building surfaces and many other improvements.

It means the re-building, the re-organization of half of New York City. The task is so enormous, the service so necessary, that it invites the earnest job of the entire exterior building surfaces and many other improvements. It means the re-building, the rejuvenation of half of New York City.

Under government financing, the work of modernization could proceed at once on a big scale. There would be no delay and work would be immediately provided directly and indirectly for more than half a million skilled and unskilled workers.

But we cannot wait for the government to act. We must act ourselves. Already a number of property owners, mortgage holders and bankers have started on this program of reclaiming lost income. Already it has been proven that modernization can reclaim for out-dated properties their former producing ability. Graphic examples are the unmistakable proof that this program will do what we claim. The following experiences from any area are available,

1. 311 Street and Other Ave.—We took over the 12-story building from the Bank for Savings at 91st Street and West End Avenue. It was the property of 117 apartments of 1, 2, 3, and 4 rooms and it was built under the depression. It was not modernized and it is now earning $5000 gross a year, a handsome profit.

2. 200 Riverside Drive—Acquired from Beek for Savings this 9-story building we altered for over 14 thousand and was 80% empty. The building was then broken up into 70% modern apartments and it is now 100% rented and paying well.

3. 333 Central Park West—We acquired this property from the Central Savings Bank. This building, which earned before alteration $8500 a year is now 100% rented and is earning $3500 gross a year, a handsome profit.

4. 344 West 110th Street—Recently, we took over from the Emigrant Savings Bank this 12-story building with an income of $12,000. We modernized and it is now 90% rented with a gross rental of $77,000.

5. 244 West 110th Street—When acquired from the Bowery Savings Bank this property formerly occupied by a club had been long vacant and showing no income. We altered it into 114 and 24 room modern apartments and it is now 100% rented and paying well.

6. 200 Riverside Drive—This fine building the former of Austria Savings Bank was purchased in 1929, the property of 148 apartments was purchased for $750,000, and 90% was rented. We modernized and it is now 100% rented and is earning $30,000 gross a year, a handsome profit.

7. 100 Central Park West—We purchased this property from Frederick Beek for Savings. This property formerly occupied by a club was long vacant and showing no income. We modernized it into 90 2 and 3-bedroom apartments and it is now 100% rented at a 10% gross of $37,000.

Our activity is already well known among property owners in New York, and we have many more examples which will warrant complete investigation.

We have discussed with interested bankers, mortgage holders, institutions and private owners. We believe that their problems, whatever they may be, can be solved with an alteration carefully planned and honestly and thoroughly performed.

Joaquin Leff
President

METROPOLITAN REALTY HOLDINGS, INC.
NEW YORK CITY

Sample of the advertising copy used by Metropolitan Realty Holdings, Inc. (New York City) to obtain more business.
ish to assign a bookkeeper to the modernization of a building as it would be to ask a physician to make an oil painting. All his life, or for many, many years, the contractor and builder has been studying and practicing the art and science of building; he is thoroughly familiar with the peculiarities of each type of building and knows at once whether it is practicable to eliminate certain partitions, whether the timbers of a house are strong enough to support a roof of slate instead of a lighter weight material, etc. In the last analysis, it will be found that the local contractor and builder can soon tell how much it will cost to do the needed job, whether the job is practicable, and so forth; many men have told the writer that less than 15 per cent of the realty people are able to make decisions of this kind, that the contractor and builder must sooner or later take hold of each job. After all, the building professional has made it his specialty to know the technical side of alterations, repair and modernization . . . therefore, he should have little trouble convincing a "new" owner of some property which has been in difficulty (and still is in difficulty), that the contractor and builder, is the best qualified man to advise and execute this type of work.

Loss or Profit?

In the New York area are a large number of apartment houses, many of which have gone through foreclosure and have been taken over by banks, mortgage companies, or other types of investors. Mr. Isadore Wolff, President, Metropolitan Realty Holdings, Inc., has seen the opportunity in this type of work and as a consequence his organization (which formerly built new structures almost exclusively) has acquired title to a number of large and valuable properties. Mr. Wolff has gone a step farther than the average contractor and builder in that he takes title to the property, after arranging for its reconditioning; with the experience and ability of his organization he has found it possible to change losing properties into profit producing units. Mr. Wolff's reasoning is very interesting.

"If the bank has foreclosed a property due to a defaulted mortgage of $100,000, for instance," said Mr. Wolff, "they don't always know just what to do next. Should they continue to pay out additional money for maintenance and repairs, without ever being able to estimate in advance how much the property is going to cost them in the next year or two? Also, if they are not expert in the management of real estate, what is to guarantee that they will keep their tenants? This may lead to a property so scantily rented that the bank will have a practically empty building on its hands, with little or no income! No matter how they figure, if they have not been actively engaged in property management, they realize they face the possibility of serious losses.

"As a consequence, we have developed a plan whereby we take over the property, take title to it, and adjust matters so that the bank has every assurance of income from the mortgage it foreclosed. Halfway measures in modernization are most expensive in the long run. In some cases an institution has gone ahead and modernized 2 or 3 or 4 apartments and the cost of doing this is always more per apartment than if the complete job were done. Every property must be judged on its status today, instead of its apparent worth and value several years ago. Many properties today are not worth more than 60 per cent of what they were worth in 1928. The only thing to do in such a case is to revalue the property, recondition it so that it will attract income from tenants, and put the entire property into such condition that it becomes a going business instead of an indefinite problem.

In our work we talk very frankly with the holders of distressed properties. We want to be sure that a property can be "brought back" sufficiently to ensure income over a period of years, and we frankly tell the owners of such properties that certain things must be done before conditions will change in regard to that property. Our past experience in the building business equips us to know definitely what such changes will cost and how they must be made.

"Using the example of a $100,000 mortgage which has been foreclosed, what value has that mortgage if,
This 9-story, Riverside Drive building was totally vacant for 14 months. Modernization into modern 2½, 3, 3½ and 4-room apartments has produced a 100 per cent tenantry at a real profit.

Who Will Put Up the Money?

"No matter what kind of structure may be under consideration, whether residential, non-residential or other type of building, if the property is not paying a profit to the present owner, it is difficult to believe that this condition will change until the property is "reorganized." Such a building is a sick property. It is losing valuation every day it is allowed to continue along the road of disintegration, obsolescence and disrepair; if it does not produce enough income to meet interest payments, taxes, etc., it is only a matter of time until the holder of that property will have to dig into his other funds and pay out substantial sums for the privilege of holding title. Every building has a fixed outgo for taxes, maintenance and operation; until the property is producing enough income to "pay its way" it will continue to require additional investment. The additional investment so required has comparatively little chance of ever being repaid; therefore, the longer a property of any kind is allowed to lose money, the more it "whittles down" the net worth of the original investment."

"Suppose, for example, you have taken over a property by foreclosure. You had a mortgage, let's say, of $5,000 (or $100,000) on the property, which represented 60 per cent of its valuation in 1928. Today the property is conservatively valued at $5,000 (or $100,000), the face amount of your mortgage, because practically all real estate has depreciated 40 per cent in the last five years. For the moment we will disregard the fact that it costs you real money to foreclose—that's water over the dam. Let's say the property is vacant, due to the fact that newer and more modern buildings in that neighborhood have more attraction for tenants.

"Taxes, insurance, etc., on the property cost $150 (or $3,000) per year. In addition you are not receiving your (say, 6 per cent) interest of $300 (or $6,000) because you now own the property. How much does it cost you to continue to own this property? Well, the first year it will cost you $150 (or $3,000) taxes, etc., plus $300 (or $6,000) interest, a total of $450 (or $9,000) and at the end of the year the entire property will have depreciated at least 2 per cent, about $100 (or $2,000). Therefore, your total loss on this property during the first year will amount to about $550 (or $11,000), or approximately 11 per cent of your original investment of $5,000 (or $100,000). These figures are conservative; it is possible that your loss will run to 15 or 20 per cent during the first year after you have acquired it through the painful and costly method of foreclosure.

"Remember, this is the exact situation faced by every mortgagee after acquiring a property through foreclosure. In some cases, to be sure, a quick sale is possible, sometimes at a profit; in other cases there is sufficient rental income to pay part of the loss. However, in very few cases is the income or possibility of sale so good that no loss is to be expected . . . . properties which are self-sustaining are seldom subjected to foreclosure."

From these observations you can see that the holder of distressed property is facing a very serious situation. His losses may not be apparent to him when he first takes the property over; but it is only a question of time until such properties begin to eat into the other resources of the owner.
Notches Weaken Joists

DEFINITE information on the weakening effect of end notching in setting joists is made available through tests recently completed at the U. S. Forest Products Laboratory. End notching, or cutting out the lower corner of the joist, is often practiced in house construction in bringing floors to a desired level. That the joists are weakened in shear by so doing has of course been recognized, but customary calculations do not account for the full effect.

The tests showed that in cases where horizontal shear is the determining factor of strength—generally, where the ratio of unsupported span to depth is 12 or less—the notched joist is weaker than the part above the notch alone would be if the lower part were entirely cut away.

This very interesting finding is explained by the concentration of shearing and tensile stresses that occur at the sharp re-entrant angle of the notch. Figure the shearing strength of the part of the joist above the notch as though the lower part were not present. Then take away from this according to the depth of the notch; if the notch is one-fourth the total depth of joist, take away one-fourth—if one-third, take away one-third—if one-half, take away one-half, and so on.

Examples of the effect of notching are clearly seen in test figures on one series of 2 by 4's. When no notch was made, a load of 4,660 pounds was carried before failure. With a notch 40 per cent of the depth, 1,690 pounds was carried, and with a notch of half the depth, 1,188 pounds, just over one-fourth the load for the unnotched member.

Floors Without Nails

NEW floor-laying system that should do much to restore the popularity of the standard tongue and groove wood floors is coming into use, and has already been practically demonstrated in such buildings as the Travel and Transport Building at A Century of Progress, The House of Tomorrow, the hangar and administration building of American Airways at Chicago, and other structures.

The new floor system is a mechanical method for laying ordinary strip wood flooring without the use of nails, wood sleepers or mastic. A metal channel 1 1/4 inches wide by 5/16 inches high with overlapping top edges is used instead of wood sleepers. This channel is laid over the subfloor 12 inches or 16 inches on centers, in the same general manner as the old fashioned wood sleepers. Standard wood flooring is laid in the same way that a nailed floor would be laid, but instead of nails a cleverly designed metal clip is used. The carpenter slips these clips into the channels immediately ahead of the last board and drives them into place by driving up the next board. This forces the clips to bite into and over the tongue of one board, and imbed themselves in the groove of the other, thus securely locking both boards together and to the channel. Wood floors, thus laid, can be installed by a carpenter with the usual tools at a very rapid pace. The system can be used over any kind of subfloor and shrinkage cracks are uniform and small. Wood floors laid by this method, being free of nails and mastic, can be taken up when desired and the floor boards reused.
GEORGE B. BAER, president of the Cleveland Residential Builders’ League, and R. F. Goodnow, manager of the Building Arts Exhibit, examine plans for the new Home of Tomorrow being built for the Cleveland Renovize Exposition opening March 6.

O

N March 6 the building interests of Cleveland are embarking on a city-wide renovize campaign and exposition that has many interesting new features calculated to correct the weaknesses of similar campaigns of the past.

First of these is a renovize sales training school for builders, dealers and material salesmen. As all who have followed the course of modernizing drives in other cities know, it is the follow-up that counts. No matter how much ballyhoo is raised, it gets the building industry nowhere unless followed up by good selling by the acknowledged salesmen of the industry—the contractors and builders, “subs,” and the retail dealers.

The sales school meets every Monday night for eight weeks; three meetings will be held before the official opening of the Renovize Exposition March 6. It is possible the school will be continued throughout the summer, and thus far the meetings have been attended by from 150 to 200 each time.

Practical selling and merchandising details are brought out at these meetings, each one of which covers some subject in connection with renovizing as follows:


SECOND SCHOOL: “Exterior Renovizing Methods”; talks by J. S. Kelley, architect; Roy Crowell of Sherwin-Williams and others. Slides of good and bad exteriors were shown and sketches of redesigned houses made.

THIRD SCHOOL: “Renovizing Plumbing and Bathrooms.” A dramatic sketch on modern selling by Jack Moore, Crane Co., and George Caleb, Standard Sanitary. The old firm of Moore & Caleb, plumbers, after bewailing present conditions, suddenly takes on new life. In a spirited scene they overcome all the objections of a prospect and sell him a new bathroom as well as the renovizing of the old one in his house.

FOURTH SCHOOL: “Kitchen Renovizing”; practical data on kitchen layout and planning by “kitchen engineers” from General Electric Co. Illustrated by detailed drawings and sketches.

FIFTH SCHOOL: “Unfinished Attics”; how to sell renovizing of old attics by men who have had first hand experience in this work.

Other subjects include heating and ventilating, interior decoration, electric wiring and appliances. The schools inspire building men to greater and more effective sales efforts in the renovizing field. While many of the “teachers” are men from manufacturing firms, specific products are not discussed; a policy of “playing ball” and promoting the whole field is followed.

This spirit of promoting the entire field of renovizing for the good of all is strongly carried out. A united
New Feature of Renovizing Drive

building industry is behind the drive. The 38 groups and organizations actively engaged are shown in the chart on page 36. In this connection, Cleveland is fortunate in having an exceptionally fine common gathering place for the entire building industry in its Builders Exchange Building which houses the well known Building Arts Exhibit. With such a setting, the building industry has become very well organized, with many of the most important groups making their headquarters in the building. An important group, which in most cities is sadly lacking in organization, is the Residential Builders' League, of which George B. Baer is president.

Many building industry drives have fallen down for the single reason that the residential and small construction industry contractors and builders were not included and no attempt made to organize them and get them out working for the campaign, as they are now in Cleveland.

The Renovize Exposition will open with a great blaze of publicity, a speech by the Mayor and impressive ceremonies. Essentially, it consists of:

1. A city-wide demonstration, including the co-operation of department stores, banks and all retail establishments which will assist with the use of show windows, newspaper space and other advertising.
2. A program, taking up all phases of renovizing sectionally, beginning on Monday, March 5, 1934, and continuing—with morning and afternoon sessions—until Friday, March 9, 1934.
3. A comprehensive exposition of all types of materials and their application to the problems of renovizing, so displayed as to bring out their useful purpose visually.
4. Follow-up activities, including sales school, architectural clinic, continuing drive for renovizing work.

The Exposition is being sponsored by the Renovize Exposition Committee of the Cleveland Chapter of the American Institute of Architects, composed of Bloodgood Tuttle, chairman; James H. Duthie, secretary; and George R. Harris, H. D. Hughes and Antonio di Nardo. A General Committee made up of representatives of other building groups and organizations co-operates in the conduct of the work, which is exceptionally well organized and planned.

Of outstanding importance is the fact that such groups as the Apartment Owners Association, Hotel and Restaurant Association, and Building Owners and Managers Association have agreed to take part and are bringing their entire memberships to the meetings. The apartment group has 500 members owning some 2500 properties.

The program of meetings, as described in (2) above takes up important types of renovizing which specially interested groups attend. This program of public meetings is not to be confused with the Sales School previously described. Bloodgood Tuttle, chairman of the Exposition Committee, in describing the program, emphasized the fact that everything will be vividly dramatized and visualized.

"We are not going to have a conference," he declared. "There will be no dull papers, statistics or set speeches."
We are going to make things interesting.

The method Mr. Tuttle described which will be used at the meetings to visualize to the public the methods and benefits of renovizing is very effective. A large drawing, wall size, will be used, and the speaker will first remove the objectionable architectural features and then draw in new ones. For example, at the Thursday meeting an old house built in 1890 will be renovized right before the eyes of the crowd.

Hanging on the stage will be a huge perspective drawing of the old house done in ink and charcoal. The speaker will say, "Now the first things to come off are these funny dormers"; he will then take his art gum eraser and rub off the dormers. Then off will go the ugly cornice, the old gimmeracks, the ancient trim. After the old fashioned and objectionable parts have been removed, the speaker will then begin to show how the new additions should be added. He will draw in the modern roof, the new entrance, modern trim and cornices. By the time he finishes he will have produced a thoroughly modern, salable home; and the audience will know exactly how it can be done.

