



**AMERICAN BUILDER
and
BUILDING AGE**

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

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AMERICAN BUILDER
and
BUILDING AGE

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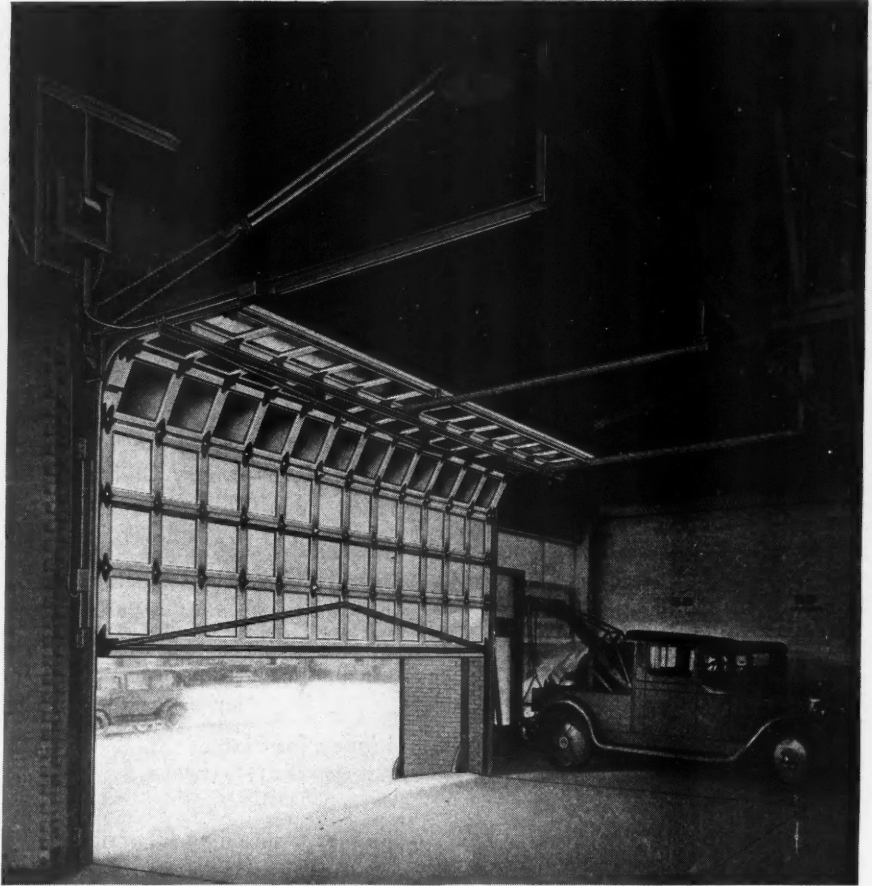
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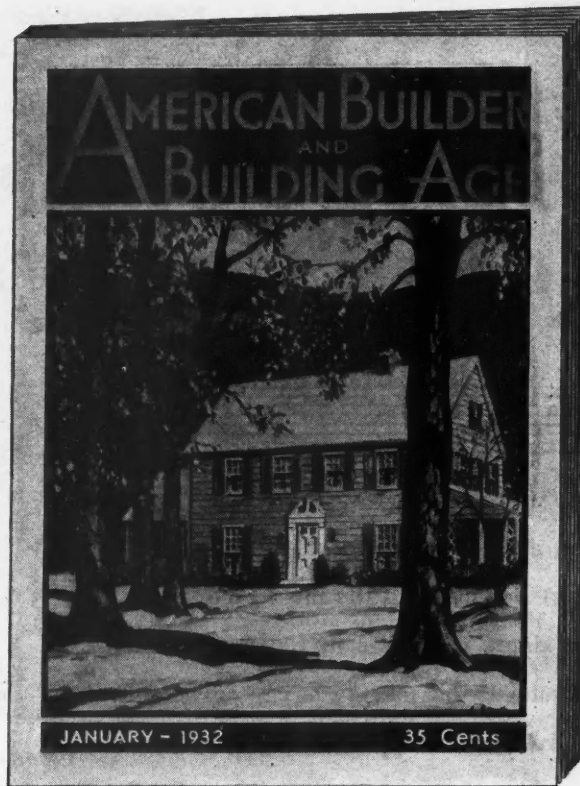
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LOOKING AHEAD
WITH THE EDITORS

January, 1932

President's Conference on Home Building

AFTER more than a year of deliberation and study, the thirty-one committees of President Hoover's Conference on Home Building and Home Ownership will meet in Washington on December 2 to 5 to present their final reports. The American Builder and Building Age has been well represented officially on these committees and Messrs. Johnson, Mathewson and Lane of our editorial staff will be in attendance throughout the meetings to report them fully for the benefit of our readers in the January issue. It is expected that many constructive suggestions will be forthcoming, many of them equal in value to the Hoover home financing plan announced on November 13, and described in detail in this December issue.

A simple enumeration of the names of the committees comprising the Conference is enough to show the wide scope of this study. They are listed below.

If we can settle the problems—or even a few of them—suggested by this range of committee study, the home building industry will be off to a good start for its 1932 operations.

In addition to the discussion of these fundamental business questions, the January American Builder and Building Age will also present an unusual collection of home designs, together with some very practical how-to-do-it craft problems and discussions. Nineteen thirty-two looks like a home builder's year. In the meantime we wish our readers, one and all, a Merry Christmas.

—The Editors

CITY PLANNING AND ZONING
TYPES OF DWELLINGS
FUNDAMENTAL EQUIPMENT
DESIGN
HOUSING AND THE COMMUNITY
SUBDIVISION LAYOUT
KITCHENS—WORK CENTERS
LARGE SCALE OPERATIONS
CONSTRUCTION

NEGRO HOUSING
BLIGHTED AREAS AND SLUMS
HOUSEHOLD MANAGEMENT
TAXATION
RECONDITIONING, REMODELING
INCOME AND THE HOME
UTILITIES FOR HOUSES
HOME FURNISHING AND DECORATION

INDUSTRIAL DECENTRALIZATION
AND HOUSING
LANDSCAPE PLANNING
FINANCE
FARM AND VILLAGE HOUSING
BUSINESS AND HOUSING
HOMEMAKING
HOME OWNERSHIP—LEASING
HOME INFORMATION SERVICES



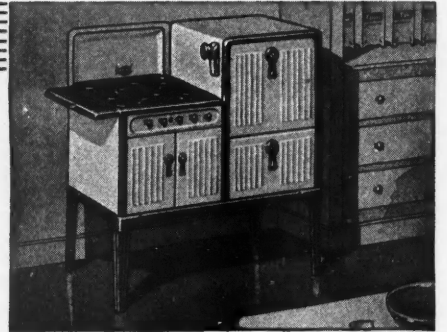
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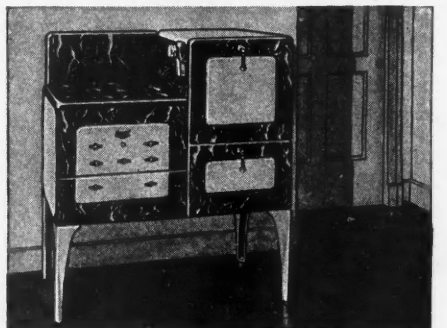
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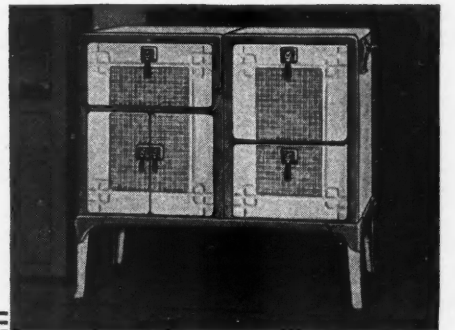
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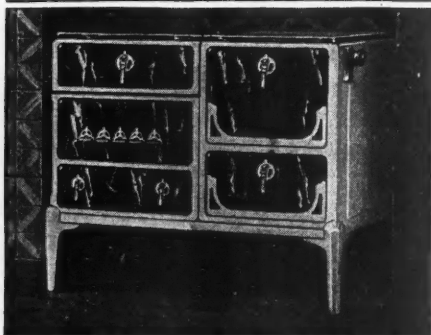
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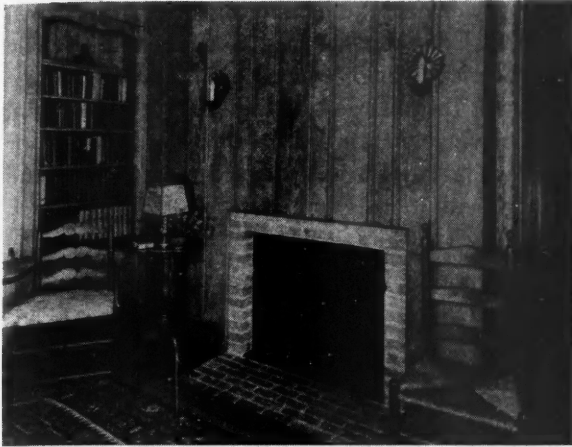


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AMERICAN BUILDER AND BUILDING AGE

HOME FINANCING RELIEF IN SIGHT

GOOD news for the home building industry was released from Washington on November 13 when President Hoover announced the details of his plan for a system of home loan discount banks, and stated that he would recommend to Congress at its forthcoming session the adoption of this plan and the enactment of the necessary legislation to give it immediate effect.

Elsewhere in this issue, our Washington editor presents the complete text of the President's proposal. A careful reading of it will reveal the breadth and sanity and the constructive helpfulness of this plan to overcome what is admittedly the greatest stumbling block to present day home building and a general revival of business,—namely, the difficult, expensive and, in many localities, impossible financing of new homes and home improvements.

This problem of the home builder and the home owner has been considered for some time by the Administration. Several different plans have been studied and considered, among them, the central mortgage bank plan advanced by the National Association of Real Estate Boards, the federated building and loan plan of the United States League of Building and Loan Associations, and the proposal to broaden the Federal Reserve system to admit real estate paper to discount. The plan, however, that was finally evolved and is now advocated by the President seems to combine the best features of all of these other proposals; and the constructive thought that went into them has evidently contributed effectively to this final result.

Builders Should Support This Plan

THE AMERICAN BUILDER AND BUILDING AGE heartily endorses the Hoover home loan discount bank plan, and urges its readers to inform themselves thoroughly regarding it and then to exert their influence for its prompt adoption by Congress. A genuine upturn in the building, improvement and furnishing of homes, and in all

the myriad industries and employments that follow in the train of nation-wide home building activity, can be expected by early next spring if this far-reaching finance plan is approved by Congress and put into operation.

President Proposes Regional Discount Banks

Analyzing the President's proposal, we find that it provides for several regional discount banks, one in each Federal Reserve district, operating under federal supervision but financed, owned and managed by the mortgage loaning institutions and agencies now serving this field. No public money would be appropriated for this cause, nor does this proposal launch the government into the home building business. A capital structure of from five to thirty million dollars for each of the regional discount banks is considered adequate at the start, the funds to be subscribed by the banks and mortgage loan institutions affected. Temporarily, some government aid may be needed to round out the capital stock of some of these new discount banks, but any such government stock interest, according to President Hoover's statement, would soon be transferred over to additional banks and loan associations that would want to join.

General supervision and control of these regional discount banks would rest in a federal home loan board with headquarters in Washington. The function of these discount banks would be to take over sound first mortgages on homes, after first giving the property a careful appraisal, advancing up to 50 per cent of the face value of the mortgage, if a short-term straight mortgage, or up to 60 per cent if a long-term amortized mortgage. However, the President emphasizes the importance of sound appraisals as the necessary background for this plan; and it would be the current appraised value of the property which would regulate its discount value at these banks; so that, no matter how liberally the mortgage had been written, its discount worth would never be greater than 25 per cent of the actual current value of the property, if on a straight mortgage, or 30 per cent, if on an amortized mortgage.

Better Market Provided for Present Loan Firms

The establishment of these regional home mortgage discount banks would give the present loaning institutions a constant and practically unlimited market for their first mortgages which conform to the sound, conservative standards to be set up by the home loan board. The banker or building and loan official could almost instantly get the release of 50 per cent of his short-term funds and 60 per cent of his long-term amortized mortgage funds for other business use, such as loaning on additional first mortgages. These, in turn, could be rediscounted, and this process continued indefinitely with the result that every capital dollar would be made to do the work of two.

Illustrating this by a concrete case, suppose a building and loan association has placed a \$4,000 six per cent five-year mortgage on a home conservatively appraised at \$8,000. The association, needing funds for additional financing, offers this mortgage to its regional discount bank. Two thousand dollars could be borrowed at, say, four per cent interest, and this in turn could be loaned on a home valued at \$4,000, this mortgage being for \$2,000 at six per cent. On this mortgage, in turn, \$1,000 could be borrowed at the regional discount bank, again at four per cent interest; and this \$1,000 could be loaned on a third mortgage on a property valued at \$2,000. This again could be discounted at the regional mortgage bank and \$500 of additional working capital secured. Adding all of these sums together, we find that the building and loan association which originally advanced \$4,000 of its funds for the first of this series of mortgages at six per cent interest has been able to secure from the discount bank, through a series of loans, a total which approaches the \$4,000, although it never quite reaches that amount. This additional capital has been secured at a lower rate of interest and has permitted the building and loan association practically to double its amount of mortgage business, thus financing double the amount of home improvements.

Sale of Mortgages Unhampered

Whenever an investor is found who wants to buy a mortgage outright, the loan association or bank calls back one of its mortgages from the regional discount bank and sells it over the counter. Thus, the regular mortgage investing market is served without interference from the new plan.

It appears that this proposed plan will greatly improve the market for first mortgages and reduce the cost to the loaning institutions of handling them, with resulting lower rates and fees, which the home builder and home buyer now have to pay. The market is improved in two ways; first, because of the confidence engendered by the standardized, scientific appraisals that will become general in the home building field as a result of the operation of this federally supervised system; and second, because of the automatic market which these discount

banks will provide for the loaning agencies, which will operate practically to double their working and loanable funds, as indicated above. Confidence in first mortgage investments will be restored to the general public, and the fear of having its funds frozen in slow moving or unsalable mortgages will be removed from banks and other loaning institutions.

Home Loan Bonds as Good as Government Bonds

What is really the most important feature of President Hoover's plan for this home loan discount bank system is the bond issue. Bonds up to an amount twelve times the capital stock of each district bank would be authorized for sale to the general investing public. These bonds would be secured by the first mortgages held by the bank, the pledges of the member banks and the capital stock of the discount bank itself, all under federal supervision. This would make a bond of the very highest type, second only, if these banks are properly conducted, to United States Government bonds. These bonds should find a very large market at a comparatively low interest rate.

The sale of these bonds will furnish the bulk of the capital on which this entire system of home loan discount will operate. This feature gives to the plan a much broader base to rest on than a mere pool of bankers' funds. No matter how large such a pool might be, it would not be adequate for very long to meet the requirements of the stupendous, nation-wide home building industry. But, with the sale of these well secured bonds to the investing public and in the investment markets of the entire country, the financial support for home building becomes just as large as the need for new homes.

