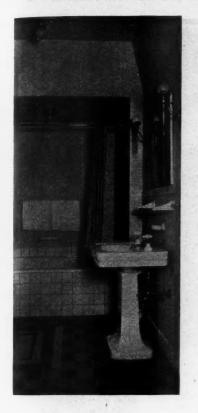
THE ISSUE OF NOVEMBER, 1931



AMERICAN BUILDER and **BUILDING AGE**

IS THE BUSINESS JOURNAL OF THE ACTIVE MEN OF THE BUILDING INDUSTRY

SUBSCRIPTION RATES — One year, United States, Mexico and U. S. Possessions, \$2.00; six months, \$1.00; single copy, 35 cents. Canada, one year, including duty, \$2.50; other for-eign countries, \$4.00. ADVERTISING RATES — Furnished on application. Advertising forms close on the 10th of the month preceding date of publica-tion. Entire contents copyright, 1931, by American Builder Publishing Cor-poration. poration.

AMERICAN BUILDER

BUILDING AGE

(A Simmons-Boardman Publication)

Vol. 52-No. 2 53rd Year CHRISTMAS NUMBER-NOVEMBER, 1931 Water Color by L. E. Arent Front Cover 1 Looking Ahead with the Editors.......December Forecast 7 Subject Sign-Post_____Editorial Contents Classified 23 25, 26 Editorials The "Prevailing Wage Scale" Menace. Homes and Road Building. New Home Best Xmas Gift. Frontispiece—Christmas Shopping for New Homes and New Home 27 Improvements How Builders Can Take Advantage of Christmas Buying Season... 28, 29 Many Home Improvements Suggested As Welcome Gifts for All the Family. Suggestions for Christmas Advertising 30 31 Why Make Hard Times Harder?.... Timely Message to Concrete Contractors by W. D. M. Allen. Winter Building Found Practical and Profitable ... 32-34 Survey by Department of Labor Investigators Reveals Extent of Winter Con-struction and Methods Used by Successful Builders in Protecting Work During Freezing Weather. New Homes for Christmas..... 35-40 Home Design Section Presenting Nine Delightful Little Homes for Winter Building. Defends Hard Road Program..... 41-43 B. F. Affleck Finds Highway Expenditures Justified; Recommends Getting Government Out of Business. 15 Degrees Cooler..... 44, 45 Apartment House Builder Discovers Value of Roof Insulation. Wanted: Money to Build!..... 46. 47 Resume of Recent Developments in Home Financing. How We Are Selling Houses in the 1931 Market 48, 49 Newland C. Prior, Vice-President, Charles H. Reis, Inc., Relates How Recre-ation Rooms and Electric Kitchens Are Helping to Sell Homes. Operation of a Central Urban Mortgage Bank 50 Marcus Nadler Summarizes the Principal Features of This Proposed Home Financing Body. The House of the Month..... 51-55 Working Drawings to One Eighth Inch Scale of an Early American Home; William C. Halbert, Jr., Architect; Munroe Stiner, Builder. New Materials and Equipment Aid Builders. 56, 57 Presenting Half a Dozen New Things That Are Worth While. Practical Job Pointers.... 58, 59 A Readers' Exchange of Tested Ideas and Methods Taken from Their Own Building Experience. Lee and Dunn Advanced to Leadership of Simmons-Boardman Publications 60 News of the Industry 61-63 Questions of Law Clearly Answered 66 "Counter Attack" 68 Advertiser's Index 85

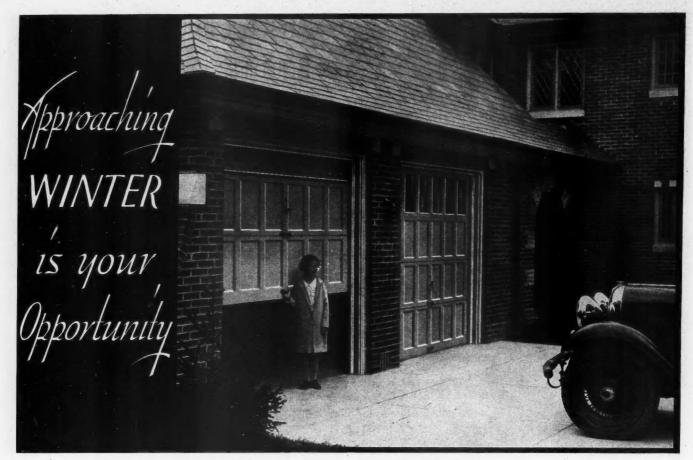
MEMBER OF THE AUDIT BUREAU OF CIRCULATIONS AND OF THE ASSOCIATED BUSINESS PAPERS

AMERICAN BUILDER AND BUILDING AGE, with which are incorporated Building Developer, Home Building, National Builder, Permanent Builder, and the Builder's Journal, is published on the first day of each month by the American Builder Publishing Corporation.

Chairman of Board, HENRY LEE; President, Samuel O. Dunn; Secretary, Elmer T. Howson; Treasurer, John T. DeMott.

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AMERICAN BUILDER AND BUILDING AGE



Our Service Helps You to ____ COLD WEATHER PROFITS

WITH the approach of cold weather, ice, sleet and snow become valiant salesmen for The "Overhead Door." The man who remembers the grief of past winters is in a mood right now to consider modern garage door equipment. Go after him, get your share of this fine replacement business, make winter show a profit.

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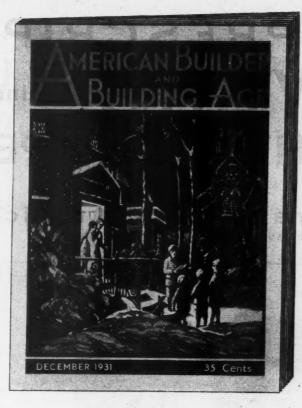
Sell "Overhead Door" service—then your part is done. This corporation will help you sell, will install the door, will see that it operates perfectly all the time. You need not tie up a dollar of your own capital or an unprofitable hour of your own time.

Contractors everywhere are cashing in on a dull winter with The "Overhead Door," pioneer, leader for ten years, handsome, dependable, widely advertised, nationally accepted.

Right now you no doubt can think of good prospects. May we help you close the sale?



FOR ADVERTISERS' INDEX SEE NEXT TO LAST PAGE



LOOKING AHEAD WITH THE EDITORS

December, 1931

Our Christmas Number-

ECEMBER continues and brings to a head the Christmas home improvement campaign started in this present November AMERICAN BUILDER AND BUILDING AGE. Contained within its beautiful December Christmas covers, you will find additional suggestions for Christmas home building and home modernizing activity, and for Christmas moneymaking merchandise of special interest to the men of the building industry.

Study the ways and means outlined in this current issue-and again next month-for stimulating and promoting your business now by featuring the Christmas gift angle. You builders and building supply dealers have to offer the very best of Christmas goods. Your offerings are sensible, thrifty, constructive-something which the entire family will enjoy. With just a little business. It will make work and create thought, you can put your goods and sales. It will help to carry through to your services right in line with the sea- the looked-for building revival next son's buying urge and make them very spring.

appealing to the buying public.

This present November issue has a number of definite suggestions and plans for builders who are in earnest about wanting to create more building business this winter. The December Christmas number likewise will be full of timely and usable ideas and plans. With your help, this Christmas can be made in your community a real home improvement event.

Our readers have always been known as men of enterprise-hustlers for business. They know how to create jobs and how to build sales. This winter, more than ever before, there is need for every man of the building industry to become an active salesman of home modernizing, new home building and home improvements. Take hold of this Christmas idea and apply it to your -The Editors.

AMERICAN BUILDER AND BUILDING AGE

"PIPE PRESCRIPTION" puts **BYERS** genuine WROUGHT IRON PIPE

Homes Permanesque of America



Permanesque Homes have been constructed in more than fifty communities by reputable, licensed builders. These new American carefree homes, whether elaborate or modest, incorporate every structural feature that assures greater permanence and less upkeep. "Pipe prescription," which calls for the right pipe in the right place, fits perfectly.

Home buyers are becoming conscious, more and more, of the enhanced value, the outand-out economy in the use of proved materials. Byers Wrought Iron Pipe, therefore, becomes an important selling point to be used by builder or realtor in establishing the real value of a home.

Where permanence is desired, where minimum upkeep and carefree ownership is essential, "pipe prescription" points definitely to Byers Pipe. Since 1864 it has been the standard of wrought iron quality. The Spiral Stripe identifies it and its genuineness is further assured by the name "Byers" on every length.

Our consulting "pipe prescription" experts and our laboratory, together with 67 years of pipe engineering experience, are at your service. A. M. Byers Company, Pittsburgh, Pa. Established 1864.



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This Classified Index is Presented for the Convenience of Readers Who Are Seeking Features and Designs of a Particular Sort. An Index by Pages in Regular Order Appears on Page 5.

The overal of the and building age of the approximate the second second

is a business builder for wide-awake contractors

24

OU will find surprisingly good business in the sale of the BARCOL OVERdoor—the garage door of modern design that is becoming increasingly popular year after year. Sales are not hard to make when your customers fully understand the increased quality that the BARCOL OVERdoor offers. Most customers of yours will readily see the advantages of this superior type of door. They will want the benefit of the OVERdoor's easy opening and closing—of its perfect balancing—and of its improved method of closing. They can easily be shown its higher quality, as represented by its better grade wood sections, its finer, more enduring hardware and its generally heavier construction throughout.

The BARCOL OVERdoor may be economically and satisfactorily installed when the proper instructions are followed. It is priced at a reasonable figure, quality considered. And it pays you a reasonable profit on every sale.

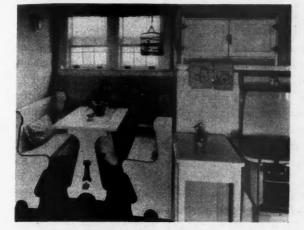
National distribution and our wholehearted policy of cooperation with the contractor insure prompt shipment and satisfactory service. We suggest you write us today regarding the OVERdoor and obtain complete information so that you can fill the orders that will originate in your territory. Most customers would like to have this type of door — and will gladly pay for its extra quality and service.

BARBER-COLMAN COMPANY

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FOR ADVERTISERS' INDEX SEE NEXT TO LAST PAGE



AMERICAN BUILDER BUILDING AGE

THE "PREVAILING WAGE SCALE" MENACE

THE Los Angeles correspondent of The New York Times recently wrote the following:

"Among the many new laws in effect this week is one known as 'the prevailing wage scale law.' No one seems very sure of what it means except that it is certain to spell a lot of trouble when and if its enforcement is seriously undertaken. The new law provides that each contract must stipulate payment to the labor employed thereon of 'the prevailing wage scale,' but how this is to be determined is a Solomonic problem."

This new California law, like similar ones in other states, is unjust, unwise, and an unwarranted encroachment by the state government on the private business enterprise of the contractor and builder. Some twenty states now have laws or special executive orders setting minimum wage scales to be paid labor employed by contractors engaged on public works. Such measures, designed to maintain wage scales artificially, are not only harmful and confusing to builders, but set a very bad precedent.

Perplexing Uncertainties

As the Times correspondent says, it is a "Solomonic problem" to determine what the prevailing wage scale means or is. The labor unions declare that the union scale is meant. But the current departure from union scales is so widespread that such a stand is hard to prove. In Los Angeles, for example, the union scale for bricklayers is \$11 a day, but the average wage paid by contractors is generally \$8. In every state where these laws have been passed there have been disputes, legal battles, and in many cases costly delays caused by the problem of determining what "prevailing wage scale" means.

Such confusion, delay and uncertainty, while bad, are not the worst results of these laws. Artificial attempts to maintain wages, food prices, monetary standards or anything else in opposition to the economic laws of supply and demand do not pay. The events of the past year, both here and abroad, have amply demonstrated this fact. In the building industry these laws make the cost of public works greater and so reduce the total volume. The taxpayers can be bled just so far before they will object.

There are other restrictions placed on contractors engaged in public works that are similarly short-sighted and unwise. Often labor must be hired locally, materials purchased within the state (regardless of cost) and other local political log-rolling affairs observed. And in the face of all this, rock bottom prices are asked. What is more, because of competitive conditions, contracts are often placed on a basis that hardly returns a profit. Then if the builder attempts to cut labor or material costs he is subject to severe fines or penalties. In one state the fine is \$500 or six months in jail for violation of the "prevailing wage" law. Another penalizes the contractor \$10 for each workman per day of violation.

Freedom of trade between communities and states is one of the basic forces behind the remarkable growth and economic success of the United States. To erect barriers such as those placed upon public works contractors strikes at this freedom. "Buy at Home" movements are hard to combat locally until the community, county or state suddenly realizes that the reprisals they create are hurting them. No community can be entirely self-supporting. If it refuses to buy from its neighbors, they will retaliate by doing the same. The result to local business more than offsets the good the "Buy at Home Campaign" was thought to have done.

Such restrictions as the prevailing wage laws and buy-at-home orders are un-American as well as unfair. Where high wages are economically justified, they should be paid; but if they are not, no amount of legislative tampering will keep them up. Where local materials are cheapest, they should be used; but when it is economical and good business practice to purchase them elsewhere, then that should be done.

HIGHWAYS AND HOMES

E publish elsewhere in this issue a letter from B. F. Affleck, president of the Universal Atlas Cement Company, commenting upon the editorial entitled, "Huge Governmental Costs Threaten American Industry" that appeared in our September issue. Mr. Affleck is a public spirited citizen and a keen student of economic problems, and is interested in both building and highway construction. He agrees with the AMERI-CAN BUILDER AND BUILDING AGE that present governmental expenditures and taxes are excessive, and must be reduced. He takes exceptions, however, to certain of the comments made by us upon expenditures for highways and the sources from which the taxes for them should be derived.

Mr. Affleck says, "The attempt to divide taxpayers as indicated in our editorial into motorists who pay and those who do not pay real property taxes seems open to question. All the owners of the 26,000,000 automobiles in the United States pay real property taxes whether they own the property or not. * * * Taxes should be reduced. But in order to do this, is it not preferable from every point of view, to cut out expenditures that are wasteful, injudicious and excessive rather than curtail our investment in good roads which save taxpayers more than they cost?"

No Real Estate Should Be Taxed For Road Building

The AMERICAN BUILDER AND BUILDING AGE believes it is an economically sound proposition that all the money spent under present conditions upon highways should be derived from the vehicles that use them. This means that the great bulk of these taxes should be derived from motor vehicles.

(1) The users of highways may either own or rent real estate, but it is as users of the highways that they derive benefits from them. Mr. Affleck points out that the development of hard roads reduces the cost of operating motor vehicles. This is an argument for, not against, making motor vehicles bear all highway costs.

(2) The taxation of real estate for highway purposes increases the burden borne by owners of real estate and correspondingly reduces the burden that would have to be borne by owners of motor vehicles if all the money spent upon highways were derived from them. The effect of heavily taxing real estate for highway purposes is artificially to hamper building construction and artificially to stimulate expenditures upon highways and motor vehicles. This helps to throw the business of the country out of adjustment, and is one of the causes of the present stagnation in the building industry.

(3) The highways are used not only by private motorists, but, also, by motor busses and trucks operated for hire. When motor vehicles in general, and busses and trucks in particular, are allowed to use the highways for less than total highway costs, and the balance of the costs are paid from general property taxes, the owners of real estate are forced to subsidize highway transportation, which is unjust.

The AMERICAN BUILDER AND BUILDING AGE is not opposed to the construction of hard roads where they are needed. Wherever they are needed, under present conditions, it is for the use of motor vehicles. The true test as to whether they are needed in any particular territory is whether the motor vehicles in that territory can and will stand the amount of taxation required to construct and maintain them.

The building industry ought not to continue to be depressed and the motor vehicle industry to be stimulated by a policy of taxation which makes it both more expensive than it should be to build and own homes, and less expensive than it should be to operate motor vehicles and, especially, commercial busses and trucks.

NEW HOME BEST XMAS GIFT

"A BETTER Home for Christmas" is the slogan being adopted by many contractors and building supply men as part of their drive to increase home building activity this winter.

For most kinds of shopping it may still be a bit early to be thinking about Christmas. But if the gift is to be a new home, or some improvement about the home, now is a good time to get work started. Fall and early winter are desirable seasons for building work because labor and material costs are lower than at other times of the year. Contrary to most people's ideas, winter weather is no obstacle to good home building. Many builders, in fact, have proved that they can do better work in winter and at less cost.

At a time when people are inclined to watch their expenditures for luxuries and non-essentials very carefully, the desirability of putting money into home ownership or improvement is most apparent. This year, instead of spending on Christmas luxuries, the thrifty thing to do is to invest in a better home.

New homes can be purchased or contracts let this winter at the lowest prices in many years. Construction materials and methods are better, equipment and laborsaving devices greatly improved, home designs more efficient, yet the cost is from 20 to 35 per cent less than it was two years ago. No gift could possibly return greater dividends in satisfaction and happiness. Considered as an investment, the well-located, well-designed modern home is extremely safe and brings in a high financial return.

In addition to their activities in selling new homes as the best of possible Christmas presents, builders and supply men are advocating modernizing and home improvements. Such work provides employment at a time when it is greatly needed and adds much to the value and convenience of a house.

As a part of the building industry's drive this fall and winter for increased activity and employment nothing is more logical, timely and promising than to enlist the services of good old Saint Nick, and direct the Christmas buying urge toward new homes and home improvements.

THE ISSUE OF NOVEMBER, 1931

CHRISTMAS SHOPPING FOR NEW HOMES AND HOME IMPROVEMENTS

Now is the time to influence the folks in your community toward Christmas gifts of real worth—new homes, homes modernized, and homes equipped for fullest enjoyment.

AMERICAN BUILDER AND BUILDING AGE

START YOUR "BETTER HOME for

N times of depression people are inclined to think twice before spending money foolishly or on luxuries. There is a very special reason, therefore, why the active men in the building industry should make a vigorous effort at this time to turn such expenditures into the safe and satisfying channel of homebuilding or modernizing. Such a slogan as "A Better Home for Christmas" may well become the

Such a slogan as "A Better Home for Christmas" may well become the rallying cry around which builders, supplymen, architects, and realtors will organize home improvement drives to counteract the high pressure selling activities of the luxury vendors as Christmas draws near.

With less than two months left before Christmas, builders should be especially active promoting the idea of home building or improvement and home equipment as the best of all possible Christmas gifts for the entire family. Builders must do their Christmas selling early.

The Public is Receptive

Many forces are lined up behind the building industry to make the merchandising of homes and home improvements easier. Of first importance are financial considerations. The public, timid about other investments and doubtful about the advisability of spending large sums on automobiles, fur coats, expensive radios, and other luxuries, must be sold on the superior benefits of investing in a home. They must be shown how secure, lasting, and beneficial such an investment is, and how much better for them to put their savings into their home.

Low Costs Vie with Modern Improvements as Stimuli to Xmas Building

Other arguments can be presented in strong array. Low costs, of course, provide excellent selling ammunition. Show the advantages of building in winter, and of spring occupancy. Enlist the force of public opinion in your behalf by showing how home-building now will help relieve unemployment and stimulate business.

Such arguments as these can be fully supported by data on the many improvements that have been made in homebuilding and design. Explain how new building materials, new and improved equipment, and upto-date construction methods make the modern home far superior to those of the past. Point out that the 1932 model American home is as much improved over the 1900 style as the 1932 automobile or radio is improved over those of earlier years.

How to Plan a Christmas Campaign

To present all these ideas, a vigorous Christmasselling drive is imperative, not just a drive, but a wellplanned, intensive, selling program, starting at once and continuing vigorously until Christmas.

Such a campaign should be started with a definite objective, and every sales medium should be considered to help attain that objective. Newspaper advertising, sales letters, radio talks, essay contests, and individual selling through telephone conversations and personal calls may all play a helpful part, supporting each other and resulting in a building up of favorable buying sentiment. By getting the home selling drive under way at once builders will obtain an advantage over the many claims for the American public's money during the holiday season. ARE YOU PREPARING TO TAKE FULL

THE

ADV

Before taking up the various sales methods that may logically be employed, let us consider some of the improvements that may be suggested. Subjects for selling must of course depend on the builder's set up and personal desire as to what direction his expansion shall be directed. Selling a new home, with work starting at once, is of course most desirable; but there are other forms of work, such as modernizing and improving, that or

CHRISTMAS" DRIVE EARLY

For Father-

An extra washroom for shaving, well lighted, with good mirror A cheerful fireplace A special closet for his belongings Exercise room in basement Better placed coal bin Private study or workroom in attic For the Girls— Individual bedrooms Playroom in attic or basement Automatic dishwasher

For the Boys— Workshop or playroom in basement Individual bedroom or study in attic For the Whole Family— A commodious new house More windows Redecoration throughout Automatic heating and refrigeration Modernized bathroom Exterior refinished Closets, bookcases, shelves, cupboards Wall-safe for valuables

A selling campaign by mail, as described in the September and October AMERICAN BUILDER AND BUILD-ING AGE, is recommended to get immediate results. It is suggested that such a sales program extend tor six weeks, beginning November 10, with one letter going out each Tuesday. Select your mailing list caretully, and make the letters *sell*. For builders specializing in new homes alone, the following subjects are suggested. The entire five go to the same list of prospects. Only those who have replied or to whom sales are made are removed from the list.

Letter No. 1—Build a home now while prices are low. Letter No. 2—Sales description of one or two favorite designs with cost set up.

Letter No. 3—Financial advantage of putting money in a home investment.

Letter No. 4—New comfort and convenience features of two popular selected home designs. Letter No. 5—A home makes the best Christmas gift.

Where results indicate that the number of Christmas sales will warrant it, special cards announcing in Christmas fashion the gift of a new home to the family may be made up for hanging on the Christmas tree or presentation to members by the head of the household. A good advertising plan is also to offer to send out the buyer's Christmas cards for him in the form of an announcement of the new home, with sketch and floor plan drawn in cartoon fashion showing location of each person's room or special activities. Inscriptions would read: "Here sleep the twins," "Here father shovels coal." "Here mother bakes good cakes," "Where Bill would sleep if he stayed home nights," etc.

The letter selling campaign may well be supplemented by use of the local radio station for short talks. Subjects might include those suggested above for letters as well as more general ones such as "Home building and improving helps local unemployment situation" or "Social and financial advantages of owning a home," etc.