Apartment Men Active

Before and after pictures of various residences will be shown, both in pictures and in slides, and the many advantages of performing such work stressed. This procedure will be followed at all meetings, taking up the renovizing of all important types of buildings. At the 10 o'clock session on Tuesday, the modernizing of apartment houses will be taken up. All members of the Apartment Owners Association will be present. They will be shown, in the graphic and effective manner described above, just how an old apartment interior can be transformed. In addition, the financial value in getting tenants and holding them will be demonstrated. In talking to these people, practical, financially justified renovizing will be shown.

Similarly, the meeting Tuesday afternoon will be devoted to renovizing office and business structures, and all members of the Building Owners and Managers Association will be present. On Wednesday morning the members of the Hotel and Restaurant Association will be told how to renovize their properties, using the same practical, visual method. Other subjects to be covered at the public meetings include:

- Renovizing industrial plants.
- Renovizing home interiors.
- Renovizing the kitchen.
- Bathroom renovizing and improvement.
- Landscape renovizing.
- Lighting, heating, electrical, etc.

A feature of the Exposition that is new and interesting is the setting up of an Architectural Clinic to be conducted by the members of the Cleveland Chapter of the A. I. A. Well known practicing architects will be available through this clinic to the general public for conferences and advice. Property owners may phone the clinic and ask for a survey of their property by an architect, who will call and inspect the property and report what it needs. A small fee (not yet decided upon but indicated to be $5.00) will be charged for this inspection.

The Architectural Clinic will, if successful, be a continuing activity after the Exposition. It is thought that much work will be stimulated by this Clinic, for an architect, called out by a property owner who has, say, a leaky roof, will recommend other needed work and possibly the complete remodeling of the property if needed and practicable. Where extensive architectural services are required, an architect will be provided at the usual fee. In cases where no such services are needed, the clinic will take bids on the work from members of the affiliated groups, such as the Residential Builders' League, subcontractors, etc. Such work will be rotated among members of the various organizations.

It should be noted that the Cleveland drive is, as its name tells, an Exposition. Prominent in importance are the extensive displays of materials, equipment and building products that go into renovizing. Displays of all kinds are being featured in the Building Arts Exhibit where thousands of people will flock to see the latest in building lines. It is reported that material manufacturers contributed $5,000 to support of the exposition.
 Builders Now Under Code Authority

President Roosevelt signs Construction Code and General Contractors' Divisional Code

Bid Peddling outlawed—40 cents per hour set as minimum wage

Every job must be registered; fee $2.00 minimum up to 1-10 of 1% of contract

By J. W. FOLLIN
Secretary Construction Code Authority

The approval of Chapter I of the Construction Code by President Roosevelt, on January 31, provides self-government and regulation under governmental auspices of the extensive construction industry of the entire United States which normally performs through more than 150,000 employers a volume of construction work ranging from five billion to ten billion dollars a year, using 2,500,000 employees. Chapter I, which is usually referred to as the basic code, is analogous to the keystone in an arch in that it ties together the various divisional codes and consolidates the construction industry into a unit for the collective and individual benefit of its functional divisions.

Other chapters of the Construction Code are being given the finishing touches before approval by NRA. Chapter II—General Contractors Division, has been approved by NRA and secured the President's signature on Feb. 17. This latter chapter provides for separate subdivisions covering building construction, highway construction and railroad and other heavy construction, each administered separately. Other chapters that are approaching completion include Painting, Wallpapering and Decorating Division, Marble Contracting Division, Heating, Piping and Air Conditioning Division, Tile Contracting Division, Elevator Manufacturing Division, Roofing and Sheet Metal Contractors Division, Mason Contractors Division, Contracting and Retail Plumbing Division, Plastering Division, and Electrical Contracting Division.

Three Phases of Negotiating Construction Code

Negotiation of the Construction Code was marked by three more or less clearly defined stages. The first stage was development and approval of a unified or integrated construction industry. In the latter part of July, 1933 the Construction League of the United States, founded in 1931 and comprising national professional and trade associations in the construction industry, undertook to draft a basic code for all construction and to coordinate the codes for divisional groups. Such a basic code and nine of the supplemental codes thereto were heard at public hearing on September 6, 1933 and others followed during the next sixty days. On November 20 the public hearings were reconvened to test the representation of the sponsoring organizations to present a unified code for construction, as against the protest that there be as many codes for construction as there are logical divisions of the industry or that they be placed in two groups, one for

THE CONSTRUCTION CODE AUTHORITY

Officers: (1) Stephen F. Voorhees, Chairman; (2) John P. Hogan, Vice-Chairman; (3) F. P. Byington, Treasurer; (4) J. W. Follin, Secretary.

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E. M. Craig, President, American Construction Council, Chicago

Sponsors
Construction League of the United States
American Institute of Architects
American Society of Civil Engineers
Associated General Contractors of America
Building Construction
Highway Construction
Railroad Construction
Public Works and other types of Construction
International Society of Master Painters and Decorators, Inc.
Heating, Piping and Air Conditioning Contractors National Association
Cement-Gun Contractors Association
National Building Granite Quarries Association
Contracting Plasterers International Association
Tile and Mantel Contractors Association of America
National Association of Master Plumbers of the United States
National Elevator Manufacturing Industry
Mason Contractors Association of United States and Canada
American Road Builders Association
National Association of Master Framing and Lathing Contractors
Associated Contractors National Association
National Association of Building Trades Employers
National Association of Builders Exchanges
American Construction Council
Roofing and Sheet Metal Industries Conference
building construction and the other for heavy or open construction. This reconvened public hearing definitely established the unification of the industry, and at its conclusion a conference committee was appointed by the Administrator to iron out the points still at issue in the content of the code.

The second stage involved the development of adequate provisions for the enforcement of standards of wages, hours of labor, and other conditions of employment mutually agreed upon in a locality, region, or in the entire United States, in any of the divisions of the industry, and as a result of bona fide collective bargaining. The conferences developed a most ingenious plan, whereby the employer not conforming with such standards is called before a special complaint board and charged with unfair competition, and the burden is thrown upon the non-conforming employer. For years, only the signatories to an agreement could be held to its provisions; the code permits the binding of the non-signatory if maintaining unfair competition.

The construction code, now tightly unified into a single document wherein the supplementary divisional codes become chapters following the basic code or chapter of general provisions, went to the President for approval on December 22. It was returned to NRA practically a month later, following a conference granted Labor officials by the President.

Negotiation then entered the third phase—that of developing provisions for adequate industrial relations and the perfecting of the divisional chapters. A National Planning and Adjustment Board, comprising ten employer and ten employee representatives with an impartial chairman, is created to hear and determine disputes concerning wages, hours and other working conditions referred to it by all parties in interest. It is also charged with the planning and development of policies that relate to the promotion of better relations between employers and employees and the furtherance of other matters of mutual interest. This Planning and Adjustment Board is further defined as the agency to which interested parties may ask approval of increasing the maximum work week per employee of 40 hours to as high as 48 hours on remote and inaccessible projects, as well as determination where employees desiring to share work request reduction of the standard 40-hour week per employee in any division of the industry, and agreement has not been reached with their employers.

**General Contents of Code**

Chapter I of the code approved by the President on January 31 becomes effective on March 2. It provides a broad definition under which the industry is unified; to wit, the designing and constructing of building structures, including modifications thereof and fixed construction accessory thereto intended for use as shelter, and of other fixed structures and improvements and modifications thereof intended for use in industry, commerce, sanitation, transportation, communication, flood control, power development, reclamations, and other similar projects or services. It covers well the installing and the applying, including the assembling at the site, of manufactured parts and products incorporated in and to such structures. The code applies to the entire industry as above defined excluding contracts entered into prior to the effective date or operations undertaken in accordance with bona fide bids made not more than sixty days prior to the effective date.

Chapter I provides for mutual agreements for standards of hours of labor, rates of pay, and other conditions of employment in a locality, region, or the entire nation, made by collective bar- (Continued to page 60)

**Copies of Both THE Basic Construction Code and the General Contractors' Code may be obtained from J. W. Follin, Secretary, the Construction Code Authority, Willard Hotel, Washington, D. C. Copies are also obtainable from the Construction League of the United States, 1741 New York Avenue, N. W., Washington, D. C.**

American Builder, March 1934.

**Outline of Basic Construction Code**

**Following** is a résumé of the provisions of Chapter I of the Code of Fair Competition for the Construction Industry, the general provisions governing the entire industry, as issued by the Construction League.

*Article I—Application*, states that all construction work is to be done under the provisions of the Code, except operations undertaken in accordance with bona fide bids made not more than sixty days prior to the effective date, or contracts entered into prior to the effective date.

*Article II—Definitions*, fixes the scope of the industry for the purposes of this Code, and defines other terms used throughout. Article II also lists the 20 original sponsors of the Code, and provides that additional associations which sponsor chapters shall be included in the list.

*Article III—Hours, Wages, and Conditions of Employment*. Section I of this Article provides for the establishment of area agreements for wages, hours, and conditions of employment. Whenever the employer and employee groups of associations negotiating the agreement must be truly representative; the area may be a city, trade area, natural region, or any other type of locality defined in the agreement. The agreement so negotiated can in no way become binding upon members of another division or subdivision of the industry; for example, an agreement made between mason contractors and masons for building construction in no way binds masonry work on heavy engineering construction, such as dams. Separate agreements must be negotiated for any other divisions of the industry.

After these agreements are approved by the President, it is prima facie unfair competition for any employer in the area engaging in the type of work defined in the agreement, to violate the provisions of the agreement. Failure of such an employer to comply with the provisions of the agreement, after due notice and opportunity to be heard, is a violation of the Code.

In each division or subdivision of the industry the Administrator is to establish Boards to investigate and hear any complaints on noncompliance with the provisions of the agreement.

Whenever no such mutual agreement has been arrived at and approved, employers are required to pay not less than 40 cents per hour for unskilled labor. Forty hours is the maximum work week, but in certain cases a 48 hour week is permissible. Minimum rates of pay are established for accounting, office and clerical employees of from $12.00 to $15.00 per week, depending on the size of the city or area.

In case any of the provisions of this Article III conflict with a valid labor agreement in force on the effective date, or with standards set up by governmental agencies, any employer required to comply with such agreement or standard is not bound by conflicting provisions of this Article III.

A National Construction Planning and Adjustment Board is to be set up, consisting of both labor and employer representatives. The Board has as its purposes the development of broad policies, and the adjustment of differences on labor provisions when a case is voluntarily submitted to it. President Roosevelt's letter to Gen. Johnson in approving the Code suggests that one of the first duties of this Board be to study jurisdictional disputes.

*Article IV—Administration*. A Construction Code Authority is set up to consist of one representative of each of the sponsor organizations, with the Associated General Contractors appointing four—two for each division of general contracting.

The Construction Code Authority is empowered to make surveys and investigations, collect statistics, set up or recognize existing agencies to carry out its functions; propose modifications or amendments, administer the Code in any division for which no chapter has been approved and the Authority may also require the registration of construction work or services in excess of $2,000.

Divisional Code Authorities to administer the Code within divisions of the industry are provided, with like powers and duties as the Construction Code Authority.

*Article V—Appeals*. An Appeals Board is provided to hear complaints which cannot be settled in divisions of the industry.

(Continued to page 64)
Full Text of Gen. Contractors' Code

Chapter II of Construction Industry Code Approved on Feb. 17 by President Roosevelt; Effective March 19

Article I.—Definitions.

Section 1.—A General Contractor.

The term "general contractor" is hereby defined to mean without limitation any individual, partnership, association, trust, trustee, trustee in bankruptcy, receiver, corporation or agency which undertakes, whether by formal contract or otherwise, to direct, superintend, coordinate and execute either directly or through others, the work of constructing, substantially in its entirety, any fixed structural or physical improvement, or a modification thereof, or an addition or repair thereto, excluding any such operation aggregating in its entirety less than the sum of $1,000.00.

It is recognized that the function of the architect or professional engineer is to design or plan construction projects and acting in his professional capacity to supervise the execution thereof on behalf of the owner. Such architects or professional engineers in the performance of their normal and customary functions shall not be referred to be included in the foregoing definition of a general contractor.

Section 2.—Subdivision.

The term "Subdivision of the General Contractors Division of the Industry", or "subdivision" shall mean a defined section of this division, established for administration purposes. Without limitation upon any additional subdivisions, the subdivisions which shall be established and defined in Sub-Chapters II A, II B and II C heretofore are:

Chapter II A.—Building Contractors Subdivision.

II B.—Heavy Construction and Railroad Contractors Subdivision.

II C.—Highway Contractors Subdivision.

The subdivisions under this chapter may in their respective sub-chapters amplify and expand the provisions of this Code, and the same, when approved by the Administrator, shall apply to the respective subdivisions so proposing the same, with the same force and effect as any other provisions of this Code.

Section 3.—Association.

The term "Association" as used herein shall mean The Associated General Contractors of America.

Section 4.—Sub-contractor.

The term "sub-contractor" as used herein shall mean anyone other than an employee who enters into a contract for the performance of an act with the General Contractor who has already contracted or otherwise arranged for its performance.

Article II.—Administration.

To further effectuate the policies of the Act and to administer this Code within the General Contractors Division and its subdivisions there shall be established a Divisional Code Authority for General Contractors as provided herein.

A. Divisional Code Authority

Section 1.—Constituency.

The Divisional Code Authority for General Contractors intended to be "The Divisional Code Authority," shall be composed of seventeen (17) members, twelve (12) of whom shall be appointed annually by the Executive Committee of the Association from its Board of Governors and/or its Advisory Board, and each member so appointed shall serve until the new annual Executive Committee of the Association shall reappoint him or appoint his successor. The twelve (12) members so appointed shall appoint to the Divisional Code Authority five (5) additional persons to be approved by the Administrator engaged in the business of general contracting who are not at the time of selection representative of or responsible to members of the Association and each of the five (5) members so appointed shall serve until he is so reappointed or his successor selected, or until he or his successor shall be selected by the nonmembers of the Association pursuant to a method of selection satisfactory to and approved by the Administrator.

Section 2.—Powers and Duties.

The Divisional Code Authority shall have, in addition to the powers and duties conferred upon it by Chapter I thereof, the following powers and duties applicable to the General Contractors Division.

(a) Its members or its authorized representatives may upon request attend meetings of any administrative agency established for any subdivision.

(b) It is authorized upon the supervising of and in cooperation with the Construction Code Authority in the exercise of the power conferred upon it in Section 2 (d) of Article IV A of Chapter I to require the registration in such manner as it may deem appropriate of all construction work undertaken by general contractors as herein defined exceeding two thousand dollars ($2,000.00) in value, and, in order to defray the expenses of such registration, of the collection of the reports and the data herein required and of the administration of this code, to charge and collect as a registration fee not to exceed one hundredth of one per cent of the value of the work. From the funds so collected, The Divisional Code Authority shall defray its expenses, and the general contractors' proportionate share of the expenses of the Construction Code Authority, in administering this Code, and make an equitable apportionment between the Divisional Code Authority and the subcommittee or agencies as shall cooperate in procuring the registration of such work or services.

B. Subdivisional Administrative Committee or Agencies

Section 1.—Procedure for Establishing.

There shall be established for each subdivision of the General Contractors Division an Administrative Committee or Agency which shall, within the limitations provided herein, administer within such subdivision the provisions of this Code applicable specifically to such subdivision. The procedure for establishing each such administrative committee or agency shall be defined in the sub-chapter pertaining to that subdivision of the General Contractors Division.

Section 2.—Powers and Duties.

Each such subdivisional administrative committee or agency shall have in addition to such duties and powers as the Divisional Code Authority may delegate, the following powers and duties:

(a) It may establish rules and regulations for the conduct of its affairs and may appoint such committees, agencies and representatives and delegate to them such of its powers and duties as it may deem necessary for the proper discharge of its functions hereunder.

(b) It shall cooperate with the Divisional Code Authority in making investigations as to the functioning and observance of this Code within its subdivision at its own instance or on complaint of any person affected, and shall collect from members of the subdivision and compile and furnish to the Divisional Code Authority, any reports and other information required under the Act.

(c) It shall study the trade practice provisions applicable to its own subdivision, and the operation thereof, and may make such recommendations to the Divisional Code Authority as it deems desirable for modification or addition thereto. Such recommendations, upon approval of the Administrator after such notice and hearing as he may prescribe, shall become a part of this Code and have full force and effect as provisions hereof.

(d) It shall receive and so far as possible adjust all complaints as to trade practices between members of its subdivision in the operation of the provisions of this Code applicable to that subdivision.
(e) It may prescribe bidding rules, requiring the inclusion in each bid of all direct and indirect costs properly defined, and methods for administering such rules, and such rules and methods, when approved by the Administrator, shall apply to the members of its subdivision.