Plan Widely Endorsed

President Hoover has received for his plan encouraging endorsements from the leaders in Congress and also from prominent bankers, building and loan officials, builders and contractors, architects, real estate men, manufacturers, chambers of commerce, etc. Many of the messages received proffer help in putting the necessary legislation through Congress. Many of the messages characterize the President's plan as a "most constructive" one, calculated to serve in the double capacity of relieving the present critical situation in the home mortgage field by giving new liquidity to many sound mortgages now frozen, and secondly, of providing new funds and confidence for the resumption of much needed home building and home improvements. All agree that the resumption of home building on a nation-wide scale is the most promising road out of the depression and up into general employment and prosperity.

In reading these messages of endorsement, however, the AMERICAN BUILDER AND BUILDING AGE is struck by the fact that many seem to be looking upon this plan primarily as something to relieve distress among present

home owners, rather than as a means for putting the building industry on a sound appraisal basis and providing funds for needed new home building and improvements. As an example of this attitude, note the following message received by the President from a Congressman from a western state:

"Home credit plan announced this morning heartily approved. Believe will provide mighty stimulus to home construction. There are throughout our land, however, thousands of home owners who are losing their homes because mortgages negotiated in more prosperous times now coming due and unemployment or reduced earnings make their payments at due date impossible. These conscientious, hard working citizens stand to lose life savings by foreclosures. Suggest in development of home credit plan means be provided for refinancing these mortgages particularly on urban and small suburban homes on basis which will enable these small home owners to preserve their equities and thus maintain their courage and morale, continue their confidence in their government and hold them as the backbone of our citizenry."

Politics and Tax Money Must Be Kept Out

The home loan discount banks must not be regarded as charitable institutions for the rescuing of poorly financed buildings of the past. They must look forward, and not backward. The President assures us that all operations will be based on sound appraisals at present values, and that no mortgages in default will be eligible for discount. This is a wise provision and should be scrupulously adhered to. The politicians must be kept out of this business. If organized and conducted by business men, the Hoover home loan discount banks will be a success. If politics gets in, along with doles of public money, the plan will soon wreck itself by becoming loaded up with frozen and depreciated mortgages.

Nation-wide Appraisal Service and Standards

The AMERICAN BUILDER AND BUILDING AGE has always stood for good design, thorough construction and financing based on honest appraisals. Because of the loose organization of the home building industry, these high grade standards, in the past, have been very difficult to maintain. The large proportion of responsible, experienced builders have seen the good reputation of the industry blackened and besmirched by the operations of the gyps and the jerrys. No form of supervision or regulation up to this time has seemed adequate or broad enough in its coverage to rule out these incompetents, even though they have been in the minority. Now, through this financing proposal, President Hoover offers the home building industry for the first time an effective control for quality construction and for honesty in financing. He states that mortgages will be discounted only after sound appraisal. This will mean the setting up of a competent appraisal committee in every community. The home loan board at Washington would formulate the rules and regulations to guide these appraisal committees, so that uniformity would be secured. Sound appraisals are fundamental to this industry. Here, for

the first time, is offered the means for achieving a unified, nation-wide appraisal service that will have authority and will command respect. Nothing could be more far-reaching for the establishment of sound construction practice in the home building field.

The Industry "Set to Go"

The cost of home building materials has come down, the efficiency of labor has increased, and wage rates are being readjusted to present conditions. The price of vacant land is very much deflated; which leaves only the cost of financing to be tackled and brought down to a reasonable figure in order to have the entire home building enterprise priced attractively in line with the deflation and efficiency in other commodities. President Hoover's home loan discount bank plan will reduce the cost of first mortgage financing and, inevitably, second mortgage rates will also come down. Thus is removed the great obstacle to the revival of home building.

We will await with keen expectations the action by Congress on this very constructive recommendation from the President.

HIGH WAGES ARE HOLDING BACK BUILDING

IN the leading editorial the AMERICAN BUILDER AND BUILDING AGE for August put the question: "Must Building Wages Come Down?" We pointed out that many contractors, perhaps a majority, were paying less than published union scales; that the wage situation was in a chaotic state, with some men paying full scale while others secured reductions by various under cover methods. It was shown that while living costs had gone down, building wages had gone up, but that at the same time it was generally acknowledged that the productivity and efficiency of labor was at a high level.

Events of the past four months now point conclusively to the fact that building wage reductions are in order. Not secretly or by roundabout or sub rosa means, as is widely practiced, but frankly and out in the open. It is time for the unions to acknowledge the public demand that building wages line up with those in other industries and with lower commodity prices.

The wide publicity given the building industry as the Big Push that will restore prosperity brings with it a new responsibility. People have been told it is the patriotic thing to do to build now, that they should make sacrifices if necessary to do so. Again and again they have heard how every dollar spent in construction rolls through the entire structure of American business, putting men to work, starting factories, sending orders for building materials and specialties to the far corners of the earth. Now many people with an embarrassing habit of asking questions are saying: what is the building industry itself doing? It has gratefully received all this accolade, but has it done its share to further increased construction? Have construction prices been

reduced to the point where it is economically and financially desirable to build? Has the industry done everything it can to bring about rock bottom prices?

We honestly believe that contractors and home builders have done everything that is humanly possible to lower building costs excepting reduce wages. Not only have they cut overhead and operating expenses to the bone, but they have taken jobs which return practically no profit, and which certainly do not recompense them for the risk involved. Building material prices, too, have hit rock bottom; in fact, they have gone too low for the welfare of the important manufacturing and distribution divisions of the industry. Realty values have dropped drastically, in many cases fifty per cent or more. The only important group which has not publicly accepted a reduction in income is that made up of wage earners. We believe their turn has come. It is true that the average efficiency of labor is at a high level, but this may also be said of workers in the iron and steel, automotive, public utilities, and other industries that have finally accepted wage cuts, and the railways are now seeking reductions.

Westchester Builders Ask Wage Cuts of 25 and 30 Percent

One evidence of the sentiment developing all over the country is the resolution recently passed by the Building Trades Employer's Association of Westchester County, New York, representing more than 100 contractors in the various building divisions. This reads:

"The executive committee recommends to the board of governors that the several trade associations meet with their respective trade unions; that they seek a modification of the present scale of wages, such modification shall consist of a reduction of 25 per cent below the present scale for mechanics and 30 per cent below the present scale for laborers and helpers.

"That the modification shall become effective on December 1, 1931, and shall continue until December 31, 1932.

"That the various trade boards shall solicit the immediate co-operation of the trade unions in effecting such modifications to the end of eliminating the peril now menacing the principle of trade unionism and of stimulating a revival of business in the building industry, and report the result of their conferences to a meeting of the Chairman of Agreement Committee on November 30, 1931."

While we do not believe that the 25 and 30 per cent reduction asked for by the Westchester organization can be indiscriminately applied, the resolution is an indication of the sentiment among this group of contractors in an important building community.

Something Important to Advertise

A widely advertised reduction in building costs made possible by lower wages would be a great stimulus to construction at this time. Nothing could do more to hasten a return to normal volume. As stated by Louis

K. Boyson, chairman of the realty finance committee of the National Conference on Construction, in a recent address before a U. S. Chamber of Commerce group, buildings that are needed are being held up because construction costs have not paralleled the downward swing in average income of buildings. Capital, he says, will not again be attracted to the construction industry unless the physical cost of building drops to the level of its income value.

According to Mr. Boyson's figures, rents have declined about 30 per cent since 1924 and in addition taxes have mounted sharply. Building costs have not come down enough to make investment attractive in the face of these figures. Announced reduction of wages in the building industry would serve to dispel doubts along these lines and would attract more money to building.

Wage reductions will undoubtedly entail hardships and meet with opposition as they have in other industries. But it is quite certain that most building workmen will prefer a job, at slightly lower wage levels, than no job at all. Lower wages will mean more construction and consequently more work for everyone. That is more desirable than that a few should have wages above the average of other industries while a great many seek the breadline or other charity. Moreover it is very possible that the extra work created by such a move will more than compensate for the loss in hourly wage rate.

Accompanying any official reduction in building wages that contractors and labor leaders may bring about, however, should go some greater guarantee of security and permanent employment. The chief cause of unemployment, seasonal fluctuation in building activity, is a difficult problem, but as data presented in recent issues of AMERICAN BUILDER AND BUILDING AGE in its Winter Building program show, it is not impossible to regulate. Planned construction, extending over the whole year, will stabilize the builder's business and give steady employment to his men. If workmen can be assured of more steady employment, they will not be unwilling to accept a justified wage reduction in line with the lower cost of living.

NATIONAL HOME SAVINGS DAY

THE observance of December 1st as National Home Savings Day, a suggestion of the National Association of Real Estate Boards, is a proposal we heartily endorse. By thus setting aside one day of the year for special emphasis on home owning and of saving to buy a home, public interest may be greatly stimulated. The down payment bugaboo that holds back so much home building can best be overcome by savings accounts started well in advance of construction. Once a place is made in the family budget for a certain sum each month to go toward a new home, the down payment will be quickly amassed. If National Home Savings Day can do even a little to get people to take this important first step toward home ownership, it will indeed merit the energetic support of all men in the construction industry.



MERRY CHRISTMAS IN THE KITCHEN!

Home improvements are the best gift to all the family, so Franklin H. Bivens, Vice President of the Southern Counties Gas Company, Los Angeles, built this home and installed a magic chef range in the kitchen, feeling quite certain his wife would be pleased. She was—and how!—as the saying is.



HOME LOAN DISCOUNT BANKS

Details of Home Financing Plan which is to Be Submitted to Congress

A PLAN for the establishment of twelve Home Loan Discount Banks, one in each Federal Reserve District, if so many should be necessary, under the direction of a Federal Home Loan Board, each with an initial capital of \$5,000,000 to \$30,000,000, which would make it possible to finance a total of approximately \$1,800,000,000 of advances to borrowing institutions, was announced by President Hoover on November 13. After many months of study and consultation with the representative groups most interested this plan was announced by the President as the one which he will propose to Congress at the opening of the session in December with a view to aiding in the revival of home construction.

The district home loan banks would issue bonds or short term notes to investors, secured by the obligations of the borrowing institutions, and would make loans to building and loan associations, savings banks, deposit banks and farm loan banks upon their obligations. The plan, which has been evolved after consideration of various plans suggested by different organizations, has met with general approval, the President said, from those to whom it has been submitted in its form as now outlined, although it is subject to still further refinement and consideration as to details. He described the plan as being intended to meet the following four purposes:

Home Owning to Be Made Easier and Safer

"1. For the present emergency purpose of relieving the financial strains upon sound building and loan associations, savings banks, deposit banks and farm loan banks that have been giving credit through the medium of small mortgage loans on urban and farm properties used for homes. Thereby to relieve pressures upon home and farm owners.

"2. To put the various types of institutions loaning on mortgage in a position to assist in the revival of home construction in many parts of the country and with its resultant increase in employment.

"3. To safeguard against the repetition of such experiences in the future.

"4. For the long view purpose of strengthening such institutions in the promotion of home ownership particularly through financial strength thus made available to building and loan associations."

"The immediate credit situation" the President said, "has for the time being in many parts of the country restricted severely the activities of building and loan associations, deposit banks including country banks, and savings departments, savings banks and farm loan companies in such a fashion that they are not only not able to extend credit through new mortgages to home and farm owners, but are only too often unable to renew mortgages or give consideration to those in difficulty, with resultant great hardships to borrowers and a definite depreciation of real estate values in the areas where such pressure exists.

Real Housing Shortage Accumulates

"A considerable part of our unemployment is due to stagnation in residential construction. It is true that there has been some overbuilding in certain localities

in the boom years. But even in these localities the inevitable need is obscured by the tendency of the population to huddle temporarily due to unemployment. The real need steadily accumulates with increasing population and will become evident and insistent as we come out of the depression.

"The high importance of residential construction as a matter of employment is indicated by the fact that more than 200,000 individual homes are erected annually in normal times, which with initial furnishing contribute more than two billions to our construction and other industries. This construction has greatly diminished. Its revival would provide for employment in the most vital way. As a people we need at all times the encouragement of home ownership, and a large part of such action is only possible through an opportunity to obtain long term loans payable in installments. It is urgently important, therefore, that we provide some method for bringing into continuing and steady action the great facilities of such of these great national and local loaning concerns as have been under pressure and should provide against such difficulties in the future.

"The farm mortgage situation presents many difficulties to which this plan would give aid."

President Hoover has consulted with representatives of the various groups granting credit on mortgage loans for the home and farm, as well as government officials

HOME LOAN BANK PLAN

SUBSTANTIAL endorsement of the President's plan to revive home building through better home mortgage financing was immediately given by leaders in Congress as well as by prominent bankers, building and loan officials, builders and realtors, following his announcement of the details of his proposal. Numerous telegrams warmly endorsing the program were received at the White House. They came from many sections, and were from important political, financial and building interests.

Senator Fess, chairman of the Republican National Committee, and Senator Smoot, chairman of the Senate Finance Committee, expressed unqualified approval, while Representative Steagall of Alabama, ranking Democrat of the House Banking and Currency Committee and its probable chairman, sanctioned the basic idea.

"I heartily favor the President's plan, since it is concrete in proposing a program to care for the long-term credit situation, as the Federal Reserve does for the short-term credits," Senator Fess said.

Senator Smoot telegraphed this statement: "I heartily approve the recommendation of President Hoover for the establishment of banks as an aid to home-builders and for the extension of agricultural mortgages. There is no question but what the beneficial results from this important move will be felt throughout the United States."

Representative Steagall said: "Any sound plan which enlarges credit facilities at this time and will absorb non-liquid assets is desired. The President's suggestion has possibilities of constructive service."

Among the telegrams received by the President were the following:

PROPOSED BY PRESIDENT HOOVER

By HAROLD F. LANE

Washington Editor, American Builder and Building Age

and other economic agencies, and as a practical solution from the various needs and the various ideas advanced he proposes the following general principles for the creation of an institution for such purposes:

How the New Home Loan Banks Would Operate

"(a) That there be established twelve Home Loan District Banks (if necessary) one in each Federal Reserve District under the direction of a Federal Home Loan Board.

"(b) The capital of these Discount Banks shall be initially of minimum of five to thirty million as may be determined by the Federal Board upon the basis of the aggregate of such mortgage loans and probable needs of the particular district.

"(c) The proposed Discount Banks to make no initial or direct mortgages but to loan only upon the obligations of the loaning institutions secured by the mortgage loans as collateral so as to assure and expand the functioning of such institutions.

"(d) Building and loan associations, savings banks, deposit banks, farm loan banks, etc., may become members of the system after they have satisfied the conditions of qualifications and eligibility that may be fixed by the Federal Board.

"(e) The mortgage loans eligible for collateral shall not exceed \$15,000 each and shall be limited to urban

and farm property used for home purposes.