An essay contest in the local schools will stimulate much attention. Offer prizes for the best essay on "Why A New Home Makes the Best Christmas Present." Arrange to have the newspapers describe the contest and print the winning essays.

Newspaper advertising is, of course, the backbone of most selling efforts. Your advertisements should be carefully worked out, and inserted twice a week during the pre-holiday season.

Because newspaper advertising is expensive, you (Continued to page 82)

THE BEST OF ALL CHRISTMAS PRESENTS. ADVANTAGE OF HOLIDAY BUYING SPIRIT?

will help to keep your men busy. A few Christmas suggestions are as follows: For Mother—

A modernized kitchen

JLL

New, easy to clean, comfortable floors

A sun-sitting room

Additional closets and cupboards

A dressing room off bath or bedroom



AMERICAN BUILDER AND BUILDING AGE



NEWSPAPER ADVERTISEMENTS SUCH AS THESE WILL HELP MAKE YOUR "BETTER HOME FOR CHRISTMAS" DRIVE A SUCCESS THE ISSUE OF NOVEMBER, 1931

Why Make Hard Times Harder?

Timely Message to Builders of Concrete Improvements Around Homes, Schools, Parks, Playgrounds, Industrial Plants and Farms

> By W. D. M. ALLEN Manager, Cement Products Bureau Portland Cement Association

HARD TIMES MADE HARDEP.

Chicago, Feb. 5.—Times are: haid! Yes, sir; they surely are. They are wo hard, in fact, that you cannot get a reply to letters asking for a price for some hard work you want done.

The paving of the alley in the rear of my home has made it necessary for the back walk to be raised, as it is now below alley grade. On Jan. 12 I wrote a concrete construction company asking a price on the work. Although I later followed this up by a personal visit, and still later by a telephone request for a reply, to date I have had none. So on Jan. 29 I wrote another cement construction company asking for a price on the work. I even took this letter to the firm personally, but as yet no reply. Yes, sir ! times are hard. My experience proves it.

From "Voice of the People" section of Chicago Daily Tribune

WHY make hard times harder? This question is asked by one of the readers of the *Chicago Daily Tribune* and his manner of asking, as shown in the newspaper clipping reproduced here, concerns concrete contractors—those builders responsible for all kinds of improvements around homes, schools, parks, playgrounds, industrial plants and farms. The facts as this man expresses them do not constitute an exceptional case. In order that this may not be considered a broad statement without a basis of wellfounded facts, I want to say that a survey recently made by the Portland Cement Association revealed the following:

Thousands of prospects who want concrete improvements have had experience similar to those of the man who wrote this "Hard Times Made Harder" letter. Our survey definitely proves this fact. That high class leads of this kind are being passed up without any effort to get business is evidence that the selling phase of the concrete contracting business is not receiving the attention it deserves. Our survey substantiates this fact.

At a time like the present, when there is not a great deal of new building going on, contractors should be anxious to get business of the kind described by the writer of the accompanying letter. In calling contractors' attention to this letter, I want to point out the importance of following up every job, no matter how small it may seem.

A small improvement such as a sidewalk may give you an opportunity to sell the home owner a number of other improvements. A sidewalk or basement floor may need repairing; a new garage floor may be needed, or a foundation or concrete driveway; possibly a concrete pool in the yard. Carriage walks along the curb may be sold. There are all kinds of concrete jobs around the average home that a concrete contractor can promote by a little personal direct selling.

This letter also suggests the need for contractors to

employ salesmen to be on the lookout for such opportunities for business. Parks, playgrounds and clubs offer an excellent opportunity for selling concrete improvements. Tennis courts and swimming and wading pools are examples of the kinds of jobs that can be promoted through city or village officials, club members or business men's organizations. There is plenty of such work in every community that salesmen can uncover and cash in on.

Concrete contractors will find it profitable to continue this sales effort during the so-called "off-season." The contractor who gets a good break in the spring is the one who has done winter selling of spring business. He paved the way by contacting the various people in his market who would have need for the services of a concrete contractor in the spring and during the ensuing months. Personal calls made on large builders, those who sub-let their concrete work, often result in profitable contracts.

The progressive concrete salesman also interviews and keeps in touch with realtors and real estate builders. During the past year, for example, many real estate firms made plans for extensive housing developments on which work is soon to start. Such projects involve the construction of sidewalks, driveways, curbs, gutters, foundations, and they can be made to include concrete floors. This business is worth getting.

This is a good time of year to show coal and building material dealers the advantage of paved yards. This is especially true during the early days of spring when the ground begins to thaw out and the yard becomes almost impassable. The contractor who will have a large program of work laid out for next year is busy right now getting the contracts.

Concrete contractors are finding that it pays to use aggressive sales methods to get business. They are expanding old markets and developing new ones with the same kind of sales effort used by other business men in developing business.

100

AMERICAN BUILDER AND BUILDING AGE

WINTER BUILDING Found Practicable and Profitable

Survey by Department of Labor Investigators Reveals Extent of Winter Construction, Methods Used by Successful Builders in Protecting Work During Freezing Weather, and Obstacles Still to be Removed if We Are to Banish

Seasonal Fluctuations in Building

ALTHOUGH the existence of seasonal fluctuations in the construction industry has been recognized for some years past, no effective study has been made to determine and segregate the causes of these fluctuations. Are they due to the cold weather which prevails during the winter months or are there other elements, such as the rental and moving dates and other local customs, which may be responsible for the stoppage of construction work during the winter? To what extent is the stoppage due to physical factors which make it impossible to carry on construction work in cold weather or to psychological factors due to the generally prevailing notion that winter is not the proper season for building operations? What can be done in either case in order to eliminate or at least to mitigate the seasonal fluctuations in the construction industry?

In the search for an answer to these questions, the United States Bureau of Labor Statistics recently dispatched a special agent to interview leaders of the construction industry in the following cities: Chicago, Ill.; Milwaukee, Fond du Lac, and Eau Claire, Wis.; Minneapolis and St. Paul, Minn.; Atlanta, Ga.; and New Orleans, La.

Winter Operation in the Northern States

The rigorous winter weather which normally prevails in the States of Illinois, Wisconsin, and Minnesota is no longer a serious problem to the construction industry in these States. Twenty years ago the advent of the first frost in November would bring with it a complete cessation of activities in all lines of construction work. Not only would no new building projects be started during the months of November to March, inclusive, but even jobs already begun in late summer or early fall but not yet completely inclosed before the arrival of winter would be shut down until the coming of spring.

The situation now presents an entirely different aspect. During the war and immediately afterward many builders were compelled to carry on a large proportion of their work during the winter months in order to complete their projects within the time limits set by their contracts. They soon discovered that the cold weather, in itself, presented no physical obstacles which could not be overcome by means of more diligent supervision and a certain amount of protection of the work against snow and ice. Additional experimentation soon convinced them that even the operations which are most adversely affected by freezing temperatures, namely, the pouring of concrete and the masonry work on the exterior or the shell of the building, can easily be safeguarded by the simple device of heating the water and the aggregates in the process of mixing the concrete and by protecting the newly concreted section of the structure by means of canvas inclosures and artificial heat supplied by coke or oil-burning salamanders.

In the present survey in Illinois, Minnesota, and Wisconsin some of the outstanding facts disclosed by the opinions of the representative organizations and individuals are as follows:

(1) Winter weather is not regarded as a deterrent to building operations in the case of the major types of buildings, such as large offices, industrial plants, large apartment buildings, etc., which require a year or more for completion.

(2) On major operations, architects and general contractors carry on construction work irrespective of the season of the year and even in subzero weather. The



majority of the contractors in this section of the country have had several years of experience with winter work and know the precautions necessary for winter operations.

(3) The precautions and the equipment needed for winter work are comparatively simple and have now become fairly standardized.

(4) The extra expenses involved in protecting winter work against the weather are comparatively small and represent but a small fraction of the total building cost. The exact amounts vary considerably with the nature of the project and the severity of the winter season. Some of the architects and contractors are of the opinion that this extra cost is in some measure overcome by the lower costs on other items; they point out that the price of materials is lower in the winter; that the contractor may voluntarily reduce his profit on a winter job in order to keep his organization intact and his men employed, while the workmen will often accept a lower rate for year-round work. Some are even of the opinion that the extra measures necessary to protect the job in winter are no greater or more expensive than those necessary, because of heat and rain, to protect it in the summer.

(5) There is no definite agreement among the builders as to the comparative efficiency of labor in winter work. Very few contractors contend that they get as much work from a given workman during the cold season as at milder seasons of the year, as the worker is hampered by cold and by the extra clothing which he must wear. The majority of the contractors, however, are of the opinion that the average efficiency of the men hired during the winter months is higher than the summer average. This is due to the fact that, since work is slack during the winter months, the employer has a large supply of labor from which to choose. Only the best workmen, therefore, are retained.

(6) In the construction of smaller buildings, and particularly of the smaller houses, the season of the year is still an important factor. The opinion of architects and builders in this field is more or less divided. Some favor winter operations in all buildings, while others are opposed to winter work on houses as uneconomical and more or less hazardous. Those in favor of winter work on this class of building believe that the person who has his house built in the off season has a decided advantage because of lower costs of materials, lower charges by the contractor, a higher grade of labor, etc. They state, also, that a house built in the winter under the proper precautions is as well constructed as one built in the summer. Others, on the contrary, are of the opinion that winter costs are enough higher to make a prospective home builder hesitate to undertake the construction of his new house in the winter.

(7) The architects and the contractors no longer need to be educated as to the practicability of winter construction work. The amount of winter operations in the construction industry, however, will be determined by the extent toward which the general public, and particularly the prospective builders, are educated to the safety, feasibility, and desirability of building in the off season.

Fluctuations in the Southern States

In view of the fact that cold weather no longer plays an important rôle in the construction industry, even in the sections of the country which are affected by a prolonged and moderately severe winter season, the question arose as to the other factors which are directly or indirectly responsible for the continuation of seasonal fluctuations in the building trades. The survey of the Bureau of Labor Statistics was therefore extended to include the construction industry in Atlanta, Ga., which is known to have a comparatively mild and short winter season, and in New Orleans, La., where freezing weather is rare.

The outstanding facts disclosed by the survey in Atlanta and New Orleans are:

(1) The attitude of the representative architects and builders in the city of Atlanta toward the question of winter building is not uniform. They agree that there is a decided diminution in building operations during the months of December, January, and February of each year. They also agree that one of the principal causes for the winter slump in building activities is the fact that the city of Atlanta has only one renting or leasing date, which falls on September 1. All prospective commercial and home builders plan their operations so as to have the building completed by that date. This condition throws the bulk of building operations on the spring and summer months, for very few, even of the larger residences, require more than eight months for building.

Winter (?) Weather Prejudices

A large number of the builders, however, also insist that the cessation of building activities during the winter months is also due to a very large degree to the weather conditions in Atlanta during those months. They state that while the spells of cold weather in Atlanta are very brief and not particularly severe, there is more rain in the months of January and February than in other months of the year. The frequent rains, alternating with an ooccasional cold and freezing temperature at this time of the year, make it almost impossible to proceed with any outside work. Besides, very few of the builders in Atlanta have had experience in building during the cold season, and they are not provided with the equipment necessary for winter operations.

There are some among the architects and builders who claim that the causes of the winter slack period in Atlanta are entirely psychological, due to a general tendency of the public to begin thinking about building a home only with the arrival of warm weather. It is their view that an additional one or even two renting dates during the year and an educational campaign in favor of the year-round building operations, would lessen the seasonal fluctuations in the building trades in Atlanta. The builders would then be called upon to perform a certain proportion of their work during the winter season and would thus be given an opportunity to show whether or not it is physically impossible to build in Atlanta during the winter season.

Leasing Dates Important Factor

(2) In contrast with the situation in Atlanta, the representative architects and builders in New Orleans are fairly unanimous in their views on winter building. It is generally admitted that New Orleans suffers from a definite falling off of building operations during the winter months, but it is also generally agreed that the winter weather has absolutely nothing to do with this condition. Some architects and builders even claim that conditions in the winter are more conducive to efficient workmanship in the construction industry than the hot summer weather. Nevertheless, the bulk of the construction work is concentrated during the late spring and summer months. This concentration is due to the single leasing date in New Orleans, which is October 1. Not only are all the new projects planned so as to be completed by that date, but nearly all of the repair work is

done during the summer months in anticipation of the renting season. A movement was started several years ago to inaugurate an additional leasing date in the spring, but so far without any results. It is the unanimous opinion of the architects, general contractors, and subcontractors in the city of New Orleans that the fluctuations in the construction industry in that city will not be done away with until the single leasing date has been replaced by two or even three annual renting dates.

What Can Be Done to Stabilize the Construction Industry

Construction work is very important in the industrial life of a community and a successful attempt to eliminate, or at least to mitigate, the seasonal fluctuations in the construction industry will of necessity prove beneficial not only to the construction industry but also to the country as a whole. The opinions of leading men in the construction industry who were interviewed show that the seasonal fluctuations in the industry are due not so much to weather conditions as to old popular notions and customs which have been in existence in the separate communities for years past, and which now prove to be the stumbling-block in the way of a more regulated development of the industrial life of the community.

Certain elements in the construction industry will always remain seasonal in the colder regions of the country. It is impossible to build roads and to pave streets during the cold winter months. But it has been shown that it is not impossible to build offices and houses during the winter months. An educational campaign such as was carried on in the city of St. Paul during the winter months of 1925-26 may help to induce the prospective office and house owner to build when he is ready and not to wait until everybody else begins building.

Again, such cities as Atlanta, Ga., and New Orleans, La., in which the existence of a single leasing date in the fall is responsible for the concentration of the construction work during the summer months, could and should establish two and, if necessary, three leasing dates in order to spread the building activities over the entire year. It is the prospective owner of the building who needs to be educated, and an educational campaign started simultaneously in a number of cities may help considerably to straighten out the seasonal ups and downs in the construction industry, and to that extent also mitigate the social evils caused by these fluctuations.

The survey brought out the views of leading firms on the question of winter operations in the construction industry.

Contractors and Builders Interviewed

The views of the A. W. Lynch Co., Chicago contractor, are as shown below:

The theory that winter construction in the building industry must necessarily involve slow progress and prohibitive cost is being fast dissipated. The facts are that winter construction is not only practicable but desirable, since it meets the owner's requirements of work, of good quality executed expeditiously and economically. It reduces the high pressure of summer months and gives relief to the lack of work during the winter months, with direct benefit to owner, builder, and laborer, and with consequent advantages to finance, manufacture, and transportation.

It has become almost trite to argue the case, but constant reiteration of the facts to the general public is necessary for full conviction on its part and to develop fully the effective results thus far accomplished. I am therefore briefly enumerating the elements which in my opinion justify winter construction.

Quality can be dismissed without discussion, for there is (Continued to page 70)



Photo by Scandlin

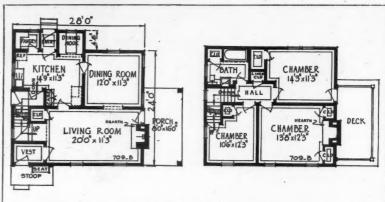
New Homes for Christmas

A Rare Collection of Designs to Aid in That Most Absorbing Guest, the Christmas Gift Home!

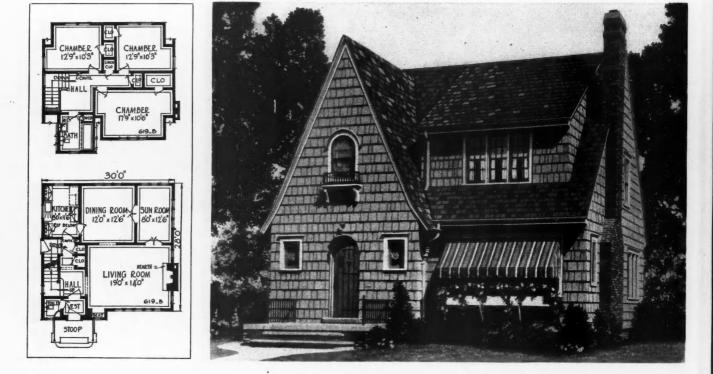


The Right Size Package

Lots of talk these days about small homes —that can be built inexpensively and occupied thriftily. Well, here are two that fill this specification. They are good lookers, too.



NATIONAL PLAN SERVICE Designs

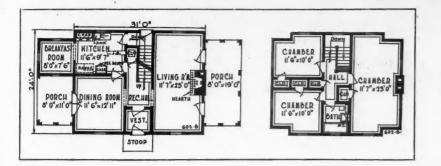


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The Gift Supreme

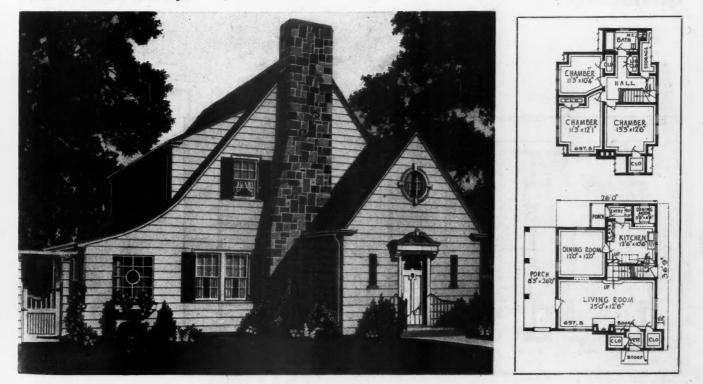
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Christmas time is home time and the best gift for all the family would be a new modern house! Plan it now; and start it soon; take advantage of the present low building costs.

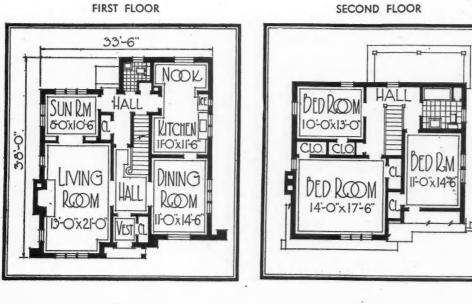
NATIONAL PLAN SERVICE Designs



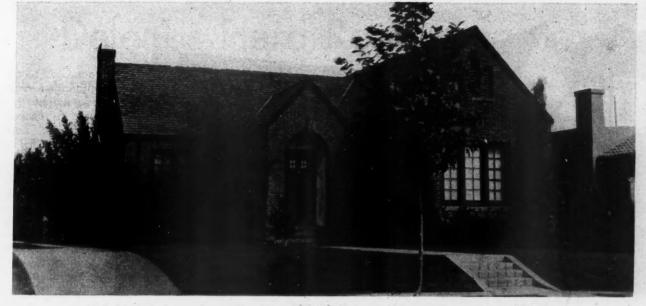


Rugged Quaintness

This little home built in Milwaukee is an interesting example of a current trend in home building which strives, through use of a combination of materials, to gain character and individuality.



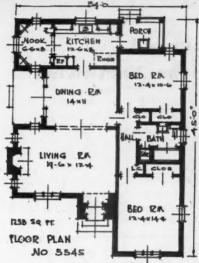
SECOND FLOOR

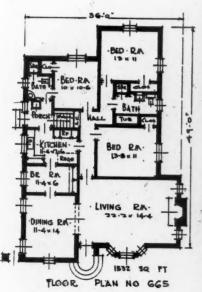


Smart Bungalow Models from the Pacific Coast

Above we present a charming home in brick—the age-proven material that seems to keep intact its "place in the sun." Below is an adaptation of the English cottage which shows how charming and picturesque the smaller house can be made in the hands of a skillful designer. The narrow casement windows, the sweeping roof lines, and the shrubbery give the right atmosphere of hominess.

A. B. CLEVELAND Designs

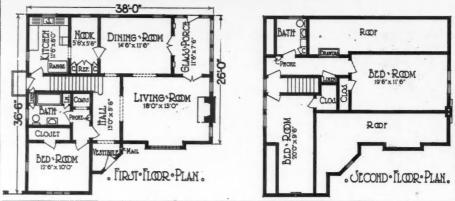




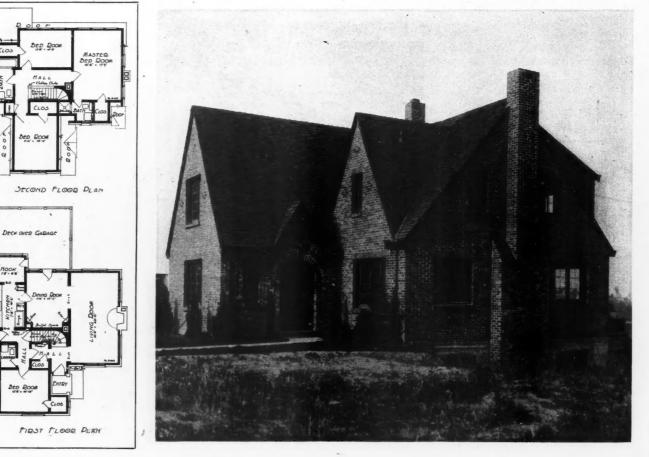


Tudor Cottageat Lethbridge, Alberta, Designed by Mrs. Jessie E. Becker of the Becker Lumber Co., Ltd.





English Style brick home below. Designed by H. LEE BURTON, Seattle, Wash.



Defends Hard Road Program

B. F. Affleck, President Universal Atlas Cement Company, Finds Highway Expenditures Justified, Saving More Than They Cost; Recommends Getting Government Out of Business and Elimination of Waste in Tax Spending as Best Means for Reducing Tax Burden

DITOR AMERICAN BUILDER AND BUILDING AGE: Your editorial in the September issue on the excessive cost of government should stimulate thought on the part of all who read it. Every intelligent person must share your view that "greatly increased and still increasing government expenditures and taxes present probably the most important problem with which the American people are confronted." Expenditures for unnecessary or non-productive purposes, extravagance in the use of money for desirable objects, waste and inefficiency in administration of public funds have resulted in a steadily mounting cost of government which should be a matter of concern to every citizen. Any agency like your magazine which calls attention to this serious problem and seeks to limit government activities to their proper field and to place government on a business basis is performing a public service.