Article III.—Appeals.

Section 1.—Local Adjustment.

Controversies or complaints within any subdivision shall be fully determined and adjusted locally as far as practicable, otherwise by the administrative committee or agency established for such division.

Section 2.—Appeal to Divisional Authority.

Any party directly affected shall have the right of appeal to the Divisional Code Authority and of a prompt hearing and decision, under such rules of procedure and proper charges to cover costs of investigation and hearing as it may prescribe, in respect of any decision, rule, regulation, order or finding made by any subdivision administrative committee or agency.

Section 3.—Power of Authority.

The Divisional Code Authority shall have original jurisdiction of all controversies affecting more than one subdivision of General Contractors.

Article IV.—Practices as to Submitting Bids.

Section 1.—Bids by General Contractors.

In order that whenever contracts are to be let by competitive bidding the terms of the contract shall be such as to insure fair competition, a general contractor, in submitting bids for the construction or improvement of either private or public works, shall be governed by the following provisions:

(a) All bids shall be in writing, signed by an authorized representative of the bidder. Alternate proposals may be submitted with the original bid, providing the same privilege is extended to all bidders.

(b) A general contractor shall not take advantage in his bid of any special privilege, favor or understanding had with him by persons in control of the award. This, however, shall not prevent any such competitor, even though not the lowest bidder, from taking such contract, providing the award is made at his original competitive price, nor shall it prevent any contractor from accepting the award of such contract at any price where no competitive bids are taken.

(c) A general contractor shall not revise his bid after bids have been opened in order to improve his position with the owner. Bona fide mistakes discovered after the opening of bids shall be grounds for withdrawal only.

(d) Standards of accounting, cost keeping and estimating may be prescribed by subdivisions for the purpose of determining a fair price for services or products and systems for the improvement of such information as to his current financial position, using the standard questionnaire forms developed and approved by and available through the Joint Conference on Construction Practices, Washington, D.C., or other forms approved or prescribed by the Administrator, and may request equivalent information from the owner.

Section 3.—Records and Accounts.

A general contractor shall maintain and employ an adequate system of records and accounts, which system shall clearly show the allocation as to each specific project of all funds received or disbursed on account thereof.

Section 4.—Contractual Agreements.

The following bases of contractual agreements are recognized as fair trade practices: guaranteed price, cost of the work plus a fee, unit price, lump sum, and other contractual methods not inimical to the public interest, providing that the regulations contained in this Code of Fair Competition are met.

Section 5.—Prohibited Agreements.

A general contractor shall not enter into any agreement or understanding prior to the award of a contract where such award is made as a result of competitive bidding by which agreement or understanding he agrees to accept a lesser amount for his services than the amount stated in his bid.

Section 6.—Disputes.

A general contractor shall be ready and willing to settle disputed matters promptly. Where arbitration as a method of settling disputed matters is agreed upon, the rules of procedure as established by the American Arbitration Association shall govern, except as otherwise required by law or contract. Payment, exceeding that sufficient to cover the amount in dispute, shall not be withheld from the parties affected.

Section 7.—Payments by General Contractor.

Funds received by a general contractor for construction work performed or to be performed by him shall be accepted and applied first for the purpose of paying amounts due from him to others in respect of any portion of such work including amounts due to employees, material men, sub-contractors and others. The provisions shall not be construed to require a general contractor to keep in separate bank accounts or deposits the funds received under separate contracts, provided that he shall maintain books of accounts which shall clearly show the allocation to each and every contract of the funds deposited in his general or special bank account or accounts, and he shall devote the final payments to him from the owner within ten days after the receipt thereof, to the payment of the balances due from him to such employees, material men, sub-contractors and others, provided satisfactory evidence is furnished showing that all outstanding claims against such parties, for which the general contractor would otherwise be liable, have been fully satisfied or provided for. Earlier payments and/or greater amounts may be mutually agreed upon.

Nothing in this section shall supersede any Federal, State or local laws imposing more stringent requirements with respect to matters referred to herein.

Section 8.—Rebates.

A general contractor shall not give or accept rebates, refunds, allowances, unearned discounts or special services to or from sub-contractors, material vendors or others which are not extended under like terms and conditions to or by other sub-contractors, material vendors and others of equal credit rating.

Section 9.—Financing.

A general contractor shall not permit or require sub-contractors or material vendors to finance his accounts unless such arrangement is expressly provided for in the original contract between the parties.

Section 10.—Waiver of Legal Rights.

A general contractor shall promptly inform sub-contractors with whom he is contracting of any waiver of lien rights executed by the general contractor. (Continued to page 64)
The pleasing appearance of this home, the simple charm and the convenient arrangements of comfort for just a couple or a family of five, are features worthy of careful study. The two rear chambers which can be added for future use will not affect nor change the attractive front elevation. An economical and practical design for any community.

**ORIGINAL HOME**

3 ROOMS

SIZE 26'0" x 26'0"

Here is the inviting original home, "adelectful English cottage," with three efficient and livable rooms. The living room to be used at night as a large bed room. The floor plans show how it may be expanded into a house of five rooms.

**FUTURE CHAMBERS**

13'0" x 9'0"

**FUTURE CHAMBER**

19'0" x 9'0"

**DINETTE**

16'0" x 8'3"

**LIVING ROOM**

15'0" x 12'0"

**FLOOR PLAN**

Perspective elevation illustrating the completed home with two rear chambers.

**NO. 16-H-G**

HOMES THAT GROW

N.P.S.

Cost Key of original three room house is 870-111-606-27-13-11. Cost Key of five room house if built originally is 1,215-143-926-40-17-16.
GEORGE WASHINGTON AND THOMAS JEFFERSON built their homes in the same Colonial tradition as was followed in the design of this house, only theirs were stately mansions while this is a small, compact, modern cottage.

THE FLOOR PLANS are compact and convenient, and provide much more "livability" per square foot than the expensive mansions of days gone by. This is an attractive modern home in keeping with the needs of today. Cost Key is 1.647—134—1103—46—20—19.

COLONIAL DETAILS ARE INTERESTINGLY CARRIED OUT in this attractive cottage. The wide white siding and large screened porch contribute to its success. It is an inexpensive design with much charm.
Built in 1933 According to
Latest “Engineered” Plans

THIS IS A THOROUGHLY MODERN HOME built at
Manitowoc, Wis., late in 1933 from plans supplied by
the Curtis Companies Service Bureau of Clinton, Ia.
According to the Schmitt Lumber Co. of Manitowoc,
the cost was $4,300 exclusive of lot. An architect’s
drawing of the design was published in American
Builder in December, 1933.

BUILT ACCORDING TO ENGINEERED PLANS, the
following specifications were included: common brick
veneer; full basement, with masonry partitions; cement
floor throughout; insulation on sidewalls 1/2”, ceiling
1”; inside partitions gypsum board base; tile floor in
vestibule and mantel hearth; tile floor and walls 4’ in
bathroom; all woodwork enameled; extra rooms in
attic; rear entrance 7x7 with closet; garage complete,
12x18; front walks from house to street, driveway ribbons,
walk from rear door to driveway; sewers and
water to street; hot water heater.

Cost Key without attic rooms
THESE SUMMER COTTAGES designed by White and Weber, Chicago architects, show how attractive inexpensive summer homes of this type can be made at low cost when proper attention is paid to architectural design. Most summer cottages "just grow" without benefit of architectural advice, and the result is ugly, boxlike structures. The four designs shown on these pages are inexpensive and yet very attractive.

Four Summer Cottages
Of Charming Design

ALTHOUGH VERY SMALL, the cottage below is pleasing in appearance and has the important features of a good summer home. The screened porch and awning-covered veranda are important and well handled.
THE LARGE LIVING ROOM AND EQUALLY LARGE SCREENED PORCH are features of this unusually well planned summer home. The kitchen opens onto one end of the porch which is used for eating. Bay windows are attractive.

ANOTHER good looking summer home by Architects White and Weber of Chicago. The four shown are typical of a group proposed for a large summer colony in Michigan. Wood shingles, wide siding and local field stone are used.
THE HOUSE OF THE MONTH

4-Room Modern Low Cost Colonial Home

William P. Cain, Architect
The Homeland Co., New York, Builders

Cost Key is 1.039—112—704—30—11—11

DESIGNED FOR TODAY'S MARKET, this little house is worthy of careful study for it is a type greatly in demand by home owners. Carefully drawn details are given on the opposite page.

HERE IS A THOROUGHLY MODERN, low cost dwelling of the type so much needed by people today. It is designed throughout with an eye to beauty, with its wide siding, field stone chimney, green shutters, window boxes and artistically handled entranceway. It is provided with steam heat, tile bath, kitchen cabinets and 7/8 inch oak floors over heavy subfloor.

AN INTERESTING modern feature is the placing of the kitchen towards the street while the attractive porch is at the rear overlooking a beautiful valley. The rooms are necessarily small but the arrangement is good and all space fully used.
DETALIED DRAWINGS PREPARED ACCURATELY to scale. Small modern Colonial home designed and built last year by the Homeland Company of New York, well known builders who are in touch with current home demand. Architectural details are carefully worked out and are worthy of study.
What Lumber Can Do in Modernizing

By ERNEST L. KURTH
Chairman, Trade Promotion Committee
Southern Pine Association

In view of the virtual stagnation of private construction in the United States during the last five years, it is not surprising that there has been a steadily increasing shortage of suitable housing and of proper quarters for commercial and industrial enterprises, which today has attained amazing proportions. Lack of private building operations has not only brought discomfort and inconvenience to the people, but has added millions of men to the vast army of unemployed and augmented the national distress.

Conservative estimates place the actual shortage of homes today at one million units, and in addition ten million dwellings in urgent need of maintenance repairs, alterations and remodeling. In fact, according to estimates from the best informed sources, minor or major repairs, alterations or modernization are needed by 90 percent of the dwellings in the United States.

For the last five years at least, American homeowners in virtually every community have been imbued with a false concept of economy and fear as to what the future might hold for them. They have deliberately deferred making any expenditure on their homes even though it was necessary to maintain them in decent habitable condition. In consequence millions of homes are in a sorry state. Millions of others, not so badly deteriorated, require alterations, remodeling or modernizing in order to bring them up to the American standards of comfort, convenience and appearance.

Improvement of Commercial Property

There are tremendous possibilities for providing employment and stimulating business activity in the capital goods industry—and in all other lines—through the repair and improvement of residential property alone. But students of the country's construction needs assert that there is an almost equally large field in the improvement of commercial and industrial properties, which have been permitted to deteriorate for several years or which require repairs and alterations to put them in safe and serviceable condition from the viewpoints of maintenance, convenience and appearance. In virtually every community in the United States, a great number of homes and commercial buildings have fallen behind the times in efficiency, comfort, serviceability and appearance.

In the past some manufacturers of building materials have been inclined to neglect repairs and modernization as a source of profitable business, holding that the average repair or modernizing job consumes only a small quantity of any materials, and such projects have not warranted their serious consideration. However, this has not been the attitude of the lumber industry. Lumber manufacturers for years have encouraged and given every assistance to repair and modernizing campaigns, realizing that although these jobs individually may require only a small amount of lumber, yet if properly stimulated in the various communities, they afford in the aggregate a desirable market for their product.

At this time, considering the immense volume of repair and modernization of dwellings and commercial properties that is needed, the lumber industry is keenly appreciative of the opportunities afforded for lumber. We know that the southern pine manufactur-
ers particularly are fully awake to the possibilities for an active market for longleaf and shortleaf southern pine offered through repair and modernization on a nationwide scale. And in the opinion of southern pine manufacturers, any nation-wide campaign for adequate housing would be incomplete unless repair and modernization were made an important part of such a movement.

Numerous Uses for Lumber

In many communities there may be little shortage of housing units and only a small amount of new building would suffice. But in all communities throughout the country there is a well defined need for "better housing" and a pressing need for proper maintenance of existing structures of all classes.

A cursory examination of the approved "check lists" for repair and improvement of homes, issued by the United States Department of Commerce and other agencies, discloses numerous purposes for which lumber would be in demand. Among the many such jobs for which longleaf and shortleaf southern pine is especially recommended because of its specific qualities are:

- Strengthening or replacing house sills, columns, joists, rafters, and floors; applying bridging between the floor joists, fire stopping around the sills in the basement and between the studs at the floorline in the attic. In the basement for providing outside entrance and stairs, inclosing inside stairway, railing for basement stairway, ceiling the side-walls and roof,partitioning off rooms for recreation or children's play, storage bins, fruit closet, shelves, work-bench, etc. and laying basement floor.

For improvements to the interior of the house southern pine is recommended for laying new floors over old; installing partitions to provide additional rooms, closets, dining alcove or breakfast nook; replacing worn-out treads on stairs, old stairway posts, railings and banisters; for baseboards and picture moulding; for new linen closet, soiled clothes chute, built-in book-cases, cabinets, cupboards, shelving; window and fireplace seats; additional windows or doors in various rooms for better lighting or ventilation; shutters, storm windows and doors; for utilizing the attic by laying finished floors, ceiling the sidewalls and ceiling and partitioning off additional rooms.

Lumber for Exterior Improvements

Among the many uses for southern pine in home improvement on the exterior and about the grounds are for building a new garage; building attractive lattice fence around the premises; replacing worn-out or damaged siding; building additional porches, sun-parlor or sleeping porch; replacing worn porch floors, columns and railings; installing new doorways or entrances to home; beautifying and making more serviceable the lawn and grounds by building pergolas, trellises, arbors, entrance arches, driveway arches, summer house, garden seats, benches around trees; placing lattice panels on house for climbing flowers and vines; providing flower boxes for windows and porches, etc.

These suggestions for uses of lumber in urban homes apply equally to improvement of farm dwellings, and in addition southern pine is recommended for new barns, milk-houses; hog and poultry houses, implement sheds, cattle shelters, silos, corn ribs, granaries, greenhouses, fences, and other structures.

A very considerable market is afforded for lumber of the heavier type—timbers, dimension, planking, etc. as well as for the better grades of finish lumber, in the repair and modernizing of stores, offices, factories and industrial plants. Maintenance repairs which require lumber, as well as improvements making for greater convenience and attractive appearance, are needed by millions of commercial structures.
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.

Template for Jack Rafters

I AM sending a plan of a template I use when I cut jack rafters. It can be used for marking common rafters too, as it has the plumb and tail cuts. The 1"x6" board is cut off square at the back end so it can be used for marking square across a rafter if necessary. The advantage of this template over one published a few years ago is that you can mark plumb and side cuts without moving template around.—EDWIN E. LARSON, Nekoosa, Wis.

Rig for Cutting Plaster

WHEN cutting for a ceiling register, in a wood lath, plastered ceiling, I found this rig very helpful, as you cannot break the plaster very easily beyond the frame opening. The frame I put together with four corrugated fasteners. Then I wedge it, with two supports, in position under the ceiling and cut the lath and plaster. When the frame is removed, it leaves a clean cut hole for the register.—T. W. JUDSON, Builder and Contractor, Winsted, Conn.

Handy Clamp for Doors

THIS is a very handy clamp I have made which I use for holding doors or sash while I am working on them. It is light and easy to take with you, and yet very good. In regard to my drawing, I have drawn in dotted lines to show how the clamp opens up when weight is released; also sketch of bolt brazed on at one end of spring, which I cut from an old handsaw. The blade should be 1" wide and the bolt 3/4". I have used this clamp for a number of years and it is very handy.—H. B. BEALL, Builder, Reno, Nev.

Safety Wire for Ladders

LONG ladders can be prevented from slipping when working on smooth concrete or wooden surfaces, or on soft, loose earth, with the aid of the simple, twisted wire safety prong illustrated in my photograph. The prong is 6 inches long and is fashioned from a piece of heavy fence wire. The wire is twisted to fashion an eye at one end and filed to a sharp point at the other end. The prong is attached to the ladder leg with a heavy wood screw through the twisted eye. An iron washer under the screw head holds the eye securely in place. Another screw is placed in line with the screw holding the eye and the front point of the ladder foot, so the center of the safety prong will rest on it when the ladder is being used on a smooth surface. When working on earth, the safety prong is forced into the ground in a vertical position. When not in use, the prong is swung upward and over, so it will rest on the top of the center screw in an out-of-the-way position. Safety prongs of this sort should be installed on both legs of the ladder.—RAY J. MARRAN, Kansas City, Mo.
**Metal Sandpaper Holder**

SOME time ago I had a job which required quite a bit of sandpapering. As the job did not warrant a machine, I devised a sandpaper holder, a sketch of which I am enclosing. It is made of a piece of 20 gauge iron which the tinsmith bent up for me. It is easily made and very helpful. I hope this can be of service to others in our trade.—DANIEL D. SHELBY, Brooklyn, N. Y.