"(f) The maximum amount to be advanced against the mortgage collateral not to exceed more than 50 percent of the unpaid balance on un-amortized or short term mortgage loans and not more than 60 percent of the unpaid balance of amortized long term mortgages, and no advance to be made on mortgages in default. Such loans are to be made on the basis that there are sound appraisals of the property upon which such mortgages have been made. In other words, given sound appraisals, there will be advanced in the case of short term or unamortized loans 25 percent of the appraisal and in case of amortized long term loans, 30 percent of the appraised value of the property.

"(g) The Discount Banks as their needs require from time to time to issue bonds or short term notes to investors to an amount not to exceed in the aggregate twelve times the capital of the issuing bank. The bonds of these Discount Banks would be thus secured by the obligations of the borrowing institutions, the mortgages deposited as collateral against such obligations and the capital of the Discount Banks. These bonds to be acceptable for security for government and postal deposits. The result would be a bond of high grade as to qualify and security.

Capital Stock Subscribed by Member Institutions

"(h) If the aggregate initial capital of the Discount Banks should in the beginning be fixed at \$150,000,000 it would be possible for the twelve banks to finance approximately something over \$1,800,000,000 of advance to the borrowing institutions which could be further expanded by increase in their capital.

"(i) It is proposed to find the initial capital stock for the discount banks in much the same way, in so far as is applicable, as the capital was found for the Federal Reserve Banks—that is, that an organization committee in each district should first offer the capital to the institutions which would participate in the service of the Bank. And as was provided in respect to the Federal Reserve Banks, if the initial capital is not wholly thus provided, it should be subscribed by the federal government; and further somewhat as was provided in the case of the Federal Land Banks other institutions using the facilities of the Discount Banks should be required to purchase from time to time from the government some proportionate amount of its holdings of stock if there be any. In this manner any government capital will gradually pass over to private ownership as was the case in the Federal Land Banks."

Basis for Action by Congress

"The above details of the proposal are put forward as suggestions in order to give clarity to the central idea rather than as inflexible conclusions", the President said. "The whole plan would necessarily be subject to the action of Congress and many parts of it will no doubt need development.

"There is no element of inflation in the plan but simply a better organization of credit for these purposes.

"This proposed institution does not in any way displace the National Credit Association which occupies an entirely different field of action."

FAVORABLY RECEIVED

H. S. KISSELL, president, National Association of Real Estate Boards, Springfield, Ohio—Deeply appreciate your splendid announcement of the mortgage bank plan as an administration measure. It will bring hope and courage to millions. I have tonight wired my executive committee to meet in Chicago next Wednesday to organize support for your great plan and help you put it through Congress as soon as possible.

WILLIAM E. BEST, president, United States Building and Loan League, Tulsa, Okla.—Your announcement regarding Home Loan Reserve System being widely acclaimed in building and loan circles. In my judgment it is the most constructive proposal since establishment of Federal Reserve Banking System. You will find complete agreement on objectives and great benefit will come to home builders and home owners from

strengthening home financing system and assisting building and loan associations in refinancing short term mortgages. Count on our full cooperation.

HARRY CREECH, president, Cleveland Trust Company—Your plan for regional bank to loan on mortgages meets the approval of the entire banking group in this section. The establishment of a bank of this kind will inspire confidence and give much needed relief to homeowners.

WM. A. STARRETT, general building contractor, New York City—May I congratulate you on your splendid accomplishment in effecting plan for residential mortgage relief as reported in morning papers. Your plan takes a place of equal importance with your National Credit Association plan and cannot but furnish a like stimulation to speedy return of confidence and industrial revival.

How to Get Things Started

Building Activity Can Be Stimulated In Your Community Now
By Forming A Local Committee of Building Interests

FOR many years, AMERICAN BUILDER AND BUILDING AGE has strongly advocated the formation of local groups to attack common problems of the building industry. And now, more than ever before, we are in need of local organization and co-operation. In connection with its national campaign to stimulate construction this winter, AMERICAN BUILDER AND BUILDING AGE strongly advocates immediate organization of local building groups to achieve common ends. In this article are given methods of successful local organization which may be followed. We will be glad to assist interested readers in getting further information about the organizations here described.

—THE EDITORS

Leading builders in every city of the country actually realized what local organization and co-operation could do for their business, building construction throughout the nation could be stimulated almost immediately by the formation of building committees of the type that are effectively operating in some localities today. Here are just three of the beneficial activities that any local body of associated building men can bring about without the necessity of high pressure tactics of any kind:

1. *Scheduling a program of needed building construction that ought to be followed in the community.*
2. *Rousing of the community to the need of this construction to reduce unemployment.*
3. *Release of credit for the required construction.*

It may be difficult for the individual builder or building supply dealer alone to carry out such a program but in league with each other and with the architect, the banker, and the realtor such a program is not only quite feasible, it is well nigh indispensable at the present time.

A Need of Long Standing

The need for such local organization has long been pointed out by the AMERICAN BUILDER AND BUILDING AGE, but recent events now dictate the almost absolute necessity of forming strong local organizations of building men in as many communities as possible. Recent developments that now make local federations imperative in the construction industry are:

1. The immediate necessity of reducing unemployment by winter construction programs that ought to be worked out by local building federations.
2. The recent formation of a national federation of various building groups that must depend for its proper functioning on the activity of local units of some kind.
3. The probable enactment of some national scheme for easier home financing. Local benefits from such a scheme will depend a great deal on the quality of construction. Some form of local supervision will therefore be necessary and it is best that such supervision be handled by a local federation of building men.

An Organized Industry in Philadelphia

That the "present situation in the construction field has demonstrated that organization of individual trade groups in the construction field is no longer sufficient" is a fact brought out by the Philadelphia Federation of the Construction Industry, recently organized to bring together the building, architectural, building supply, real estate, and banking interests in that city for the common

good of the entire building and construction industries.

Up to the time of the formation of this federation in Philadelphia there was no facility for uniting the various building interests for a joint consideration of problems of vital interest to all of them. "Integration of the industry as a whole" has now been effected in the city of Philadelphia and the construction industry of that city, through its single federation, is now prepared to carry out the following plan:

To protect and promote generally the various interests of individuals, firms and corporations in the construction industry.

To provide a clearing house of information for all phases of the industry.

To improve the ethical standards which govern the relations of different groups and trades within the industry.

To promote sound credit standards and practices.

To encourage the settlement of trade disputes of all kinds by commercial arbitration.

Organization activities of the Philadelphia Federation of the Construction Industry will be divided into eight categories: Research, Engineering, Information, Credit, Public Relations, Arbitration and Membership.

Credit Information

Two of the most important activities of the Philadelphia Federation will be conducted in the Research and Credit divisions. The general functions of the Credit Bureau will be to improve credit standards by: (1) The collection and dissemination of credit information concerning individuals and firms doing business in the local field, and (2) The development of standard practices in the granting of credit. It will be a city-wide bureau designed and operated for the benefit of all branches of the industry.

An important and significant part of the Federation's program will be the development and operation of a research department to provide an authoritative source of information for bankers, realtors, architects, investment builders, bonding companies and others concerned with basic trade problems. Objective studies of building projects will be made, and facts will be gathered and published to enable bankers and operative builders to anticipate with some degree of accuracy the extent and location of the demand for various types of houses at any given time.

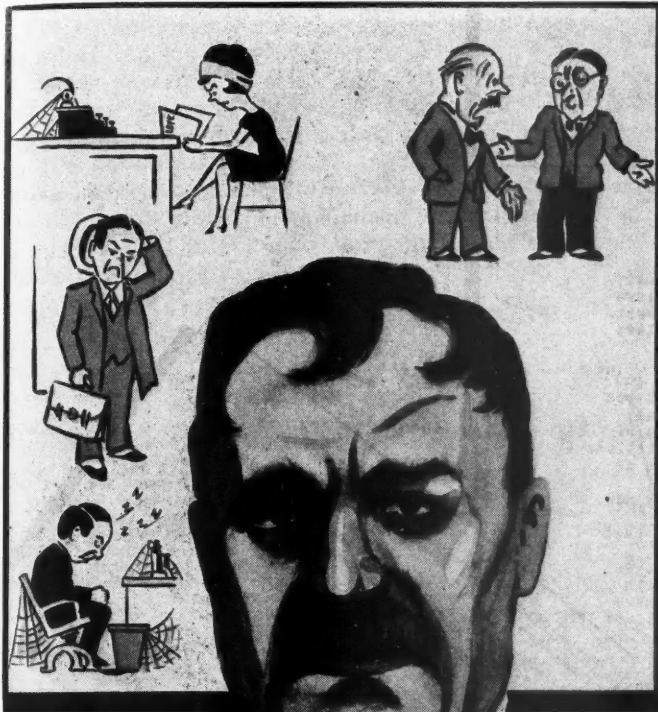
Membership

Active membership in the Federation is limited to established individuals, firms and corporations of proven character engaged in any branch of the construction industry within the territory covered by the Federation. The policies and program of the Federation are formulated by a Board of Governors composed of delegates appointed by Trade Association members and the representatives of trade divisions of the Federation elected by active members in their divisions, thus providing for a balanced cross-section of the opinion of the entire industry.

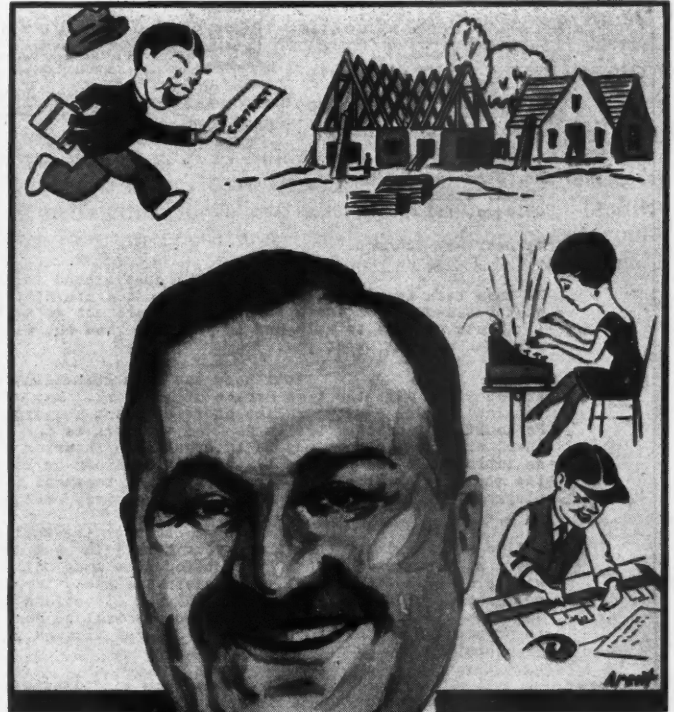
Administration of the policies and program determined upon by the Board of Governors is vested in an

(Continued to page 70)

**THE PESSIMIST
Thinks of Excuses**



**THE OPTIMIST
Goes After Business**



OPTIMISM PLUS ENERGETIC SELLING

BRINGS NEW WINTER BUSINESS

MANY definitions of pessimists and optimists have been made, but present business conditions in the building industry have brought out a new one that beats them all.

A pessimist is a man who spends so much time thinking up reasons why business is bad that he hasn't time to do anything else. An **OPTIMIST** is one of that small but energetic group that is keeping the wheels going around. He believes there is business to be gotten and is going out with a strong selling campaign and bringing it in.

One of the biggest reasons why the building industry is not humming today is that we have too many dead-from-the-neck-both-ways pessimists and not enough live-wire optimists.

There is plenty of building business both new and of the modernizing and remodeling type for those who are aggressive enough to go out after it. An increasing number of surveys and statistical investigations reveal the growing need for new construction. What is required now is a strong selling drive by builders to bring this need out into the open and transform it into immediate building activity.

An example of the optimist is illustrated by the tele-

gram shown on the next page of this article. Here is a man who was aggressive enough to go out and secure an exceptionally fine order before he even had equipment enough to handle it. In his telegram he is rushing the manufacturer to start shipment, and in doing so he is spreading business all along the line, creating employment for many men.

Hardly a day passes but we hear of the profitable business brought in by someone with optimism and enthusiasm who went out and sold his idea and got immediate results. Right now there is an especial need for low-cost houses, which people can buy out of their normal savings. Energetic optimists are planning small houses to fill this need, and then going out to the people in their communities who have been hoarding money in socks or teapots because they do not know of a safe way to invest it, and selling these homes.

Certain oil burner dealers and salesmen are getting fine business results by showing the advantage of home investment. They are selling oil burners and basement remodeling programs by assuming that the customer has the necessary money in a four per cent savings account, and comparing the advantages of such a home investment with the twenty or thirty dollars interest they might

each case where a contract is let before the Christmas holidays, the builder agrees to provide a Christmas basket to be given the needy, tagged with the name of the customer who has given the information.

This plan not only stimulates business but does a very worthwhile bit of local charity.

Many government, state, and local organizations are conducting drives to get people to engage in home modernizing and improvement this winter. The optimists in the building business are taking advantage of this drive in their behalf and are co-operating in every way possible with local unemployment committees.

A good idea to stimulate local interest in home modernizing and improvement is for the builder to print up a list of such as is given on this page for wide distribu-

tion. Such a list may well be sent to local home owners as a part of a program of co-operation with your local committee for unemployment relief. Accompanying the list should be a good sales letter and, of paramount importance, a business reply card. Provide a place for the prospect to fill in items of improvement of interest to him, or to give names of friends who might be interested in having such work done.

"Give a job and improve your home," is a slogan that may well be used by builders in working with the numerous local bodies now organized to stimulate interest in homebuilding to relieve unemployment. Every builder has here an opportunity to display optimism and courage as well as good business sense in working to stimulate homebuilding and home improvement.