40 Cents of Every Tax Dollar Wasted

Your statement that general property taxes are excessive and should be reduced in the interest of a revival of home construction seems well founded. If some of the huge amounts of public money that are now being wasted were saved, it should be possible to reduce substantially the burden on real property. For example, about five billion dollars are wasted each year in the expenditure of public funds, according to William Bennett Munro of Harvard University, who is quoted in an article by Harry H. Smith in the August, 1931, issue of "Mining and Metallurgy." Professor Munro "is authority for the statement that 40 cents out of every tax dollar spent in the United States is wasted," Mr. Smith said. "Forty per cent of \$12,200,000,000 is nearly five billion dollars per annum." If only the money that is actually *wasted* were applied to a reduction in real estate taxes, material relief would be secured.

In addition to the billions of dollars that are wasted, there are other billions injudiciously spent by the government which, if saved, might well be used to still further reduce the burden on real property. One obvious example of this injudicious expenditure is the entrance of federal, state and local governments into the field of private business. Almost without exception, every time the government has departed from its own proper functions and entered into business in competition with private concerns, taxpayers have had additional burdens thrust upon them in order to meet the losses resulting from the government's experiments.

Government in Business Proves Expensive

Government operation of our shipping industry produced a deficit of more than three billion dollars in 11 years, according to an editorial in the *Chicago Tribune* of March 13, 1929. Government operation of our railroads for just two years is reported to have similarly produced a loss of nearly two billion dollars which taxpayers had to make good. The almost universally disastrous results which follow the government's entrance into industry were summed up by President Coolidge in his message to Congress December 8, 1925, when he said: "If anything were needed to demonstrate the almost utter incapacity of the National government to deal directly with an industrial and commercial problem, it has been provided by our experience with this property (Muscle Shoals). We have expended vast fortunes; we have taxed everybody, but we are unable to secure results which benefit anybody."

Federal, state or local governments have engaged in the ownership or operation of shoe factories, printing plants, oil stations, grain elevators, cement plants and some 70 other industrial projects and have operated street car systems, power plants and other utilities. All these were unwarranted and undesirable invasions of the field of private business and almost all of them resulted in losses totaling billions which have to be recouped out of the pockets of taxpayers. If all the money which various governmental units spend in *injudicious* ways were saved, it should be possible to make other sizable cuts in general property taxes.

Where Pruning Could Well Be Done

Besides the enormous amounts that could thus be saved by eliminating wasteful and injudicious expenditures, other substantial amounts could be saved by reducing the expenditures for certain objects which are necessary but which seem today to consume an undue proportion of public income. For example, no less than 72 cents out of every dollar spent by the federal government is spent for war purposes—past or future, estimates President Hoover, quoted in the July, 1931, issue of "The Index," published by the New York Trust Company. "Other authorities place the proportion as high as 82 cents," "The Index" states. In short, from 75 to 80 per cent of all national expenditures is for military purposes.

"One-sixth of the total world expenditures on all arms is being spent by the United States," the article says, "our combined military and naval costs being the highest in the world. Consequently, limitation of military budgets . . . has a special application to the United States, a subject deserving to an especial degree the earnest thought of every taxpaver.

degree the earnest thought of every taxpayer. "While every good citizen believes in reasonable preparedness and in devoting adequate attention to the welfare, especially, of disabled veterans of former wars, it is difficult to contemplate the large and growing amounts being spent for military purposes and their proportion to total national expenditures without inquiring whether they are imposing an unnecessary hardship on taxpayers. As President Hoover points out, they are a serious obstacle to "the economic recuperation of the world."

Most readers will agree, I believe, with your statement that "no government expenditures are ever justifiable unless the public will derive benefits from them proportionate to their amount, and unless the benefits from them will be divided as nearly as practicable among those who must pay the resulting taxes in proportion of the taxes they will have to pay."

Home Building and Road Building

With your definition of justifiable expenditures in mind and recalling the billions of public funds that are being wasted, injudiciously spent or spent in excessive amounts on necessary things, it is difficult to understand why you selected the investment of funds in "hard roads" as the subject of criticism in your editorial. You naturally are interested in the promotion of home construction and you intimate that those who favor good roads do so from selfish motives. I, also, am in favor of home construction. As a cement manufacturer I am as much concerned with building as I am with hard roads; for fully as much cement is consumed in the structural field including homes and other types of buildings. as is consumed in all road, street and alley pavements put together. But laying aside any selfish motive, the economic benefits of hard roads to everyone are so evident that it was with surprise that I read your criticism of them. Concrete roads are not only comparatively moderate in cost at the start and cost much less in the long run than other types of pavement, but the roads themselves save more than they cost, thereby proving a profitable investment rather than a liability for taxpayers.

Hard Roads Save More Than They Cost

Hard roads save taxpayers more money than they cost by reducing operating costs of motor vehicles, cutting road maintenance costs hundreds of dollars per mile per year, benefiting farmers and increasing the value of real estate. Savings produced in the cost of operating automobiles alone more than pay for the cost of building and maintaining hard roads. After exhaustive tests of numerous types of pavement, Professor T. R. Agg, Engineering Experiment Station, Iowa State College, reports that a motorist traveling over a hard pavement instead of a dirt road will save 2.6 cents per mile in gasoline, tire wear, oil, depreciation and other items of expense. In motoring an average of 5,000 miles a year, the car owner will have saved \$130. According to the 1931 year book issued by the National Automobile Chamber of Commerce, there were 26,523,779 registered motor vehicles last year in the United States. If each one of these traveled an average of 5,000 miles a year on concrete roads as against unpaved roads, their combined savings would reach the stupendous figure of \$3,448,091,270.

But in order to be conservative, suppose they only saved half the amount stated by Professor Agg. Then the aggregate saving to motorists who also are all directly or indirectly taxpayers, would be \$1,724,045,635. This almost equals the entire amount spent annually by *all* federal, state and local governments for good roads.

Similar large amounts are saved taxpayers each year by hard roads in reduction of maintenance costs. Prior to placing hard pavement, the Pennsylvania State Highway Commission found that it cost an average of \$2,330 a mile per year to maintain stretches of the Lincoln Highway between Philadelphia and Pittsburgh. After hard pavement was laid, the repair costs dropped to less than \$200 per mile per year. In a few years the savings in maintenance alone more than offset the total cost of the pavement. Figures compiled by the Illinois Division of Highways for a six-year period showed that the average maintenance cost of concrete per year for the six years was \$76.51 per mile, or lower than that of any other material. Other types cost as high as \$716 per mile per year to maintain. Similar results are reported by New York, Ohio, Indiana, Oregon and other state highway departments. The need of roads is conceded by everyone. It is simply a question of which type of road is most desirable. Is it not apparent that where traffic is fairly heavy, high-type hard roads which more than pay for themselves are cheaper for taxpayers to build and maintain than the lower type roads which require frequent and costly maintenance and which are less permanent?

Paved Roads Increase Property Values

Paved roads benefit farmers as well as individual motorists and the general public. Maricopa County, Arizona, built a 330-mile system of concrete pavements that, according to official figures, is saving its citizens more than a million dollars a year. They do this by increasing land values and by giving the farmer a con-venient, speedy and economical means of reaching his market. Construction of wide concrete roads in Du Page County, Illinois, increased the value of farm land 25 per cent or more, according to E. L. Gates, county highway engineer. Aside from the comfort, convenience and safety, the lessened gasoline consumption and tire wear and the reduced road maintenance to motorists (who in fact are the taxpayers), the increase in land values alone in territory served by good roads has more than compensated the taxpayer for building them, according to Edward N. Hines, a printer, and for 25 years a member of the Wayne County (Detroit) Board of County Board Commissioners.

Similar testimony is given by Judge Oscar C. Dancy of Cameron County, Texas, whose county a few years ago adopted bond issues for highway purposes aggregating more than seven million dollars. Judge Dancy declares that every time his county spends a million dollars for irrigation and highway development, nine million dollars are added to the selling value of the property in the county.

When these widespread benefits of good roads to everyone—whether he drives a car or not—are considered, and when in addition it is seen that these benefits actually cost taxpayers nothing because good roads save the public more than they cost, I believe most people will agree that the money we invest in improved highways, like the money we invest in sewer systems, irrigation projects and similar improvements, is one of the soundest expenditures we can make. When, further, it is recalled that many more millions go into wasteful, injudicious and excessive expenditures from which few people profit than go into hard roads, does it not seem evident that the reductions in expenditures which we would all like to see secured should be sought in such fields rather than in one where the returns are greater than the expense?

Highway Expenditures Not Excessive

While the aggregate amounts spent for good roads seem large when taken alone, these amounts appear moderate when considered with other governmental expenditures. You state that "a substantial part of the expenditures of the federal government are being made upon highways." In 1930 only slightly more than 2 per cent of the federal expenditures went into federal aid of public roads, according to figures cited by Merlin H. Hunter, professor of economics, University of Illinois, in Barron's magazine for May 18, 1931. He puts the total federal expenditures at four billion dollars and states that "in 1930, the total amount expended for this purpose (public roads) was \$86,239,000." With something like 75 per cent of the national income being spent on war and with large amounts being wasted in other ways, does it seem unreasonable to expend 2 per cent on good roads?

In the same way an analysis of expenditures made for highways by other than federal governmental units.



dropping the floor two steps.

Modern Home Interior at Pasadena, Cal.; Reginald Johnson, Architect. The construction is fire-resisting, with quarry tile laid over concrete for the floor. Ceiling height in the living room is increased by

considered in relation to their total expenditures, would seem to indicate that disbursements for roads are not excessive. They constitute only about 20 per cent of total expenditures. The total amount expended for highways by all state and local governments in 1928 was \$1,791,000,000, reports "The July Index," issued by the New York Trust Company. The total expenditures for all purposes was \$8,639,000,000. When all the benefits of good roads, not only to motorists but to property owners, farmers, business men and others, are considered, does it seem inequitable to invest onefifth of state and local expenditures in good roads? The amount spent for education is nearly 40 per cent more than that spent for roads, being \$2,466,500,000,



A Winsome Detail Photographed at Glendale, Cal.; Lloyd Rally, Architect; Hockensmith Engineering and Construction Company, Builder.

or more than 28 per cent of total expenditures. The amount spent for charity and social welfare approximates that spent for good roads, being \$1,466,240,000 or about 17 per cent of the total expenditure. When expenditures for all purposes are taken into account, the amount invested in highways appears reasonable. The total amount expended on highways throughout the country by all federal, state and local governments in 1928 was only \$1,872,281,000. This is much less than half the amount (five billion dollars) which Professor Munro states is being wasted annually in the United States in the expenditure of public funds. In selecting means by which taxes can be reduced, which is what we all want to see accomplished, will it not be more advantageous to everyone concerned to concentrate on those fields where money is being wasted, injudiciously spent or spent in excessive amounts than to select a field like good roads which save the taxpayer more than they cost?

Who Pays?

The question of who is paying for the cost of good road does not seem to me to be the most important question because everyone is benefiting from them either directly or indirectly. Three-fifths of the road income is derived from motor taxes, according to the 1931 year book of the National Automobile Chamber of Commerce. The amount paid last year including registration fees, gas tax, personal property and municipal taxes totaled more than a billion dollars.

The attempt to divide taxpayers as indicated in your editorial into motorists who pay and those who do not pay real property taxes seems open to question. All the owners of the 26,000,000 automobiles in the United States pay real property taxes whether they own the property or not. Some of them pay directly as owners; some pay indirectly in the form of rent. Renters as well as owners are thus interested in securing a reduction in taxes on real property. All of us are anxious to see this brought about. We heartily agree with your own feeling in this matter. Taxes should be reduced. But in order to do this, is it not preferable from every point of view, to cut out expenditures that are wasteful, injudicious and excessive rather than curtail our investment in good roads which save taxpayers more than they cost?

B. F. AFFLECK, 208 South La Salle St., Chicago.

AMERICAN BUILDER AND BUILDING AGE

15 DEGREES COOLER - -



44

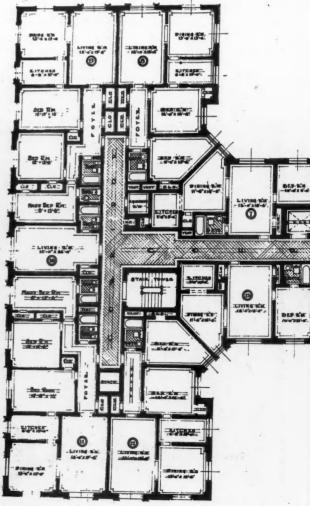
ADDITION OF 4" LAYER LOOSE FILL INSULATION MAKES ROOF APARTMENTS OF HARRISBURG BUILDING RENT BETTER

Three inch pipe line used to blow insulation to top of 6 story building. A 4-inch layer was placed over 13,000 sq. ft. of ceiling area, greatly cooling the top floor. HE problem that confronted G. J. Lappley, architect and owner of the Riverview Manor building, Harrisburg, Pa., was to keep the sixteen top-floor apartments from getting excessively hot during summer. The brick and concrete structure was new, well arranged and popular with tenants. But during hot spells the favorite roof apartments were uncomfortable.

An insulation expert was called in who recommended a fluffy, loose-fill type of insulation that could be blown into place without expensive alterations. A three-foot air space separated the ceiling of the apartments from the concrete roof slab. The three-inch blowing hose was run down ventilators into this area and a four-inch layer of the insulation placed. Because of the lightness of the material no extra ceiling support was required.

A total of 13,000 square feet of ceiling area was covered. The insulating material was forced from ground to roof of the six-story building through





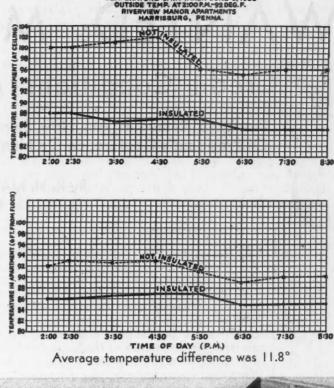
The H-shaped floor plan of the Riverview Manor building provides abundant air and light for the 76 apartments contained in the six stories.

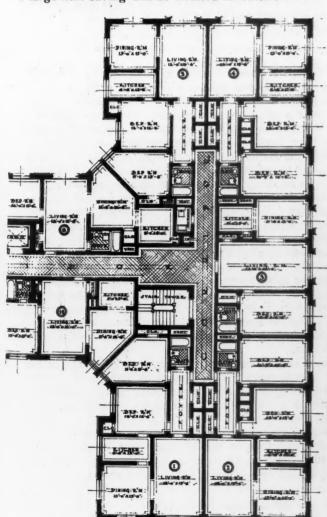
THE ISSUE OF NOVEMBER, 1931

a three-inch metal rain pipe, then delivered into place through a flexible hose.

Before the full job was undertaken, it was decided to conduct a test on two comparative apartments. Accordingly a test area of 600 square feet of insulation was placed over one apartment, and during a hot spell, temperatures were recorded in this and in an uninsulated apartment of similar size. Results showed a marked cooling effect on the insulated apartments. Heat filtering through the ceiling of the uninsulated rooms raised the temperature as high as 15 degrees above the insulated ones. Hourly readings as recorded are shown in the graphs at right. At 4:30 P. M. the ceiling temperature of the uninsulated apartment was 102°; at six-foot height, 93°. The insulated apartment recorded only 87° at both heights.

Of great importance was the fact that hot air bottled in the three-foot space under the roof slab kept filtering down *after dark*, keeping the uninsulated apartment very hot, while the insulated rooms cooled off nicely. This is shown by the fact that at 8:30 P. M. the uninsulated rooms were 96° at ceiling and 92° at six-foot height, while the insulated rooms had dropped to an even temperature of 85° . The tests were so favorable that the owner immediately went ahead with complete insulation. He stated that he expected the insulation to pay for itself through the increased tenancy of the top floors in one summer. In addition it is expected that a large heat saving will be effected in winter.





Walls are of brick and tile. The 16 apartments on top floor were hot in spite of heavy concrete roof slab. Addition of insulation saved rental loss.



WANTED: Money to Build!

Credit Conditions Must Be Improved

Proposed Remedies Are Now Being Studied By Finance Committee Of President's Conference On Home Buildings And Home Ownership

By R. H. MATHEWSON

Eastern Editor, American Builder and Building Age

OR a long time, AMERICAN BUILDER AND BUILDING AGE has realized the primary Himportance of financing in the building industry. Heretofore, attempts to improve lending practices in this field have been confined almost entirely to isolated attempts to deal with local situations. Earlier in the year, AMERICAN BUILDER AND BUILDING AGE devoted prominent space to one of the first comprehensive proposals to improve our mortgage system on a nationwide scale. We have made the improvement of financial conditions in the building field one of our major editorial objectives and each month we have given our readers the latest developments in this important phase of the industry. Indications are that the campaign to better credit conditions is bearing fruit. National leaders are now studying proposals for remedying the situation. In this article an analysis of three chief proposals is made and a program of nine points of progress is laid down. In another article in this issue, details are given of the organization of the Central Mortgage Bank, first described in our July issue.

HE problem of realty financing is one of the most important that faces the country in this depression. Remedy the unfortunate conditions now prevailing in the mortgage market, and an important step will be taken toward recovery. Now that the easing of commer-cial credit is in a fair way to be accomplished by the so-called bankers' pool, recently established under the sponsorship of the government, national leaders are seriously turning their attention to credit conditions in the building field. And it is a field sadly in need of cultivation. Bad practices, outworn methods, costly procedures, usurious rates, have existed in the mortgage market for years, but not until the end of the second year of depression have leaders fully wakened to the necessity of substituting good credit practices in the building field for bad ones.

A New System Needed?

To most active men in the building field it seems that some new system of dispensing credit for building construction is sorely needed. Lower rates of interest, particularly for second mortgage money; the elimination of burdensome fees; longer periods for amortization; the restricting of credit for wildcat operations; adequate credit for quality construction; the elimination of cumbersome and costly foreclosure practices; liquidity for mortgage paper in the financial market; standardized and simplified practices in mortgaging . . . all of these are reasonable demands on the part of hundreds of thousands of home-seeking borrowers throughout the nation.

Can these reasonable demands be met by the present system? It does not seem likely. The system has not operated well in the past and our present ills in the mortgage market are chiefly due to its faulty functioning. It is said by men whose work in the field of mortgage lending has been efficient and of great public service, that the system itself is not at fault, it is the way

the system is operated by some individuals. This may be partly true, but where widespread conditions exist such as we have today, that are due to bad credit practice over a period of many years, the system must take the blame because, within the system, too many individ-uals have found it possible to effect abuses. Let us modify the system, therefore, so that it will more nearly conform to enlightened practice rather than place too much dependence on educating and enlightening hundreds of thousands of those misguided individuals who have abused the present system. To teach them proper practice would take too long; it is easier to adjust our system.

The question of whether the individual or the system should be changed always arises at a time of social and economic adjustment. It is really not a question of one or the other, but a balance between the two, to be found in the light of our social aims and ideals. At any one time, the system should approximate, as closely as possible, enlightened practice of the times between individuals.

So it is with our credit system in the building industry. Let us make a trial of reasonable methods to relieve a bad mortgage situation and modify, to some extent, at least, our present faulty system of lending money on realty.

Within the past year, three major remedies for bad credit conditions in the building field have been proposed. These three remedies, now being studied carefully by national leaders, are as follows:

- A National Central Mortgage Bank.
 Federal Incorporation of Building and Loan Associations, accompanied by the establishment of a central credit reserve organization.
- 3. A Second Mortgage Acceptance Corporation through which second mortgages might be discounted at reasonable rates.

t

There have been other proposals made, such as: the building up of a credit organization within the construction industry by subscriptions from all elements in the industry itself; the subsidizing of slum rehabilitation by government bond issues; the formation of an organization for unified lending among insurance companies; the establishment of a credit corporation by material men and manufacturers of building products.

One or more of these proposals may yet materialize but, for the time being, the three major proposals above mentioned seem to be occupying the center of the stage.

An analysis of each one of these proposals shows that each has its advantages and disadvantages. Accompanying this article is a general description by Professor Nadler of a set-up of the Central Mortgage Bank which he first proposed before a Senate committee early this year. In this article Professor Nadler touches upon the benefits to be derived from this system of mortgage lending. The idea of a Central Mortgage Bank will recommend itself to many builders because it is the one proposed scheme which offers a nationwide method of standardized mortgage practice that can be applied and utilized by all lending institutions in the mortgage field including savings banks, title and mortgage companies, building and loan associations, and insurance companies. With proper governmental safeguards it is capable of being operated economically and efficiently and it will eliminate many, if not all, of the mortgage evils with which we are now cursed.

This proposal demands careful study and it is being carefully investigated by national leaders. It is quite probable that bills will be advanced in the next Congress, embodying most of the features of this proposal.

Federal Incorporation of Building and Loan Associations

Meanwhile, we have another remedial proposal that embraces the possibility of incorporating building and loan associations under Federal charter. This proposal has been advanced by Charles O'Connor Hennessey, President of the Franklin Society for Home-Building and Savings of New York, and was reported in full in the September issue of AMERICAN BUILDER AND BUILD-ING AGE. At present, building and loan associations are organized under state laws but not under national laws. By Federal incorporation, the building and loan associations would begin to operate according to standardized practice and procedure and according to well-planned national regulations. Once organized under Federal charter, there would be the additional possibility of establishing a central credit reserve organization, which has been called a Federal Home Loan Bank, through which prime mortgage paper could be discounted, thus providing a method of avoiding the frozen condition in which many building and loan associations find themselves today.

Unquestionably, the non-liquid condition of building and loan associations in many parts of the country is one of the chief deterrents to an upturn of activity in the residential building field. Any legitimate remedy which provides a practicable way of relieving distressed local associations and improving the whole national operation of building and loan associations will be a step in advance.

The disadvantage of this whole proposal is, of course, that its benefits apply only to building and loan associations and not to other lending institutions such as savings banks and mortgage companies. Further, it provides no solution for the problem of granting credit to the worthy home-seeker who cannot pay more than 25 per cent of the cost of the house. Building and loan associations will grant first mortgages for 50 per cent of the valuation but not much beyond. Hundreds of thousands of home-seekers can accumulate only 10 per cent, or at the most, 25 per cent of the price. If we believe in encouraging home ownership among the best and most industrious elements in our population, we can hardly dismiss this problem by saying that a man who does not have 50 per cent of the price of a home should not have a home of his own at all. This may be an ideal financial principle but not an ideal social principle. Again we must find some balance between legitimate financial caution and equally legitimate human aspiration.