Fashioned from 20 gauge iron for extensive sanding.

**$14 Incinerator**

WE are sending herewith a job pointer which has been used by many contractors locally, is reasonable and easy to make. Several contractors here have been giving these incinerators away to their clients. The photograph which we enclose is the same as our blueprint and is being used in a bungalow court to burn all the papers, leaves, rubbish and whatever else they may have to burn, and is doing a very good job for eighteen people. If you will compare the costs with other incinerators, you will find these features: it holds much more rubbish, will not crack, will last more than five years, is necessary to clean only once a year, material cost $6.00, labor cost $8.00. The plan is self explanatory. The metal used is No. 18 steel. It can be made at home by any man, except rolling, which must be done in a roll, and this we have done for 80 cents for rolling all the parts. Set on bricks when used as per photograph. The material used is 2 sheets No. 18—36" x 120" steel; 1 box ½" x ½ RH stone bolts; ½ box No. 3 rivets; 1 sq. ft. screen; 3-4" hinges; 1 catch, 1 handle and 1 draw band made from straps on iron bundles. We make these for $14.00.—FRANK E. HAWKINS, Sheet Metal Contractor, Los Angeles, Calif.

[Sketch of incinerator]

**Access Door for Tubs**

I AM submitting a short cut—an original, convenient, economical access door for built-in bath tubs. An inexpensive piece of plywood saves the price of a cupboard door, hardware, and considerable labor.

To trim opening, use regular window or door trim, simply rebate the back and opening edge of casings to receive plywood panel. Nail side casings in place, rebate head casing and secure plywood panel to head casing with three or four short wood screws from the back. Use head casing as a means of lifting or removing panel when necessary.—H. M. PHELPS, Contractor and Builder, Fulton, N. Y.

**Wire Tie for Subsill**

ILLUSTRATED in the sketch above is my method of solidly fastening a subsill, particularly a long one, under a wide frame in a masonry wall. After the 2 by 4 is all bricked in, spike one end of wire to it and fasten other end to a spike in a lower brick joint and pull it tight with still a third nail. Wire and nails will be covered by plastering.—PAUL TIFFIN, Ferguson, Mo.

[Sketch of wire tie for subsill]
NEW PRODUCTS

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

New Brick Wall Covering

A NEW brick veneer product that can be attached to frame, stucco or other types of construction and is especially suited for low cost modernizing of old exteriors has recently been put on the market.

This is a scientific combination of kiln burned clay brick, waterproof cement and rustless galvanized iron. Its total thickness applied to a wall is only 1½ inches, and its weight per square foot is 6 pounds. The application consists first of covering the entire surface with a waterproof building paper. Secondly, corrugated galvanized iron sheets are attached to the wall by means of slater's nails driven into the studding. Thirdly, the corrugated-keystone sheets are plastered with waterproof cement. Lastly, the dovetail interlocking brick are pushed into the mortar. They become locked in place when the cement hardens and keys it to the metal sheets. The keystone construction locks each brick four times to the metal, producing a rigid permanent brick exterior.

Bricks are locked in place to metal backing.

Roll Rubber Flooring

NEW rubber flooring manufactured in roll form, simplifying the problem of floor covering for homes at reasonable cost, has been announced by one of the largest tire and rubber companies.

This new flooring, placed on the market last month after years of development and test work, is made of rubber and compounds and is manufactured in rolls one yard wide, 25 to 30 yards in length and one-eighth inch in thickness. A fabric insert in the product precludes creeping or stretching under foot traffic.

Eleven attractive colors are available. This new material presents a smooth, resilient finish, is easily kept clean, offers resistance to the ordinary staining agents, and in exhaustive tests has met the demands of varying foot traffic conditions.

Pop-up Lavatory Waste

A notable departure from conventional types of lavatory wastes is embodied in a new pop-up waste just placed before the plumbing trade by a Chicago firm. This new device gets entirely away from the rigid rod type of pop-up waste, by employing instead a unique application of the flexible rod principle. A strong bronze wire, directly connecting the knob with the stopper, operates through a close-coiled brass spring which serves as a housing. This spring provides an element of elasticity to the shaft, so that, in the event of the stopper being arbitrarily held down, the spring expands sufficiently to absorb the action of the plunger wire. The stopper is non-turning, free and rapid escape of water when the waste is opened is assured.

Metal Scaffold Joints

NO NAILS, bolts or screws are required to build horses or trestles with a new type of metal joint now on the market. The metal joints make a safe, low cost trestle, saw horse, under-staging or scaffolding and the only labor required for their erection is a few blows with a hammer. They can be taken apart and stored without wasting space.

At left is shown new metal joints for any size horse or trestle.

Pop-up waste is operated by flexible bronze wire.
The biggest change in home design

is in the Windows

Builders are capitalizing on a decided trend toward more light, more air... more GLASS

As America comes back to life... it comes back to LIGHT, as well. People want new homes because they see there's something new in home design. Wide-awake builders are jumping at this chance to quicken a prospect's decision to build. They are talking about all the new things made possible by the greatly increased use of glass... and about the quality of the glass they will use in following out this modern trend. Usually, it is the products of Libbey-Owens-Ford to which they refer.

Libbey · Owens · Ford

Quality Glass
NEWS—building activities of the month

Prefabricated Lumber House

The first home of a series to be erected throughout the country, has just been built at 545-36th Avenue North, Seattle, Wash., by the Weyerhaeuser Timber Company, Tacoma, Wash., one of the nation's largest lumber producers. The home is of a novel modern design, constructed entirely of units prefabricated at lumber mills. It is one story, has a flat roof and contains an automatic heating and air conditioning unit.

Units fully manufactured and finished at the mill are used. The entire framework, all partitions, closets, doors and windows were first brought together at the mill and made into units. These units were transported to the site in the form of panels, which need only to be joined and tightened. A wedged U-bolt is used to fasten the wall units to adjacent units and to the floor and ceiling structure.

NEW LUMBER HOUSE built at Seattle, using prefabricated panel units constructed at the mill by the Weyerhaeuser Timber Company. House is modern throughout, low in cost, makes extensive use of plywood.

Residential Contracts Up

Residential building contracts for the first half of February, as reported by F. W. Dodge Corporation, were $8,654,100, indicating a total volume for February approximately 30 per cent greater than 1932. This increase carries on the January improvement. Residential contracts for January 1934 totaled $15,110,400, which is a marked increase over the January 1933 total of $11,950,900.

Release of Federal funds for financing home building is expected to encourage a large volume increase in home building and repairs in 1934.

"WE ARE AFRAID of the big bad wolf and are building this house of brick" is the statement on the sign on this new house being built by Charles W. Reed, contractor of St. Paul. He says it attracted much attention. It's a brick veneer job, though.

Real Estate Survey

COMPLETE lack of financing and a growing shortage in single-family dwellings is shown in the 22nd semi-annual survey of the real estate market in 273 cities reported Feb. 10 by the National Association of Real Estate Boards. The survey shows:

Appreciable percentage of cities in every section of the United States showing shortage of single-family dwellings. (This was not true six months ago.)

Shortages appearing in apartment space. This, as yet, in cities of under 100,000 population.

First sign of a check in the down tendency in rents. Up movement begun, both in residential and business space.

Indicated stoppage of the decline in real estate selling prices (although levels are still generally at maximum lows).

Absolute dearth of money supply continuing in every section and in every type of city.

Hackett Directs Housing Corporation

Col. Horatio R. Hackett of Chicago, a member of the architectural firm of Holabird and Root, was appointed general manager of the Public Works Emergency Housing Corporation on Feb. 14 by Secretary of the Interior Ickes. In commenting on this appointment, Secretary Ickes issued the following statement:

"He is an executive of wide experience in both business and construction. He is nationally recognized as an able architect as well as an engineer. He has an enviable war record and has gained distinction in the building construction field."

2,000 Ask for Homesteads

With only $25,000,000 available, the Subsistence Homestead Division of the Interior Department has had proposed to it projects which would cost four billion, 500 million, Secretary Ickes said Feb. 17.

The opportunity to live on a small farm and grow food while working in cities has brought in 2,000 separate applications for homesteads. These come from every state.

"Of the proposed projects," said M. L. Wilson, director of the Division, "a preliminary examination indicates that upwards of $750,000,000 in proposals have genuine merit which would entitle them to further study and consideration."

Three projects have recently been approved and are going ahead. One is for 70 garden homes on 300 acres of land near Wilmington, Del. Another is a project for 230 families on the Cumberland Plateau near Crossville, Tenn. The third calls for 350 homesteads near Houston, Texas.
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A Type and Style To Fit Every Job

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You will get a greater share of this year's roofing and re-roofing business if you know the sales-inviting features and extra values offered in the RU-BER-OID Line of Asphalt and Asbestos Shingles.

Inventive genius has found new ways to give you and your customers the famous RU-BER-OID quality with more beautiful colors and finishes and greater speed of application, in a complete line of shingles that enthuses the most discriminating taste and at a price range that invites sales.

Moreover, contractors selling RU-BER-OID re-roofing jobs find multiple sales opportunities in the RU-BER-OID Line—Asbestos-Cement Siding, Newtile for kitchen and baths, etc. Learn more about the sales opportunities of the RU-BER-OID Line. Clip and mail the coupon—while you're reading, NOW.

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Address
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BA-3-34
Home Building or CWA Mobs
(Continued from page 19)

are desirous of building their own homes, the lowest price indicated being $4,000, the highest, $30,000, and the average running in the $10,000-$20,000 bracket.

A survey made by Mayor Howard of University Heights, part of Greater Cleveland, covering 300 lot owners, resulted in approximately 75 contracts for homes ranging from $8,500 to $12,000.

A survey made in Greater Cleveland, including builders, real estate men, architects and others, indicates that approximately 1500 houses could be built within the next year, ranging from $5,000 to $30,000. (For further data on need and demand for new homes see February American Builder.)

Thus far there are no agencies, Governmental or otherwise, which are providing the funds necessary to finance either the repairs of existing structures or the construction of new homes. The system of Federal Savings and Loan institutions is, at the present time, inadequate. In the first place, there is not sufficient capital where building is needed most. The provision that the Government will invest $100,000 in each Savings and Loan Company is inadequate. These agencies will have difficulties providing any material assistance until the set-up is changed so that the Government will furnish much more capital than is provided in the present arrangement. If sufficient capital could be found in the City of Cleveland to provide enough building and loan associations with the $100,000 required for each association, there would be no need for seeking Governmental financing.

Duffy Bill Provides Way

Realizing the plight of this vast industry and its vital importance in connection with the national recovery program, James G. Caffrey, well known lawyer and Cleveland realtor, has drafted a plan and, together with associates of The Ohio Association of Real Estate Boards and The National Retail Lumber Dealers Association, presented it to Government officials early in December. This plan was acclaimed and endorsed by numerous local and national labor, material and building organizations interested in the rehabilitation of this industry. It was suggestive in character and comprehensive enough to include provisions for distribution as well as safeguards to insure repayment of loans.

There was no disposition to exclude existing institutions. Rather, the facts were taken as they were found and an attempt was made to remedy a situation rather than condemn any method or class of institution.

The Caffrey plan, which was incorporated in H. R. 6460 (The Duffy Bill), proposed that the Government provide and lend the money through the existing but non-functioning financial institutions such as banks, savings and loan associations, trust companies and other institutions engaged in mortgage business and also through the Federal Savings and Loan Companies. It also provided that these banks, savings and loan and insurance companies that have since claimed to have plenty of money, lend their own money under the provisions of this plan and such loans so made to be guaranteed as to principal and interest. The proponents of this plan further asked that if the existing organizations refused to co-operate in this plan for recovery, the Government make direct loans through the Home Owners' Loan Corporation or some other Federal agency.

This plan would enable these institutions to function, using Government money or temporarily their own money without any risks, and be compensated for being the conduit of this money. Could any proposal be safer, fairer or sounder? It would be impossible to anticipate requirements more thoroughly. It is inconceivable to the writer why the existing financial institutions did not put their shoulders behind this movement, thereby helping themselves as well as putting these 5,000,000 men back to work and this country back on its feet, triumphant over the depression.

The Duffy Bill has been presented to Congress and referred to the Committee on Currency and Banking. It asks for an appropriation of $500,000,000 (which amount would later have to be enlarged), and provides that loans shall be accepted over a 3 year period, from July 1st, 1933; which is further evidence that

(Continued to page 58)
Cutting Building Costs — Yet Making Larger Profits

Carter Electric Tools will enable you to cut costs, pay full wages, make larger profits for yourself and turn out better work. With them every butt mortise is cut uniform and true; mortises for locks and lock faces are cut straight and smooth.

Ask for Folder A and easy payment plan.

THE R. L. CARTER CO.
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This remarkable machine cuts costs as quickly and as surely as it cuts wood! Does the work of five ordinary machines—eighteen different every-day jobs—faster and at less cost! Cross-cut saw, rip saw, jointer, shaper and router—five machines in one... at the cost of one. Ball-bearing throughout. Write for full particulars.

AMERICAN SAW MILL MACHINERY CO.
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For Farm Buildings

CLAy "OPEN-AIR"

Represents the greatest improvement ever made in barn windows. Heavy steel construction—no swelling and sticking in wet weather—no drying out and rattling in dry weather. The only window to raise to full window opening leaving sash itself under the ceiling out of the way. Kept window to open, close and tilt for ventilation with new latch construction and long latch handle. Takes full advantage of "air and sunlight—the farmer's silent partner." Six standard sizes in 4 lights—6 lights—9 lights. Model for masonry walls—O. P. W. for stand walls.

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CLAY "ALL-PURPOSE" VENTILATING WINDOW

A low priced metal ventilating window for barns, hog houses, poultry houses. Easily tilted for ventilation with special latch construction and latch handle. Quick and easy installation—one standard size.

CLAY ROOF WINDOWS

Bring warmth and sunlight into hog and poultry houses. All metal non-leakable. Special drain rib and condensation gutter. In single and twin windows, also special ventilating style.

The most complete line of windows for farm buildings made. Write for literature.

CLAY EQUIPMENT CORP.
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THIS remodeling business is profitable business. But every owner seems to have a different idea as to just where they will start. So, I’ve come to this decision. One of the best ways to go after all kinds of remodeling business is to start talking about fireplaces, not just fireplaces—but Heatilator fireplaces.

"This Heatilator will not smoke when properly installed. It also does something that no ordinary fireplace has ever done—it circulates its heat to every corner of the room, even those adjoining. They tell me that in milder climates and in summer homes and camps, it’s absolutely the only heat that is needed. It saves the owner the money he now wastes in spring and fall.

"The Heatilator won’t change the appearance of either hearth or mantel—the owner can have any architectural style he prefers. Put all these selling advantages together and you can see why I’m enthusiastic about Heatilator. And I don’t think I’m different from any other builder who sees the money that can be made remodeling right now."

Mail us the coupon and we’ll send you promptly the whole story. There is no disposition to invite Governmental competition with private capital on a permanent basis.

American Builder, March 1934.

The nation wide interest in this subject is evidenced by the fact that three other Congressmen from widely separated districts have since introduced Bills to remedy the situation, any one of which, with amendments or modifications, would be satisfactory. These are Congressmen Hoepple of California, Healy of Massachusetts and Ellenbogen of Pennsylvania.

The Ellenbogen bill is very comprehensive. It provides for a bond issue of $5,000,000,000.00 and for the purchase of existing mortgages, payment of taxes, etc., as well as for repairs and new construction. This bill, with a definite stipulation as to new construction, would be satisfactory, except that it limits mortgages to $14,000.00, while the Duffey bill limits the mortgage to $20,000.00; which surveys have proven would be much more satisfactory.

The Healy bill is very similar to the Duffey bill but attempts to limit the maximum cost of the home—which is a mistake. What is right in principle for one price home is right in principle for another and Government regulatory measures can control this. Local conditions must govern the type and cost of the home.

The Hoepple bill gives greater power. It authorizes the Secretary of the Treasury to issue not less than $10,000,000,000.00 in United States notes, and the loaning field is very broad—not confined to the building industry.