98 HOME IMPROVEMENT SUGGESTIONS*

- 1—Develop recreation room in basement.
- 2—Install cedar lining in one or more existing closets.
- 3—Repair or replace gutters, leaders, or flashings.
- 4—Install dormer window or skylight to make attic space more useful.
- 5—Repair existing roof; restain or apply preservative to wood shingles; repaint canvas deck roofs; stop all leaks.
- 6—Reroof with wood, asphalt, asbestos or metal shingles, slate, clay, tile, or metal.
- 7—Repair or replace hardware; correct sagging doors or defective windows.
- 8—Install a milk or package receiver.
- 9—Convert coal-fired boiler or furnace to burn low-cost buckwheat or pea coal.
- 10—Apply asbestos or other heat insulating covering on pipes and boiler to reduce waste of fuel.
- 11—Reconstruct and straighten warped chimneys, add chimney pots, point up old masonry to improve draft.
- 12—Construct new outside chimney to permit introduction of new fireplaces.
- 13—Clean chimney flues; clean out ash pits, repair flue connection, reset furnace.
- 14—Install an incinerator.
- 15—Modernize exterior of house by applying shingles, clapboards, brick facing or stucco over present exterior.
- 16—Repair porch railings, floors, steps, etc.
- 17—Add new porch or enclose existing porch with glass to make new sunroom.
- 18—Construct new removable winter vestibules for doors exposed to cold winds.
- 19—Build portable screen enclosure for open porch for summer use.
- 20—Prepare window and door screens for next season's use, including rewiring where necessary and repainting.
- 21—Install full-length mirrors on bedroom doors.
- 22—Install modern closet fittings, such as shoe racks, clothes hangers, linen shelves, storage drawers, etc.
- 23—Install booster fan on warm air pipe leading to underheated room.
- 24—Correct the heating of a cold room.
- 25—Repaint exterior of house in fall while weather permits.
- 26—Modernize floor plan of house by combining two rooms in one, changing or removing partitions, etc.
- 27—Convert large closet into an extra toilet or shower room.
- 28—Provide extra bedroom by subdividing large room, by using waste space in attic, or by extra addition.
- 29—Install wash basin in bedroom.
- 30—Install door bed in sewing room, library, or other extra room (having a closet) to make it a convertible bedroom for occasional guests.
- 31—Enlarge existing garage for extra car or build new garage.
- 32—Remove dead wood from trees and shrubs and have tree surgeon repair decayed parts of important trees.
- 33—Reconstruct dry-wells; carry drainage from leaders further from foundation; or apply waterproof membrane around exterior of basement walls before ground freezes (to forestall flooded cellars in spring where conditions indicate need).
- 34—Modernize existing bathroom—new wall treatments, flooring, fixtures, medicine cabinet, etc.
- 35—Build new closets.
- 36—Provide outside accessories such as window boxes, trellises, bird houses, etc., ready for use in the early spring.
- 37—Erect new fences, gates, arbors, pergolas and other outdoor garden structures.
- 38—Construct concrete, stone or brick walks, terrace, or steps to house or garden.
- 39—Conceal all radio wiring, including aerial and ground connections.
- 40—Install new concealed radio wiring to permit use of extension speakers.
- 41—Install remote control for radio receiver, built-in speakers, etc.
- 42—Modernize the kitchen arrangement for more efficient work.
- 43—Build breakfast nook in unused part of kitchen or pantry, or build new breakfast porch.
- 44—Install new kitchen or pantry cupboards and closets or modernize storage space.
- 45—Install oil burner, automatic stoker (coal or coke), or gas burner in heating plant.
- 46—Relocate or replace radiators.
- 47—Install movable disappearing stairway for space economy.
- 48—Convert warm air heating plant to modern forced circulation system for better heating, with humidification.
- 49—Convert one-pipe steam heating system to vapor-vacuum system for more uniform heating and greater fuel economy.
- 50—Improve operation and efficiency of two-pipe steam, vapor or hot-water system.
- 51—Install new high-efficiency boiler, furnace, or air conditioning heater.
- 52—Replace common glass with ultra-violet ray (health) glass in nursery, sunporch, or other selected windows.
- 53—Install automatic heat control device.
- 54—Install air-moistening (humidifying) equipment to create more healthful conditions (now possible with any type of heating system).
- 55—Weatherstrip doors and windows.
- 56—New storm sash or double windows for exposed rooms.
- 57—Install fuel lift from basement wood pile to near fireplace in living or dining room.
- 58—Install an invalid's elevator to give greater freedom of movement for a person who cannot climb stairs. (Can be installed without major alterations).
- 59—Have wiring system checked over for compliance with insurance requirements.
- 60—Modernize lighting system—relocate fixtures, substitute wall brackets for chandeliers, provide new fixtures.
- 61—Install extra electrical outlets to eliminate or reduce the need for long cords.
- 62—Eliminate the nuisance of finding light pull cords by installing adequate wall switches at entrances.
- 63—Install new sink in kitchen or pantry.
- 64—Install an electric dishwasher.
- 65—Install pilot light on selected switches.
- 66—Install night lights or bed lights in bedroom with switch at bedside.
- 67—Eliminate batteries on bell call or annunciator system by installing small power transformer.
- 68—Provide low voltage current in playroom for operating electric trains and toys.
- 69—Modernize the laundry equipment—perhaps including new trays, washing machine, ironer or clothes dryer.
- 70—Install laundry chute.
- 71—Remove storm windows in early spring. Replace old screens with more convenient type such as roll-up or outswinging.
- 72—Early spring exterior painting of all items not repainted in the fall.
- 73—Repair cracked, loose, or fallen plaster on walls or ceilings throughout the house.
- 74—Plaster basement ceiling on metal lath for fire protection, cleanliness, and better appearance, or surface with wallboards.
- 75—Cover defective plaster ceilings with fabric, wallboards, or pressed metal to eliminate future repairs.
- 76—Install a ventilating fan in kitchen.
- 77—Correct defective fireplaces.
- 78—Install hearth and mantel for gas or electric radiant heater in bedroom or other room lacking chimney connections.
- 79—Install pine, oak, or other plank, or paneled walls in dining or living room.
- 80—Modernize obsolete interior trim and doors by replacing with new.
- 81—Repaint interior trim in one or more rooms, or throughout.
- 82—Insulate roof or attic floor to reduce heat losses in winter and to make second story or attic bedrooms cooler in summer. Also consider insulating side-walls of house for maximum comfort.
- 83—Line unfinished attic space with insulating boards or plaster to create extra room or playroom.
- 84—Build in new bookcases, window seats, china closets, telephone closet or cabinet, folding ironing board, children's toy cupboard, work bench, etc.
- 85—Dampproof basement walls on inside to prevent leaks.
- 86—Insulate cellar walls and cold water pipes to minimize condensation and excessive dampness in mild weather.
- 87—Redecorate with paint, plastic paint, wallpaper, wall fabrics, wood veneer, or other material one or more rooms.
- 88—Kalsomine or whiten ceiling throughout the house.
- 89—Install new hot-water heater or tank.
- 90—Refinish hardwood or painted floors, or cover existing floors with pre-finished or block type wood flooring.
- 91—Install linoleum, rubber tile, or other modern decorative composition floors in selected rooms.
- 92—Install ceramic tile floors or wainscots in bathroom or kitchen.
- 93—Add new bathroom (by rearrangement of partitions or exterior addition, or in attic or other spare space).
- 94—Install shower enclosure in bathroom.
- 95—Install modern concealed radiation.
- 96—Install an electric sump pump to automatically remove water from basement where subject to flooding during spring.
- 97—Install handrail on stairs (cellar, service, or main staircases); reconstruct cellar stairs for greater safety; install gate at head of stairs to safeguard children.
- 98—Recondition driveway, applying new crushed stone surface; reset brick or flagstone walks or terrace pavements where lifted by frosts.

*Courtesy THE AMERICAN HOME.

MONEY FOR HOMES:

From the Viewpoint of a "Building and Loan" Official

By GEORGE L. BLISS

President, New York State League of Savings and Loan Associations.

LOANS from building and loan associations have helped hundreds of thousands of home seekers to have their own homes. These associations have been the greatest source of residential credit in this country. To get a representative viewpoint of a building and loan official with regard to present credit conditions, AMERICAN BUILDER AND BUILDING AGE asked Mr. Bliss to write this article. Readers will understand that it represents his own views and not those of this publication. We are pleased to publish it because Mr. Bliss' opinion reflects that of a great many men in the mortgage business and is one which must be seriously taken into account.

THE savings and loan and building and loan associations of the country—which for one hundred years have been the one financial group operating almost exclusively in the home financing field—welcome the focusing of public attention through the Home-Ownership Conference summoned by President Hoover to meet in early December. Much benefit must certainly result from the concentrated thought that has been given by some twenty-five sub-committees during the past year to methods of increasing the enjoyment of home-ownership.

Insofar as the eastern states are concerned, suggestions that funds for first mortgages on homes are inadequate cannot go unchallenged by savings and loan men. In New York State, the savings and loan associations granted 12,394 mortgage loans for a total of \$38,867,615, during the first eight months of 1931, and on September 1 had surplus funds of \$20,000,000, sufficient to finance 6,175 more, based on the average loan. In adjoining states, likewise, the flow of savings funds into these institutions has been more rapid than the mortgage demand.

Much has been said in the public press about the need for lowering the cost of junior financing. Savings and loan associations are lending about sixty per cent of the appraised value of a home. Where the owner is not prepared to pay the remainder in cash, second mortgage money is admittedly scarce and, when available, the rate is high. That any practical plan can be formed to make it otherwise is doubtful.

The amount that can safely be placed on first mortgage is, obviously, the level to which values drop in a period of deflation, *less the cost of repossession*. In states with costly foreclosure laws or long periods of redemption, this latter item is an important factor that is generally overlooked. In New York State, where the cost of repossession averages ten per cent of the loan in the case of home mortgages, it means that a first mortgage can be only ninety per cent of the sum that would otherwise be lent. If \$5,000 is the amount that might be placed, having consideration only of the eco-

nomie safety limit, then \$500 must be deducted to cover the cost of repossession in the event of possible default, resulting in a \$4,500 mortgage.

Any sum that the owner or purchaser requires above this amount represents financing in the "area of risk." That savings and loan associations, investing the savings of the people, should lend in that area is unthinkable. That other agencies would do it without compensation adequate to the risk, is rainbow-chasing.

Anyone who questions that statement need only compare present values with those prevailing in 1927. A state-wide survey just completed by the New York State League of Savings and Loan Associations, shows that for \$5,000 one can buy today the house that cost \$6,250 four years ago. Fancy the position of the second mortgagee where such a house was sold with a down payment of but ten per cent!

Dreamers may chase their rainbows, but the fact remains that once in every economic cycle, home values will deflate some twenty or thirty per cent. When that stage comes (and how we all dislike to admit that it will!), whoever has participated in financing in the "area of risk" will find his fingers burned.

The answer? There are several.

The first is to educate the home-owner to provide his own funds for the owner's equity. It is his home. He receives the benefit of any increase in values; he must assume the risk of decrease. If he wishes to share the risk, he must expect to pay the premium. Any savings and loan men will testify that the larger the owner's equity, the more he *enjoys* his home.

The second. If lot-sellers, builders and material men are impatient at such old-fashioned economics, let them finance the junior interest or guarantee those who do against loss. They will incur certain risks, it is true. By picking their customers, they will limit any losses. It borders on over-selling, but within reasonable limits, it will work. Certainly, if they make the sales, they should not expect others to assume risks that they would not.

The third. Let all who are interested in aiding the home-owner join together to reduce the cost of repossession. Just so far as the cost of repossessing, direct or indirect, can be reduced, just to that extent can the vast majority of home-owners who never default on their obligations be benefitted through finding the amount of their first mortgages increased.

The fourth. Savings and loan leaders of the country are developing a plan to establish a regional Savings and Loan Reserve system, to be based on a membership of federally incorporated savings and loan associations and such state chartered savings and loan associations as might be admitted to the system. Such a program will result in a more plentiful supply of first mortgage funds for home-financing throughout the country by providing long-term credits to members of the system and by affording a mobility of credit through the flow of surplus funds from associations in one part of the country to another.



Homes Containing Charming Interiors

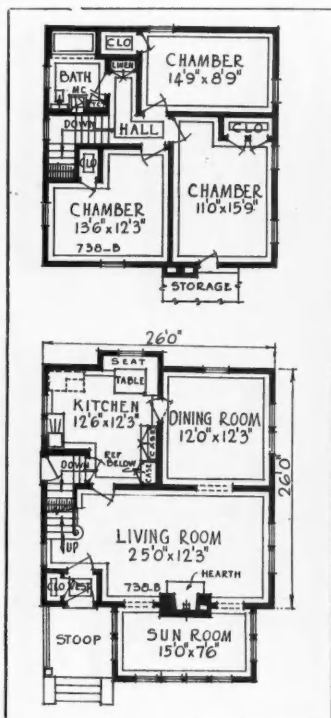
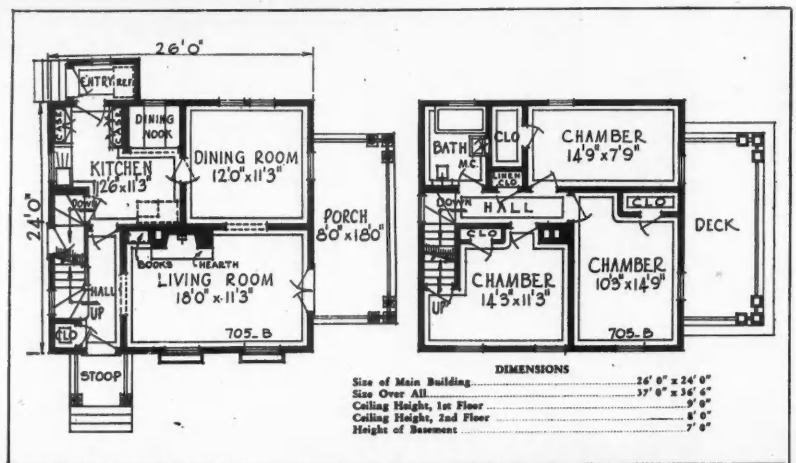
A Collection of Modern Homes
Planned from the Inside—
Planned to Live in—Study Them



Simplicity, the Highest Art

NATIONAL PLAN SERVICE Designs

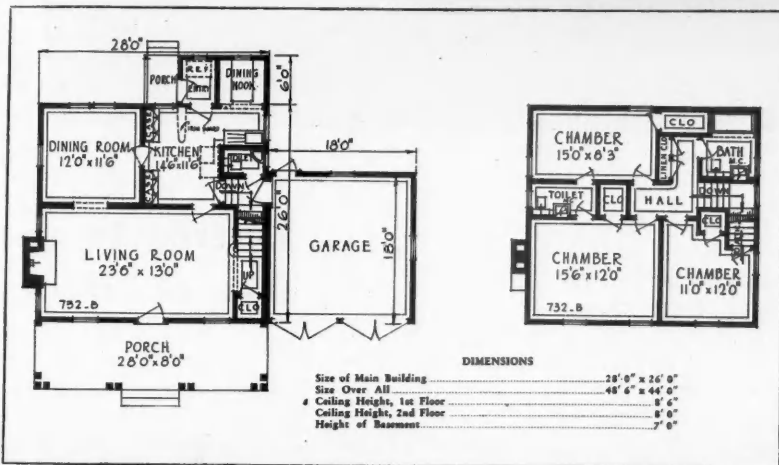
Compare these two designs—they are practically of the same size, six rooms each, and width 26 feet. The little home above follows the severe Colonial pattern while below the more informal English cottage style is used.