Where, then, are we going to get the money to provide the difference between the first mortgage of say, 50 per cent, and the sum that the owner can himself contribute as his equity, which is, say, 25 per cent. Here is a gap of 25 per cent. Where can we find the money to fill this gap?

An Old Problem

The problem of second mortgage, or junior financing, has occupied the industry for many years. Three common solutions have been attempted in the past: (1) Granting of second mortgages by building and loan associations; (2) by the builders themselves, and (3) by a local organization of men interested in the building industry.

The granting of second mortgages by building and loan associations has not been altogether approved by building and loan authorities and, under present conditions, it is not likely that we can depend on these association for junior financing:

The granting of second mortgages to buyers by the builders themselves has worked out well in some cases, some builders allowing home purchasers second mortgage money at 6 per cent and with a reasonable time for amortization. In other cases, builders have been forced to rediscount their second mortgage paper at high rates and the loss they knew they would have to sustain in the discounting process, has in many cases been prepared for by excess economy in construction, or by fixing a higher purchase price, thus placing the eventual burden back on the home owner. Furthermore, builders can carry second mortgage paper only to a limited extent.

The third method that has been employed is for local business men, interested in building and real estate, to form a finance corporation for lending second mortgage money. This provides a pool of funds among local men (Continued to page 80)

> A NINE-POINT PROGRAM FOR BETTER MORTGAGE PRACTICE

> Offered by AMERICAN BUILDER and BUILD-ING AGE In Its Campaign For Better Credit Conditions In the Building Field

- I. Adequate credit for quality construction.
- 2. Lower rates, particularly for second
- mortgage money. 3. Elimination of unjustifiable fees.
- 4. Longer periods of amortization.
- Restriction of credit for questionable operations.
- 6. Elimination of costly foreclosure practices.
- 7. Liquidity for mortgage paper in the financial market.
- 8. Standardized and simplified mortgage practice.
- 9. Competent appraisals.



NEWLAND C. PRIOR

N the spring of this year we began a newspaper campaign to advertise homes in Sunshine City. The response was immediate. Only one specific house was shown and described in each advertisement and for many continuous weeks it became an accepted thing for someone to buy the identical house immediately after its appearance in an advertisement. Other houses, seen by prospects attracted through the campaign, were also sold.

We continued this procedure during the months of April and May and managed to sell 12 houses each month, as in March. So we were well content with the results, which, frankly were beyond expectations. But then the unexpected happened. Things came to a standstill! And so badly that it became a rarity to find more than a dozen visitors on Sundays.

Wanted: A New Appeal

The advertising was the same as before. The values were equally good. Yet for some unknown reason things were as tight as a clam. We were nonpulsed.

Then came the idea of finishing and decorating a portion of the basement to serve as a modern recreation room! We were sure this would give a new slant to our proposition, but how large this response would be, it was impossible to foretell. However, we determined to play it up in our advertising, and an illustration was created, showing not only how this room actually looked, but how people were having simply a grand time playing bridge in one corner and ping-pong in the other.

Did it take? And How- After fairly well concluding that nobody was interested in buying houses, so why keep on trying to sell?—you can imagine our amazement at seeing the crowd which responded to our first announcement in which this basement feature was

How We Are Selling

By NEWLAND C. PRIOR

Vice-president, Charles H. Reis, Inc.

Developers of Sunshine City, Wood-Ridge, New Jersey

played up. The result was that sales immediately took an upturn and that first week we sold four houses.

But we weren't content to rest there. We gave that recreation idea just two weeks to produce, but rather than take any chance of having a good thing die in our hands again, we came right back with still nother slant —and this time, we hit it best of all!

Playing Up the Kitchen

Wé went into the kitchen, and there in addition to the electric dishwasher, buffet gas range, huge cabinets, porcelain table and four chairs, ironing boards, inlaid linoleum, colored tile drain, electric clock, etc., we now added an electric refrigerator.

The first announcement of the "Electric Kitchen" produced the finest turn-out since the campaign had gotten under way. Almost without realizing it, we had stumbled on something that nearly every woman was interested in.

Bear in mind that this kitchen, with the exception of the refrigerator, was identical with what had been shown and sold in all of the homes since the start of the program. But now for the first time, we went out and actually dramatized that kitchen so that women could hardly resist the temptation to see it. When they came, they found it just as described, and since it is an old rule that most sales are turned by the woman, it follows that we secured proportionally good results in actual sales.

A Good Story "For the Papers"

The "Electric Kitchen" was also responsible for publicity releases which were well accepted by the papers. Here is an example of one item which was widely used:

"Interesting observations in the buying psychology of women are noted by Mr. Newland C. Prior, Vice-President of Charles H. Reis, Inc., developers of Sunshine City in Wood-Ridge, New Jersey. After a program in which more than 1,000 homes were built and sold, Mr. Prior concludes that the greatest single element of appeal to the housewife interested in the purchase of a home is in the character of the kitchen.

"After observing many hundreds of people who come out to inspect a home which they intend to buy,' declares Mr. Prior, 'it is interesting to note that most men will carefully take in every detail of the exterior, or go poking around in the basement to study the heating plant and plumbing system. But Mrs. Housewife? Right to the kitchen! And if that kitchen does not contain the many things, big and little, which she has read about, heard about, and insists on having in her home, then there is at least one family which will not purchase a home that day.'

There's always some selling slant. To stimulate business, dramatize and advertise something with popular appeal, like an electric kitchen: That's the advice of Mr. Prior.

Houses in the 1931 Market

Equip Your Home With RECREATION ROOMS and ELECTRIC KITCHENS ADVERTISE! Then Watch Your Prospects Come!

"Having learned this simple method of feminine appeal in homes,' continued Mr. Prior, 'we decided right from the start to make every kitchen in Sunshine City as attractive as possible. But we did not rest there. Knowing that continuous changes and improvements are being introduced into modern kitchens, and that most women are well aware of them, we made it a policy to improve our kitchens each year as new homes were built. The climax was reached only two weeks ago, when the announcement of "The First Electric Kitchen Ever Assembled in a Moderate Priced Home" was made to the public. Hundreds of women visited Sunshine City, just to inspect this kitchen and much favorable comment was aroused when they found that almost every aid to easy kitchen work was included in this new type kitchen.'

"It was pointed out by Mr. Prior that one important reason for the insistence of women that their kitchens embody all possible convenience, is the fact that so much more entertaining is now done in the home than in years past. Dwellings as a whole have become more attractive, and with it has come a greater inclination to stay at home and invite guests. Naturally, this has thrown a greater burden on the housewife, and in the necessity for easing her duties, she looks to modern ingenuity to devise ways and means which will shorten her kitchen hours.

SUNSHINE CITY, WOOD-RIDGE, N. J.

Phone RUtherland 2-4500

Pared Street. Semer Water, Cas. etc. are al

300 Visitor

Note These

Features!

6 Roome—All Decorat Linoleum Flooring in Kitchen L. & H. Colored Gas Range

Range Built-in Sink Colored Tile Drain and Back-Splash Built-in Cabinets Walker Electric Dish-

Furnished Breakfast Nook oom Width al

louse ing Room 12x12 feet erican Radiator team Heat tomatic Hot Water

Automatic troi Heater Cross Ventilation in Badrooms Tiled Bath with Built-in Tub and Shower Stairway to Attic Screen, Awnings I-Car Garage with Con-crets Floor and Drive-

Entire Plat Seeded, Roll-ed and Shrubbed

from Jappes City D

Living R House Dining R

Last Week!

"In the 'Electric Kitchen' which Mr. Prior referred to, many such features have been introduced, including an electric refrigerator, electric dishwasher, plentiful electric outlets and electric clock. Inlaid linoleum flooring is another convenience, while the colored tile drain, buffet type gas range, large cabinets, porcelain table and four chairs, ironing board and large windows comprise further additions to the convenience and beauty of the room."



the month of July, during sizzling summer weather, we reached 12 sales!

Our quota calls for 15 houses in October.

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Central Urban Mortgage Bank

By MARCUS NADLER

Associate Professor of Finance, New York University Associate Director, Institute of International Finance

'HE establishment of the National Credit Corporation to make liquid frozen assets of banking institutions has perhaps more than anything else indicated the need of an institution, national in scope, to make urban mortgages marketable.

Although a first mortgage on real estate is one of the safest securities in existence it has one great defect in that the holder of such a mortgage often cannot liquidate it without incurring a substantial loss. To remedy this situation, to prevent bank failures, and at the same time to reduce the interest cost on first mortgages on urban real estate, the author of this article suggested before a Senate sub-committee in February of this year, the establishment of a central urban mortgage bank whose purpose it would be to buy and discount first mortgages of banking institutions. Since this proposal was made, considerable discussion has been going on in the press both pro and con regarding the establishment of such an institution. This discussion has indicated that only a comparatively few people in the United States are familiar with the operation of a central mortgage bank and it is, therefore, the purpose of this article to explain the organization and operation of such an institution.

(1) Organization: It is proposed that a central mortgage bank be established with head offices in Washington and with branches in all large cities with a population of 200,000 or more. It is believed that a centralized organization is preferable to a decentralized organization consisting of individual banks linked together through a board such as the Federal Reserve System or the Federal Farm Land System. Through a centralized institution the capital facilities of the country will be available to all borrowers on the same terms.

(2) Operation: One of the most important questions that arise is whether a central mortgage bank should deal directly with the public or should restrict its dealings to existing institutions which are regularly engaged in making mortgage loans. In the latter case, the existing institutions, such as savings banks, building and loan associations, insurance companies and mortgage companies, would become members of the central mortgage banking system just as commercial banks are members of the Federal Reserve System.

If the latter plan were to be adopted the above-mentioned institutions would be in a position to sell or discount their mortgages with the central bank any time they may desire. Such a system would make it possible for local savings banks or building and loan associations to make loans without fearing that a withdrawal of deposits would put them in an uncomfortable position, since they would be able at almost any time to convert their mortgages into cash.

A further advantage of such an institution is that it would enable members to lend money in periods of depression when the cost of labor and building materials is low and when money rates should be cheap. Furthermore, they would not be dependent upon the local supply of capital because, through the central mortgage

N the July issue, American Builder and Building Age published the first article by Professor Nadler on Cen-tral Mortgage Banks. In last month's issue, Professor Nadler answered some of the criticisms directed against the Central Mortgage Bank idea and in this article he treats the organization and operation of a Central Mortgage Bank in greater detail. The proposal for a bank of this kind in the United States is one of the most important suggestions ever offered for improving credit conditions in the residential building field.

bank, they would be in a position to draw capital from all over the country.

It is recognized that a central mortgage banking system, built around existing facilities, while it would tend to decrease the cost of mortgages, and to increase the volume of funds at the disposal of the building industry and home owners, has at the same time certain disadvantages. In the first place, the borrower (mortgagor) would have to obtain his loans from the existing institutions and there is no certainty that the various abuses such as bonuses, surcharges, etc., that some institutions have been guilty of, could be eliminated. Secondly, the expansion of mortgage credit would be dependent not so much upon the initiative of urban property owners or the central institution, but rather upon the institutions leading the money, because the central mortgage bank would discount or buy mortgages only when the latter are offered to them.

The alternative would be the establishment of an institution which would operate similarly to the Credit Foncier of France. Its functions, briefly stated, would be to make loans on first mortgages directly to home owners or residential property owners. The Credit Foncier, which operates along these lines, has worked successfully for a number of decades and has greatly

reduced the cost of mortgage money. (3) Issuance of Bonds: The bonds of a central mortgage bank, whether formed along co-operative lines, or operating along the lines of the Credit Foncier, would be secured as follows: (1) by the capital and surplus of the respective institutions; (2) by the first mortgages which have been pledged with the central mortgage bank as collateral for the loans.

(4) Eligibility of Mortgages: The eligibility of mortgages for purchase by a central mortgage bank of either type, would have to be clearly defined by law. They should not exceed 60 per cent of the actual value of the property as determined by a fair appraisal. Appraisals should be made by disinterested parties and the method of appraisal should be uniform throughout the country. The mortgages should run for not more than twenty to twenty-five years, depending upon the quality of the property, the location of the property, and what changes are likely to take place. Each mortgage should be amortized during this period by quarterly or semi-annual payments.

It is not intended that the facilities of the central mortgage bank should be available to all types of mortgages but rather that this institution should help the small property owners and the multiple dwelling owners. Loans should not be granted on business property such (Continued to page 82)

THE ISSUE OF NOVEMBER, 1931



The House of the Month

Early American Home by William C. Halbert, Jr., Architect; Munroe Stiner, Builder; Presented in Eighth-Inch Scale Drawings

COMBINATION of stone for the first story and shingles for the overhanging second story gives this little home that look of dignity, restraint and permanence which characterize the family ideals of so many home seekers. A design of this type is thrifty because its features of good appearance are inherent in the plan itself; they are not added; and so do not increase the cost. The space enclosed is a simple cube which uses the minimum amount of wall construction to enclose this amount of usable room. The best old-time precedent has been followed in the exterior details, such as window shutters, wrought iron handrail for the porch, turned pendants for the overhang of the second story, and the half-pitched roof. The porch projection at the left end is nicely balanced by the garage addition on the right.

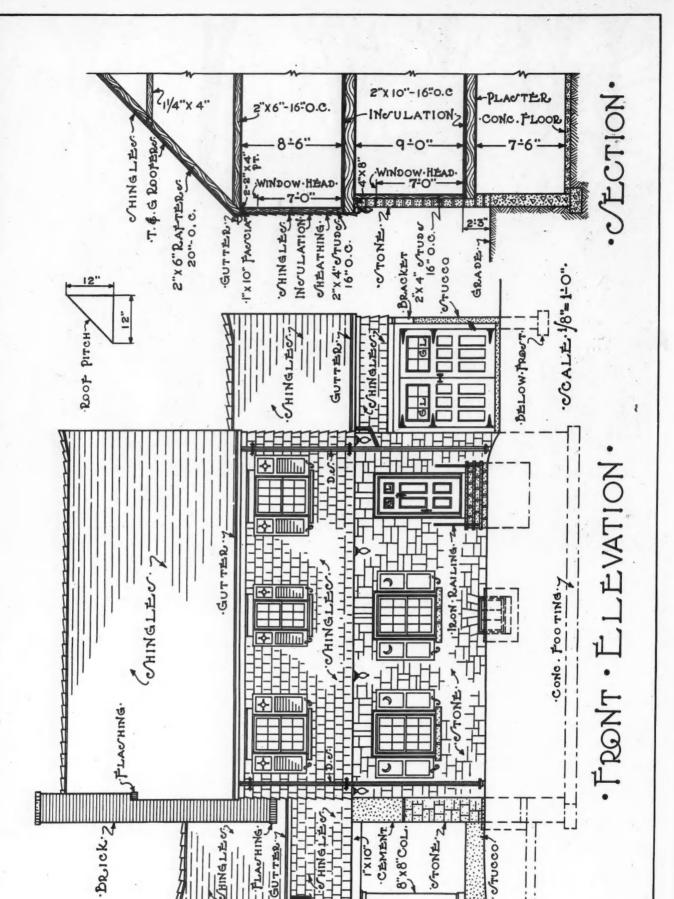
Inside, we find this house arranged in a very cheerful, attractive way. There is a large living room, a pleasant dining room, and a compact, convenient kitchen with an interesting breakfast nook with built-in table and benches between dining room and kitchen. On the second floor are four bedrooms and two baths, besides a large dressing room and an abundance of closet space.

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The basement must not be overlooked in planning the modern home. In this design, this cellar space is well arranged with an entrance out of the kitchen and also an outside basement door reached from an outside concrete stairway. The basement space is divided into two large rooms, one for the heating plant and other mechanical apparatus, and the other for a playroom or workshop for Dad and the children. Laundry tubs can be installed in this space if desired, although today so many housewives prefer to send all the washing out of the house to the commercial laundries that this detail will be determined by the occupant.

A careful study of these plans will reward any architectural draftsman or builder desiring to perfect his approach to this popular Early American style.

WORKING DRAWINGS OF THIS HOME ON THE NEXT FOUR PAGES



Front Elevation and Cross Section Construction Detail of the November "House of the Month," William C. Halbert, Jr., Architect, and Munroe Stiner, Builder.

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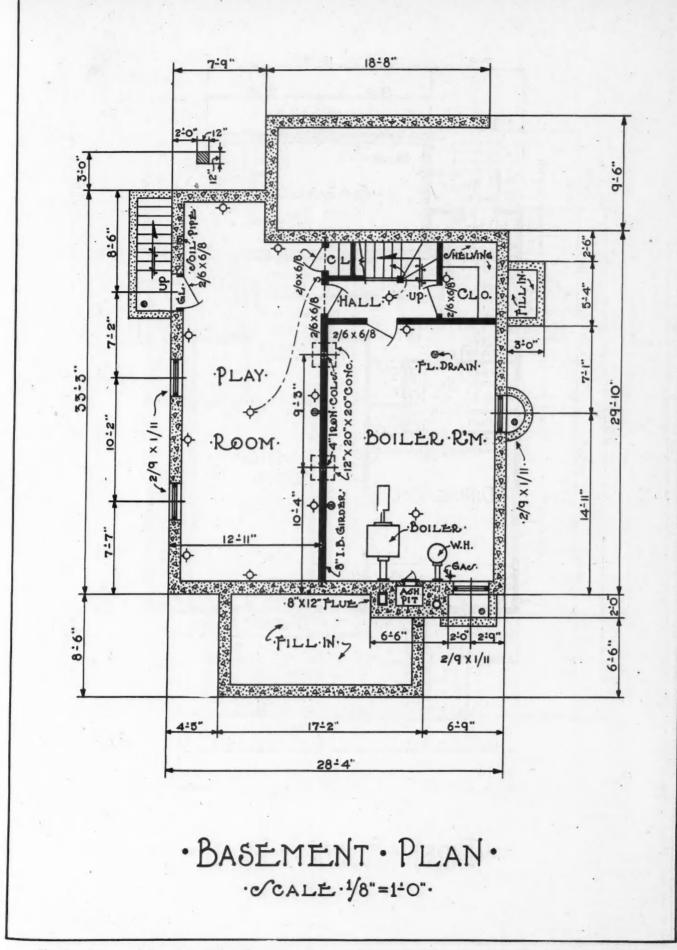
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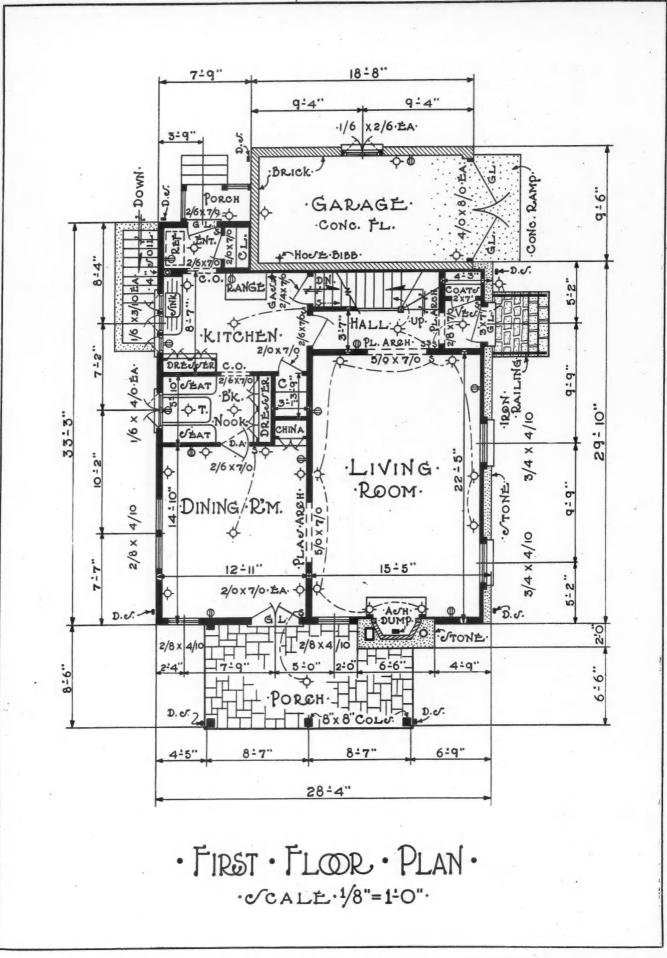
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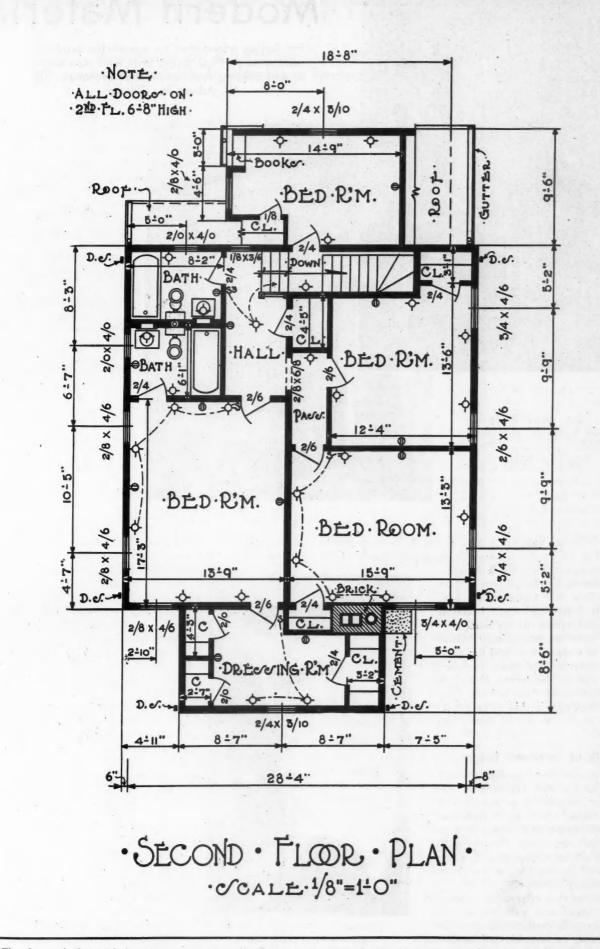


The Basement and Foundation Plan Shows This House to Be 28 Feet, 4 Inches Wide by 29 Feet, 10 Inches Deep, Plus the Garage and Porch Extensions. The basement is arranged in the modern way. 53





The First Floor Plan of the November "House of the Month" Shows a Large, Cheerful Living Room, Well Arranged Dining Room and Kitchen, and Open Porch to Left Balancing the Garage Addition to Right.