The Duffey bill purposely omits detail. It permits Administrative regulation of operation which has the virtue of elasticity. Arbitrary limitations as to detail would not add materially to safety but would possibly cause much difficulty to the Administrative Departments, for if provisions in the law were found impractical a new Act of Congress would be necessary, whereas any regulatory measure found to be in error could be remedied immediately.

The Duffey bill provides the power and outlines the boundaries—all that is necessary or advisable in the present emergency. The plan suggests the details and if we can finance along these lines, it will be the means of protecting the savings of many hard-working men because it will help defeat those who, by devious means and high pressure methods, have wheedled the savings away from many people by holding out promises of quick and fabulous profits.

Must Eliminate 2d Mortgage

The many affiliated industries affected are hoping for a new deal in financing by eliminating the old practice of 1st and 2nd mortgages and their incidental high charges, loaned over a short period, with the ever-present threat of foreclosure or difficulty in securing renewal of financing, abolished. Money is being sought over a period of 18 years at a fair rate of interest which will be amortized monthly on an arrangement permitting the property owner to pay principal and interest, as well as property taxes, insurance at one window—paying for his home on a budget basis in a similar manner that he now pays rent, having, however, unlike the renter, an estate created for himself at the end of this period.

The Government can find ways and means of relieving this situation temporarily, there is nothing to prevent the different types of lending institutions from taking over these mortgages in the next two or three years. By that time many mortgages will be amortized down to a level where these banking agencies will be willing to purchase such paper. They can and probably will pick and choose. There cannot be much loss involved on the part of the Government, but even if there did occur a substantial loss fits to be expected from such a movement.

The Government can issue bonds, guarantee them both as to principal and interest, and the building industry will get started. These bonds will have the finest security in the world back of them—a mortgage upon the home of a man who wants to keep it. Guarantee these bonds and there will be no question as to their negotiability.

No one heard of the banking interests objecting to the Government going into business during war time to protect capital—why should anyone object to the Government temporarily financing 5,000,000 men to help protect industry, and especially when such action must eventually prove profitable?
TRAVEL SHIP VIA THE ST. LOUIS GATEWAY

1934 EARNING POWER

GET SET FOR BIG THREE BILLION DOLLAR PUBLIC BUILDING PROGRAM

A Revolutionary Process—Makes both face and common brick of highest grade at lowest cost—Used in the finest and largest buildings wherever made—Established plants prove stability. Earning power and point the way to your success.

United Cement Products Company of Wichita supplies both face and common units for large group Sinclair Oil Stations. . . . million DUN-BRIK for brewery. Kalamazoo firm sells at 100% mark-up with orders exceeding a million units in one month.

Learn about the earning power of this business—Why DUN-BRIK can be made for less. How it cuts building costs, and how you can secure exclusive franchise—Send for complete Manufacturing Data now.

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

THE SAW Every Builder Wants

PAYS FOR ITSELF SO QUICKLY!

- SKILSAW rips 60 ft. of ¾" maple flooring in 3 minutes against 4 hours for hand sawing! Does other jobs with similar speed—and with absolute accuracy to do nothing of the saving in work. You can't afford not to own one. Made in six powerful sizes—reliable, efficient and low priced.

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SERVING THE NATION FOR 95 YEARS

RAILWAY EXPRESS AGENCY, Inc.
NATION-WIDE SERVICE

Builders Now Under Code Authority

(Continued from page 38)

gaining after proper notice and hearing between truly representative associations or groups of employers and employees respectively concerned in a specific division or subdivision of the industry and approved by the President, as provided in Section 7 (b) of the Act. Where no applicable mutual agreements have been approved, a minimum wage of 40c per hour is established and is considered as a minimum rate of pay only for common or unskilled labor. Minimum weekly rates for accounting, office, or clerical employees are established, based on population in cities and their immediate trade areas. A maximum work week per employee of 40 hours and daily maximum of eight hours per employee are fixed, except as this 40-hour maximum week may be increased or decreased in special cases as noted above. A minimum age of sixteen years is prescribed and eighteen years in any occupation hazardous in nature or dangerous to health.

Administration of the code is vested in the Construction Code Authority and Divisional Code Authorities which exercise autonomy within the divisional chapters. The Construction Code Authority comprises members selected from and appointed by each of twenty sponsors listed in the code, including the Construction League and the various allied national associations which have applied for approval of the code. Other national associations not listed in the code, which subsequently sponsor divisional chapters will be added as sponsors. The Divisional Code Authorities are provided for in the divisional chapters, usually the majority of their members to be appointed by the national associations sponsoring such divisional chapters.

Chapter I further defines a series of bidding practices where competitive bidding is employed for furnishing definite service or supplying material required. Bid peddling and bid shopping are definitely condemned as unfair and are prohibited; unnecessary number of bids or alternates declared an economic waste; prequalification of bidders prescribed; collusion and rebates prohibited; and award of contract permitted to any bidder, but only at the bidder's original price. To enforce this practice, Divisional Code Authorities are required to check bids, either by designating a depository for filing of duplicate bids, or some other acceptable method.

The divisional chapters generally will contain a definition to define the operations within the division, prescribe the constituency of the Divisional Code Authority, include any exceptions or additions to the general wage and hour provisions of Chapter I, and trade practices peculiar to the division. Chapter 7 provides that in case of conflict between the divisional chapters and Chapter I, the provisions of the divisional chapters shall govern, thus carrying out the autonomy of the division. Conflicts between the provisions of two or more divisional chapters are determined by the Construction Appeals Board, an agency of balanced constituency, to be established by the Construction Code Authority—one architect, one engineer, three general contractors, and four special contractors. The Construction Appeals Board also hears appeals by any interested party from the decisions of a Divisional Code Authority, and thus provides for the settlement of as many questions as possible within the industry. Appeals from the decisions of the Construction Appeals Board or of the Construction Code Authority may be carried to the Administrator.

Opportunities under the Code

The construction industry now has a constitution or charter, empowering it to deal comprehensively with the regulation and improvement of trade practices. With the active support of members of the industry, it will now be possible to eliminate the chiseler, the unreasonable imposition upon those supplying services and materials and the exploitation of labor. The purchaser of construction will benefit immeasurably from the elimination of practices that heretofore have caused deterioration of quality of construction in a demoralized market.

The way is paved for the development of industrial relations within this vast industry to the mutual advantage of both em-
MAKE COLORCRETE PRODUCTS — A COMPLETE HOME INDUSTRY
Profitable. Sell for over 4 times cost to make. Offers quick returns and future growth. You have a waiting market with
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Here is your chance to cash in this year on the big remodeling work that has already started. With our tested plan work is easy to get — A small down payment starts you. This is your chance of getting into something for yourself. Write quick for full particulars.

The American Spinner for sanding the edges of floors is a wonder — FLOORMEN — write for circular.

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Special Low Priced Machines
New Models
Thousands in use by builders, carpenter shops and lumber yards.
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AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa.

For the Building Supply Trades
We manufacture SHEETS of recognized reputation and value. For roofing, siding, gaskets, spouting, air conditioning systems and general sheet metal work, use KEYSTONE Copper Steel Sheets
for lasting service and maximum resistance to corrosion. Trust upon AMERICAN Black Sheets, Keystone Quality Sheets, Apollo Don Base Galvanized Sheets, Galvanized Terne Plates, and USS STAINLESS and Heat Resisting Steel Sheets. Write for information.

AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa.
25 YEARS OF QUALITY

1934 marks the Frantz Manufacturing Company's 25th anniversary. There's a real thrill in looking back over a quarter of a century and finding so many dealers who have been loyal through all the years. In 1909 the Frantz "line" was made up of 2 items. Today it is comprised of hundreds of exclusive, fast selling specialties. The Frantz dealers in your community have helped to make this progress possible and Frantz is grateful. The policy of "quality first" has proved its worth.

FRANTZ MANUFACTURING COMPANY
STERLING ILLINOIS

BUILDERS NOW UNDER CODE AUTHORITY
(Continued from page 60)

Many labor and effort have been devoted to the development and negotiation of the construction code. Its administration will be the most difficult of any code approved by NRA, not even excepting the Retail Code. Construction is a dispersed and itinerant industry. Regulation to maintain fair competition and fair employee relations is a problem of the first magnitude, deserving the active support and encouragement of all employers in the industry.

Thoroughgoing administration of the code is possible only through the delegation of administrative power to responsible committees, agencies, or representatives in regions and local communities comprising respected leaders in the industry who are on the ground, who know the peculiar local conditions and are able to demand the respect of the members of the industry. Under the code, administration is vested in each division of the industry, and authority to administer its provisions will flow down vertical lines from National Divisional Code Authorities to regional or local committees or representatives. General contractors, master painters, architects—fact, all divisions of the industry—will administer their own chapters nationally, regionally, and locally. But in each region and locality there should be a tying together of these various divisional committees or representatives for the coordination of their activities and in the interest of economy of administration. Integration of local administration is as important as national integration through the Construction Code Authority, but the power for such local integration lies with these respectively appointed local committees or representatives in each division of the industry established under the code.

Opportunity is afforded here and now for stabilization of construction, for purging the industry of its unsound and uneconomic practices, for development of fair employee relations, and for restoring confidence of the purchaser of construction and of the public in the products of construction. The challenge is to the leaders of the industry to seize this opportunity so vital to the welfare of the entire construction industry.

Comments on Contractors' Code

In transmitting Chapter II of the Construction Industry Code to the President for his signature, Administrator Hugh S. Johnson made the following interesting comment:

"The General Contractors are of major importance in the Construction Industry. They organize and correlate the activities of various operations and sub-contractors as divisions of the Construction Industry who furnish the products of skilled trades. General Contractors are usually divided into several sub-groupings such as building, highway, heavy construction and engineering contractors. Provision is made in the code for inclusion of specific provisions for such subdivisions of this division of the Construction Industry and for their self government.

"The provisions for hours and wages are set out in Chapter I of the Construction Code, which was approved by you on January 31, 1934, and the same provisions are applicable, under this Chapter, to the General Contractors division.

"Due to the magnitude of the General Contractors' Industry, and the mass of statistics relating to it, it is difficult to make an epitomization as to the economic effect of the Code. Construction volume approached $11,500,000,000 in 1928 and direct employment in 1929 ranged from 3,200,000 to 3,400,000. It is safe to say, that with the prohibition of unfair trade practices, and the establishment of uniform rates of pay and hours of work, that more wholesome conditions will prevail in this industry and that employers, employees and the public will all be benefited. In the South the established minimum rate will vastly increase purchasing power and greatly benefit the worker."
MASONRY MATERIALS

The Standard Lime & Stone Co., Baltimore, Md.

200—"Capitol Rock Wool Insulating Cement." Bulletin, 4 pp. Illus. Describes the application of these materials for pipe and boiler coverings for high temperature and low temperature insulation.

Portland Cement Assn., Room 152 33 W. Grant Ave., Chicago, Ill.


Boliker Brick Co., Canton, O.

202—"Boliker Brick Facts." 20 pp. Illus. Shows the manufacturing facilities and processes of the company, together with general information on brick work, manufacturing, joints, bonds, residential brick work and modernizing old buildings with face brick.


204—"Bird & Son Brick of New England." Folder in colors illustrating asphalt brick siding which comes in sheets for easy application. Colors are bright red, buff, deep red and blended browns.

ROOFING AND METAL WORK

The Philip Carey Co., Lockland, Cincinnati, O.

205—"Fibres of Riedel Beauty." Catalog, 20 pp. Illustrated in full color, showing the line of Carey Asfaslate shingles, both singly and in blended combinations.

Milnor Steel Co., 4111 S. Burnham St., Milwaukee, Wis.


Redlands Shake Borer, 4455 Stuart Bldg., Seattle, Wash.


208—"Solid Comfort for 200 Years." 4 pp. folder, Illus. Showing how to modernize old homes with red cedar shingle side walls.

Tecson Steel Co., Youngstown, O.


Republic Steel Corp., Youngstown, O.


The Edwards Manufacturing Co., Cincinnati, O.

211—"Steel Ceiling Catalog No. 179." 32 pp. Illus. Best pocket size, showing many designs and their application, how to estimate and figure costs.

Kimber Manufacturing Co., Columbus, O.


CARPENTRY


213—"For Durability and Conservation." An illustrated booklet telling how to use the various thicknesses of Douglas Fir Plywood for walls and ceilings, bath rooms, siding, building, etc. There are numerous photographs as well as construction details, finishing instructions and test data.


214—"Loxit." 18 pp. Illustrated handbook making clear a simple, economical way to lay standard tongue and groove wood floors without nails, without wood sleepers and without mastic.

The Sisakraft Co., 205 W. Wacker Drive, Chicago, Ill.

215—"Sisakraft "Brand New" Insulated Sisakraft with illustrations of six typical applications. Uses of Sisakraft described.

United States Gypsum Co., 350 W. Adams St., Chicago, Ill.


FURNISHINGS


217—"Sanitas Cloth Wall Covering." 16 pp. bulletin in full colors illustrating the use of Sanitas cleanable wall covering. Many decorative suggestions presented.

CHASE COMPANIES, INC., Waterbury, Conn.

218—"Alpha Brass Fire." Handy chart showing weight per linear foot of seamless brass and copper tubing, both plumbers sizes and iron pipe sizes.

HEATING AND VENTILATING

Richmond Radiator Co., 1480 Broadway, New York City.

219—"Helpful Heating Data for Builders." Illustrated catalog. How to select the proper size and type of boiler, increasing breathing zone warmth and reduce ceiling temperatures.

Bryant Heater & Mfg. Co., St. Clair Ave., Cleveland, Ohio.


General Electric Co., Schenectady, N. Y.

221—"The Inside Story of the New Fuel-Saving General Electric Oil Furnaces." 10-page illustrated handbook giving full specifications of the G-E oil burner, estimating and cost data, how to utilize the basement.

American Radiator Co., New York City.

222—"Ideal Heating for Cottage or Swaycraper." 12-page illustrated booklet of hot water and steam boiler, new style radiation and temperature control devices.

Hopman Specialty Co., Inc., 25 W. 45th St., New York City.

223—"Controlled Heat with the Touch of a Finger." 48-page handbook, illustrated, on Hoffman valves for residences and public buildings.

ILG Electric Ventilating Co., Chicago, Ill.

224—"Sensible Ventilation." 32 pp. Illus. Actual examples of how 22 ventilation problems were solved in factories, stores, restaurants, theaters and apartments.

Electrolux Servant Corp., 51 E. 42nd St., New York City.


Sedgwick Machine Works, 159 W. 15th St., New York City.

226—"Announcing the New Electric Sedgwick Roto-Waiter." A folder on dumbwaiter equipment for bakeries, banks, cafeterias, clubs, drug stores, factories and hotels.

American Stone Co., Cleveland, Ohio.

227—"Meet Mrs. Modern, Your Customer." 24 large-page portfolio, illustrating and presenting the national advertising campaign back of the new Magic Chef gas range. Details of new models.

INSULATION

Johns-Manville, 22 E. 4th St., New York City.

228—"Cot Fuel Bills 30%." 20 pages, illustrated, featuring Rock Wool insulation for winter feet saving and summer comfort. Questions and answers on insulation problems.

The Standard Lime & Stone Company, Baltimore, Md.

229—"Cott Rock Wool Felted Insulation." 8-page illustrated booklet giving tables of heat losses, installation details and specification data.


230—"Through the Window Glass." 9-page illustrated booklet on the manufacture and use of Scoby Health-Lite Window Glass.

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Numbers

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Occupation

American Builder, March 1934.
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For commercial and residential use

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Eliminates 90% of the usual amount of friction found in other overhead doors.

Illustration above shows door opening without friction; at right, door sealed tight on closing.

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Ask especially about the Ro-Way low-priced door for residence garages.

Rowe Manufacturing Co.,
706 Holton St., Galesburg, Ill., U.S.A.

**More MIXER for Your MONEY**

Get latest catalog on Jaeger all-steel, roller-bearing 3½S trailers with "Dual-Mix" high speed drum.

Power Loader Tilters: 3½, 7, 105 sizes.

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THE JAEGER MACHINE COMPANY
521 Dublin Avenue, Columbus, Ohio

**FOR 47 YEARS**

$590.00

Parks woodworking machines have been noted for strength, durability and low price. No excess weight.

Send for complete catalog.

THE PARKS WOODWORKING MACHINE CO.
Dept. B.L.-3, 1224 Kenwood St., Cincinnati, Ohio

American Builder, March 1934.

Outline of Basic Construction Code

(Continued from page 38)

and to adjust conflicts between chapter provisions.