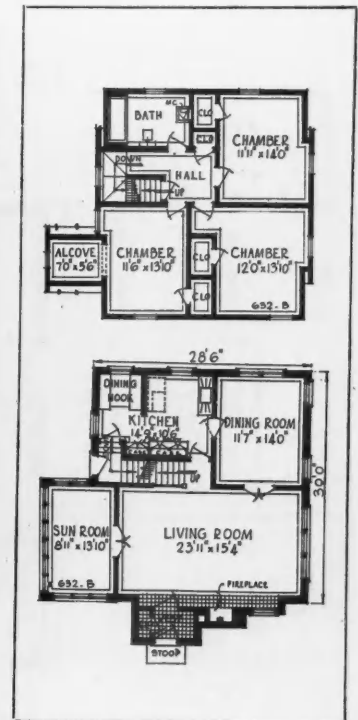
Thrift, the Greatest Pleasure



NATIONAL PLAN SERVICE Designs



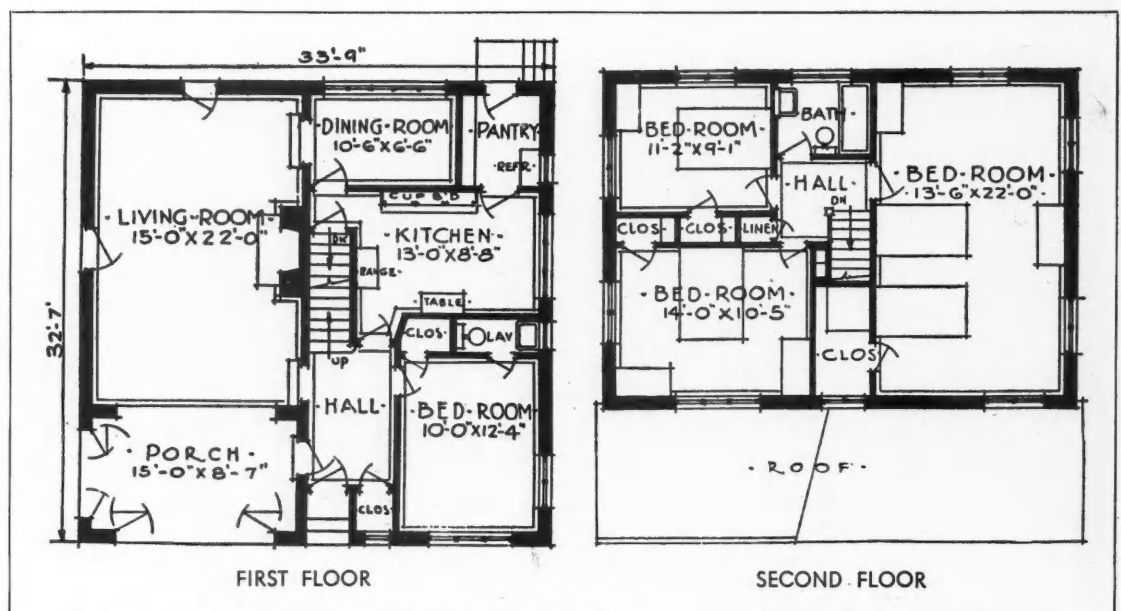
The small, compact home is easy on the purse both at the time of building and also later on when occupied. Less fuel and reduced upkeep are the rewards of a well built, well designed small home, like these two.





Letting in the Out of Doors

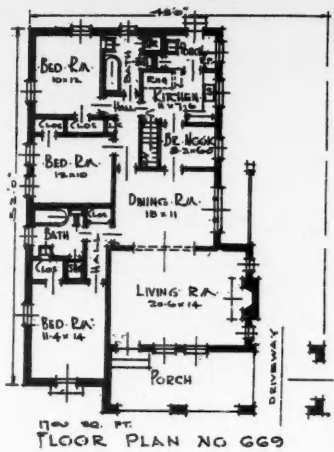
The first floor plan of this common brick house is out of the ordinary in that the end of the living-room opens onto the porch, practically making the two units into one commodious room. The collapsible doors at the front of the porch are arranged so that the entire front may be thrown entirely open. A planting of shrubs to surround this front garden space will make an enticing spot here as a true outdoor extension of the living room.





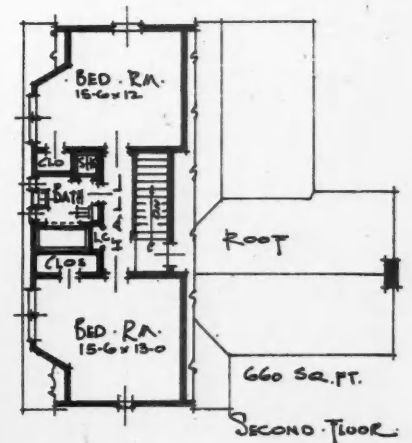
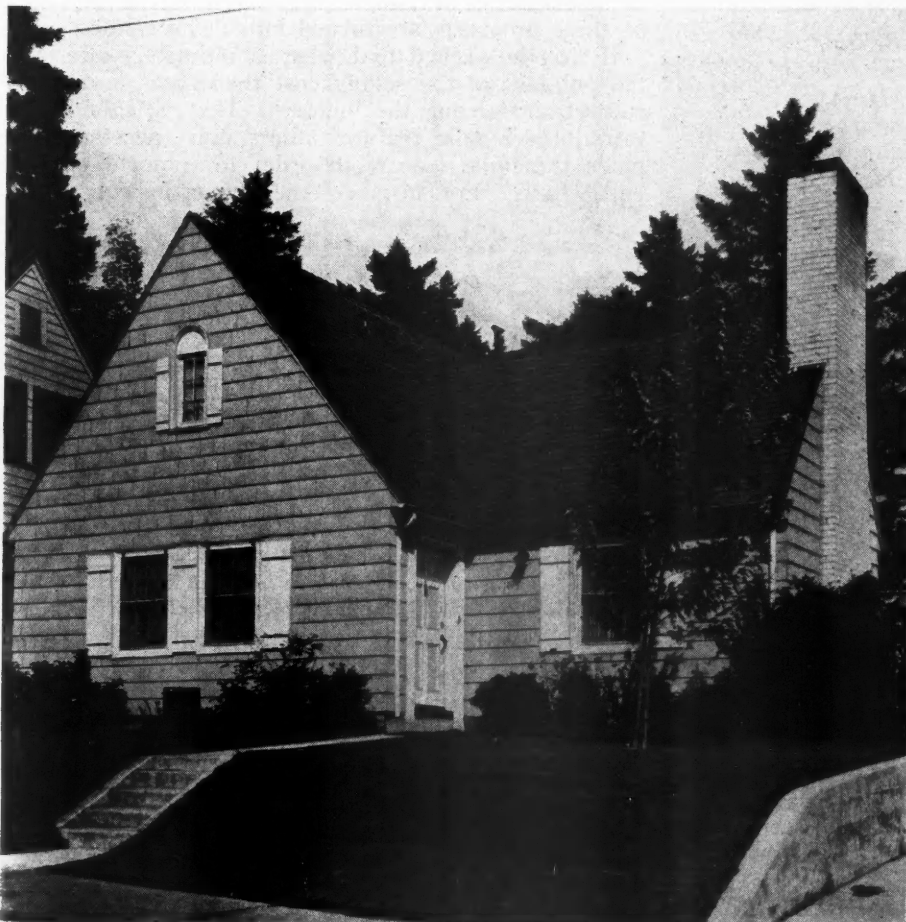
Spanish and English

More than a dash of the picturesque is required to suit the taste of home builders on the Pacific Coast. Spanish designs in white washed brick and stucco and English designs in stained shingles are popular. Here we show two unusual examples. They commend themselves both west and east to those looking for individuality in home planning.

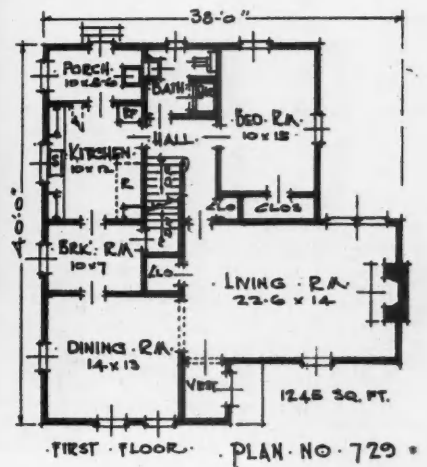


FLOOR PLAN NO 669

A. B. CLEVELAND Designs



SECOND FLOOR



FIRST FLOOR PLAN NO 729

The Row House: One Answer to the D

By ARTHUR E. ALLEN



ARTHUR E. ALLEN

Row housing undoubtedly permits economies in construction and in the future will probably be erected in increasing quantities in metropolitan areas. Housing experts are now favoring this kind of housing to provide low cost homes where land values are comparatively high. Builders in big Eastern cities have long utilized the row house to meet a public demand for a low cost home with mass appeal and many builders have been highly successful in this field. The author of this article has designed row houses that have been the most successful in the East. He gives five features that low cost homes must have in order to sell in the present market.

In the past two years, Arthur E. Allen has created the designs for approximately 5,000 row houses erected on Long Island, New York. These include the homes in such successful developments as Gibson Homes, Valley Stream; Laurelton Homes, Laurelton; Island Housing, Flushing; Droesch Homes, St. Albans; Auburndale Heights, Inc., Auburndale; United Associate Homes, Forest Hills West; Moss Homes, Bayside; Brunswick-Praver-Nasoff, Laurelton; Merrick Gables, Merrick; Mezick Homes, Queens Village. Before studying to be an architect, Mr. Allen was a building mechanic; he knows the game thoroughly.

IN answer to what the average home seeker wants it is easy enough to reply: "The greatest value for his money". But this gives little indication of the manifold requirements that must be met in designing a house to achieve a completed home that will exert a broad appeal to many individual tastes. It must be remembered that hundreds of prospective buyers, each with his own particular desires will test the builder's efforts, and that success will be measured in terms of how many of these prospects are turned into definite sales.

It may be argued that what is ultimately offered to the public, and the selling cost thereof, is a result of competition among the builders. That is, if a builder introduces a new feature, others must necessarily include the same feature in order to compete upon an equal basis. For instance, the converting of a large

COLONIAL HOMES

Flushing, Long Island
New York

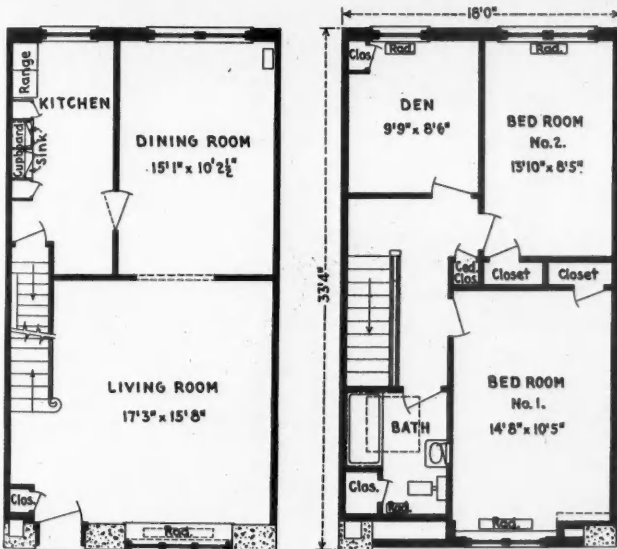
ISLAND HOUSING CORPORATION

Builders

The Colonial style is very adaptable to row housing and it has a lasting appeal. It is a style in which many variants can be introduced and will probably become increasingly popular. The homes illustrated here sell for \$8,990.



the Demand for Low Cost Homes



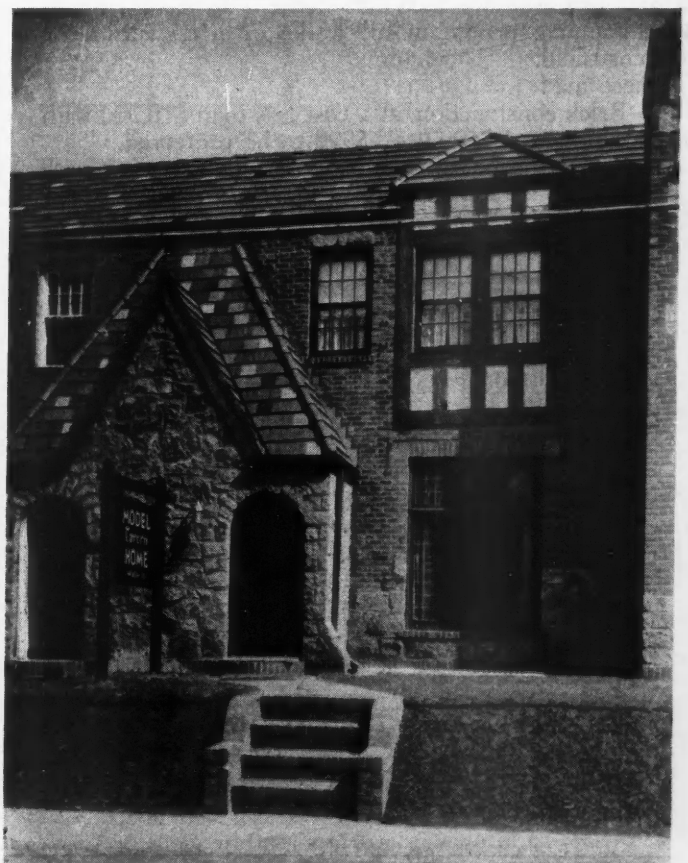
FLOOR PLANS OF DOROTHY VERNON HOMES

DOROTHY VERNON HOMES

Philadelphia, Pa.

SMITH, MCGOWAN & DONNOLLY
Builders

Philadelphia builders are past masters in the art of constructing the row house. Here is an attractive row of stone-faced homes, erected on lots 18 feet wide and 102 feet deep. They contain tile baths and have hardwood floors throughout.



part of the basement space of the low-priced homes on Long Island into a lounge-den, completely finished and with a wood-burning open fireplace, is now an accepted feature of this type of home.

But to say that this innovation and others were brought about by the initiative of one builder tells only part of the story. There is still to be explained from what sources the builder drew his ideas. Often it is the buyer, himself, who suggests, in a general way, the features that ultimately go into these low-cost homes,

TAVERN HOMES

LAURELTON HOMES, INC., Builders
Long Island, N. Y.

Tavern Homes are among the latest and most successful types of row housing. They are of solid brick and stone and sell for \$7,990. Terms are \$500 cash on contract and \$490 on title with a monthly payment of \$69.95 to pay all carrying charges. Sixty-eight were sold in three weeks.

THE LATEST LUXURIES INTERIORS OF

Laurelton, Long



This unusual room in the basement of each Tavern Home is 32 feet long and 19 feet, 6 inches wide. It has wood-paneled walls and ceiling, built-in book case, a utility closet and a wood-burning fireplace. The kitchen, shown below, contains the latest model gas range, McDougall cabinets, electric refrigerator and a tiled alcove sink.

and it is then the task of the builder to select specific items and to fix the quality for price ratio of these units.

I have found, in my experience, that interviews with home buyers yield valuable information regarding the everyday needs and desires of the home prospects and I often ask home owners questions with regard to the convenience of interior arrangements, light and ventilation, interior finish, etc. Their answers enable me to shape the designs of row houses as closely as possible to the many individual tastes.

There are so many features to be considered that it is difficult to enumerate them. However, I have come to the conclusion that there are five particular qualifications that must be met, if a home is to have a broad appeal among people of all walks of life, within the low cost field.