The Second Floor of the November "House of the Month" Contains a Surprising Amount of Well Arranged Space,—Four Bedrooms, Two Baths, a Large Dressing Room and an Abundance of Closets. 55

Modern Materials

For further information on any of the products mentioned on these pages write American Builder and Building Age, Information Exchange, 105 W. Adams St., Chicago.

> Wall Coverings That Are Beautiful and Permanently Colorful, and Can Be Washed without Injury, Strike a New Note of Quality and Economy in Interior Finish.

HOUGH we may not talk of homes in terms of yearly models, as we do of automobiles, the standards of ten

years ago, in the finish and equipment of homes, are just as out of date today as is a 1921 model automobile. Constantly better and more beautiful materials and equipment are being produced to meet the increasingly critical demands of home owners and the more recent products have been designed with an eye to the future, that they may not become too quickly outmoded. Nowhere is this more apparent than in the matter of wall finish materials.

The New Wall Patterns Blend Perfectly with the Popular Linoleum Tile Floors of Today.

Walls of Permanent Beauty

A recent wall covering display which has set a new high standard in this field must be seen to be appreciated. This material, which is of cork and linseed oil composition, comes in large sheets which are cemented to the walls just as linoleum is applied and makes a solid wall surface, for the few seams are practically invisible.

This material is offered in a special line of colors and patterns of real beauty correctly designed for all of the various wall requirements of modern homes, offices and other buildings and in a sufficiently broad range to satisfy a multitude of different tastes and decorative color schemes.

When used in combination with floor linoleum in bathrooms, kitchens, hallways and other rooms, it is especially effective. In kitchens it not only meets the current demand for colorful decoration but also offers complete freedom from the soiling of grease and dirt. It can be readily washed at any time and kept in its original clean beauty.

For offices and apartments it solves the problem of expense and delay of redecoration for new tenants. When new tenants are to occupy the office or apartment it is only necessary to wash the walls, a simple and inexpensive matter as compared with the usual redecorating.

Fabric Wall Coverings

Another wall covering material of the permanent type is a coated fabric which is applied like wall paper but, once applied, can remain indefinitely on the walls. It too is washable and can always be maintained in its original fresh beauty. It is available in a wide range of patterns suitable for every room in the modern home.

Compactly Built But with Ample Refrigerating Capacity for the Average Family.





And Equipment Set High Standards

Wall Materials and Kitchen Equipment Occupy the Center of the Stage in the New Products Display This Month

Such wall coverings might be said to become a structural part of the home in which they are used for they effectively reinforce the plaster, covering old cracks and preventing new ones. They are well adapted not only to use in new homes but also in homes which are being modernized and add a considerable part to the increased value through modernizing.

With material which is really artistic in design and of highest quality there is no more danger of tiring of a wall covering which is permanent than there is of tiring of fine furniture which is used for many years. The long service which such a material renders makes it highly economical to use, a point which should have a special appeal in the present period.

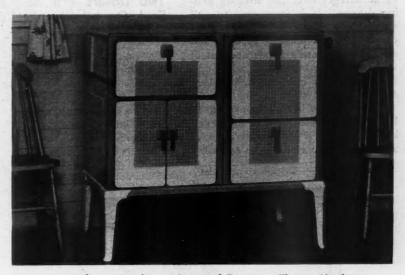
Better Refrigeration

Along with better and more attractive wall materials better and more attractive equipment must be used in homes in order to maintain the standard. The mechanical refrigeration field offers something new which effectively harmon-

izes with the beautiful wall coverings already mentioned. This is an electric refrigerator which is especially designed for apartment installations but is equally desirable for single homes.

This refrigerator is in the low price class but offers the same refinements and service that go with the larger models. Though compactly designed to fit into the limited space allowance of modern apartments and small homes, it has





More Like a Handsome Piece of Furniture Than a Kitchen Range, But with Practical Utility and Convenience Equal in Every Respect to Its Beauty.

ample storage and ice capacity for the average size family. In addition it is designed so that it can be built in with kitchen cabinets by using a special ventilation flue.

All parts are contained within the cabinet which is designed in the style of high grade furniture and lacquered white all over. The lining is one piece porcelain which is easily cleaned and all features are of the same standard as the other units in this high grade line.

The Modern Kitchen Range

Modern standards also demand a type of range which was unknown only a few years ago. Recently a high grade gas range, which was a distinct departure from established design, was introduced. Additional models were added to the line and now still another model has been added. The new model is in a price class which completes the line, making this type of range available in all price classes.

The new range is really a thing of beauty, resembling more a fine piece of furniture than a piece of working equipment. It is beautifully enameled in colors and artistically ornamented. This particular model is finished in old ivory with green trim and a basket design in cocoa-brown on the front.

When closed the cooking top and gas controls are entirely covered, the working parts of the stove are hidden and the appearance is that of a handsome cabinet. Mechanically this stove is of the same superior grade as it is in appearance.

These are some of the things about which the builder or prospective owner should inform himself if he hopes to produce a 1932 model house of which he can be justly proud and which will maintain the highest resale value over the longest period of time. Undoubtedly the manufacturers of building products are setting high standards in present day materials and equipment which offer opportunity to builders.

The First Thing You See When You Enter the House, the Wall Covering, Makes a Good Impression If It Is a Permanent Coated Fabric. 57

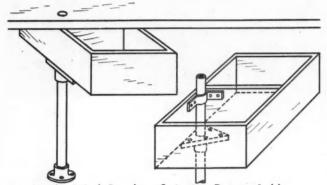
Practical Job Pointers

Swinging Bench Drawer

THE swinging type bench drawer shown in the sketch has a number of advantages over the ordinary sliding drawer. It is impossible to pull such a drawer out too far and spill the contents. It is possible to open and close it when one's hands are full of

tools. It never sticks and, when opened, the entire drawer is brought out into the light where one can see all its contents.

Such a drawer is easily constructed and fitted to any work bench. The main thing is to use a sufficiently large plate below the drawer to support it and a pipe of sufficient diameter for the weight to be carried.



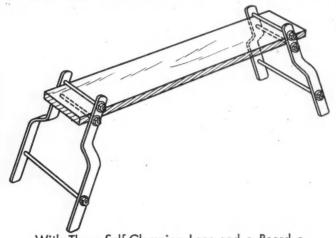
On the Work Bench, a Swinging Drawer is Handier and More Practical Than a Sliding One.

All details of the design are shown in the sketch, and dimensions can be made to suit the individual requirements. CHARLES H. WILLEY, Hill Crest Acre, Penacock, N. H.

A Portable Knock-Down Bench

A PAIR of legs. such as those shown in the sketch, are easily made from heavy strap iron and a half dozen long bolts. When a board is inserted between the bolts, the legs clamp it securely and a handy bench, or low stage is formed. The board is as quickly removed and the legs are easily transported from place to place, taking little room in the truck.

CHARLES H. WILLEY, Hill Crest Acre, Penacock, N. H.



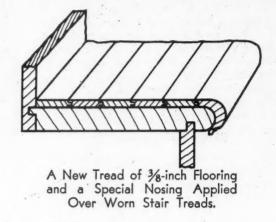
With These Self-Clamping Legs and a Board a Handy Bench Is Available Anywhere.

A Reader's Exchange of Tested Ideas and Methods, Taken from Their Own Building Experience. Two Dollars Will Be Paid for Each Contribution Published in This Department.

Reconditioning Stair Treads

THE sketch shows a method I use for reconditioning badly worn stair treads. I designed a nosing which would fit over the old nosing and had it machined on a shaper and matched to 3%-inch flooring. I then glued to this nosing enough pieces of flooring to cover the tread as shown in the sketch.

This new tread was scraped and sanded and then laid on the old tread, and nailed to the face of the riser and at the



ends. Before laying the new tread, however, the low spots in the old tread were shored up. This method works equally well for straight treads or winders.

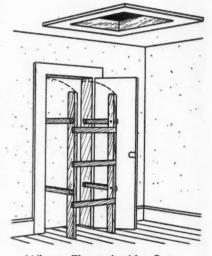
FRED W. WESLEY, Burks Falls, Ont., Canada.

For the Stairless Attic

N many homes where there are no attic stairs, access to the attic is usually through a scuttle in a hall ceiling, by means of a ladder or

stepladder which has to be carried in and put away every time it is used. To overcome this difficulty at small cost, one builder uses a folding ladder which is enclosed in a wall cabinet, as shown in the sketch.

This takes up no hall space when not in use — the lack of hall space is usually the reason for omitting the attic stair but is always readily available when needed. To bring the ladder into position, for use, the door of the cabinet is opened and the lad-



Where There Is No Room for Attic Stairs, This Cabinet and Ladder Serve.

der is pulled down to rest on the floor, as shown. When through using, the ladder is pushed up and back into the cabinet and the door closed.

G. E. HENDRICKSON, Argyle, Wis.

To Catch Overhead Borings

TO prevent the borings from an auger used overhead, from dropping in the eyes, half of a rubber ball can be used as a cup to catch the borings. The ball is split in half, a



The Rubber Ball Cup Catches the Borings Instead of Letting Them Fall Into the Workman's Eyes.

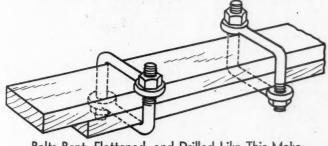
hole is punched through the center of one half and the cup is slipped over the bit and rests on the jaws of the brace. This cup will catch all the borings and allow the worker to stand directly under the brace where he can get the best upward pressure.

RAY J. MARRAN, 3225 E. 28th St., Kansas City, Mo.

Handy for Clamping Parts

ANDY clamps can be made from common bolts by bending them at right angles, as shown in the sketch, flattening the ends and drilling holes in the flat ends. These can be used for all sorts of purposes such as clamping together bars, wire rope or bars and are especially handy for holding two parts together for drilling.

CHARLES H. WILLEY, Hill Crest Acre, Penacock, N. H.



Bolts Bent, Flattened, and Drilled Like This Make Handy Parts Clamps.

Regarding Knee Pads

N the September issue, Mr. Scudder, of Farmington, Ill., told how he sewed a pocket on the knees of his overalls to hold rubber pads, to protect his knees in laying floors. The idea is all right in general but has one fault. Most carpenters' overalls are made double at the knees. Some have the patch sewed across the bottom but the open ones are preferred because, when the patch becomes worn shaving, sawdust, etc., will lodge in the pocket so formed. The same would be true of Mr. Scudders pad pockets.

Why not just slip the rubber pad up under the reinforcing patch that is already on the overalls and fasten it temporarily with a harness safety pin, or with snap hooks and eyes at each of the upper corners? I think this would prove more satisfactory.

ROBERT MCRAE, Market Square, Saskatoon, Sask., Canada.

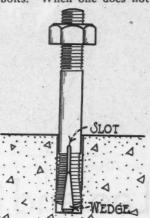
Emergency Foundation Bolts

OFTEN, on a construction job. there is need of putting in a few extra foundation bolts. When one does not

have enough of the regular commercial type to provide the extras, it is a simple matter to meet the emergency with standard bolts. When used as shown in the sketch the standard bolt makes a very good substitute.

Just saw a slot in the end of the bolt and start a small, steel wedge into it, then put the bolt in the hole. When the wedge is resting on the bottom of the hole, drive the bolt home. The wedge will spread the split end of the bolt till it grips firmly.

CHARLES H. WILLEY, Hill Crest Acre, Penacock, N. H.

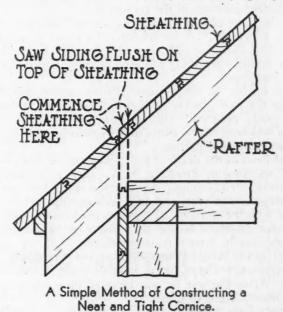


An Ordinary Bolt Can Be Used as a Foundation Bolt.

Building Tight Cornices

THE sketch shows a method of building a neat cornice which is very tight and which can be used on many buildings, whether sided vertically or horizontally. Let the siding run a couple of inches above the rafters, fitting it well around the rafters. Commence sheathing the roof just above and below the siding, then saw off the siding flush with the top of the sheathing.

ARNOLD E. MILLER, Agosta, Ohio.



AMERICAN BUILDER AND BUILDING AGE







Edward A. Simmons

Chairman of Board Deceased—Late President President Lee and Dunn Advanced to Leadership of Simmons-Boardman Publications

'HE election of Henry Lee as chairman of the board and of Samuel O. Dunn as president of the American Builder Publishing Corporation, to succeed Col. E. A. Simmons, deceased, places in executive charge of its management two men who have been associated with the Simmons-Boardman publications for a quarter cen-tury. The association of Mr. Lee with this organization dates from 1905; that of Mr. Dunn, from 1907. Each has participated to a major degree in the development of this company and its affiliates to their present position as publishers of nine leading business papers, including the AMERICAN BUILDER AND BUILDING AGE and five outstanding journals in the railway field.

At the same time Mr. Dunn was elected chairman and Mr. Lee president of the affiliated Simmons-Boardman Publishing Company; Mr. Lee was also elected president of the House Furnishing Review Company, another affiliated company.

The history of the Simmons-Boardman organization during the past quarter century has been one of sound and steady progress. During most of this time, Mr. Dunn was head of the editorial department and Mr. Lee of the business department.

The news of the death of Col. Simmons, on September 30 at his home in Brooklyn, N. Y., came as a shock to his many friends among construction men. He was in his fifty-seventh year, and had been continuously associated with the Railway Age and its predecessor publications for 42 years, having as a youth of 14 joined the organization he later came to head.

During the World War, Col. Simmons served with the Quartermaster Corps, being commissioned a major in 1918. After the war he was elevated to a colonelcy in the Officers' Reserve Corps.

Henry Lee, who succeeds Col. Simmons as chairman of the board of the American Builder Publishing Corporation, was born at Hamlet, Ill., May 25, 1884, and received his education at the Aledo, Ill., high school and at the Metropolitan Business College at Chicago. He joined the staff of the Railway Age in 1905, was elected a director of the Simmons-Boardman Publishing Company in 1912 and became vice-president and treasurer in 1916, at which time he was placed in active charge of the business department. Mr. Lee has been active in various organizations, including the Federation of Trade Press Associations (now the Associated Business Papers, Inc.), of which he was secretary-treasurer in 1910-11. He was successively secretary, vice-president and president of the New York Business Publishers Association during the years from 1916 to 1919, and was a director of the Technical Publicity Association in 1918.

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Samuel O. Dunn, who succeeds Col. Simmons as president of the American Builder Publishing Corporation, was born on March 8, 1877, at Bloomfield, Ia. When 12 years of age, he began to learn the printer's trade and at 18 was editor and publisher of a newspaper at Quitman, Mo. Later he joined the editorial staff of the Kansas City *Journal*, for three years was an editorial writer on the Chicago *Tribune*, and joined the Simmons-Boardman organization in January, 1907, as associate editor of the Railway Age, succeeding to the position of editor in 1911. Expansion of the company's publications brought parallel expansion in his duties as he became editor-in-chief of all papers acquired and established.

Mr. Dunn has been a frequent contributor to maga-zines and speaker on economic and business subjects. He is the author of several books and has lectured on business subjects in many of the leading universities. He is a member of both the Railroad Committee and the Inland Waterway Transportation Committee of the Chamber of Commerce of the United States, and is a former president of the Associated Business Papers, Inc.

CLEAR THE WAY FOR RAPID RECOVERY IN THE BUILDING INDUSTRY

This Is The Need of the Hour Say Nation's Builders

CENTRAL MORTGAGE BANK IS FAVORED BY ASSOCIATED GENERAL CONTRACTORS

N line with the ever-growing demand for increased building activity this winter, furthered by the campaign that AMERICAN BUILDER AND BUILDING AGE has been waging since early fall, another association of national influence has put all its power and prestige behind the movement to relieve unemployment and end the depression by reviving building construction throughout the nation at once.

A program to achieve this purpose was drawn up at a two-day meeting of the Associated General Contractors of America held in Washington, D. C., on September 30 and October 1.

Central Mortgage Bank Endorsed

This program endorses the idea of a central mortgage bank to provide additional banking facilities so that loans on certified, quality construction may be secured up to 75 per cent of the certified actual cost of a dwelling and payments made over a period of 15 years and at interest no higher than 6 per cent.

'We believe that the financial institutions of the United States, both banking and fiduciary, should be a 'bull' on America," reads that section of the program devoted to construction finance. "Improvements generally are an asset to the community of which the bank itself is an integral part, and any community that is not willing to go forward with a constructive program would seemingly demonstrate lack of faith in its own destiny. We believe that the financial system of the nation, however, has singularly failed in the present emergency to regulate the flow of credit so that capital for sound and needed enterprises might properly be maintained. We recommend, therefore, that, if necessary, the retirement of public obligations be deferred and that the Federal Reserve Board should examine every possible method of stabilizing financial conditions, guaranteeing the solvency of the nation's financial institutions and releasing hoarded capital into its rightful channel of business, industry and commerce. If the Federal Reserve System, as now constituted, requires additional legislative powers to further this section, we recommend that such power be granted by congress."

All the recommendations in the program drawn up by the builders are

Coming Events

- Nov. 10-12, 1931—American Petroleum Institute, Annual, Stevens Hotel, Chicago.
- Nov. 19-21. 1932 California Retail Lumbermen's Association, Annual, Hotel Oakland, Oakland.
- Dec. 7, 1931—National Homes Finance Corporation, First Annual Stockholders Meeting, Congress Hotel, Chicago.
- Dec. 7-9, 1931—Associated Leaders of Lumber and Fuel Dealers of America, Annual, Congress Hotel, Chicago.
- Jan. 9-15, 1932—American Road Builders Association, Annual Convention and Road Show, Statler and Book - Cadillac Hotels, Detroit, Mich.
- Jan. 18, 1932—Associated General Contractors, Hotel Schroeder, Milwaukee, Wis.
- Jan. 18, 1932—National Association of Real Estate Boards, Annual Mid-Winter Meeting, Jefferson Hotel, St. Louis, Mo.
- Jan. 19-21, 1932—Northwestern Lumbermens Association, Annual, Minneapolis Auditorium, Minneapolis, Minn.

directed at "the fundamental causes that have prevented the construction industry from leading the country out of the depression" and the country is asked to consider these recommendations so that they can be put into immediate effect by united and co-operative action.

To relieve unemployment, it is recommended that local, state and Federal governments expend maximum funds that can be immediately raised, in sums as large as possible, to undertake a constructive program for the nation.

In addition to the financing of public construction by general or special bond issues, it is recommended by the A. G. C. that bond issues be authorized for a revolving fund to buy special tax bills issued for specific improvements, the rotating funds to be used by the city to carry such tax bills as the taxpayer might not wish to meet for the next two years. Such a moratorium, it is thought, would remove much of the present opposition of citizens to needed municipal improvements.

"It is also eminently proper that private institutional work should proceed at once," the program affirms. "An opportunity to work is far better than charity. We, therefore, urge that every citizen and political subdivision undertake their individual plans of construction and improvements now."

Financiers Should Help Build Confidence

The loose and unsound financing methods that characterized some types of construction in the days of the boom are roundly condemned and the recommendation is made that investors in construction securities, civic leaders, financial agencies, and all elements of the construction industry take immediate action looking toward the appointment of duly authorized boards to direct the work of determining the sound worth of existing construction securities, placing the management of construction projects on a sound basis and of stabilizing the market prices of such existing securities to the end that their sound values may be made as liquid as possible.

The program calls upon "all responsible financial agencies to aid in rebuilding public confidence through open and above board declarations of the basic financial factors affecting each of the projects that are underwritten; and not only join in clearing the decks of unsound and improperly financed projects but in calling attention to the basically sound opportunities for profitable and conservative investment in the construction industry."

Sympathy is expressed with other taxpayers in demanding a minimized cost of government operation and elimination of waste in government; but taxpayers are reminded that a comparison of tax rates is not necessarily the whole story. Increased demands for filtered water, sewage disposal plants, traffic signals, parking space, airports, public comfort stations, better harbors, libraries, community schools, are all facilities which the taxpayers have demanded and for

(Continued on page 62)

Building Activities

The Month's News of the Industry

Clear the Way for Rapid Recovery in Building

(Continued from page 61)

which they should be willing to pay for value received, the contractors believe. Every community is advised to make a thorough analysis of the value received for taxes paid. If people desire more facilities they should be willing to pay for them, but they should pare to the bone any needless expenses for government, the program declares.

Other proposals on the program recommend that the use of prison labor be discontinued; that continued federal aid be given to counties and states for highways, and also for schools and hospitals; that immediate consideration be given by states for the issuance of bonds for public buildings; that public utilities study the problem of setting up financial reserve to take care of expansion of facilities and that utilities let their work out on contract instead of doing it themselves; that contractors be licensed and that credit bureaus be established to determine responsibility.

A final recommendation was made that, if necessary to the carrying out of the program, a special session of Congress and various state legislatures be called to put it into effect.

Legislative Program

The executive board authorized a legislative program, on recommendation of the legislative committee, providing for the introduction in Congress of a bill to prohibit the government from engaging in business in competition with private business. The program also includes proposals for an amendment to the Bacon-Davis prevailing wage law to include clauses making in mandatory on government departments to pre-determine the prevailing scale of wages to which contractors are required to adhere, so that they may be included in the specifications. Another proposal favored amendments to the Cramton bill including provision for pre-qualification for bidders on federal construction work, and means for arbitration of disputes between contractors and government departments.

W. A. Starrett of New York and H. J. Kaiser of Oakland, California, were nominated for election as president and vice-president-at-large at the annual convention.

President Discusses Home Financing

PLANS for stimulating home-building through the development of improved methods of home-ownership financing were discussed by President Hoover on October 7 at a conference at the White House with Secretary Lamont, of the Department of Commerce and members of the Finance sub-committee of the Planning committee of the President's Conference on Home Building and Home Ownership, which is to meet in Washington on December 2 to 5. The conference was largely of a preliminary nature to give the President an opportunity to exchange views on various plans that have been proposed prior to the general conference and no conclusions were announced.