**Article VI—Adjustments,** provides for price adjustment where cost has risen because of codes for other industries.

**Article VII—Competitive Bidding Practices,** sets forth the procedure to be followed in bidding, prohibits bid peddling, shopping, sets a time limit on contract awards, and provides for methods of checking bids.

**Article VIII—General,** contains the labor provisions from the Recovery Act, forbids monopolies, prohibits reclassification, and prescribes the method of adding further chapters to the Code. The President's powers conferred by the Act are then declared inviolate, with no limitations imposed by the Code.

Full Text of Gen. Contractors' Code

(Continued from page 40)

**Section 11—Deficient Plans.**

In competitive bidding a general contractor shall not offer or agree to assume the responsibility for deficiencies in or omissions from the plans and/or specifications, which he has not prepared or caused to be prepared by others, and upon which the contract is based, for the purpose or with the effect of securing an unfair competitive advantage.

**Section 12—Labor Welfare.**

A general contractor shall provide for the welfare and safety of his workmen, complying with all applicable laws governing such matters. Except where such laws otherwise require, he shall comply with the provisions of the safety manual heretofore adopted by the Associated General Contractors of America.

**Section 13—No Prison Labor.**

A general contractor shall not employ prison labor in the execution of the work.

**Section 14—Payment of Wages.**

A general contractor shall as promptly as possible make payment of all wages due, in lawful currency of the United States, or by a negotiable check at par therefor payable on demand. A general contractor or his agents shall accept no rebates directly or indirectly on such wages, nor give anything of value or extend favors to any person for the purpose of influencing rates of wages or the working conditions of his employees.

**Article VI—Reference to Provisions of Chapter I**

The mandatory provisions required by the Act, and all other provisions contained in Chapter I of this Code (approved January 31, 1934) except as otherwise provided in this Chapter II, apply with like force and effect within this division of the Construction Industry, as if incorporated herein.

**Article VII—Modification.**

Subject to the provisions of Section 2, (c) of Article IV, B, of Chapter I of this Code, the provisions of this chapter, except as to provisions required by the Act, may be modified on the basis of experience or changes in circumstances, such modifications to be based upon application to the Administrator and such notice and hearing as he shall specify, (30th) day after its approval.

**ARTICLE VIII—Effective Date.**

This chapter shall become effective on the thirtieth (30th) day after its approval by the President.

COPIES OF THE Basic Construction Code as well as the General Contractors' Code may be obtained from J. W. FOLLIN, Secretary, the Construction Code Authority, Washington, D. C.
THIS BOOK OF 75 SMALL LOW-COST HOMES—FREE

A profusely illustrated book for those planning to build new homes or remodel old ones—shows one or more examples of all principal styles of domestic architecture—designs especially selected to serve the needs of contractor-builders, dealers, and others who contact property owners—a book which can be displayed with confidence—a modern “planning book” in every sense of the word.

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What possible reason is there—
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Guaranteed against ripples and ridges. Has belt speed of 1900 surface feet per minute; full 32 sq. in. sanding area; 5 H.P. universal motor; weighs only 18 lbs. Perfectly balanced.

For details write to:
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New Model "B"
Has Vacuum Dust Collector. Eliminates dust; improves utility; makes sanding belts last longer.

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New, guaranteed National Pottery Machine makes more than 2,500 different designs, sizes, colors of concrete Garden Vases, Jars, Urns, Bird Baths, Pedestals, etc., without molds, power or costly tools. No experience needed. Use only sand and cement. Complete pottery plant for less than the price often paid for one mold. Two days' output pays for it.

Big profits—daily cash income. A side-line or full time money maker. Descriptive book and details 10 cents.

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American Builder, March 1934.
CONTENTS

March, 1934

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Hoo Hoo Is Coming Back—Whose Goods Shall We Buy?—
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Plans for Practical Farm Buildings, Including Big Dairy Barn,
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L. R. Putman Analyzes Human Nature

HOW TO GET LOCAL RECIPES AND FEDERAL (FUNDS)
FOR HOME BUILDING
Oscar R. Kreutz, Field Organizer, Explains the Federal Savings
and Loan Associations

HOUSE VALUATOR ESTIMATING
A. W. Holt Tells How to Sell Goods with Quick, Accurate
Estimates

LETTERS TO THE EDITOR

E. E. WOODS

9 American Builder nominates for the dealer Hall of
Fame, E. E. Woods of Claremore, Okla., and Kansas City,
Mo., because—

9 For eight years he has been the popular secretary of the
Southwestern Lumbermen's Association, yet is still a suc-
cessful retail lumber dealer on his own account.

9 He is not only Association secretary but also Code
Authority for his division. He served two terms in the
Oklahoma Legislature.

9 He is tremendously interested in all matters relating to
the retail lumber business. He is both a student and a
leader.
We Were Convinced That the International
Is the Best Long-Term Investment We Could
Make in the Way of Truck Equipment

IN this statement, Barney Stewart, vice president of the T. J. Stewart Lumber Company, Oklahoma City, Okla., gives voice to an opinion held by truck users the country over. Here is the way a recent letter from him reads:

"For our purposes, we needed a small, powerful tractor-truck which could haul from three to seven tons on a semi-trailer for long and short distances at a minimum cost per ton-mile. After a thorough investigation, we decided upon an International.

"We have been more than pleased with the results. The truck has been in constant service and operates more economically than any other make of truck we have, regardless of size.

"It might please you to know that we could have purchased other makes of trucks for less money than the International; however, we were convinced that the International is the best long-term investment we could make in the way of motor truck equipment."

The more you talk to International Truck owners the more you will find them agreeing that Internationals can't be beat when it comes to hauling at the lowest possible cost. It is a simple matter to get acquainted with International Trucks—call up the nearest International Branch or Dealer for a demonstration. Tell them what your hauling problem is and they will bring out a size to meet it. The line ranges from ½-ton to 7½-ton. Chassis prices as low as $360, f.o.b. factory.

INTERNATIONAL HARVESTER COMPANY

606 So. Michigan Ave. of America (Incorporated) Chicago, Illinois

INTERNATIONAL TRUCKS
Hoo Hoo Is Coming Back

IT HAS always seemed to me that one of the coldest blooded expressions I hear is, "Business is Business." When a man goes to pull some hard boiled stunt on a fellow being, he uses that term to ease his conscience. I think that attitude is one of the basic reasons for our present situation.

I find that business isn't always business. Right often it's friendliness. I know there's an awful lot of building and building material business done on friendship and personality. That seems to be particularly true in the lumber business.

As a retail lumber dealer down in Arkansas, I joined Hoo Hoo, "away back when." My number is 9191. I've paid my dues and been honored with offices, but like most of the others, I've stood by and let it go down and out.

The other day I ran into a bunch of old friends who are out to bring Hoo Hoo back. I visited with some of them, talked over old times and lived again some of the wonderful days when Hoo Hoo was flourishing. The upshot of it was that I paid my dues and am a renewed booster for Hoo Hoo.

With dues at $3.00 per year, there ought to be fifty thousand Hoo Hoos in the United States who are ready to call a man liar when he says, "Business is all business."

Whose Goods?

THERE are more new buyers of building materials in this country today than ever before in its history. Carpenters and painters have become contractors. Yard men have become lumber yard managers. Architects have turned builders, and so it goes all up and down the line. Whose goods are these new buyers going to buy?

Well, just put yourself in their places. Whose goods would you buy? As I write this, I am looking out of the windows of a room in the Nicollet Hotel in Minneapolis. Across the acres of city buildings, two great electric signs catch my eye. I never saw them before, yet they are both familiar. One is, "Eventually." Without any further explanation I would know what that stands for. Usually it is followed by the three words, "Why Not Now?" Then some distance away, in electric letters twenty feet high, are these words, "Gold Medal Flour." That's the story we have been told over and over again for many years.

I don't know a thing about flour: but if my wife told me to send home a sack of flour and the dealer asked me whether I wanted Jones' or Smith's or Brown's or Gold Medal, I'd take Gold Medal. Other buyers are the same.

A lot of manufacturers have been "still hunting" for business for the past two or three years, sending out circulars and other direct mail matter. It reaches the dealer at the time he is getting a lot of other mail that means more to him than these circulars. Naturally the circular gets very little attention.

A sales message, to get results, must be put before the buyer when the buyer is in a humor to read it. Its prestige and effect are greater if it is in a medium that has the respect and confidence of the reader.

Yes, these new buyers are more susceptible to good advertising than any buyers we've had in many years. It's the same with home owners. People who have in the market for a home are those who have no homes. They know very little about building and building materials. They depend largely on the men who are going to do their building. Now is the time for manufacturers to inform the dealers and builders about their goods. And it's also the time for dealers to make close working arrangements with the local builders.

Leadership That Leads

THERE were some striking things about the February issue of the AMERICAN BUILDER. The letters received regarding it point out some of them. But to me, one of the most commendable things was the spirit of the advertisers.

Most of the advertising copy was not intended to sell goods so much as to help complete the story the editors were trying to tell the powers at Washington regarding home financing. Thousands of readers were additional to our regular subscribers. They included President Roosevelt, his Cabinet, all members of Congress, chambers of commerce, two thousand newspaper editors, etc.

The use of such advertising copy paid for by the manufacturers and dealers shows the right kind of spirit and leadership. This kind of institutional and inspirational advertising going to our vast audience of active contractors, architects, builders and other active men in the home building field, is bound to cause these men to give more cooperation to the local dealers in making more intensive local drives for new building and repairs. Such advertisers are worthy of much consideration by our dealer subscribers.

Don't Pass the Buck

AMONG the retail lumber conventions we looked in on this winter was that of the Wisconsin Retail Lumbermen's Association, which is always held at Milwaukee. Among Wisconsin folks, Milwaukee is just as famous for conventions as for beer. Secretary Montgomery always has a good convention, but this year it was exceptionally good and well attended.

One of the most impressive things I noticed at Milwaukee this year was a leaflet handed me at the registration desk. It was headed, "Don't Pass the Buck." A paragraph or two read like this: "When you are asked by a customer to reduce your price, do not tell him, 'The Code prevents me—NRA won't let me—the Government prohibits it.' These are poor excuses. Stand on your own feet. The reason you must get the price is because you must have it in order to take care of your expenses and the cost of doing business. The Code does not provide a profit except for a few dealers who have a low cost of operation... Why try and pass the buck? Stand up like a man for your own rights and be able to justify what you say."

This seems to me like mighty good advice. The codes can easily become as unpopular as nuisance taxes if the dealers make them carry all of their reasons for New Deal reforms.
THE first home of a series which is expected to revolutionize small house construction throughout the country, has just been built at 545—36th Avenue North, Seattle, Washington, by the Weyerhaeuser Timber Company, Tacoma, Washington, one of the nation’s largest lumber producers. The home is of a novel modern design, constructed entirely of units prefabricated at the mills of the Weyerhaeuser Timber Company. It is one story, has a flat roof and contains an automatic heating and air conditioning unit. The plan is similar to that of the most modern apartment house, although the home is located on a large landscaped lot in a setting of trees and shrubs.

After the foundations were laid the house was completed, ready to move into, in twenty-one working days, although weather conditions during the entire operation were the worst experienced in western Washington in a great many years. The speed in construction was the result of the units being fully manufactured and finished at the mill. The entire framework, all partitions, closets, doors and windows were first assembled at the mill and fabricated into units. These units were transported to the site in the form of panels, which needed only to be joined and tightened.

A unit consists of:

1. Sections of wall complete with window frames, sash and screens, doors, transoms and screen doors, and glass and hardware;
2. Interior partitions which duplicate the wall units except that the sheathing and exterior finish is omitted, and closets, wardrobes, drawers, or mirrors included;
3. Portions of the ceiling and the roof. All these were delivered at the job in sections for joining. The assembling carpenters worked practically without tools, lumber or nails.

The wall units made for this house consist of a series of vertical boards for the exterior, building paper, sheathing, Balsam wool blanket with a dead air space between, and Douglas fir plywood on the inside. These units are the basic elements in the manufacture of prefabricated housing, being complete in themselves and capable of forming any size or arrangement of rooms in multiples of the unit width. A wedged U-bolt is used to fasten the wall units to adjacent units and to the floor and ceiling structure.

The sub-structure above the foundations consists of a sill plate in length multiples of the wall unit and with drilled holes in spaced intervals to bolt to the foundation. The headers and floor joists are also in length multiples of the wall units, the joists fit into notches factory cut into the headers at one-half and one unit intervals.

CONSTRUCTION view taken the second morning, showing rear door. Note interior partition units lying on joists—two men can handle any unit easily and one man could lift or move the unit if necessary.
Retail Lumber Dealers Offered Materials for New Type Homes of Shop Fabricated Plywood Panels

The floor plan measuring about 34 feet wide by 42 feet deep gives 4½ large well lighted rooms. It is a popular "apartment lay-out."

and fastened to the headers after being dropped into place.

Headers are fastened to the sill plates and the floor plates fastened to the headers.

Floor plates are router drilled for the U-bolts which are used to securely fasten the wall units to the floor plates. Solid bridging of exact sizes is provided, making for exceptional stiffness of the sub-structure.

It is not necessary in this type of construction to lay the sub-floor until after the wall units are in place and it is a very simple matter to install the plumbing, heating and wiring equipment in the walls, under the floor, and over the ceiling as soon as the roof is on.

The vertical cedar siding on the exterior wall is finished in natural color with marine varnish of highest quality. This varnish has been known to withstand salt water for years when used on boats. A mosaic band runs around the outer wall a short distance below the cornice, giving a touch of color.

The garage is of exactly the same wall construction as the house and may be set up in one working day. The quality of construction together with the effectiveness of design assure long life and high re-sale value. On the other hand there are advantages from the point of view of the country merchant or restaurateur who locates along the busy highway. If the route of traffic is changed he can disassemble his units and re-erect them on a new site quickly and at comparatively small cost.

The treatment of the Douglas fir plywood interior finished panels in this home is particularly pleasing. Panel joints are simple butted joints with a slight "V" effect, unobtrusive, adding rather than detracting from the appearance of the wall surfaces. An interesting and beautiful effect has been obtained in the treatment of the ceiling panels, which are also of Douglas fir plywood, in the living room and the master bed room. They are decorated in an unusual, striking pattern in several gradations of black and silver. The natural finish of the wood paneled walls, balanced by the expanse of windows at the sun room end of the living room, helps to make this room restful to an unusual degree. The second bed room is paneled in knotty white pine, a simple but effective pattern. This room has a ceiling decorated in gradations of blue, reflecting the blue painted wood bed and dresser, and, although as modern as the rest of the house, it has a closer touch with the best designs of the past. This room should prove a delightful one for a growing child, with its bright hemlock floor, the waxed pine walls and the corner windows overlooking the garden.

The kitchen and the breakfast nook have proven particularly interesting to the women visitors. The ply-
wood walls and ceiling are enameled in canary yellow, any possible monotony in the use of the one color being overcome by an unobtrusive ceiling decoration. The breakfast nook has its corner windows facing east and south to receive the rays of the morning sun. A store-room off the kitchen has ample storage space and built in on one side is a complete clothes dryer which operates from the air conditioner, and, it is claimed, will dry clothes soft and fluffy in fifteen minutes.

A double, combination deep laundry tray and shallow tray, stainless steel sink and drainboard with ample drawer space below and above is installed against the plumbing partition of the kitchen, adjacent to the sink. The electric range is against the heater unit wall. The refrigerator has its space convenient to the breakfast nook and the kitchen. The china closet and cooler are handily located to serve directly to the breakfast table, or when dinner is served in the large room, only one more step need be taken. The kitchen and breakfast nook show the progress made in modern planning and arrangement of these more essential parts of a home.

The bathroom, although entered from the short side-hall which connects the two bed rooms with the living room, has its plumbing back to back with the kitchen plumbing. This arrangement is very much more economical in the cost of piping, drains, etc., as well as installation. When these fixtures are placed in widely separated parts of the house, which has often been the case where the full economies in home arrangement have not been studied, the costs to the home owner are much greater. A new enameled metal tile mounted on resilient Nu-Wood backing in panel units was installed in a few hours on the wall of the bath room. It is claimed that there is no possibility of the tile cracking or coming loose no matter what temperature changes might occur.

One of the greatest surprises to the visitor is when he is told that the oil burner, heater and air conditioner are in a space three feet two inches wide by six feet eight inches long, centrally located and accessible through a door from the hall. This small, fireproof space is, also, soundproof and the oil burner is inaudible when it is running. There is a slight hum when the air conditioner is operating but it is barely noticeable, showing the progress that has been made in this type of equipment even in the past year.