These are:

- 1—Brick construction, at a cost less than \$10,000 with a price range of \$6990 to \$8990 to be preferred.
- 2—The exterior to be attractive enough, and with



POPULAR FEATURES IN THE SPECIFICATIONS

EXTERIOR

Brick and Cut Stone
Cypress Trim
Clay Tile Mansard Roof
Copper Leaders and Gutters
Concrete Sidewalks
Reinforced Concrete Streets and Driveways
Ornamental Fence for Yard
Murray Hill Clothes Drier

FIRST FLOOR

Massive Batten Door with Wrought Iron Hardware
Vestibule with Closet
Extra Lavatory

STUDIO LIVING ROOM

Wood-burning Fireplace
Leaded Glass Studio Windows

MAIN BATHROOM

Walls tiled 5 feet high in pastel shades
Colored Built-in Tub, Toilet and Pedestal Basin
Metal Medicine Cabinet with Venetian mirror

DRESSING ROOM

Modernistic Vanity Table in Colored Glass

MASTER'S BATHROOM

Colored Tile and Fixtures
Separate Shower Stall
Chromium Plate Glass Door
Metal Cabinet with Venetian Mirror
Needle Spray Shower Closets

DINING ROOM

Leaded Glass Windows
Craftex Walls and Ceiling

KITCHEN

Electric Refrigerator
Console Mode Gas Range
McDougall Kitchen Units
Colored Tile Drainboards and Back Splash
Chromium Plated Faucets
Built-in Ironing Board
Linoleum Flooring
Rear Delivery Entrance

BREAKFAST NOOK

Furnished with Table and Four Upholstered Chairs
Artistic China Cupboard built in corner

LAUNDRY

Porcelain Tubs and Sink

LIBRARY DEN

32 feet x 19 feet, 6 inches
Panelled Walls & Ceiling
Wood-burning Fireplace

EQUIPMENT

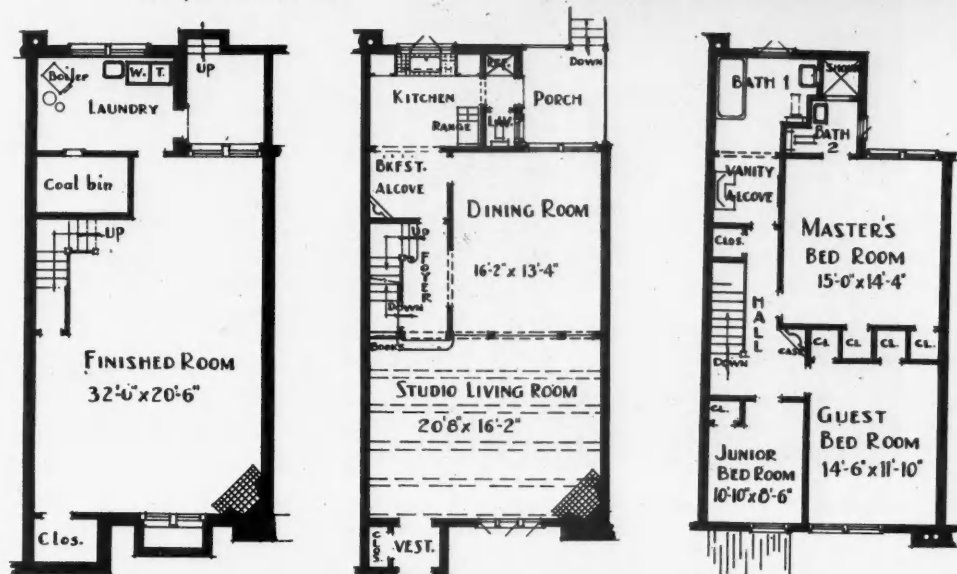
Celotex Insulation
Oak Floors and Stairs
Bakelite Switches
Plenty of Base Plugs
Brass Plumbing
Chromium-plated Fittings
Metal Weatherstrips
Metal Corner Guards
Jacketed Boiler
Craftex Decorations
Window Shades

IN ROW HOUSING

TAVERN HOMES

Island, New York

The dropped living rooms in Tavern Homes are 10 feet, 8 inches high. The leaded glass studio windows are a combination of clear and tinted panes. This room contains a wood-burning open fireplace and built-in bookcase. The floor plans below reveal that there are three bedrooms and two complete baths in Tavern Homes, in addition to the finished room in the basement. The price is \$7,990.



FLOOR PLANS OF TAVERN HOMES



sufficient individual changes in the brick finish of each unit, to warrant an investigation of the interior.

3—An attractive and economically modern kitchen, with the most modern of mechanical equipment and with an adjoining breakfast nook. Color is an important aid to attractiveness, and this should be carried out not only on the walls and woodwork, but also on the equipment, including the stove, kitchen cabinets, drain boards, etc.

4—An up-to-date and efficient bathroom, that includes a dressing alcove. Again, color is a paramount requirement of this room, which should have color harmonies in the tiled walls and floor and chromium fixtures.

5—A living room of sufficient size to become a worthy background for a charming home setting, in good taste. A studio effect, with a high ceiling in which are exposed cross-beams of rough timber, and a wood-burning open fireplace, is essential. It must be remembered, always, that this is the first room into

(Continued on page 72)

Two complete bathrooms and an extra lavatory are contained in each Tavern Home. The main bathroom has colored tile and is equipped with colored tub, toilet, pedestal basin, metal medicine cabinet, Venetian mirror and special steel casement windows. It also contains a full size dressing room with modern vanity table in colored glass, triplicate mirrors, closets and drawer.

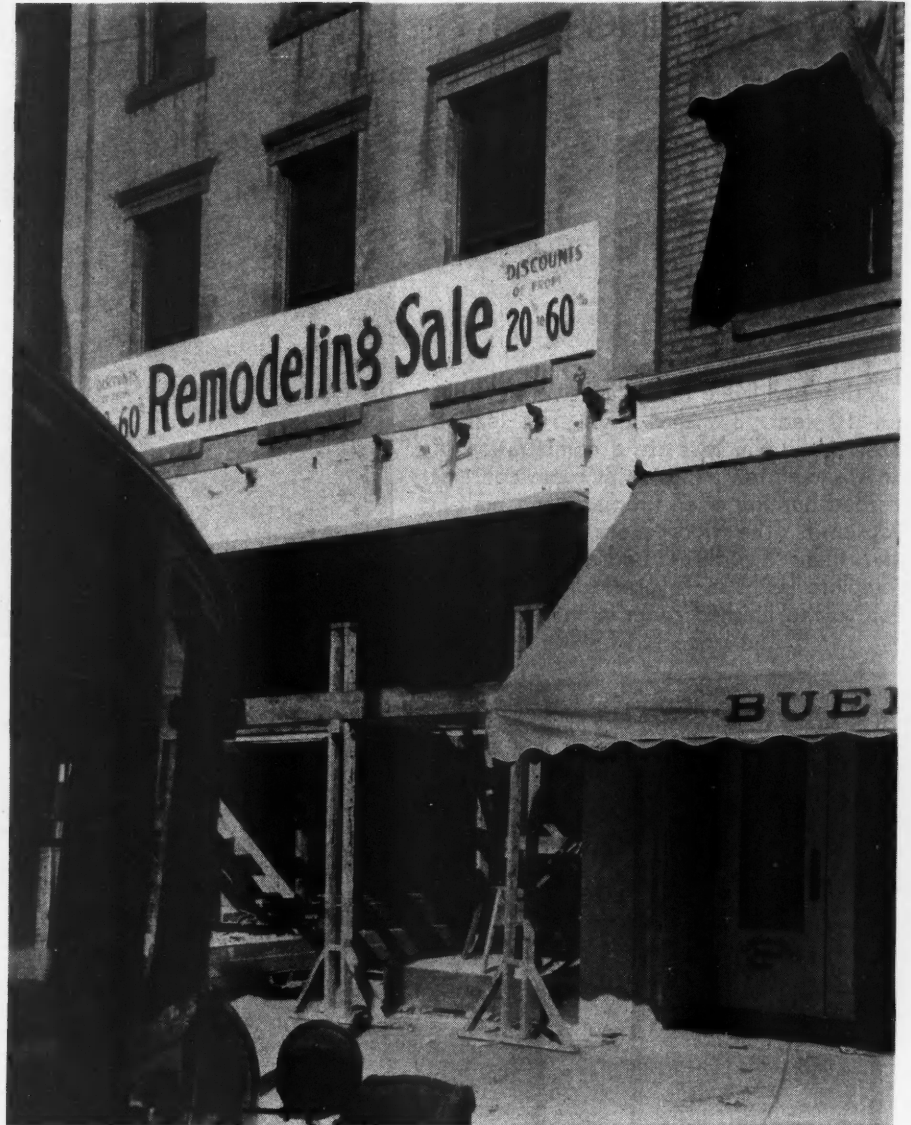
By
JOHN C. FISTERE

WITH property values in almost every city at such heights that every possible trick of design and construction must be practiced to bring adequate returns on building investments, efficient utilization of space has become the controlling factor in the planning of commercial buildings.

Perhaps this has always been so to a certain extent, but the importance of the ratio between total area and net rentable area has never been given so much attention as it is receiving at the present time. Furthermore, to produce the highest per square foot rental possible and to plan for the maximum daylight and fresh air has become an absorbing study for builders.

It is interesting, in this connection, to review certain facts on the rental value of the various floors in commercial buildings, particularly in relation to the value of store space. A recent survey by the National Association of Building Owners and Managers revealed that in buildings 8 stories, store rents produce 35 per cent of the income; in buildings of 12 stories, 24 per cent of the income; and in buildings of 15 stories, 18 per cent of the income. *The same survey showed that store rents are from 2½ to 4 times higher per square foot than the office space in the same building.*

One of the deductions from consideration of these facts is that the maximum amount of store space should be obtained for that purpose in every commercial building. The importance of shops and stores in a rental scheme has already led to one innovation in building construction, the setting back of columns to permit greater areas of glass on the lower floors for the display of merchandise. The customary structural design calls for set-back columns up to the second floor, giving the same free area on the second floor as on the first. In a recent statement, William F. Lamb of the firm of Shreve, Lamb and Harmon, architects for the Empire State Building, asserted that the second floor had become almost as valuable as the first from the angle of merchandise display, pointing out that on busy streets the second floor level was more visible to a larger number of passers-by than the ground floor level. Hence, the

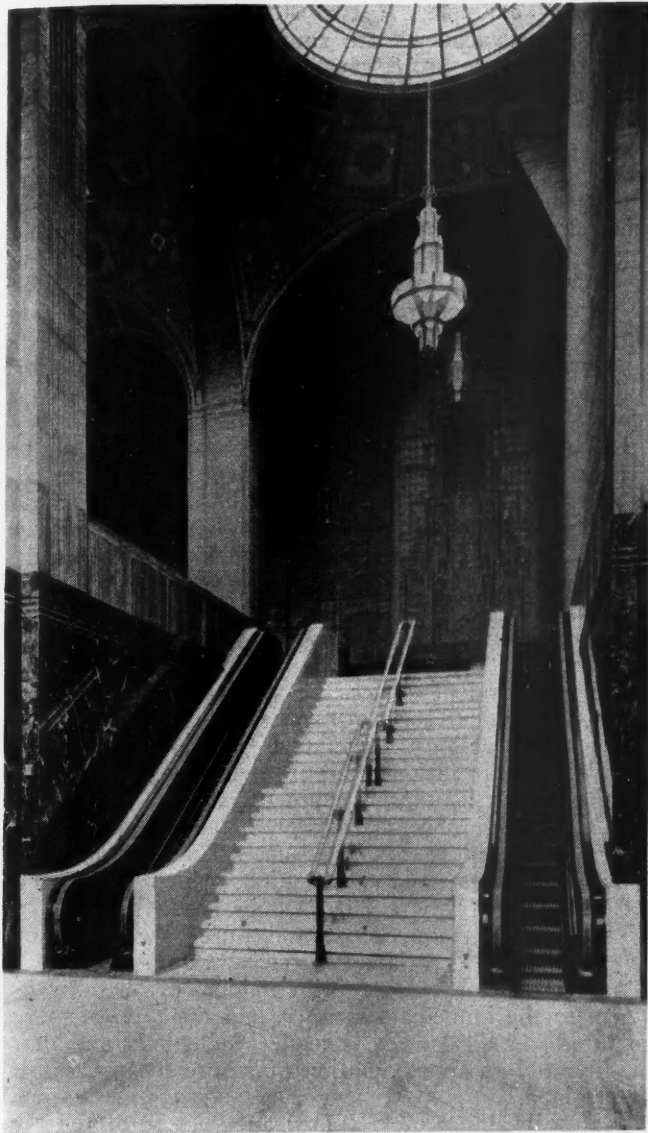


Remodeled Stores and Shops Bring Larger Income Than Other Rental Types. Job under construction at Madison, Wis.

Modernizing Makes S Shops and Stores A

conclusion that second floor stores are destined for greater popularity than they have ever enjoyed. There is, however, one important element in a discussion of stores above the street level—and that is the transportation of customers from the sidewalk to the second floor. Stairways and ramps are not inviting to women shoppers (or to men either, for that matter); and elevators are not designed to carry the constant, heavy traffic which such a plan would produce. Some have already found the solution—and others are finding it—in the installation of escalators.

Department stores were the first to recognize the advantages of this form of vertical transportation in handling of heavy traffic. A study of New York department stores by an elevator company revealed that the upper



Bank Customers Brought to 2nd Floor by Escalator. Stores on 1st Floor.

Escalators Handle Large Crowds Easily and Make Upper Floor Shops As Popular As Those on Ground Level.

The immediate success of the restaurant, however, convinced the management that a second floor cafeteria would produce more revenue than was then coming in. At first, the innovation did confirm the accuracy of their prediction, but soon they noticed that many of their patrons preferred to wait on the first floor rather than walk up a single flight of steps. The problem having established itself, the solution was not long in being found. An escalator was installed to handle the traffic to the second floor—and soon it became more popular than the first, due partially, no doubt, to the fact that patrons wished to get away from the noise and clatter of the street.

The Old Merchants National Bank and Trust Company building in Battle Creek, Michigan, provides another example with a slightly different moral. The location of the building in the center of the business district made the first floor more desirable for rent-producing occupancy than for banking purposes. Consequently, the main banking room was located on the second floor, to which access is gained by two escalators flanking a broad stairway directly in front of the main entrance. In this way, the bank, so to speak, ate its cake and had it too; for the first floor produced the desired revenue and the escalators gave the second floor, first floor convenience.