The conference and its various committees that are now studying the subjects assigned to them are working on the problem from the longrange point of view rather than with the emergency aspects of the situation first in mind. It is understood, however, that the President feels that some of the difficulties in financing home-building and real estate operations that have been caused by the general depression may be relieved by the general program he had announced the day before for the general assistance of the banking situation.

The banking plan provides for the creation of a large credit pool to be used in relieving situations resulting from the accumulation of "frozen" or "slow" assets, and is expected to do a great deal toward maintaining confidence in financial institutions generally.

The proposal for a central mortgage bank, which is being so strongly urged by the National Association of Real Estate Boards, occupied a prominent place in the discussions with the President, although differences of opinion were expressed by the representatives of the different groups. The plan was outlined by President Kissell of the real estate association but it is stated that some opposition was voiced by representatives of the insurance companies, that have been providing large sums for investment in first mortgages, and of the building and loan associations.

President Hoover in announcing the appointment of the conference on home-building and home ownership had expressed great interest in bringing about an improvement in the financing of home-building, with a view to eliminating some of the complications and items of expense in connection with the first and second mortgage plan which he said tends to discourage home-ownership.

Those present, in addition to Secretary Lamont, included: James L. Madden, third vice-president, Metropolitan Life Insurance Company; W. E. Best, vice-president of the United States Building & Loan League; H. S. Cody, vice-president of the Cody Trust Company; H. A. Kahler, of the New York Title & Mortgage Company; H. S. Kissell, president, National Association of Real Estate Boards; Samuel N. Reep, president of the Home Building & Loan Association of Minneapolis; W. A. Starrett, vice-president, Associated General Contractors; E. T. Trigg, president of John Lucas & Co.; Clarence M. Woolley, president, American Radiator Company.

Real Estate Boards Approve Mortgage Discount Plan

RESOLUTIONS urging the need of improvement in home financing methods and commending the National Association of Real Estate Boards in bringing forward for consideration a plan for a central mortgage bank which would rediscount mortgages on homes, were passed by the following state associations of Realtors during the week of October 11th: Wisconsin Association of Real Estate Brokers, Illinois Association of Real Estate Boards, Ohio Association of Real Estate Boards, and the California Real Estate Association.

Passage of these resolutions evidences growing interest in the suggestion designed to make real estate credit more liquid. Similar action had previously been taken by state meetings of realtors in the following states: Massachusetts, New York, Michigan, Virginia, North Carolina, and Indiana. The Pacific Northwest Convention which met last summer and which was attended by realtors from Washington, Oregon and Idaho, also took affirmative action.

State associations representing approximately three-fourths of the sixteen thousand members of the National Association of Real Estate Boards throughout the country have thus expressed their interest in this fundamental proposal. A detailed study of this and other proposals to lighten the burdens of the home buyer and the home owner with respect to cost of financing is being carried on in the Committee on Finance of the President's Conference.

Radio City Construction Now Under Way

WORK on Radio City, which will occupy practically all of the three blocks in the heart of New York City, is progressing rapidly. The development has advanced to the point where destructive operations, such as razing of old buildings and excavations, have given way to actual work of erecting the first of the ten buildings planned by the Rockefeller interests.

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CURRENT CONSTRUCTION FIGURES

September Records Eight Per Cent Contract Gain Over August

A^N increase of eight per cent in construction contracts for September, as compared with August, was due entirely to increased non-residential and public works and utilities activity, residential building showing only a slight increase over the preceding month. The total contracts for September, amounting to \$346,247,461 were divided between the various classes of work as follows: Residential Buildings\$130,910,440

Commercial Buildings	32,656,618
Factories	11,956,864
Educational Buildings	23,058,950
Hospitals and Institutions.	15,891,001
Public Buildings	25,091,364
Religious and Memorial	6,642,133
Social and Recreational	7,238,145
Public Works and Utilities	92.801.946

Construction League Is Organized

NINETEEN groups of the construction industry, with more than 100,000 members, and representing billions in capital, have formed an alliance "to co-operate for the common good of the industry and better serve the nation." The number of member associations will eventually be increased to thirty-five.

This new organization, which will be incorporated in the District of Columbia, and will maintain headquarters in Washington, will be known as the Construction League. Robert D. Kohn, of New York, president of the American Institute of Architects, has been chosen general chairman of the provisional organization. Other officers have been named as follows:

First vice chairman, Francis L. Stuart, New York, president of the American Society of Civil Engineers; second vice chairman, A. P. Greensfelder, St. Louis, president of the Associated General Contractors of America; treasurer, H. H. Sherman, Boston, president of the Producers' Council; general secretary, P. W. Donoghue, Washington, D. C., national president to provide for contracts in the 11 states west of the Rocky Mountains and for smaller, unreported work not covered by the Dodge organization.

Construction in the Pacific Coast and Mountain states normally amounts to about 10 per cent of the total for the balance of the country. Increased activity over August, which was felt throughout the eastern portion of the country, was less apparent in the far west and reports obtained indicate that 9 per cent should be used to account for the additional western states.

Only a portion of the new building, modernizing and repair work of less than \$5,000 is covered in the Dodge reports. A large portion of this work is rural and small town. Normally it amounts to about 25 per cent of the reported construction. Because of the stimulation of rural building following the harvest season, and the added stimulation of recent activities in providing grain storage on farms, and housing for additional stock which can be profitably fed with low priced grains, this activity is, relatively, somewhat above normal. A factor of 26 per cent has, therefore, been used to account for it.

Since practically all this work is residential or farm buildings it has been classified under the heading Residential Building, in the tabulation.

of the National Association of Master Plumbers of the United States.

"An effort is to be made to create a medium for coordinated action within the building industry," according to a statement by Mr. Kohn outlining the purposes of the League. "Each member organization will send representatives to periodic conferences, at which reports aimed to improve the public service of the industry will be submitted. The League, it is believed, should do nationally what has been done in many cities by local building congresses."

The organizations represented in the new combination are: American Engineering Council, American Federation of Labor, Building Department, American Institute of Architects, American Institute of Steel Construction, Associated General Contractors of America, Contracting Plasterers' International Association, Electrical Guild of America, Heating and Piping Contractors National Association, International Cut Stone Contractors' and Quarrymen's Association, International Society of Master Painters and Decorators, National Association of Builders' Exchanges, National Association of Building Trades Employers, National Association of Marble Dealers, National Association of Master Plumbers of the United States, National Association of Ornamental Iron and Bronze Manufacturers, National Association of Sheet Metal Contractors, National Committee of Building Congresses, The Producers' Council, The United Association of Journeymen Plumbers and Steam Fitters.

To Use "Zinc Institute Seal of Quality" Trade-Mark

GALVANIZED sheets of certified quality, carrying a zinc coating far heavier than on regular commercial sheets, are now readily available to the consumer through completion of license agreements for the "Seal of Quality" trade-mark of the American Zinc Institute.

The following manufacturers, representing a substantial majority of the industry, have been licensed to use this "Seal" upon galvanized sheets:

American Sheet and Tin Plate Company (subsidiary of U. S. Steel Corporation), Pittsburgh, Pa.

Apollo Steel Company, Apollo, Pa. Bethlehem Steel Company, Bethlehem, Penna.

Continental Steel Corporation, Kokomo, Ind.

Granite City Steel Company, Granite City, Ill.

Gulf States Steel Company, Birmingham, Ala.

The Newport Rolling Mill Company, Newport, Ky.

The Reeves Manufacturing Company, Dover, Ohio.

Tennessee Coal, Iron & Railroad Company, Birmingham, Ala.

The Youngstown Sheet and Tube Company, Youngstown, Ohio.

The need of such a guide to quality has been emphasized by recent field investigations of the Institute which have shown not only a great variation in the zinc coatings on galvanized sheets, but a surprising lack of knowledge on this subject on the part of consumers, dealers and even distributors.

Illinois Uniform Wage Law Ruled Unconstitutional

CONTRACTORS on seventy-two state highway road and bridge sections and seven contractors doing institutional construction work in Illinois have been notified that all payments for work performed would be stopped immediately, following the Illinois Supreme Court's decision against the rate of wage law.

Work totaling approximately \$54,-000,000 is affected by the action. This includes state highways, bridges and public building construction.

Better Air-Better Heating

Air Conditioning Is a Feature of Growing Importance Which Goes Hand in Hand with Improved Heating Equipment



This Air Conditioner Is Especially Valuable in Hospitals, Its General Use in Other Buildings Would Prevent Much Sickness

A IR conditioning promises to be "The Next Big Change" in industry, according to a recent article in one of the leading general business publications. That this promise will be fulfilled can hardly be doubted by anyone who is acquainted with recent investigations proving the importance of clean, properly humidified and tempered air not only to health and comfort but

also to working efficiency.

Fresh, Clean, Silent Air

One of the outstanding new developments in the air conditioning field is suitable for installation in homes, offices, hospitals, or in fact any room which is occupied by people and so requires proper ventilation. It not only assures ample ventilation, 150 cubic feet of fresh air a minute which is sufficient for five persons, but also removes all dirt from the outside air and shuts out the noises of the street.

This device is a small cabinet which occupies a floor space of only 10 by 24 inches. It is easily installed in front of, or at either side of any window to which it is connected by an intake flue. It does not interfere with the opening or closing of the window, but once it is installed the window need be opened only for washing. In new buildings it may be built into any outside wall and no window connection is required. Such an installation may be inconspicuously finished like the wall itself.

In operation, air is drawn into the cabinet, passed through a filtering material and delivered into the room without creating an undesirable draft. At the same time there is sufficient draft to assure air circulation throughout the room. In winter especially this is important. The cool, fresh air is directed upward toward the ceiling and the air temperature throughout the room is completely equalized. The air stream can be directed up or down, or to either side as required.

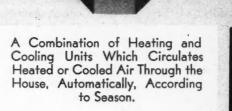
The filter removes more than 90 per cent of all dust and dirt from the air. It also prevents the entrances of flies and insects and of pollen with the result that it is of particular value to those who suffer from hay fever. The filter material can be quickly and inexpensively replaced as often as necessary to maintain efficiency and the cost of operation is negligible. The device itself is not only absolutely silent in operation but excludes all outside noises as it is accoustically treated throughout.

For Heating or Cooling Homes

Another feature of air conditioning that is attracting attention these days is the circulating of cooled air in hot weather, just as warm air is circulated in cold weather. A new combination heating and cooling plant for houses provides for this in a single installation.

This, is an automatic, gas-fired heating system, of the forced air type equipped with an evaporator and compressor for cooling. The warm air ducts of the system are used to circulate the cooled air in summer. The cooling unit is installed in the central return air duct and a by-pass carries the cooled air past the heating unit through a circulating fan, which has a capacity of 600 cubic feet per minute.

The system is designed for homes of six or eight rooms. The heating unit is entirely automatic in operation and the



For further information on any of the products mentioned on these pages write American Builder and Building Age, Information Exchange, 105 W. Adams St., Chicago.

THE ISSUE OF NOVEMBER, 1931

cooling unit can be either manually or automatically controlled. The cooled air can be directed into all rooms at the same time, but engineers of the company state that the best results are obtained if only. The or two rooms are cooled at a time. When two rooms are cooled the plant will reduce both the temperature and humidity considerably.

Low Cost Concealed Radiation

A forward step in heating was taken when concealed radiation was introduced a few years ago. The outstanding advantages of this type of heating unit are already quite well known. One obstacle to its more general adoption has been a question of cost. Now, however, this obstacle has been greatly reduced if not entirely removed.

One of the original manufacturers of concealed radiation units has developed a low priced unit suitable for use in moderate priced homes. The first cost of these units is reported to be within the range of cast iron radiators, and additional saving, through installation economies, is pos-



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Have

sible. The manufacturers also claim that this type of unit effects a material saving in fuel because of its better distribution of heat and instant control.

Gas Boilers Are Economical

In the supply of properly heated and conditioned air, the furnace or boiler which does the actual heating is an important consideration. The use of gas as fuel approaches the ideal in the matter of convenience and cleanliness but, except where natural gas was available, has always remained a rather expensive method. It seems likely, however, that this difficulty will be eliminated.

Made Economical to Install and to Use. able for hot water heating of homes, or for heating the water supply, has been brought out at an exceptionally low price. According to reports it is also so economical in operation that automatic gas heating need no longer be

venience within the financial means of all.

considered a luxury for small homes, but is now a con-



The Cost of Concealed Radiation Units Has Been Reduced to Adapt Their Price Range to the Requirements of the Moderate Priced Home.

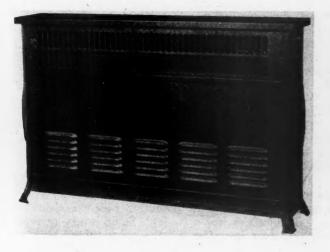
A special feature of these boilers is their water-cooled base, which permits their installation on any type of flooring material. They are particularly adapted to use on the same floor with the radiators. This eliminates the necessity and expense of a basement under the house, although just as good results are obtained when they are installed in the basement, in the usual way.

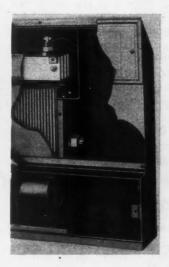
Complete Heating Control

Another departure which gives absolute and economical heating control under all conditions is a combination of two types of heating element that is either built into the wall or installed as a free standing cabinet. In this new combination an electric and a steam heating element can be operated either in conjunction with each other or separately, as desired.

When the two elements are operated together they provide a greater heating effect which may be used for emergencies. For normal heating requirements the steam element is used, while with the electric element, a turn of the switch provides a quick flow of warmth to offset the chill of fluctuating temperatures, under between-season conditions, when the central heating plant is not in operation.

The motor fan, which is a part of this unit, assures proper circulation of the heated air. It may also be operated, independently of the heating elements, for cooling and air circulation, in hot weather.





Steam and Electric Heating Units Combined in a Single Cabinet Give Complete Heating Control for Normal Heating, Extreme Cold Weather or Between Season Conditions.

Questions of Law Clearly Answered

Legal Rulings of Interest to All Builders By M. L. HAYWARD

The Careful Endorser

F Smith gives a builder a note without receiving any value whatever, the builder cannot collect the note, as there is no legal "consideration" for the giving of the note, as every business college graduate knows.

Suppose, however, that Smith applies to a bank for a loan, the bank agrees to advance the required cash if the builder will endorse Smith's note, and Smith asks him to "go on" as endorser.

"I will, if you will give me your note for the same amount to protect me," the careful builder agrees. Smith gives two notes for the same amount, one payable to the builder, and the other to the bank, which the builder endorses.

Is the builder's note valid? In other words, is his endorsement of Smith's note to the bank a legal consideration for Smith's note to the builder?

This point came before the Massachusetts Supreme Court in the case of Harpwood vs. Wellington, 136 Mass. 217, where the court ruled that the note was enforceable.

Unreasonable Delay

N January 14 an Idaho builder forwarded to a certain corporation a check for \$239 to pay the last installment on a motor truck.

On January 17 the corporation received the check, wrote the builder that there was \$7.50 interest still due, and that the check would be held until the interest was received.

On February 5 the builder gave the agent from whom he had bought the truck a check for \$7.50 to cover the accrued interest.

On February 7 the agent forwarded his own check for \$7.50 to the corporation.

On February 8 the bank on which the \$239 check was drawn closed its doors before the check was presented, and the corporation sued the builder.

"The first check should have been presented not later than the day after you received it, and I'm released from liability by your unreasonable delay," the builder contended.

"That is true, but you must show that the delay in presenting the check resulted in a loss to you, which you cannot do," the corporation argued.

The American courts are not uniform in ruling on this point. In the case referred to, however, the Supreme Court of Idaho in a case reported in 258 Pacific · Reporter, 550, decided that the corporation had to stand the loss.

The Burden of Proof

"WHAT'S that \$100 charged in my passbook on 15th," the builder demanded.

"That's a check of yours in favor of John Brown,"

the cashier told him. "I never gave Brown a check for \$100 nor for any other amount in my life," the builder declared.

"Well, sue us for the amount, and prove that the check was a forgery.'

"No, I'll sue and swear that I never gave him a

check, then the burden of proof is on you to show that the check was genuine," the builder maintained.

And the Illinois courts ruled in his favor in Chicago Savings Bank vs. Black, 126 Ill. App. 128.

The Bank's Responsibility

"Y OUR account in favor of the Popular Building Company for \$75 has been left with me for collection. Unless I receive payment within 5 days, the

claim will be placed in suit," the attorney wrote. "Am enclosing herewith my check for \$75 on the Sand Bank, in favor of the Popular Building Company, in full payment of their account," the customer replied. The accompanying check form was filled out in the customer's handwriting, in black ink.

The attorney promptly dipped his pen in the purple ink bottle, wrote "John Jones, attorney for" above the name of the Popular Building Company, endorsed it "for deposit a/c John Jones, attorney," and deposited it in the River Bank. The River Bank collected the check from the Sand Bank. The attorney checked out the proceeds, failed to account to the Building Company, and departed for parts unknown. "The alteration of the check in a different hand and

a different colored ink was a material alteration that should have put you on inquiry, and you're bound to make good the loss," the manager of the Building Company told the cashier of the River Bank. The Supreme Court of North Carolina in a recent case reported in 183 S. W. Reporter, 830, ruled that the bank was bound to make good the loss. "If a negotiable instrument, having a forged en-

dorsement, comes into the hands of a bank, and is collected by it, the proceeds are held for the rightful owner of the paper, and may be recovered by him, although the bank gave value for the paper, or has paid over the proceeds to the party depositing the instrument for collection," said the North Carolina Courts in this case.

Liable for Damages

NEW YORK builder issued four checks, which were rejected by the bank on which they were drawn because the builder's wife had filed a claim against his account. But, instead of giving the real reason for refusing the checks, the bank notified the holders that they were returned because the account was closed.

Then the builder and his wife were reconciled and she withdrew her claim. The builder sued the bank for injury to his credit as a business man.

"We admit we were wrong, but all you can recover is 'nominal' damages," the bank argued. "Dishonoring my check injured my business credit,

and the question of damages should be left to a jury,' the builder contended, and the New York Court of Appeals ruled in his favor.

"The bank made its choice, and must answer for the consequences. Liability existing, we cannot say, as a matter of law, that the damages were merely nominal. The builder was a trader. Some injury to credit may therefore be inferred," the court said.



A COMPLETE LINE that meets every building need

• In the Magic Chef line there is a gas range to meet every building requirement . . . from the modest bungalow to the most pretentious apartment. Instead of merely a single gas range of limited appeal, Magic Chef is a complete line of models that meets every requirement of size, design, taste and price. To make its appeal still stronger, the Magic Chef line has advanced features of efficiency, convenience, and economy found in no other gas range.

• These features include the famous Red Wheel Oven Heat Regulator ... safety type gas valves ... specially designed three-in-one non-clog top burners, efficient at every point from simmering heat to hot, fast fires... the sanitary high burner tray which conceals pipes and valves and protects them from spattering grease ... the distinctive cooking top covers ... the smooth, sanitary oven linings ... the rackless, reversible broiler pan which reduces chances of fats catching fire ... the broiler extension carriage.

• Backed by extensive national advertising and accepted by housewives as the standard for modern gas ranges, Magic Chef will help materially to make your properties more attractive to home hunters.

MAGIC CHEF . Series 29



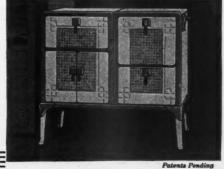


67

MAGIC CHEF . Series 700



MAGIC CHEF · Series 500



MAGIC CHEF . Series 600

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AMERICAN STOVE COMPANY

World's Largest Manufacturer of Gas Ranges NEW YORK • PHILADELPHIA • ATLANTA • CLEVELAND CHICAGO • ST. LOUIS • LOS ANGELES • SAN FRANCISCO

WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

WHAT IS YOUR NAME

Oh! that was

Way Back

In '89

"Counter-Attack"

An Episode in the Daily Trials of a Building Department

NOTE: A Publik Noosance is The Man who is Stone Deef but Won't Admit It

By C. B. GRIFFIN Dept. of Buildings, Seattle Wash.

ND it so happened that on one otherwise perfect day in the Department of Buildings of this, the City of Seattle, Washington, an elderly gentleman deployed himself along the left flank of the permit counter. He aimed directly at the nearest clerk and loosed a gas attack. There was no frantic beating of shell cases, no jangle alarm—only the clerk was rattled!

Venerable Party, "I know I don't need any permit, but I thought I'd come up to make sure. I've got an old coal shed on my lot and I want to tear it down and make a garage out of it."

Clerk, "Do you plan to make a larger building or change the location on the lot?"

A. "Heh? I put that shed up in '89, long before you came here, I'll bet!"

Q. "But are you planning to make a larger building? You are taking the old shed down, are you rebuilding in the same location to cover the same area?"

A. "It's an old coal shed."

Q. "BUT ARE YOU REBUILD-ING THE SAME SIZE OR LARGER? HOW BIG IS THE SHED!"

A. "Yes.

"When I first came to this part of the country there wasn't a house within a mile and a half of the place. I lived in this very shed for over two years! Ha, ha! I certainly didn't think then that one day I'd be keeping my own private rig in the house! Of course, I don't drive the Ford. My grandson is staying with me and is going to University now. I got him the 'coopie' for his birthday. The way he is driving it I don't think it's going to last till another birthday! Well, sir, he started out one day to pick up some of his friends to go to a party! He came back in about a half an hour -he forgot his "kal-laylee." I was out fixing the fence where the milk truck came through Saturday and, my stars, they must have been six or seven boys and girls in that car! I should have counted them as they tumbled out. Every last one of them had to get out

before Will could budge."

Q. "How big a garage do you want to build?"

A. "I'm going to tear it down and make a garage out of it!"

(Time out here to write the question.)

Venerable Party, "What's this? What's written here! I left my reading specs at home. What's it say here! (Impatiently) Read it if it's not a secret! My stars, I'm not a deaf mute!"