The wardrobe closets, cabinets and other so-called
built-in equipment are ordered and come like furniture, completely finished in units, ready to be moved into place. Four of these units, comprising a large hanging space, shirt drawers, shoes and hat compartments, and even spaces specially designed for suitcases are placed in each bedroom, back to back, thus forming the partition between the two rooms.

There is an unusual group of these furniture units between the living room and the master bedroom, having bookshelves and spaces for magazines on the living room side and a recess with mirror for a vanity on the bed room side, flanked by cabinets specially designed for dresses and lingerie.

The lighting fixtures throughout the house are practically dust proof and are designed to best fulfill their function as sources of light and a spot of interest in the room. Although there is nothing in their appearance which would indicate this to the observer, the lighting units in the living room, also, serve as outlets for the conditioned air which heats the house in winter and cools it in summer.

The expanse of windows makes a delightful sunroom end to the living room without the drawbacks of an old-fashioned sun porch which it was very often impossible to use in the winter when the sun was needed as it was too cold and drafty to enjoy sitting there.

All through the house there is so much room for the amount of space used. It is a big little house. In addition to the large living room there is a master's bed room, second bed room, kitchen, dinette (or breakfast nook), bath room, hall and commodious storage room. And then there are many built-in wardrobes and cabinets.

In announcing this first and experimental unit, F. R. Titcomb, general manager, Weyerhaeuser Timber Company, made the following statement:

"It became apparent to our company during the depression that if the manufacturing and sale of home building materials were to keep abreast of the improvements constantly being made in other fields, there would have to be a substantial reduction in the time consumed in building, as well as the more definite determination of the cost of homes contracted for.

"It is desirable from the purchaser's viewpoint, as well as from the dealer's and the manufacturer's, that a house should be a more nearly finished product, and recent progress made in the housing field has been in that direction. We, therefore, concentrated on the problem of factory manufacture of the frame and finish of the house in predetermined unit sizes which could be produced in quantity and completely finished ready for shipment.

"In order to find out ourselves just what we had accomplished in our study, we decided to manufacture and erect a demonstration house.

"This first house is only one of many designs in types ranging from the simplest of cottages to substantial urban residences possible to manufacture in the mill. Perhaps the time is not yet arrived, but we believe it is coming, when a prospective owner can go to a dealer and choose his own home and move in two weeks later."

The unit and the method of manufacture were developed in the Housing Research Department of the Weyerhaeuser Timber Company under the direction of C. W. Drew, an architect, who was assisted by Henry Fey and R. C. Reamer, both as consulting architects, of Seattle.
One way to get local improvements started is for lumber dealers to start at home—practice what they preach about repairs.

Use CWA workers to clean up Main Street, improve and paint up public buildings, fix the streets, rouse public pride.

To retain this business and prestige, communities must be kept attractive, modern and efficient.

The lumber industry, and in fact the entire building industry, is more in need of a broad campaign of promotion and salesmanship than it ever has been before. The rebuilding, improving and beautifying of the business sections of cities, towns and villages is a market towards which we may well turn today, in addition to the pent up need for better homes.

With the loosening of credit now occurring, money for such improvements will be available. But such work will not go ahead without leadership and promotion. Everyone knows that every extensive improvement that takes place in the business district of a town usually starts with one aggressive firm that did a good job of building or remodeling. It stood out so sharply in contrast to the other buildings that other owners were pushed into doing the same thing.

Perhaps one way to get local improvements started is for the lumber dealers to show the way and start at home. I was discussing this with one of my lumber friends in a midwestern town the other day, and I told him, "You fellows ought to practice what you preach. Here you've got this old brick building that has stood there for over twenty years without being touched. Why don't you fix it up, modernizing it, make it an example of what can be done to other old buildings in the town?"

"Why not rearrange and remodel your office interior, using the materials you want to sell to others? Why not relocate your desks, chairs and furniture?"

"It will not only set an example for other businesses in town but will get your own men out of their rut, give them new ideas and stimulate them to a different outlook on affairs."

I believe that local lumber dealers should set a good example in their own towns by modernizing, dressing up and painting up their own plants. They can bring pressure to bear on their local CWA forces to clean up Main Street, improve and paint up public buildings, fix the streets, paint the schools and start a feeling of activity, aggressiveness and local pride.

Store Fronts Need Attention

Such a feeling is contagious and it might spread to merchants rebuilding their store fronts and interiors and local business men in general modernizing and improving their plants.

I am reminded of my own experience in an Iowa town, twenty years ago, when we got the Chamber of Commerce to dressing up our "Main Street." There was an old fashioned wavy brick pavement, irregular sidewalk, some dead and dying trees lining the street, a down at the heel air.

We paved the streets, removed the dead trees, put in new sidewalks. Then came the job of getting the local merchants to subscribe to a new decorative street lighting system. This was pretty hard work, and it took us quite a while to get the merchants to agree to pay their share. Finally, we got one block signed up—all except two "individualists" and we decided to go ahead without them.

Well, we turned on the lights in that block as part of a big celebration with a band concert and gala affair. The whole town turned out. What happened then? Early the next morning the two hold-outs came over and paid in their share for the lights. That same day all the other merchants in the adjoining blocks signed up and we had our complete street lighting system installed a short time thereafter.

As no lumber dealer needs to be reminded, every small town today is competing with other towns and with many outside interests. If the small town is to retain its beauty, prestige and business, it must keep attractive, modern and efficient. The lumber industry can lead the way in this work.

Nothing has done more harm to the thousands of communities throughout this nation than the tragic encroachments of the chain stores. Take this same Iowa town that I just mentioned. Fifteen years ago the business section was lined with business activities owned by highly respected local citizens, men who had been in the
town for years, had raised their families there, owned their homes there, paid their share of the taxes and supported the community in every way. Today, a large number of these good citizens have disappeared, and instead, there are the glaring red and yellow fronts of the Eastern owned chain stores with their temporary hired managers and low rate rented quarters. That town has lost out to a tremendous extent through the strangling of the local business men.

Today the lumber dealer attempting to get the local citizens to renovize and improve their business districts will be confronted with this chain store problem. Perhaps some of them will join in. But more likely, it will be the old, established local businesses that can be enlisted, and they will be in a position to profit by the improvements performed. While the chain store is waiting to obtain permission from New York to pay higher rents that will permit the local landlord to improve the property, the local business man can take the advice of the lumber dealer and rebuild, modernize and improve his property. He will achieve a business advantage over out of date plants at home and in neighboring towns and will contribute to the advancement of his community.

**Good Work by Shingle Bureau**

At the beginning of this article, I spoke of the need for a campaign of promotion and education by the lumber industry. As an illustration of what I mean, take the splendid work that has been done by the Red Cedar Shingle Bureau.

That organization first made researches into the history and customs of their industry, the possible improvements of their product, and their future potential markets and how to reach them. They caused the abandonment of cheap unworthy grades and adopted rigid rules of quality and perfection of manufacture, packing, staining and treating.

They inaugurated a well planned campaign of education, advertising, demonstration and new uses. For example, they perfected a successful plan for laying a new shingle roof over any old roof, which not only avoids the cost, exposure and litter of taking off the old roof, but gives double insulation and protection at a lower total cost—a real improvement and a real saving to the home owner.

Results? Every lumber dealer will tell you today "Red Cedar Shingles are coming back in a big way."

The lumber industry, from the manufacturers down through the retail associations to the individual dealers in thousands of communities, can do a similar job of selling. New lumber products and old products used in a new way (as this example of the shingles) are known to the few. Through proper promotion and salesmanship, they can be made known to the many. Not only the lumber industry but all industry will profit thereby.

The many local and national associations of lumbermen, Manufacturers, Wholesalers and Retailers, should unite in the support of a "Lumber Bureau" (the machinery has already been set up in the American Forest Products Industries, Inc.) and follow and enlarge on the Red Cedar Shingle Bureau example for the benefit of the whole lumber industry and especially the benefit of the public.

Meanwhile each retail dealer should pry himself out of the old rut, prove to his community that he is really an asset to them, set the pace and example in putting men and money back to work and in making their business sections, and homes, take on the same brighter, hopeful and determined appearance that our eyes and faces have been taking on this past year.

**MR. DULANY Says**

"Local and national associations of lumbermen should unite in support of a strong 'lumber bureau.'"

"New lumber products, and old ones used in a new way, can be made known by proper promotion and salesmanship."

"Set the pace and example in putting men and money back to work, and in making your business sections and homes take on the same brighter, hopeful and determined appearance that eyes and faces have been taking on this past year."
Plans for Your Farm Trade

THROUGH the courtesy of Henry Geise, head of the extension department of Iowa State College, Ames, Iowa, and chairman of the committee of co-ordination, we are privileged to illustrate farm building plans developed by experts in farm building design at various state colleges and universities in the middle West, and now are available at any one of the fifteen schools participating in the Midwest Farm Building Plan Service:

University of Arkansas, University of Illinois, Purdue University, Iowa State College, Kansas State College, University of Kentucky, Michigan State College, University of Minnesota, University of Missouri, University of Nebraska, North Dakota Agricultural College, Ohio State University, Oklahoma A. & M. College, South Dakota State College, University of Wisconsin.

34'x64' DAIRY BARN

The detailed plans for the 34 foot gambrel roof dairy barn shown to right offer a wide variety of optional features which may be incorporated into the general plan shown to meet the varying demands of dairy farmers.

The arrangement illustrated above and carried through in detail in the plans, was selected from five well arranged floor plans suitable for a dairy barn of this width. These alternate floor plans show accommodations for 20, 30 or 40 cows in stanchions. The location of box stalls, feed room and silo is varied to suggest several workable arrangements. An accompanying milk house is shown on three plans; horse stalls on two. Both face-in and face-out arrangements for stanchion stalls are shown. The structural details for framing, etc., while they apply in particular to the plan shown, are typical and may be used with any plan selected.

Midwest Plan No. 72311

HALF MONITOR POULTRY HOUSE

The half-monitor type of roof may be used advantageously in poultry house design, because of the low cubic content per bird made possible, together with a good distribution of light over the interior. These features have been built into the poultry house pictured above.

The height of the roof in all cases has been kept down to a workable minimum. The rear roof barely clears the full sized entrance door, and the front roof is of minimum height to accommodate a good sized window sash in the front wall.

The scratch pen under the front roof is particularly well lighted by the windows across the entire front and in each end. When the weather permits, these windows may be removed to admit the direct sunlight. The upper windows which admit light to the rear portion of the house, may be tipped in at the top for ventilation. An air duct leads the fresh air from the rear of the house up to the middle of the roof where it enters the room. A good circulation across the building is assured for summer use, with the front windows removed and the others opened.

The inside of the walls may be lined with insulation board if low winter temperatures are to be encountered. The walls outside are covered with horizontal siding. Prepared roll roofing should be used on the roofs.

Plans for the floor construction show a one inch thickness of concrete poured over a layer of hollow tile blocks with a layer of building paper placed in between.

Midwest Plan No. 72741
HIGH CORNCRIB AND GRANARY

This corn crib and granary provides a storage space for 3600 bushels of ear corn and 2800 bushels of small grain.

The design calls for a crib eight feet wide for ear corn on each side of the driveway, and three bins overhead for storage of small grain and shelled corn.

The sills are anchored to a concrete foundation, and concrete floors are used throughout. A shell- ing trench, covered by removable boards, extends the full length under the center of each ear corn crib.

Adequate bracing has been provided throughout the structure. The diagonal cribbing, shown on all exterior exposures, gives additional stiffness to the walls. The walls of the crib are tied together with cross braces.

The bins above are lined with six inch D. & M. flooring. Tie rods are provided to keep the ends from spreading.

The driveway is wide enough to accommodate a wagon dump, and high enough for a hoist in case an outside elevator is to be used. If an outside portable type of elevator is preferred, hatchways may be cut in the roof to replace the cupola shown above.

Either wood or asphalt shingles are suitable for roof covering. Where tight walls are required, 1" x 6" drop siding may be used.

The structure may be rat-proofed by using a 24 inch strip of hardware cloth between the studdings on the inside of the cribbing, and an eight inch strip of sheet metal at the top of the screen on the outside.

Midwest Plan No. 73221

MODIFIED “A” TYPE HOG HOUSE

The modified “A” type of house has built into it many desirable features of both gable roof type and the standard “A”.

With the gable roof type of front a large door may be used in the roof. This construction makes interior cleaning much easier and provides an opening for sunlight on warm days. Location of the hog door at one end of the front side leaves a sheltered corner inside even with this door open.

The end ventilators were designed to provide adequate ventilation without draft when the doors are closed.

Midwest Plan No. 72602

PORTABLE “A” TYPE HOG HOUSE

The “A” type of individual hoghouse represents probably the minimum in investment for a satisfactory shelter for swine. Omission of the floor reduces the work required in cleaning and disinfecting. It also reduces the weight to be moved when a change of location is desired.

Floor drafts may be prevented by banking around the base of the walls with earth. The end ventilators with droops provide ventilation in cold weather when the building is otherwise closed. Guard rails are placed at each end for the safety of the small pigs.

Midwest Plan No. 72601
As I have said on several previous occasions, efficient marketing is in greater need today than at any time we can remember. The first thing a good merchant does is to analyze his market and buy what he finds his customers want or can be most easily induced to buy.

Our problem in the building business is no different from those in any other business. Henry Ford and many other successful business executors tell us that there is no over-production but that we are suffering from under-consumption. If that is true—and I believe it is—then our first job is to find out why people are not buying our product—homes. Surveys made by the American Builder, National Lumber Manufacturers Association, NRA and others, show that thousands of people are ready to buy or build when they can get the money for a long period at a reasonable rate of interest. Our February issue was dedicated to putting these facts before the building industry, the President and his Administration, as well as all other interested men of importance. It was "Dedicated to the Re-employment of Two Million Men." We have every reason to believe that results will be forthcoming in the very near future.

Real Estate at Bottom

But there are those who oppose new building, or even lending money for modernizing old buildings. These are the people who have a lot of foreclosed properties on their hands. They want to force these properties on the market with as little competition as possible. They tell everybody the country is over-built. They tell everybody the country is over-built. So you see we have competition which is proving very expensive to the building industry.

Knowing that people did buy homes and remodeled their old ones in 1933, a representative of the Home Owners' Loan Corporation set about to find out why these people bought homes and why they bought those particular homes. They sent out questionnaires and tabulated the replies.

Seventeen reasons were listed as to why a home was bought. From these new home owners all over the country, the principal reason given was their belief that real estate prices had reached the bottom.

The second greatest influence was the buyer's belief in home ownership. The third most important motive given was "to get a home of our own," and the fourth, the fear that inflation would raise prices. Other reasons, in the order of their importance, were: "advantages for children," "to get more room," and "so we can do as we please."

The questionnaire suggested several probable reasons as to why the buyer chose the particular home he bought. Three reasons were mentioned most frequently. They were: price, neighborhood conditions, and room arrangements. The matter of a long term mortgage didn't seem so important nor did better neighbors, or attractive landscaping. One buyer bought because the house had such a fine bathroom.

Such facts as these should give us something to consider in presenting the building industry to prospective home owners. Take the most frequently mentioned reason as to why the owner bought his home—"belief that real estate prices had reached the bottom." It seems to me we should attempt to show the public that homes at today's prices are bargains. We have some good authority that such is the case. I have in mind Roy Wenzlick, a nationally known real estate analyst of St. Louis.

Those who attended the "Better Housing" Conference held at the Congress Hotel in Chicago something over a year ago will remember Mr. Wenzlick. His address created more interest than any of the others. It was illustrated with facts, figures, graphs and charts. He presented a complete study of the real estate market from 1858 down to the time of his address. He didn't offer the cheer that his audience hoped for. He said that the market had not then hit bottom.

But Mr. Wenzlick delivered a more recent address. He spoke before the National Association of Real Estate Boards at their annual business meeting late in January. There he had a different story. "Now," he said, "is the time to buy. We cannot emphasize this too much. Practically every phase of the whole present national policy will increase the value of real estate." And so it will be seen that the opinion of this great real estate expert checks with the opinions of most of those who bought homes in 1933 as reported by the H. O. L. C.

Mr. Wenzlick sets up the facts to prove his opinion that real estate has reached the bottom and has started up. These facts should be given the widest possible publicity by all who are interested in the revival of home building. In other words, we've got a real authority to back us up in presenting the best and most effective sales talk for home building. Let's use it.