The increased use of escalators offers two opportunities for the promotion of business by builders—one in the field of modernization and the other in the development of an all-store type of building with two or three stories. In the promotion of either of these types of business, the sales argument is the same—greater rev-

COST OF IMPROVING 255 LINEAL FEET OF STORE FRONTS

	<i>Running foot cost</i>	<i>Per cent</i>
Surveying	\$0.56	.13
Granite, material	14.50	14.50
Masonry	2.00	.56
Steel framing	15.50	3.88
Granite, setting	11.00	2.76
Concrete	2.00	.50
Waterproofing, slab	1.47	.38
Stonecutters	4.85	1.23
Terrazzo	16.50	4.07
Bronze	147.50	36.29
Metal work	4.00	1.00
Plumbing	5.03	1.23
Glazing	14.30	3.57
Plastering	10.30	2.54
Carpentry	42.14	10.35
Hardware	2.50	.63
Painting	1.75	.48
Electrical work	8.00	1.96
Awnings	1.30	.32
General Labor	17.78	4.38
Superintendence	9.10	2.24
Architect's fees	28.80	7.06
Total	\$405.48	100.00

Second Floor Attractive

stories of those buildings in which escalators were used handled approximately twice as many customers per square foot as the upper floors of those buildings which depended solely upon elevators and stairs. In many stores, escalators are used only for the first two floors and basement; but there are some buildings in which this means of travel is employed for as many as eight stories.

Two actual cases will tell the escalator story better than a mass of generalities. Kugler's restaurant in Philadelphia occupies two floors in one of the busiest sections of the city. When the restaurant was first opened on that site, a stairway led to the second floor, which had been designed to handle banquet crowds and whatever overflow there might be from the main restaurant.

ene. Nothing is more convincing to an owner than that. In the second place, the use of escalators in this connection is a comparatively new idea, and a new idea is easier to sell than an old one. That escalators are certain to come into prominence is indicated by two prominent examples in New York at the present time—one, the installation in the new Cities Service Building, and two, the installation in the new annex of the Metropolitan Life Building.

Since the thought of the entire building world has turned within the last few years to modernization, and since that type of work is easier to promote under present financial conditions, let us consider definite possibilities in that field. One of the possibilities has already been suggested by the Battle Creek Bank. Let us say that another bank occupies the ground floor of a three-story building in a busy neighborhood that is devoted chiefly to shops, stores and office buildings. Business expands, and the demand comes for more space. The bank worries along with overcrowded facilities, until a builder with his eyes open for business appears on the scene with a plan for modernizing which will not reduce the revenue of the building, and which will give the bank the amount of space it requires. The plan, as he outlines it, is to renovate the ground floor into shop space—both street front and arcade. The arcade shops are to flank a stairway and escalator to the second floor banking room, and the third floor is to be devoted to the dependent departments of the bank which do not require space directly off the banking floor. The rent from the shops at more than twice the per square foot rental obtained from the former office space gives the bank the same amount of revenue.

Would a bank president listen to such a proposition? Of course, he would.

TABLE OF PERCENTAGE OF RENT TO
GROSS SALES FOR VARIOUS TYPES
RETAIL STORES

Type of store—	Percentage
Automobile agencies	2
Automobile accessories	10
Barber shops	\$20 per chair
Books and stationery.....	8
Candy and refectory.....	8 to 10
Cigars and tobacco.....	7 to 10
Clothing—women's cloaks and suits.....	8
men's	7
credit clothing stores.....	8
Dental and medical supplies.....	5
Drug stores	7 to 10
Electrical appliances	6 to 8
Five and ten cent stores.....	5 to 8
Florists	15
Furniture	7
Groceries	6
Haberdashery	8 to 10
Hats, men's	6 to 10
Hosiery and knit goods.....	10
Millinery	12
Musical stores	15
Restaurants	9
Rugs	8
Shoes—men's, women's, children's.....	8 to 10
men's	5 to 8
women's	8 to 10
Tailors	6 to 8
Trunks and leather goods.....	12
Women's wear	10

Another example. A two story building in a city where office vacancies are running as high as 18 per cent, and where store vacancies are less than 5 per cent (such as New Haven, Connecticut) is to be repainted on the interior as a means of filling the second story space devoted to offices. The painting contractor mentions the work to a friend, a general contractor, who is also on the lookout for more business. The general contractor knows the realty market well; he knows that second story stores would be a valuable innovation in the town, and he convinces the owner that he ought to remodel the entire building along lines similar to those suggested in the bank plan. The contractor gets a job, and the owner gets a greater net return from his building than he had received when the building was new.

Before discussing new building work, it might be well to state a few facts on percentage costs of remodeling store fronts. This seems to be one of the most intricate of all problems since conditions vary so much on different jobs. The table on page 41 is based on the findings of W. E. Malm, prominent Cleveland building manager.

In promoting the two and three story building for stores, no matter whether the building is to be erected for an independent owner, the problem is one of satisfying the demand for store space. There is no rule of thumb to determine whether new stores are needed; all one can do is to make an accurate survey of the neighborhood, both as to the character it possesses at the time the building is contemplated and as to its character within ten years. The successful store demands above all things—a good location, which means that the pedestrian traffic count must be high, that the type of pedestrian traffic is of the purchaser type (not schoolchildren, day laborers, etc). Competition must be ascertained by a careful checking of the type of stores in the immediate vicinity, and the type of stores required. If the survey is made intelligently and thoroughly, a close approximation of future tenancy can be determined.

Naturally, there must follow an estimate of the revenue to be expected. Since the percentage method of store rentals is growing in favor all over the country, the table on this page should be of assistance in figuring the return on the building.

The figures quoted hold for both first and second story stores, since percentage figures only are given. In actual square foot rentals, the comparative prices will have to be determined by the character of the job. If escalators are not installed, the rent obtained from the second floor will not be so much as it would be if the added service were there. In the first place, the volume of business would not be so great, and in the second place, the lessee would not feel that he was receiving as good as a ground floor location.

Whether escalators can be installed or not is a problem that cannot be solved until the facts are known. The practical difficulties of installing escalators are practically non-existent for the builder. Manufacturing companies are eager to work in co-operation with builders—both as to estimating the cost of the work and the actual installation of them. The most important point to remember in connection with escalators is that they do not occupy as much space as is commonly supposed. The area requirements for an escalator with a capacity of 4,000 persons per hour are only approximately 84 square feet on each floor that it serves. The space underneath the escalator, beyond the six-foot headroom, may be used for a concession stand of some kind. All escalators are built at an angle of 30 degrees, and travel at a standard speed of 90 feet per minute.



The House of the Month

Homey Pennsylvania Type Dwelling Built at Larchmont, N. Y., William C. Halbert, Jr., Architect; Eighth-Inch Scale Drawings Presented

THIS house of eight rooms with built-in garage, three baths and a game room has been given a look of great comfort and naturalness by following the informal lines often observed in the century-old farm-houses of eastern Pennsylvania. The upright, simulating the older part of such a dwelling, is a straight gable section solidly based on a heavy stone wall at the front and around the entrance door. Then the wing extending across to the left has the graceful sweep of a low gambrel roof design with two well-placed dormers and a massive chimney to lend interest. The combination of these two roof types, the high gable and the low sweeping gambrel, achieves a charming result.

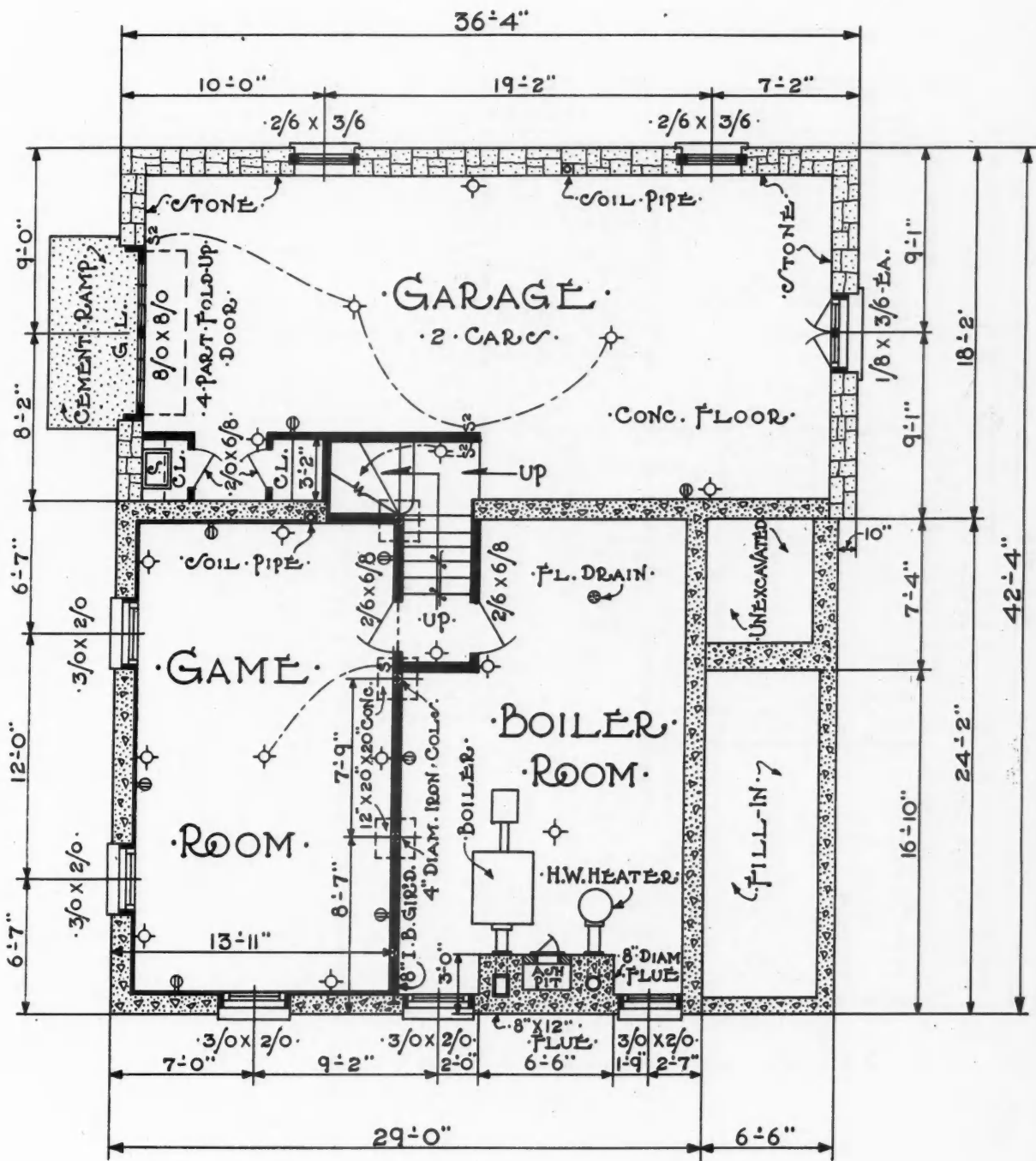
As would be expected in a home of this type, the interior is extremely comfortable and cheery, and the arrangement of the rooms is interesting. By excavating

deeply for the basement proper, then arranging the garage floor just slightly below grade, the house is given a half-step arrangement with rooms on six different levels. In the upright, we get two bedrooms and bath over the garage, seven steps up from the living room, dining room and kitchen section of the wing. Then, seven steps up from these two bedrooms, we find two more in the wing over the living room and dining room. The maid's room and bath and a storage place are again five steps up under the roof of the main section of the house.

Such an arrangement is considered convenient and step-saving, and is more conducive to quiet and privacy than the more conventional arrangement with all chambers together on one floor.

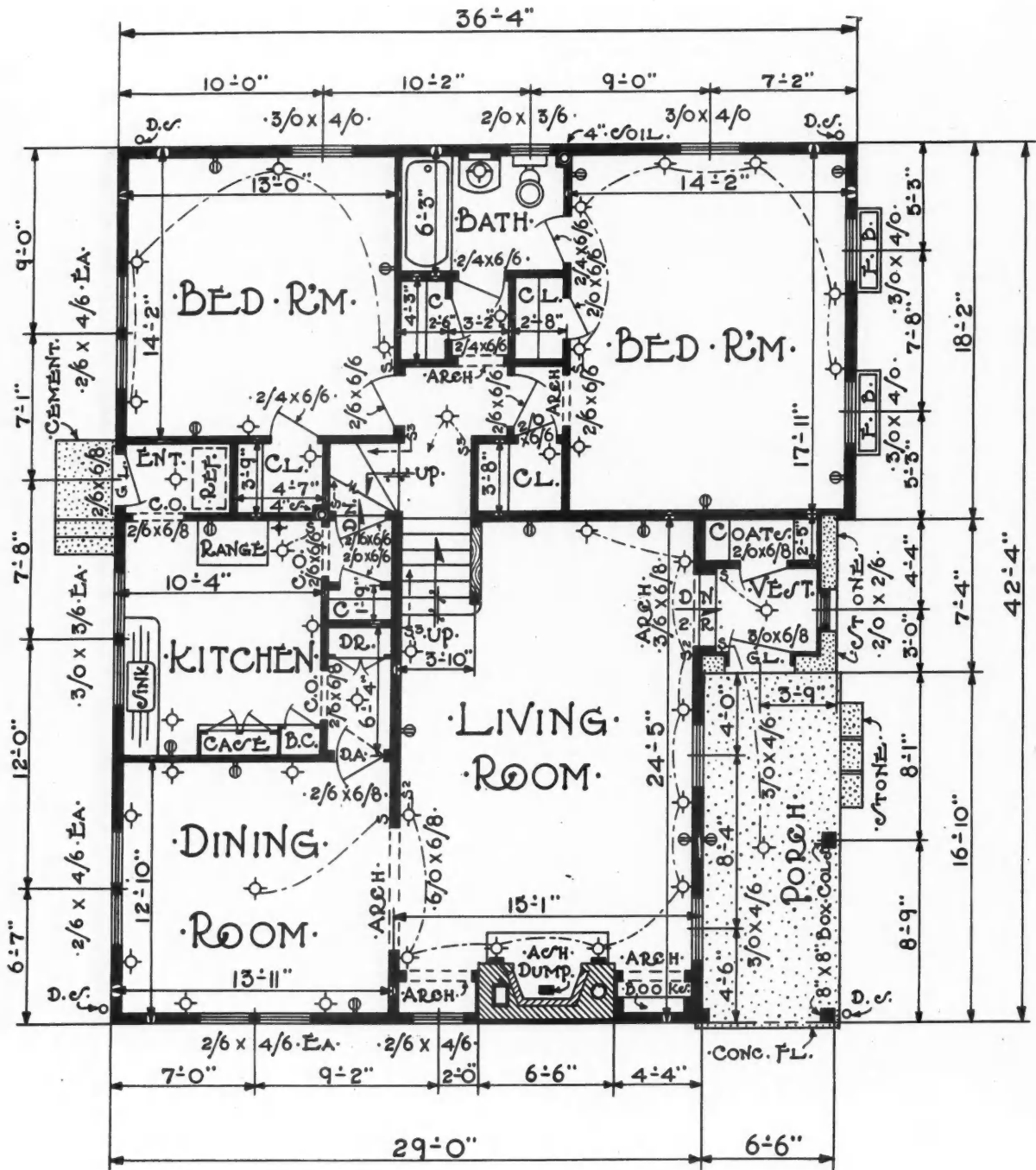
Eighth-inch scale plans presented on next four pages.