Q. "HOW BIG A GARAGE DO YOU WANT TO BUILD?!!"

A. "Oh! Big enough for a 'coopie' and a little space for some wood and coal and boxes of old books, the hose and some garden tools, wash tubs and lawn mower and I'm keeping the same old cook stove I got when I first built my shack. There's no telling but what I might want to take up a claim again sometime. They don't make stoves like that these days. It can sure cook up a meal and keep you warm, too. You know, I think this country is getting colder. I think it's because they've cut the trees off. When I first come out here in '89 and built that little house they was trees, big trees, all around it. Of course I cut them all away for about a hundred feet so as they wouldn't fall on the house. Kept me in wood for years but of course I didn't burn much because it was so sheltered there and my stove was so economical. Did you ever see one of those kind of stoves? Heh? About this square and sets off the floor about this high-and bake! They had the oven right where it should be-right under the fire and-

Q. "What is your name?"

A. "Oh, that was way back in '89!" Clerk, handing applicant pencil and pointing out place to sign. "Sign here, please."

A. "Oh."

"I'm from Missouri. Most of my folks are still living back in the old town, Joplin. That is most of them that are still living. There were four of us brothers and five sisters and my father—What?" Q. "Where is this place!"

A. "What d'ya say?"

Q. "WHERE DO YOU LIVE!?"

A. "I'm going to tear it down and make a garage out of it!"

Q. "No! WHERE IS THE HOUSE! Address! ADDRESS!"

A. "Oh. Why didn't you say so! Out on the south side. Fond-of-nellie street No. 726."

Q. "What? Oh, I see—No. 726 Fontanelle Street! What's the value of the improvement?"

A. "There's a sixteen-foot alley in the rear there—they condemned eight feet offa me four years ago."

(Clerk, busy at finishing application, makes almost silent prayer that there'll be no come-back.)

Venerable Party, "Thank you, young man, I'm glad I had you to wait on me. I knew I didn't need a permit but I thought I would get one anyhow. It's a little hard for me at times. Folks say they cannot understand me, but I'm sure I don't have any trouble understanding them.

"Have you been in politics long? I used to know a man who worked in this department twenty years ago. Smith, his name was. Do you remember anybody by that name? No? Well, maybe he worked in one of the other departments.

"Say, do you know, your face is very familiar to me, I'm sure I must know you. What is your name? What?"

- A. "Wilson is my name!"
- Q. "What?"
- A. "Wilson!"
- Q. "What!"
- A. "WILSON!"
- Q. I didn't just get it."

A. "W-W-W-I-L-L-S-S-S-S-S-O-N-N-n-n * & % ! ! ! 30c"

(Activity in entire office is suspended for several minutes!)

Venerable Party, "Magillicuddy, you say? No, that's not the name I was thinking of! Oh, now I know! You remind me of Charlie Jones—Poor Charlie, he died over two years ago!"

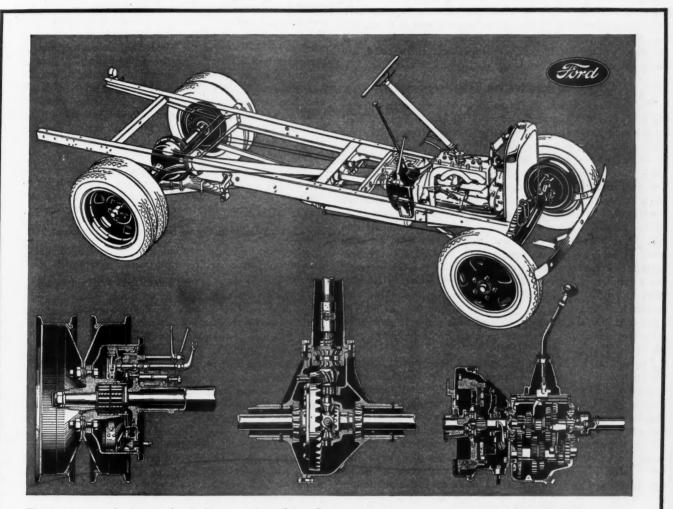
STRETCHER-R-r-r

Do you realize the extraordinary value

built into the Ford Truck chassis?

BENEATH the staunch bodies with which Ford trucks are fitted lie vital mechanical features which determine the strength, reliability, long life, and witimate economy of Ford commercial units. Many of these features are little known to their hundreds of thousands of owners and drivers—chiefly because the need to know them seldom arises. Nevertheless, they are interesting because they are the actual foundation on which Ford hauling value is based.

 \bigstar Ford hauling-units are available with more than forty standard bodies, meeting every business need, and in forty handsome color-combinations. Your Ford dealer will gladly help you with your hauling problems. In most principal cities there are centralized exhibits of Ford commercial units.



Three-quarter floating axle-shafts

With the three-quarter floating construction, the axle-shafts serve only to turn the wheels without carrying any of the weight of truck or load. Notice the large roller bearing. The truck weight is transmitted from the axlehousing through this roller bearing directly to the forged steel wheel hub.

The axle-shafts simply transmit the power of the engine to the wheels, a task for which they are especially designed, with their tensile strength of 180,000 pounds per square inch. The result is tremendous strength, reliability and long life.

Spiral bevel gear rear axle

Notice that the pinion-shaft is straddlemounted; that the pinion is *between* roller bearings. This construction minimizes deflection in the propellershaft caused by a tendency of the pinion to force itself out of place, under load.

Abnormal strains in the steel shaft are thus eliminated, wear is reduced, and reliability added. On the inner face of the housing, there is a bronze thrust-plate which gives additional support to the ring-gear back of the point where it meshes with the pinion, insuring constant, perfect mesh.

4-speed transmission

Four speeds forward provide abundant power to climb steep grades with capacity loads, and ample speed to save time on street and highway. The transmission gears and shafts are of chromealloy steel, heat-treated for hardness.

Seven ball and roller bearings are used in transmission and clutch, minimizing friction and prolonging the life of these parts. There are more than twenty of these anti-friction bearings in the Ford truck chassis. In high gear, the entire drive, from engine to wheels, is carried on ball and roller bearings.

WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

AMERICAN BUILDER AND BUILDING AGE

Winter Building Found Practicable and Profitable

(Continued from page 34)

nothing else needed than competence to produce a quality of work in winter equal to that obtained in summer.

As to progress, there are few days in the year when it is too severely cold to work. Through accustomed habit of thought people generally consider the winter weather delay to be very considerable, but investigation of numerous jobs indicates that in recent years in this climate delay due to severe cold and heavy snows has not amounted to a total of a week's time. In rare cases it may amount to no more than 10 days. In thinking of weather delays in the winter, equal delays due to rain in the milder seasons are overlooked, and it is my opinion that there is little difference, if any, in amount of lost time between the winter and any other season. * *

It will be conceded generally that the quality of work will be unimpaired and that the work can proceed expeditiously in winter as well as in any other season, but it is argued that the cost is prohibitive; first, because the protection of the work in cold weather is very expensive; and second, because the execution of the work itself is too costly.

Extra Cost for Heating Relatively Small

The methods of heating materials and of preventing freezing of concrete while being poured and afterwards are well known and need not be discussed. Many people, including some contractors and architects, lay considerable stress upon the increased cost which these precautionary measures add to the items of concrete and masonry work and fail to consider how small a ratio these extra outlays are in comparison with the total costs of the entire structure. When the structure is entirely reinforced concrete, the heat and protection costs are the greatest. Recent inquiries on the subject indicate this cost to run from 11/2 to 4 per cent of the total building costs of jobs averaging from \$50,000 to \$250,000, the percentage decreasing as the size and value of the job increase. On a number of large reinforced-concrete structures running from \$1,000,000 to \$3,000,000 the writer has found the cost to run less than 1 per cent and only in one case as high as 3 per cent. On steel-frame buildings with concrete arches the ratio is considerably less, and on steel-frame buildings with tile arches it is still less.

Due to May 1 leasing in this territory, the demand for completion prior to May 1 of large buildings which generally require a year's construction period necessitates temporary heat for the interior work. The cost of temporary heat for this work, including heat for construction materials, rarely exceeds one-half of 1 per cent of the cost of the structure.

The writer made a case survey of the unit costs of concrete work, form work, and brickwork on five large jobs which clearly showed that the average unit costs of winter operations are as favorable if not more favorable than summer work.

One of the reasons for high wages in the building industry is the tremendous turnover and the contention of the various trades that workmen have only seasonal employment due to the nature of the industry. Furthermore, scarcity of employment in the winter months is a deterrent to potential mechanics who would readily enter the trades were there an all-year demand for their labor.

Lack of constant employment during the year's period means a higher wage rate per hour, and excessive demand for labor in summer means still higher labor costs during that period.

The practice of letting contracts during all seasons of the year would give greater utilization to all branches of the industry and would produce a more normal flow of the volume of business for materials and manufacture, for transportation, for finance and labor. This is extremely important. Under the circumstances it may be asserted that the addi-

tional cost of temporary heat and of protecting the materials during the winter will be more than absorbed by the favorable effects on the other elements and on the division of work involved. It may also be confidently asserted that winter construction is not only practicable but highly desirable with direct benefit to owner, builder, and laborer, and with consequent advantages to the community at large.

Experience of Mills and Sons, Chicago

The following represents the views of Mills & Sons, a firm of home builders in Chicago which has been in business for the past 44 years and is experienced in the construction of both bungalows and 2-flat apartment houses ranging in price from \$9,000 to \$15,000:

We have always been in favor of continuing construction throughout the winter months even though it costs us an average of \$150 additional expense per building. The additional cost covers the operation and maintenance of concrete protection, purchases of coal and coke, installation prior to the necessary time of hot-water heating plants to provide temporary heat during the plastering, carpentry, and painting operations. This cost, however, represents a very insignificant amount when the operations involve two to three hundred buildings. There are, of course, certain days, and now and then certain weeks, that construction must necessarily be at a standstill owing to unlooked-for subzero periods or heavy blizzards. Also, in the long run the efficiency of the workers during the winter months is decidedly lower than during the other seasons of the year.

With reference to the class of workmanship, we can safely assert that a home built in the winter, providing all of the necessary precautions have been taken, is fully as sound as when erected under ideal conditions in warm weather.

Winter Building Favored in Milwaukee

The stand of the Stockdale Homes Co., Milwaukee, on the subject of winter building is as follows:

For the past 36 years we have been building homes ranging from \$4,000 to \$12,000 in cost, and about one-third of them were built or finished during the winter months. We usually build our houses in units of 10, putting in the complete basement, windows, and flooring before cold weather sets in, and protecting our basements with straw and manure. The men then start to work on the first house and stick to it until the roof is on and the windows in. Then they start on the next house, working on mild days outside, while on colder and stormy days they work inside the first house which has been inclosed.

As soon as the house is inclosed the heating plant is installed so that the lathers, plasterers, plumbers, painters, etc., can each go to work and not be impeded by the weather.

We have found that the extra cost of heating and protecting the buildings from frost was easily offset by the difference in labor cost, as our men have always been willing to work for less during the winter months in order to have steady employment. In this way we could keep our crews busy the whole year round.

We also found that houses built in the winter stand up so well that not even an expert could tell the season in which they were built.

The following gives the views of the Immel Construction Co., Fond du Lac, Wis. This company has been doing general building work for approximately 35 years, with most of its work concentrated in Wisconsin, Illinois, Iowa, and other midwestern States:

We do not specialize in any particular type of construction and do all classes of general building work, such as public (Continued to page 72)

Business Paper AdvertisingSign of an Efficient Manufacturer

WHEN you see a manufacturer's advertising in the pages of your business paper, you may know that *that* manufacturer is not only efficient in production, but that he also knows how to *distribute* effectively and economically.

And that is important to you as a purchaser of manufactured articles. For the cost of distribution enters into the cost of everything you buy. Efficiently distributed goods cost less, quality for quality, than goods distributed through haphazard methods.

Manufacturers who advertise in business papers use the shortest, directest, most economical way to reach you with a selling message. They are buying concentrated circulation with out waste. They are applying advertising dollars wisely where those dollars will reduce other selling costs.

Through their selection of efficient means to advertise, they are giving proof that the products they offer to you bear the minimum cost of distribution—that those products, quality for quality, are lower in cost than products distributed either laboriously without advertising or carelessly with wasteful advertising.

THIS SYMBOL identifies an ABP paper ... It stands for honest, known, paid circulation; straightforward business methods, and editorial standards that insure reader interest ... These are the factors that make a valuable advertising medium.

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WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

4-C2

Winter Building Found Practicable and Profitable

(Continued from page 70)

buildings, commercial buildings, factories, theaters, hotels, garages, apartments, residences, etc.

During the past 20 years we have been doing work throughout the winter months of November, December, January, February, and March, and during the last 7 years we averaged a slightly larger volume of construction work during the 5 winter months than during the 7 summer months.

Our figures clearly show that during the winter months the company averaged a slightly larger number of men employed per month than the average for each year, and a considerably larger number than the average of the seven summer months. This is primarily due to a definite policy of the company to carry a constant volume of construction through the 12 months of the year.

During this period we found no serious disadvantages in doing winter work. On the contrary we definitely prefer it to summer work. There is less loss of time for bad weather and waiting for materials during the winter months and we would under no circumstances consider the elimination of winter construction.

Precautionary Methods Well Understood

If winter work is properly done, with the necessary precautionary measures, there are absolutely no disadvantages to the owner and there are no differences in the quality of workmanship. The winter precautions required have become of late more or less stabilized. Some of these measures are: Concrete should be placed in the forms not colder than 70° F. and not hotter than 140° F. and should be maintained in the slab at not less than 70° for at least seven days. These temperature ranges control the amount of heat that must be furnished on the job. The heating of materials is therefore a progressive process increasing with the decrease in temperature.

Starting with the first chilly days in the fall, it is sufficient to heat the water only. As the temperature drops lower, usually to about 35°, the sand and stone must also be heated. In heating the aggregates care must be taken to see that all frozen lumps are thawed out of the mixture. All frost and ice must be removed from the forms and reinforced steel before any concrete is placed. This can best be accomplished by the use of a steam jet. Before freezing temperatures are reached it is usually sufficient to cover freshly poured concrete with canvas and marsh hay to protect it during the night. For concrete work carried on when daytime temperatures are below freezing, it is necessary to inclose the structure and furnish temporary heat within the inclosure. For ordinary winter jobs in the Northern States the following practices have become quite general:

Plant Items for Winter Work

Winter plant.—The items of equipment needed for winter operations which vary in number and size with the size of the job and the temperatures are:

Steam boiler, 50 horsepower, 60 pound pressure; Steam hose, approximately 200 feet; Steam points, $6-1\frac{1}{2}$ inches for aggregates; Iron pipe and fittings; Thermometers; Tarpaulins; Salamanders; Marsh hay (not always required); Water barrel for mixer; and Water barrels for fire protection.

Heating materials.—A water barrel should be mounted above the mixer and connected to the steam boiler by a pipe valved at the mixer with the end terminating a few inches from the bottom of the barrel. Steam should be allowed to flow to the barrel in sufficient quantities to keep the water entering the mixer at about 150° F.

AMERICAN BUILDER AND BUILDING AGE

For ordinary jobs the aggregates are heated by several pieces of steam hose to which are attached 6-foot lengths of perforated pipe drawn to points and inclosed at the end. These points are forced into the pipe near the locations from where the materials are being taken to the mixer. It is a good practice to cover all material piles with canvas to retain the heat and to keep out the snow and ice. Sand and stone should be heated to a minimum of 40° F. and preferably to between 60° and 70°. Where storage bins are used, perforated pipe coils may be placed near the bottom of the bins. If sand and gravel are received in carloads, steam points must be placed into the cars before the materials are unloaded. In all cases all frozen lumps must be thawed out.

A steam hose outlet must be made available at each floor level to be used in removing snow and ice from the forms and from the reinforced steel. This should be accomplished just ahead of the pouring of the concrete.

Tarpaulins and Salamanders

Potection for concrete.—Before starting to concrete the columns of any story or the floors supported by such columns, tarpaulins must be hung from the beams of the floor to be poured and lashed to the beams of the floor below. The canvas should be held away from the outside face of the exterior concrete 6 to 24 inches, to provide room for the circulation of the heat. The tarpaulins must be well lashed to exclude wind and must reach well below the surface of the floor supporting the columns to be concreted. When the entire floor is not poured in one operation the area to be concreted must be shut off from the rest of the story by a curtain across the building.

Salamanders containing coke or oil fires must be placed inside the inclosures, and the temperature of 70° F. should be obtained in the floor just below the forms before any concrete is poured. This will generally require one salamander for about 300 square feet of floor area. At least one salamander will be required at each exterior column, and in extremely cold or windy weather two salamanders may be required for each column. Heat holes about 8 inches by 12 should be left in the floor poured with one hole approximately for each salamander. These vent holes are for the purpose of allowing heat to reach the top of the slab and at the same time of letting the carbon monoxide gas escape from the inclosed area. Whenever a considerable number of salamanders are used, the firing should be done by men working in pairs in order to minimize the danger of gas poisoning.

Temperature Records Kept

During the entire period of winter concreting a detailed record of the following temperatures should be kept: (1) Outside air; (2) forms to be concreted; (3) bottom of concreted slabs; (4) top of concreted slabs; (5) bottom of exterior columns at the most exposed side. Readings should be taken every four hours day and night, and additional heat and protection furnished if the temperature falls below 50° F. at the most exposed points. Salamanders must be fired continuously in small amounts to maintain a uniform supply of heat. Full water barrels and fire buckets must be available as a protection against fire hazards.

It is impossible to have any definite rules as to the minimum time forms must remain in place on winter concrete jobs. The safe time to strip forms should be determined by the particular conditions of each individual structure. Temperature records and tests will help in determining the length of the time during which the forms should be kept in place.

Winter costs.—The maintenance of a winter plant and the expenditures for protecting the work add certain extra outlays to the building costs. These extra costs, however, are so small that they can easily be disregarded for any averagesized structure. Complete cost records kept on 45 different (Continued to page 74) Announcing

the New Low-Priced

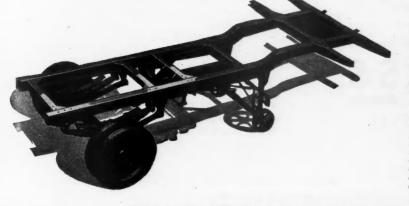
REO TRACTOR UNIT



16,000 LBS. GROSS CAPACITY. 4 CYL. TRACTOR AND TRAILER CHASSIS. COM-PLETE WITH BODY \$1800 F.O.B. LANSING

THE greatest value in truck and trailer history. A new Reo combination of 16,000 lbs. gross capacity at an astonishingly low price... The Reo tractor is equipped with standard Martin rocking fifth wheel and automatic locking mechanism. Both tractor and trailer have coordinated hydraulic brakes on all six wheels... The heavy-channeled 16' trailer frame has six cross braces; helper springs are standard on both units. Sturdy trailer support legs, forged radius rods and interchangeable Spoksteel wheels are other outstanding features. Write or call your Reo dealer for complete information.

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Reo Trucks and Speed Wagons range from 1¹/₄-ton to 4 tons. Prices \$625 to \$2800, chassis f. o. b. Lansing



WHEN WRITING ADVERTISERS FLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE



THROUGH 93,000,000 MILES OF SPACE only to be stopped by ordinary window glass

Speeding through space—186,300 miles per second, the shorter (more valuable) ultra-violet rays of sunlight reach the earth in about eight minutes, yet a piece of ordinary window glass will stop them ... Lustraglass, however, transmits a substantial amount of these all important rays of sunlight, yet costs no more than any good window glass.

Lustraglass can and should be used for all glazing purposes . . . It is a clearer, flatter, more lustrous window glass, the "whitest" of all glass made for windows—an obviously superior product even to the eye of the casual observer. Lustraglass, the ultraviolet ray window glass, will make a building more rentable, salable and . . . livable. It has no "equal." Write for Booklet A-430. AMERICAN WINDOW GLASS CO., Fifth Avenue, Pittsburgh, Penna.



AMERICAN BUILDER AND BUILDING AGE

Winter Building Methods

(Continued from page 72)

buildings erected by the company in the course of 4 years, varying in amounts from \$11,000 to \$644,000 per structure, give us the following results: Total value of contracts covered by the 45 jobs, \$6,100,800; total cubic yards of concrete poured, 83,465; total cost of concrete work including forms, \$1,216,852; total cubic yards of concrete poured during the winter months of November to March inclusive, 35,716; total extra cost for winter operation plant, including fuel and extra labor cost, \$62,279. It can readily be seen from these figures that the extra winter costs amount only to about 1 per cent of the total value of the jobs covered, and about 5 per cent of the total cost of the concrete work.

The advantages accrued to the contractor from continuous operations during the winter months by far exceed the extra winter costs presented above. Neglecting as comparatively intangible the economies due to lower prices of materials during the winter months and to the higher efficiency of labor due to the better type of workmen available in the off season, the advantages due to the ability of the organization to function over a 12-month period and to utilize the equipment over the entire year will alone more than offset the extra costs.

The advantages to the owner of the building depend entirely on the time element when the completion of the building is desired. There is no possible excuse, with modern methods of construction, for the closing down of a project for cold weather with the consequent delay in completion and increased carrying charges.

Minneapolis Experience

The lute can support the support of the support of

The following quotation from the report of McCoig & Jessup of Minneapolis gives the attitude of a representative firm of home builders on the question of building homes during the winter season:

We have been building homes and apartments in Minneapolis for the past 27 years and specialize in residence construction, both large and small. During this period we have done quite a bit of winter building, but not as much as we would like to have done for the reason that people seemed to have the idea in this climate that building could not be done during the extreme months. Recently, however, the public has been realizing that they can have their homes built in the winter and have them constructed fully as satisfactory as they are in the summer months, provided, of course, the building firm knows how to handle winter work. The only precautions that we have to take are to protect against freezing of concrete work and plastering.

The average price of our homes runs from \$5,000 to \$25,000, and we find that it costs us no more to build in the wintertime than in the summer. The cost of materials is somewhat less in the quiet season and our mechanics are willing to work for a little less per hour in order to help us obtain winter work and give them steady employment. We also find that our labor is more efficient in the wintertime when there is available a large supply of good men.

We are thoroughly convinced that the home built in the wintertime if properly handled is fully as good as the one built in summertime, if not better. The reason why the house may be even better is that it does not get soaked so much by heavy rains which prevail during the summer months.

About the only operation which we can not safely perform in wintertime is the application of exterior stucco. This work is usually done after April 1 when we are sure that the stucco will not freeze before it sets thoroughly. We are firmly in favor of building operations during the winter months because we believe that it will provide work to the men who suffer from unemployment due to the cessation of operations in the construction industry.