Such a campaign as I am suggesting isn't one that can be made successful by any one firm in a community. We've got to get all of the local building interests talking the same language. Every architect, contractor, builder and material dealer must tell his customers to "build or buy now" and tell them often and why. I had the honor of "kicking off" just such a campaign in Cleveland a month ago. It's the best organized building campaign I've ever seen started.

Cleveland invented the word "Renovize" and they call theirs a "Renovize" campaign. The Cleveland building interests believe that repairs and remodeling offer the first market for building materials and labor. Their campaign is set up on that basis. The campaign is covered fully in this issue of the American Builder. Read it and maybe we can help you start one in your town.
**How to Get Local (and Federal) Funds for Local Home Building**

By OSCAR KREUTZ

*Address before Chicago convention, Illinois Lumber and Material Dealers Association.*

**YOU men are naturally interested in increasing the volume of sales of lumber and building materials. The Administration is interested in the continued improvement of general business.**

The construction industry is a tremendously important element in the business activities of this country. It has been estimated that 75 per cent of the unemployed who have been put on the pay rolls of various emergency relief projects such as the CWA were normally connected in some capacity with the construction industry. The country finds itself in the peculiar position of having the construction industry paralyzed because of the lack of earning power and subsequent inability of wage earners to purchase or rent homes; and yet those same wage earners cannot return to their normal labors unless the construction industry recovers its normal stride. The situation reminds me of a law which the Missouri legislature passed a number of years ago, which read as follows: "When two trains approach a grade crossing at the same time, both shall stop and neither shall proceed until the other has passed."

**Big Need for Homes**

According to Government statistics there is a very grave shortage of dwelling units in this country. Normal vacancy is considered to be four per cent of the total units. Statistics show that notwithstanding the doubling up of families, there is an actual vacancy throughout the United States of less than four per cent on the average. In addition, we must consider the demand which will be created by those families which at the present time are doubled up. In actual figures, there was a shortage in the beginning of 1934 of approximately 1,350,000 dwelling units. Reduced to an average per 1,000 population, there is a shortage of 11 units per each 1,000 population. In other words, if your city has a population of 50,000, it needs 550 new dwelling units.

Obviously, this construction should not take place all at once because the unscrambling process will not take place overnight. Each community must, however, be prepared to provide the financing necessary to supply the needed construction.

Your local business men should realize the tremendous importance to them of having normal construction activities resumed. Why? Sixty per cent of the cost of the dwelling units stays in the community where the home is built, in the form of wages to labor and local profits on materials and contracts! In other words, if your community has $200,000 of construction expenditures in 1934, there will be an initial spending in the community of 60 per cent, or $120,000, and it should be remembered that this money continues to circulate for some time, thus creating good business for your merchants and prosperity for your whole community.

After the Federal Home Loan Bank Act was passed, there was created in 1932 a permanent system of mortgage reserve banks set up to serve home financing needs of the country through existing agencies which are eligible for membership in these banks. These eligible institutions are savings banks, insurance companies and building and loan associations. Most of the membership of the Federal Home Loan Bank System consists of building and loan associations with approximately a third of the eight billion dollars of building and loan assets represented in these institutions which have joined the Federal Home Loan Bank System.

The creation of this system, the Federal Home Loan Banks, was an important step in the development of home financing in this country. However, the System as originally created was inadequate because there are literally thousands of communities in the United States which have no local institutions eligible for membership in the Federal Home Loan Bank. In fact, this is true of more than half of the three thousand odd counties.

President Roosevelt early in 1933 took a second important step in the home financing program of the country by suggesting to Congress the enactment of a bill which would create a system of Federal savings and loan associations, in order to supply all communities throughout the land with local thrift and home financing institutions where the need exists.

**Are Local Institutions**

The Congress creating this system of Federal savings and loan associations adopted the best principles of the Building Societies of Great Britain, of the mutual savings banks of New England, and of the state chartered building and loan associations as they have operated during the past century in our forty-eight states. These principles are incorporated in this new System thus creating a plan designed to serve permanently the thrift and home financing needs of the country. Each Federal savings and loan association is, first of all, a local institution with a local board of directors and local management. It is, however, chartered by the Federal Government and is supervised by the Federal Government through the agency of the Federal Home Loan Bank. In order to accelerate the supply of funds where the need exists, the Federal Government will invest in shares of a Federal savings and loan association up to one hundred thousand dollars to match local capital.

A large number of these associations have already been established and many more are in process of organization. Through them funds will be provided for sound home financing. Any one interested in the formation of such an association in his community can obtain a copy of the Rules and Regulations either by writing direct to the Federal Savings and Loan Division of the Federal Home Loan Bank Board, or to the Federal Home Loan Bank of the district in which he lives. For example, the Federal Home Loan Bank of Chicago serves Illinois and Wisconsin.

Every possible assistance will be rendered by the Federal Home Loan Bank Board through field organizers and the district banks in every case where a need exists for a Federal savings and loan association.
Dealers who really know their local building costs have a wonderful opportunity to help themselves to prosperity as well as to build better homes.

EVERT indication points to real results from HOLC, or Home Owners' Loan Corporation, from loans for new buildings as well as for refinancing, so I will suggest one way that you can make the most of the opportunities you WILL HAVE soon to the end the building material dealers can get their rightful share of the consumer's dollars.

AMERICAN BUILDER has been making a gallant fight, in the interests of dealers and all others connected with the building industry, to make government financing available for new building on a basis that is bound to revive new building. You know what that can mean to you. You also are already familiar with the various ways of promoting sales, so my article will deal with co-operating with appraisers and those in charge of HOLC in your community.

Do you know who the appraiser for HOLC is in your locality? If not, find out and then arrange to see him. You may be sure that he will be intensely interested in an explanation of the House Valuator method of determining building costs accurately. Before you see him, however, prepare information that will interest him.

For your information, HOLC appraisals are based on cubical contents, which is all right for appraisal purposes, but positively N.G. for selling or even approximating building costs, as fully explained in the Dealer Section of the June 1933 issue of American Builder. Therefore, the first thing to do is to prepare to "talk in terms that will interest Mr. Appraiser" by ascertaining the cubical contents of the Basic House. This is its floor area of 864 sq. ft. multiplied by its height from the basement floor to midway of the gable, as cubic content is always figured, or as follows:

If the basement is 8' in the clear, add 9'/6" as the height from the bottom of the ceiling joist to the bottom of the ceiling joist and 4' as half of the 8' height to the ridge because the pitch fraction, 1/3, of the 12' span is 8'. This makes the height 21'/6" and the cubical contents is 21'/2 x the floor area of 864 sq. ft., or 18,576 cu. ft.

The next thing to do is to figure your cost of the Basic House as though you were to build it. Suppose your key-cost according to the list of materials provided by the Cost-sheet is $2,000.00 for labor as well as all materials. Figure its total cost, substituting your own costs, as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superstructure, 1.000 x $2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Foundation (page 28) 120 lin. ft. at $2.00</td>
<td>240.00</td>
</tr>
<tr>
<td>Basement floor, 864 sq. ft. at 15c</td>
<td>129.60</td>
</tr>
<tr>
<td>Excavation, 6' (deep) x 36.6 or 220 yds. at 40c</td>
<td>88.00</td>
</tr>
<tr>
<td>Built-in cabinets, say</td>
<td>200.00</td>
</tr>
<tr>
<td>Fireplace, say</td>
<td>150.00</td>
</tr>
<tr>
<td>Plumbing, say</td>
<td>400.00</td>
</tr>
<tr>
<td>Heating, say</td>
<td>300.00</td>
</tr>
<tr>
<td>Lighting (wiring and fixtures) say</td>
<td>150.00</td>
</tr>
<tr>
<td>Total cost</td>
<td>$3,657.60</td>
</tr>
</tbody>
</table>

Dividing this $3,657.60 by the cubical contents of 18,576 cu. ft. gives a cost per cubic foot of almost 20 cents per cu. ft.

What would it cost per cu. ft. if the house is 30' x 36'
containing the so-called "5 rooms and a bath," the same as the Basic House?

The cubical contents would be its floor area of 1,080 multiplied by its height, as follows: basement height 8' + height to plate, 9'/6" + (14 pitch or 30' span ÷ 2) 22'/2 feet. This equals 24,300 cu. ft. to be divided into the costs as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superstructure (p. 52) 1.136 x $2,000.00</td>
<td>$2,272.00</td>
</tr>
<tr>
<td>Foundation (p. 27) 132 lin. ft. at $2.00</td>
<td>264.00</td>
</tr>
<tr>
<td>Basement floor, 1080 sq. ft. at 15c</td>
<td>162.00</td>
</tr>
<tr>
<td>Excavation, 6' (deep) x 45 or 270 yds. at 40c</td>
<td>108.00</td>
</tr>
<tr>
<td>Fixed costs as before ÷ $50.00 for heating</td>
<td>1,250.00</td>
</tr>
<tr>
<td>Total Cost</td>
<td>$4,056.00</td>
</tr>
</tbody>
</table>

Cost per cu. ft. ($4,056 ÷ 24,300) or 16.7 cents.

Presenting such FACTS to your local appraiser will likely cause him to feel that you KNOW and that you can be a friend to him occasionally, as he can be a friend to you.

In view of the possibility that Mr. Appraiser will need "persuasion" as well as to give information that every dealer should have, consider this question:

"What value would you give per cu. ft. for a two-story house: 24' x 36', 6 rooms (living room, dining room, kitchen, 3 bedrooms) and bath (total of 13 rooms), 1/2 pitch, 12" cornice with same fixed costs as before except $100.00 more for heating and $25.00 more for wiring? Have the following information prepared before hand, of your own costs.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superstructure (p. 111) 1.427 x $2,000.00</td>
<td>$2,854.00</td>
</tr>
<tr>
<td>Basement (as for Basic House)</td>
<td>457.60</td>
</tr>
<tr>
<td>Fixed costs (Basic House $1,200 + $125.00)</td>
<td>1,325.00</td>
</tr>
<tr>
<td>Total cost</td>
<td>$4,636.60</td>
</tr>
</tbody>
</table>

Cubical content equals floor area of 864 sq. ft. x 30'/2 feet (8' + 18'/6" + 4' or half of 8' to ridge) or 26,352 cu. ft. Dividing $4,636.60 by this cubical content of 26,352 gives 17.6c as the cost per cu. ft.

After you have the foregoing information on the basis of your local costs, see Mr. Appraiser. Remember, however, he has his instructions from Washington with blank forms for making his appraisal and I am not questioning the value of that method for appraisal purposes. In fact, I think it is the best because it penalizes those
who build houses that are too small, especially if they try to crowd in a lot of dinky rooms. You know that it costs just as much for a door into a room 10 feet square as it does for one 14 x 14, having almost twice as much floor space. Furthermore, FIXED COSTS, such as plumbing, heating, lighting, fireplaces and built-in cabinets, go much less per cubic foot for large houses than for small ones. For instance, $2,000 worth of these fixed cost items will amount to 10c per cubic foot for 20,000 cubic contents and only 5c (plus a trifle more for a larger furnace) per cubic foot if the house has 40,000 cubic feet. Although homes with spacious rooms cost less per square foot of floor space, their VALUE is greater. Since the cubic contents method of appraising reflects such values automatically, I fully concur in that method for HOLC purposes.

As I write this, I cannot help but wish I were back in the lumber game again. If I were, when I saw Mr. Appraiser, I'd start out something like this:

As appraiser for HOLC, you can help me more than any professional community to relieve unemployment, and I have come to enlist your co-operation in my efforts to put men back to work in this locality. You know that building has been practically dormant around here the last four years, the same as in every locality. The building industry normally employed about 25 per cent of all workers, starting with the men who cut down trees and mined the iron ore to the painters who put the finishing touches to every building project. I'm going to go after building business around here more intensively than ever and you can help me if you will.

"I know you will be interested in this lumbermen's method of figuring actual costs of building. Perhaps you have an idea that the cubic foot cost is based on the actual cubic costs which you apply around here. This is how the HOLC System works.

I would then explain the Basic House and present the information which I had prepared to give actual cubic foot costs.

By the time you have given Mr. Appraiser the information about the HOLC System, you will find that he will be more than anxious to co-operate with you. Ask him to keep you informed of parties applying for loans, especially if his recommendation requires repairs, so you can contact those parties and do some CREATIVELY SELLING. When you do, don't stop at what is required in order to get the loan. SELL THEM WHAT THEY SHOULD HAVE.

HOLC presents a real opportunity for lumber dealers of this country. HELP TO PUT MEN TO WORK by doing a real selling job before the aggressive salesmanship of the industries which do not employ your labor, beats you to it.

If you will do as good a selling job as those who merchandize automobiles, radios, refrigerators, and the thousand and one other commodities that people WANT AND WILL BUY IF PROPERLY SOLD when they have the money, you will be helping our good President in his efforts to do a real job for you and for me.

This is no time for wishing and waiting. It's time to ACT. It's "Doers" that are needed in this lumber business. Do everything that you can to promote merchandising and repairing as well as new building in your community. House Valuator will help you immensely. I personally know many dealers who will have a better 1934 because of HOLC and House Valuator and my main object in writing this article is to help all who have this service and the thousands of other wide-awake dealers who should have this to help them DO A REAL SELLING JOB as to BRING BACK PROSPERITY!
LETTERS (Continued)

I have contacted the Contractors' Organization throughout the state, and they are back of these Bills, and also the real estate men are back of them.

You are to be commended for going after it in such a vigorous fashion.—H. A. LAKE, President, California Retail Lumbermen's Assn., Garden Grove, Calif.

(Copies of the February issue were sent to the President, his advisers and the Cabinet, including Messrs. Fahey and Jones; also to all members of Congress, chambers of commerce, 2,000 newspapers, all building trade associations, labor organizations and other institutions in the building industry.—Ed.)

Do Congressmen Read?

TO THE EDITOR: We wish to add our congratulations to the many which you must have already received for your February number.

I assume that someone has already realized the importance of having a copy of this magazine placed in the hands of each one of our senators and congressmen.

If the lumber trade throughout the country knew that copies had been placed in the hands of congressmen and senators, and each lumberman urged his own member of the Senate and Congress to be sure and review the information contained in the AMERICAN BUILDER and would then base his vote on the information thus gathered, it would seem that we might expect mortgage money to be available at a very early date.—LESTER V. STREEVER, President, Streever Lumber Co., Ballston Spa, N.Y.

Adopt Resolution

TO THE EDITOR: I read with interest your February articles and data on small home building program. I enclose a copy of resolution on Duffy Bill, H. R. 6460. This resolution was adopted by the Carolina Retail Lumber and Building Material Dealers Association at its annual convention in Columbia Feb. 7 and 8. The dealers in the two Carolinas are strong for this program and have resolved to do all in their power to put it over.—M. H. DOTY, M. W. Doty and Son, Winnsboro, S. C.

(The resolution unanimously endorses the Duffy Bill; says that lack of money for new construction is retarding general recovery, and urges dealers to write members of Congress enclosing copies of the resolution.—Ed.)

Savings and Loan Better?

TO THE EDITOR: I feel that we are on the wrong track when we urge the government to get into this thing as a matter of business. The best means of handling the building situation is through the Federal Savings and Loan Associations as set up by the Federal Home Loan Bank. We have a little association of this kind in our office and it is highly gratifying to see how well it is functioning. Of course it is managed by local investors, and as such we can pass on values, make loans, trade and close with our customers in a minimum of time. In fact, we can pass on a loan here in Jonesboro while the government would be receiving and answering the first letter.—CHARLES STUCK, C. A. Stuck & Sons, Jonesboro, Ark.

Fine Piece of Work

TO THE EDITOR: I thank you for sending me a copy of the AMERICAN BUILDER for February and think that you have done a fine piece of work in calling to the attention of the government the need for stimulating the small building industry.—F. K. WEVERHAEUSER, President, Weyerhaeuser Sales Co., St. Paul, Minn.

Put Men to Work

TO THE EDITOR: I have received the February AMERICAN BUILDER and want to compliment you on the completeness of this issue. I believe it should accomplish good results. The return of building activity would put more men to work than any other one thing that could be done, and we trust that day is not far away.

I want to thank you very much indeed for the interest you have shown in this matter.—JOHN L. AVERY, General Sales Manager, Frost Lumber Industries, Inc., Shreveport, La.

American Builder Dealer Section

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American Builder Dealer Section

(continued)