(Continued to page 76)

FOR ADVERTISERS' INDEX SEE NEXT TO LAST PAGE



W. E. DUNN MFG. CO., 450 W. 23rd St., HOLLAND, MICH.

You need a HUTHER **Dado head**



Developed from our own patents, this adjustable groover cuts either with or across the grain. Cutters may be used singly, in pairs or in any combination necessary for desired cut.

Send for one on approval. It may be returned at our expense if unsatisfactory.

Huther Bros. Saw Mfg. Co. Rochester, N. Y.

Makers of Better Saws for More than Fifty Years

Insulate with U. S. MINERAL WOOL The perfect insulator

COLD PROOF... HEAT PROOF... FIRE PROOF SOUND PROOF.... VERMIN PROOF



Reduces Both Furnace Cost and Fuel Expense

Insulating a home with U. S. Mineral Wool has decided money saving advantages in addition to the protection from cold, heat, sound, fire and vermin and the greater living comfort it supplies.

The ordinary type of heating unit is unnecessary-a much smaller, less expensive plant will keep all rooms thoroughly comfortable and create a worthwhile saving. Fuel bills, year after year, will be decreased about one third.

Insulating with U. S. Mineral Wool is a real economy, not an expense. The first nominal cost is the last-it never has to be renewed and will outlast the building.

The protection, comfort and saving is described in our FREE booklet. Send for it and also free sample of U.S. Mineral Wool.

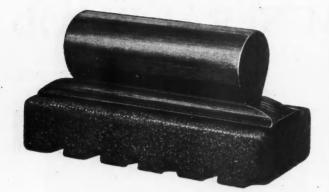
U. S. Mineral Wool Company 280 Madison Avenue, New York

Western Conne	setion
Columbia Mineral Wool Co.,	South Milwaukee, Wis
U. S. MINERAL WOOL CO., DEPT. 1	
280 Madison Ave., New York. Send FREE sample and illustrated bo	the second second second
Name	*******
Address	
City	State

WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

76

Use This and Watch the Form Marks Disappear



The Carborundum BRAND Rubbing Brick

FORM marks or mould marks seem to melt away under this improved rubbing brick.

¶It gets its speed of cut from the hard, sharp grains of Carborundum Brand Silicon Carbide—plus a clean, shear cutting action because it is fluted.

 \P It's the fastest—the longest lived rubbing brick you have ever used for smoothing down all types of concrete surfaces.

¶Made in five sizes—No. 288 is handier because it is fitted with wood handle—see illustration.

From Your Hardware Dealer or Direct

The CARBORUNDUM Company NIAGARA FALLS, N. Y.

Canadian CARBORUNDUM CO., Ltd., Niagara Falls, Ont.

Sales Offices and Warehouses in New York, Chicago, Boston, Philadelphia Cleveland, Detroit, Cincinnati, Pittsburgh, Milwaukee, Grand Rapids The Carborundum Co., Ltd., Manchester, England Deutsche Carborundum Werke, Reisholz bei Dusseldorf, Germany

(CARBORUNDUM IS THE REGISTERED TRADE MARK OF THE CARBORUNDUM COMPANY)

Winter Building Methods

(Continued from page 74)

During the fall and winter months of 1925-26 the Builders' Exchange of St. Paul, Minn., carried on an effective campaign in order to educate the builders and the public alike to the idea of winter building. The slogan of the campaign was "St. Paul builds in the winter—it pays." A sum of \$4,500 was raised by voluntary subscription from the members. The campaign was directed by a special committee representative of each of the groups of contractors, sub-contractors, material supply men, equipment dealers, and bonding companies. The campaign was carried on primarily by means of publicity in the local press and by distributing a special booklet under the same slogan. Window cards, pictures of winter building projects, and winter building slogans were displayed in hotels, banks, lobbies of public build-ings, etc. The principal reasons advanced in this campaign in favor of winter building were: First, it is cheaper to build when the demand for labor and materials is less than during the rush days of the spring and summer, and winter operations insure prompt delivery of materials and better workmanship on the job. Second, the demand for building materials and for building-trades workers helps to keep other workers busy and thus indirectly benefits business at large. Third, winter building operations result in continuous employment for the laboring men and do away with the discontent resulting from seasonal slackness. Fourth, winter building is absolutely feasible and practical, as can be proven by the millions of dollars' worth of winter building carried on during that season.

The members of the Builders' Exchange believe that the campaign was a success, worth the effort and the expenditure. It resulted in more business and more employment. The sight of people going and coming from work on building projects during the winter months had a psychological effect which was very salutary for the building industry and for business in general.

St. Paul Builder Educates the Public with Winter-Built Demonstration Homes

The opinion of Conrad Hamm expresses the attitude of small home builders in St. Paul as to the problem of winter construction work:

Our business is exclusively the designing, building, financing, and modernizing of homes, and in all cases except where we have built for demonstration purposes all of our homes are sold before we start their construction.

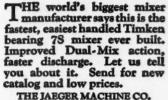
About six years ago we made a very thorough study of winter building in connection with an investigation for the purpose of increasing our sales of homes. We have found that only approximately 45 per cent of the men engaged in the construction industry were home owners. Ninety-five per cent of the remaining workers in the building trades were willing and anxious to be home owners, but due to the fact that there was considerable winter unemployment in this industry they felt that they could not possibly make the necessary monthly payments which were required over the entire year.

We had experienced in years before that the men coming to us in the spring and applying for work were in a great many cases badly in debt, due to the fact that they had lost two, three, and four months of employment during the winter season. This led us to the conclusion that something must be accomplished in the construction industry which would provide for the continuous employment of at least a fair percentage of the men involved.

We also found that a very large proportion of our local (Continued to page 78)

FOR ADVERTISERS' INDEX SEE NEXT TO LAST PAGE





THE JAEGER MACHINE CO. 521 Dublin Ave., Columbus, Ohio





speed the.... building and sale of Homes equipped with

These Weather-p

*Photo shows wedge-shaped tongues on pulley stile.

PINE CRAFT FRAMES

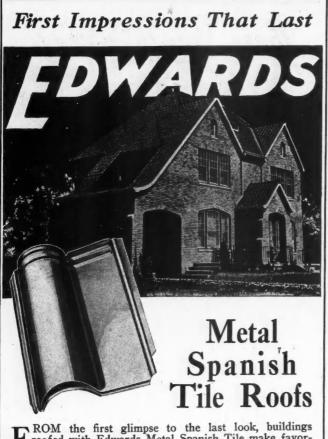
Finding a ready sale for houses built speedily but well, means profit to the builder. PINE CRAFT Frames can help you combine speedy construction with salability.

Self aligning wedge-shaped tongues and grooves slip together without effort . . . permitting frame assembly in seven minutes or less.

And for a quick-acting winter sales argument ... stress the comfort-assuring tightness of PINE CRAFT wedge-joint frames.



WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE



ROM the first glimpse to the last look, buildings roofed with Edwards Metal Spanish Tile make favorable selling impressions. The advantage of Edwards Metal Spanish Tile is more than its striking appearance . . . it includes a lowered investment, longer life, less upkeep, permanent protection, reduced insurance. Edwards Metal Tile costs less to buy and install. Requires no heavy roof structure.

Edwards Metal Shingles in ornamental and plain designs harmonize with the architectural treatment and give service available in no other material of so moderate cost.

erate cost." Edwards Metal Spanish Tile and Shingles are made of materials to fit every

purse and purpose. Galvanized steel or terne plate (tin), copper bearing steel, sheet zinc and pure copper. Fire, lightning, wind and

weather proof.

Send us your roofing plans . . . for our amazing low prices



EDWARDS Embossed Metal Ceilings and Side Walls

and complete working

details.

The deeply embossed modern and period designs lend a delightful interior decorative treatment to Halls, Churches, Theatres, Hotels, Hospitals. In addition they are conomical, sanitary, freproof and beautiful. Ideal for installation in basements, attice, kitchens, etc. Easily and quickly installed Nail holes are die-cut and beads repressed for perfect alignment. Show our new illustrated catalogue and add many profitable jobs to your credit.

Send us your blue prints... get our proposition first.

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

World's largest manufacturers of sheet metal building materials.

Winter Building Methods

(Continued from page 76) people were not sold to the idea that one could build as good a home in the winter months as in any other time of the year. Some of our bankers and architects also had the notion that it was not advisable or practical to build a home in the winter.

After considerable thought we finally decided that it was not necessary alone to sell the idea of winter building to the prospective owner but to the city at large, to the bankers, and to the merchants, and to prove to them that we could build as good a home in the winter as at any other period, do it efficiently, and with actual lower cost to the owners. In order to accomplish this we decided to demonstrate in an actual way, step by step, how the work is being done, as well as the actual results in the completed building.

With this in mind in 1927 we undertook to promote, with the assistance of the material supply houses and manufacturers, a winter-built demonstration home, which was undertaken through the combined efforts of 50 firms, at a cost of about \$15,000. The work was started on the 3d day of December, and each week we carried considerable newspaper space and other form of publicity, inviting the people to make a thorough inspection of the work, to see how the work was done, and watch the results. We had some 500 to 3,000 people each Sunday investigating the process of the building, which proceeded in a temperature ranging from 20° above to 20° below zero. At the time the excavation was started we had 18 inches of frost, and the temperature went as low as 20° below zero before we completed the foundation. The records will show that we had an unusually cold winter, and we are of the opinion that at no time could we have undertaken such a campaign with weather conditions more against us than in the winter of 1927-28.

The building was completed on the 3d day of April, was furnished by the leading department stores, and thrown open to the public each day from 2 to 9 p. m. for two weeks. By actual count we had an attendance of better than 26,000 people, who went through in groups and in each case an explanation was given as to why the home was built during the cold months. After the showing was over the building was sold for \$12,000, and the proceeds were used to defray the advertising and publicity expenses and part of the labor cost.

The fact that this demonstration had been such a success made this same group of 50 firms anxious to try it again, and house No. 2 was undertaken in the following winter, and house No. 3 the winter following after that. As a result, we are convinced that at least 80 per cent of the people of St. Paul are sold to the idea that it is possible to build as good a home in the winter months as at any other season of the year. Now our actual business shows that we are starting construction nearly every month of the year. We are convinced that similar studies in other districts would bring about equal results and would overcome the "bugaboo" of winter building.

We recognize that the handling of these demonstration houses was not representative of the average type of building. We believe that in our climate all excavations for winter building should be done and the foundations put in before the frost sets in. The framing of the building and the superstructure can be completed during the most suitable times throughout the winter. Under these circumstances we know that the cost will not exceed those of summer building, with possible savings in a number of cases, because our experience shows that one can buy materials and hire the better type of workers at a somewhat lower rate than during the busy seasons. We also get more efficiency out of our help because they are anxious to retain their jobs during the slack months, and the subcontractors are also willing to take the job at a lower margin than that prevailing during the summer months.

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Specialty Sales Representatives Wanted

URING recent months AMERICAN BUILDER and BUILDING AGE has received a number of requests for the names and addresses of specialty sales representatives.

Many manufacturers of building specialties which are readily sold to contractors and others in the building field want to get in touch with reliable, sincere men who will act as local sales representatives.

The Research and Marketing Division of AMERICAN BUILDER and BUILDING AGE is compiling a more complete list of such specialty men.

Send your name and address, together with a brief description of the kinds of specialties you would like to handle, and tell us what territory you cover. This will not obligate you, but may bring to you a number of very good propositions.

Please address your reply to the Research and Marketing Division, AMERICAN BUILDER and BUILDING AGE, 105 West Adams St., Chicago, Ill.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCU-LATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, of AMERICAN BUILDER AND BUILDING AGE, published monthly at Chicago, IL, for October, 1931. State of Illinois; ss. County of Cook ; ss. Before me, a notary public in and for the State and county aforesaid, personally appeared Bernard L. Johnson, who, having been duly sworn according to law, de-poses and says that he is the editor of the AMERICAN BUILDER AND BUILD-ING AGE and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circu-lation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit: 1. That the names and addresses of the publisher, editor, manging editor, and business managers are: Publisher-American Builder Publishing Corporation, 105 West Adams St., Chicago.

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher—American Builder Publishing Corporation, 105 West Adams St., Chicago. Editor—Bernard L. Johnson, 105 West Adams St., Chicago. Managing Editor—Joseph B. Mason, 105 West Adams St., Chicago. 2. That the owner is: (If owned by a corporation, its name and addresses of stockholders owning or holding one per ent'or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and addresses, of income langer, and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and addresses, well as those of each individual member, must be given.) American Builder Publishing Corporation, 105 West Adams St., Chicago, III, and Simmons-Boardman Publishing Corporation, 200 Church St., New York, N. Y. Stockholders of 1 per cent or more of the total amount of stock are: E A. Slim-mons, 30 Church St., New York, N. Y.; H. R. Slimons, 1625 Ditmas Are., Brook-lyn, N. Y.; P. A. Lee, Hopatonz, N. J.; H. Anderson, 246 Eugby Rd., Brooklyn, N. Y.; E G. Wricht, 398 N. Walnut St., E Orange, N. J.; S. O. Dunn, 105 West Adams St., Chicago, III; Y. A. Radford, 407 So. Dearborn St., Chicago, III.; L. B. Sherman, 375 Sheridan Bd., Winnetka, III.; Mae E Howson, 105 West Adams St., Chicago, III; F. H. Thompson, Terminal Tower, Citereiand, Ohlo; Spencer, Trask & Company, 25 Broad St., New York, N. Y. Partners of Spencer, Trask & Company are: E. M. Buikley, Acosta Nichols, Cecel Barret, J. Graham Parsons, C. Everett Bacon, William R. Basset, F. Malbone Blodget, Perviral Gilbert, Harry S. Allen, Harry A. Minon, William Beckers, W. V. C. Buuton, Mass.; and B. Bayard Colgate, Special Partner, 52 Wall St., Mow York, N. Y. 3. That the know bondholders, mortgagees, and ther security holders who do not stustee or in any other fiduciary relation, the

Sworn to and subscribed before me this 1st day of October, 1931. (Seal) (My commission expires Sept. 4, 1932.)



NEW YORK

NO SLACK TIMES FOR

"ACCURATE" METAL

THERE IS MONEY IN Weatherstripping

STEEL BOWSTRING TRUSSES by INTERNATIONAL mean Time and Money saved When you are trying to cut costs and speed up the job, order International Standard Bowstring Trusses shipment can be made almost immediately You will find also that the cost is surprisingly low because of quantity production. Use them on your next job. INTERNATIONAL STEEL AND IRON COMPANY 1330 Edgar St. Evansville, Ind. PRODUCTS OF INTERNATIONAL Airplane Hangars Roof Ventilators Public Garages Steel Windows Steel Ceilings Steel Girders

Steel Trusses

Marquise

Coal Chutes

Skylights

WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

Steel Columns

Store Fronts



Vento construction and sizes make it very easy and inexpensive to replace old wood basement cash with the ace of basement windows, the "Vento Premier", regardless of the wall construction. An ordinary good mechanic will average not more than one hour to the opening. The result is approximately 50% more light and many features of convenience that folks enthuse over. There are good profits to be made in selling this idea.

In both new and old homes Vento Premier Basement windows add value to the extent of several times their cost.

See them at your building supply or lumber dealer. Catalog on request.



\$50 to \$75 a Week-This Winter

inside work - - - no experience necessary



Have you become sick and tired of waiting for things to break? Then why not get into the floor finishing busi-ness using the well known American Method. There are hundreds of old floors in your locality that need resur-facing and refinishing. This is pleasant inside work . . . and pays well.

We Will Back You

We've helped hundreds of others get started . . . we'll do the same for you. Besides convenient terms, we'll furnish you FREE advertising matter, cards, stationery with your name and address on them . . . this will bring in the business.

> Handy Sander Weighs but 34 lbs mplete, 6" wide sand

uum system operates from wall plug on A.C. or D.C.

AMERICAN **Light Eight Sander**

All you need to start with is the American Light Eight Sander or the American Handy Sander. Both these sanders turn out the work fast, and can be easily car-ried by one man. Don't ait idle waiting for business to come back. Go out and get new business and extra profits with these money-making AMERICAN ma-chines. The coupon will bring you facts and valuable information.

AMERICAN FLOOR SURFACING MACHINE CO., 511 S. St. Clair St., Toledo, Ohio.					
Please of Floor	send Fin	l facts ishing	about and FI	AMERICAN REE Adverti	N METHOD
Name					
Address					

Wanted: Money to Build!

(Continued from page 47) interested in maintaining normal building activity and who are well acquainted with all the local problems and factors involved.

The scheme works something like this: the organization is incorporated under corporation law, rather than banking law. Capital stock is subscribed to by interested individuals, or by outside individuals as an investment, up to an amount of, say, \$250,000. A governing board is appointed that may consist of eight or nine men, including building supply dealers, builders, realtors, insurance men, or lumbermen. Out of this governing board an executive committee is chosen to pass on all loans and appraise property. When a building material dealer, a builder or a realtor makes sales in which it is necessary to give a second mortgage, he proceeds to grant this mortgage and then discounts it immediately with the finance corporation, of which he is a member, at a designated rate. Properly operated, such a corporation is able to build a surplus and to pay dividends to its stockholders while, at the same time, providing second mortgage money to the community at reasonable rates of interest.

Second Mortgage Acceptance Corporation

If such finance corporations could be established on a private business basis in a number of communities, they could be further strengthened by the adoption of a scheme that has been proposed by a prominent real estate man in New York, Joseph P. Day.

Mr. Day has asked a committee of New York bankers to study the possibility of establishing a second mortgage acceptance corporation through which second mortgage paper can be discounted at low rates. Such acceptance corporations have operated successfully in the automobile industry where they take over the installment paper on car purchases.

A group of New York bankers are now investigating this scheme and are soon expected to report on the feasibility of such an acceptance corporation in the second mortgage field.

If it will be impossible for our financial institutions to lend more than 50 per cent or 60 per cent at first mortgage to home-seekers, then it will be absolutely necessary to establish a system of second mortgage financing that will enable the large mass of wage earners to own homes without having to pay usurious rates for money loans, that represent the difference between what they can pay out of their own pockets and what they can borrow on first mortgage.

Were local finance corporations, dealing only in second mortgage paper, able to discount such mortgages through an acceptance corporation in standardized fashion throughout the country, then many of the evils now surrounding second mortgage practice might disappear. Second mortgage financing could be extended more universally and at cheaper rates although it would have to command better earnings than first mortgage loans because the risk would, of course, be greater.

The criticism has been made that proponents of a new credit structure in the building field are merely seeking inflation that will bring about boom times again in construction. This criticism is not justified, because the majority of reputable builders have always condemned the practice of lending out money without sufficient investigation and appraisal to builders whom they knew to be unqualified. The reputable builder does not welcome a loose credit system but an efficient credit system that does not penalize him for his good construction but rather places a premium on fine workmanship.

FOR ADVERTISERS' INDEX SEE NEXT TO LAST PAGE

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WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

tor Winter Construction For cold-weather construction, "Anti-Hydro" is particularly valuable because its use prevents the retarding of the set of concrete during a sudden drop in temperature. It also prevents concrete and masonry from freezing in temperatures as low as 15 de-grees. These features are in addition to its 27-year reputation as the one dependable integral waterproofer. Use the coupon for "Anti-Hydro's" interesting story. Anti-Hydro Waterproofing Co. 295 Badger Avenue, Newark, N. J. Tell me more about "Anti-Hydro" and give me details of

your 25-year guarantee.

Name

82

Address

Fiven the same raw materials and using the same process-no two companies will nice glass equal rce is in erercised.



ADAMSTON FLAT GLASS CO. CLARKSBURG, W. VA.

WESTERN SALES OFFICE

EASTERN SALES OFFICE NEW YORK CITY

AMERICAN BUILDER AND BUILDING AGE

Operation of a Central Mortgage Bank

(Continued from page 50)

as office buildings or hotels and there should be a limit on the amount loaned on any one building. The law of the mortgage bank should set forth the steps to be taken in case of non-payment of amortization charges or interest.

(5) Merits of a central mortgage bank: A central mortgage bank of either type offers a numbers of advantages; (a) it would make mortgages marketable which would, in the future, prevent mortgages from becoming frozen assets; (2) the cost of mortgage money would fluctuate with the monetary conditions prevailing throughout the country. If interest rates are low, the coupon on the mortgage bonds issued by the institution would be low, which in turn will mean a lower cost to the borrower. Since, as a rule, interest rates are lower in periods of depression and high in periods of great business activity, the result would be that the mortgage bank would offer its bonds mainly in times of depres-This would place funds at the disposal of prossion. pective home owners or builders of multiple dwelling houses in periods of depression when building activity would give a stimulus to industry and trade.

The establishment of an institution of a type proposed in this article means a new departure in real estate finance. It therefore requires a great deal of study and careful investigation of the real estate situation throughout the country. It would seem, therefore, that the next logical step would be the appointment of a committee to study the situation by some responsible body, which on the basis of the committee's findings, would be in a position to take the initiative in the establishment of such an institution.

Christmas Sales Campaigns for Builders

(Continued from page 29)

should get the most out of it by securing the advice of an expert if possible. On the other hand, the builder himself is so familiar with his product that he can put a punch into advertisements that others might neglect. Christmas advertising, like all others, should be made strong, attention-compelling and convincing. Do not lose dignity by making ads too flashy or full of rash statements and promises. State your arguments con-cisely and in strong terms, but do not make overstatements that will cause people to question the whole proposition.

Tying in the idea of home ownership and Christmas happiness is especially good practice at this time of year. People have to be sold on the basis of what they like or enjoy. No person is interested in buying sacks of cement, loose bricks or pieces of lumber as such. But everyone is interested in the happiness, Christmas cheer, family fireside pleasures and other good things that a new home may bring. Thus Christmas advertis-ing gives builders a chance to do especially effective advertising and selling. The whole campaign for "A Better Home For Christmas" may revolve about this idea, each sales medium contributing its share to the effect.

There will be no "buyer's strike" as far as the building industry is concerned this Christmas if a concerted drive is started early, pushed with vigor and followed through with skill and sticktoitiveness. (See page 30 for sample advertisements for use in promoting Christmas selling.)

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FOR ADVERTISERS' INDEX SEE NEXT TO LAST PAGE