WORKING DRAWINGS OF THIS HOME ON THE NEXT FOUR PAGES



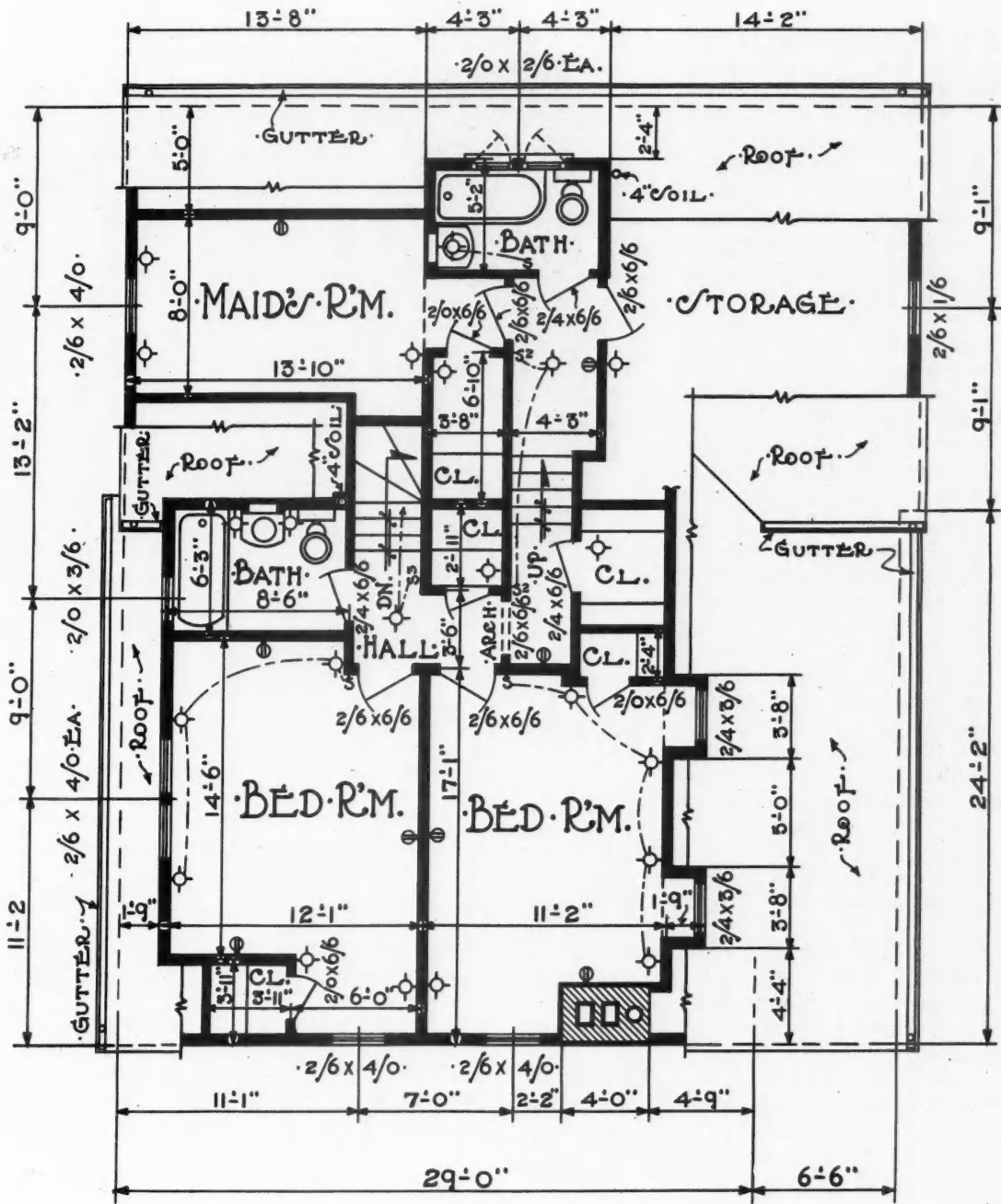
• BASEMENT PLAN •
 • SCALE • 1/8" = 1'-0" •

The Basement Proper Containing Game Room and Boiler Room Is Excavated Eight Feet Deep. The garage level is five steps up, three feet six inches below grade.



• FIRST FLOOR PLAN •
 • SCALE 1/8" = 1'-0" •

First Floor and Mezzanine of the December "House of the Month" Contain Living Room, Dining Room and Kitchen and, Seven Steps Up, Two Bedrooms and Bath.



• SECOND FLOOR PLAN •
 • SCALE 1/8" = 1'-0" •

The Second Floor of the December "House of the Month" Shows Two Pleasant Bedrooms with Attached Bath and, on a Still Higher Level, the Maid's Quarters.

AN ANSWER TO "WHAT IS C

IN July, 1931, there appeared in the AMERICAN BUILDER AND BUILDING AGE an article entitled, "What Is Good Architecture?" This article was written by Mr. Joseph B. Mason, and contained so many ideas which would manifestly excite the torrid architectural temperament, that it seemed evident that there was sly deliberation in the writing of the essay. It is no doubt true that there developed as many different answers to the question contained in the title, as there were authors anxious to sign themselves to letters. These few words are to present one answer, and perhaps to encourage a worthy exchange of ideas.

In his discussion Mr. Mason stayed within the limitations of home architecture. He illustrated his article with two photographs, one of some small architectural merit, bearing the caption, "Do you like this Prize-winner?" the other a terrific corruption of a design originally developed by an architect, and having the title "Or do you prefer this Best-seller?" These two pictures appearing directly under the title gives birth to a natural inference—"that which sells is good."

In opposition to this theory allow me to present another answer to this question of what constitutes good architecture, and I will try to substantiate my answer with various "wherefors" and "because". Here it is—"Good architecture is that building investment which results in a permanent improvement to the community."

The definition presupposes that to be sound architecturally, a building must be a sound financial investment. No building has a right to existence, nor is it financially sound, unless it answers a real human need. This is in direct opposition to the theory of home building which has its initial concept in the idea of selling. It is opposed to the idea of a high-pressure sales organization, which through the impulse of sustained publicity distorts all out of shape already over-developed ground. It is opposed to the idea of making design and construction subservient to sales.

I am safe in saying that every city of any size in the land can offer blocks and blocks of shambles, which perhaps five years ago were the "niftiest" and "latest", standing as a mute argument for the financial unsoundness of reckless, sell-regardless promotion. This point needs no argument; we just call the reader's attention to streets and subdivisions in his own city. These shambles are the result of making sales the prime objective, and design and construction secondary. My argument is sound psychologically. If the large idea is to sell, the builder is going to do those things in design which are catchy, jazzy and for the moment, but which sell. To be sure, an enlightened intelligence five years hence, may see that the broken up messy brick work, which looked so rustic, has become an abortion and a misuse of materials; and that which looked so cute once, has



A design conceived by an architect, copied many times, and finally taken over verbatim by a plan book concern, which is said to have sold 1,000 plans of it in one year.

become a hideous heart-ache which unfortunately the owner must spend his life with. A buyer is not trained to judge of architecture. An appreciation of true architecture is a gradual growth, and results from constant contact with it; so, often too late, the buyer finds that what he thought was good, he has learned by education is terrible.

My argument is sound psychologically as it relates to construction. I do not believe that many builders intentionally build poorly, but if the important idea is that of selling, the builder is certainly going to build within limits which will allow him to sell at a profit. The easiest place to assure him of this profit is the unseen structure. The temptation is to make his construction just good enough, without that factor of safety which is essential to permanent construction.

This matter of early depreciation due to jazz design, and poor construction, as seen so often in the speculative home, has been taken cognizance of by the soundest financial intelligence of the country. The president of a building and loan association, which has more than \$40,000,000 in resources says that his association has established the policy of lending 70 to 80 percent of the appraised value of houses that are suitably located, properly designed, and built in accordance with good construction practice—ten to 20 percent more than is safely possible in the absence of these qualities.

Rome C. Stephenson, as president of the American Bankers Association says in a specially granted interview:

"The home owner builds one or two houses in a lifetime;

IS GOOD ARCHITECTURE?"

by GEORGE C. WRIGHT

A.I.A., Indianapolis



One of the abuses of the design on the opposite page, which depreciates the value of the original house. Changes in seemingly unimportant details have stolen away much of its charm.

the architect hundreds. Today experience counts. We find that the architect in relation to his client functions as a governor on a steam engine. Even in a modest home, the client is anxious to express his—usually her—individuality; but uncurbed individuality, freakishness, unwise expenditure is usually detrimental to the loan, rental, and resale of the property. The capable architect, while expressing this individuality, also tactfully diverts it into modern conveniences and money saving equipment such as insulation, proper heating equipment, etc. He is also able to plan economical arrangements, such as piping construction for any particular plan or building site. In addition to all this the house is in good taste as a unit.

"I find, therefore, if a conscientious and capable architect is employed in building a home, his fee is offset by the increased dollar value he is able to give his client, as well as an added rental and quick sale value, which goes hand in hand with wise construction, and which increases the loan value at the bank from 12 to 16 percent."

Mr. H. S. Kissell, president of the National Association of Real Estate Boards says, "Mortgage institutions recognize what they call the 'loan value' of good architectural design. They know that the mortgage on a building which carries out the principles of good architectural design is, other things being equal, a safer mortgage than one on a building freakish, hodge-podge, or repellent in its external appearance, wasteful or unbeautiful in its interior arrangement."

The same institutions which are concerned with the first value of a home are concerning themselves, from this time on, with the factor of permanent value. They

are finding themselves burdened with a larger investment in houses than could possibly be realized by sale. This is, at least, partially due to jazz design and poor construction. These institutions are going to be more particular as to the elements of design and construction from this point on. This can be verified by one sufficiently curious, by making inquiry at the local building and loan association. I have done so, and the result has been universally to the advantage of a house designed by an architect.

The final item in my definition of good architecture is that of responsibility to the community. As well as answering the needs of the home owner, and expressing the individuality of the occupants, a house has a responsibility to its community. It should turn a happy face to its neighbors. It should be an addition rather than a deduction; it should step up valuations, rather than decrease them.

I believe that our definition comprehends all that could be asked of good architecture. It anticipates economy in layout, efficiency in functioning, soundness in construction, and satisfaction in design. Without these things a building fails as a permanent investment.

It is, perhaps, unfortunate that a discussion of this kind relating to home architecture, cannot be brought to a close without contrasting the architect and the so-called home-builder. Perhaps, however, this is just as well, and that through discussion we may discover the proper limitations of each, and thus how they may best co-operate.

I believe there can be found a real basis of co-operation. I believe sincerely that the architect has something which the home-builder could do well to incorporate into his scheme of things; and certainly the home-builder has plenty that the architect needs.

I am wondering if this would not be the proper opportunity to correct the prevalent idea of an architect. He is not a long-haired, dreamy-eyed artist, who applies the garnishment to an already fixed layout. He is a very serious minded analyst who organizes a building efficiently, designs it structurally sound, engineers

(Continued to page 74)

"Good architecture is that building investment which results in a permanent improvement to the community"—The architect and home-builder co-operating in design and sales can make good architecture a common inheritance of our American community life.

Winter Building Statistics

By E. L. GILBERT

Research Director, American Builder and Building Age

WINTER vacations for builders are rapidly becoming a thing of the past, for science and human ingenuity have made great strides in the battle against Old Man Winter. Each year it becomes more and more difficult to find a legitimate excuse for loafing through the winter months; even the claim of lack of business can often be traced back to the builder's own want of energy in going after winter work.

Today concrete can be poured during very cold weather through the proper use of heat, protection, and anti-freeze compounds; and non-freezing bricklayer's cement now has wide distribution. Temporary hook-up of the heating plant allows mechanics to work inside half-finished structures with temperatures approximating a pleasant June day.

Statistics Show Winter Building Activity

Studies of building records covering the last five years show that there is a great deal more winter building being done than the average person suspects. Of course, it is common knowledge that when a skyscraper is being erected the job continues right on through the coldest weather; what is not generally known is the fact that between the least active month, February, and the most active month, April, there is a difference in activity representing only three and one-half per cent of the total for the year.

Based on building records covering the last five years, here is the way building activity has been divided by months:

During JANUARY	of each year 6.3% of the year's work was done
During FEBRUARY	of each year 6.1% of the year's work was done
During MARCH	of each year 8.8% of the year's work was done
During APRIL	of each year 9.7% of the year's work was done
During MAY	of each year 9.4% of the year's work was done
During JUNE	of each year 9.4% of the year's work was done
During JULY	of each year 9.3% of the year's work was done
During AUGUST	of each year 8.8% of the year's work was done
During SEPTEMBER	of each year 8.6% of the year's work was done
During OCTOBER	of each year 8.5% of the year's work was done
During NOVEMBER	of each year 7.5% of the year's work was done
During DECEMBER	of each year 7.6% of the year's work was done

During December of each year, as shown by the above table, there is normally one-tenth of one per cent more of the total building done than during November. This seems like a very small amount—until you recollect that the total building market for even so poor a year as 1931 will total about \$5,000,000,000! And one-tenth of one per cent of this huge total means that there will be five million dollars more work in December, 1931, than in November of the same year.

7.6%	December
7.5%	November
8.5%	October
8.6%	September
8.8%	August
9.3%	July
9.4%	June
9.4%	May
9.7%	April
8.8%	March
6.1%	February
6.3%	January

Building Volume by Months
Based on 5 Year Averages

The above figures refer only to new construction and alteration jobs costing more than \$5,000 each; the thousands of small modernization jobs which are not included in the usual national building statistics are not shown in the above figures. Possibly two and half billion dollars are spent annually for modernization work; and of this sum probably thirty per cent is spent during the period from November 1st to March 1st each winter. The experienced builder need not be told that modernization work is profitable.

At this particular time builders are fortunate in being able to solicit winter modernization contracts because they can point out that building costs are lower than they have been in years. In addition, winter contracts for modernization work will fall right in line with the campaigns which are being waged everywhere to reduce unemployment.

There are in the United States today more than 12,000,000 buildings of a residential nature which can be modernized with resultant profit to the owners. Certainly some of these buildings are to be found in every neighborhood.

More than 400,000 private garages are built annually and of this number probably 80,000 are constructed during the winter months. A campaign can be successfully promoted in the average town to induce owners of good cars to provide suitable shelter for the automobiles which represent a considerable investment to them. It is decidedly unbusinesslike for the owner of a \$1,000 and up automobile to allow his machine to remain in a flimsy little shack or exposed to the elements.

New Construction Needed

In 1929 residential building activity began a decline which scraped bottom during the latter part of 1930 and the first few months of 1931. Thousands of families in all parts of the country "doubled up" and thus automatically lessened the normal demand for new residential construction. But since June of this year the trend has been gradually upward and authorities predict that residential building activity will become more and more pronounced from this time forward.

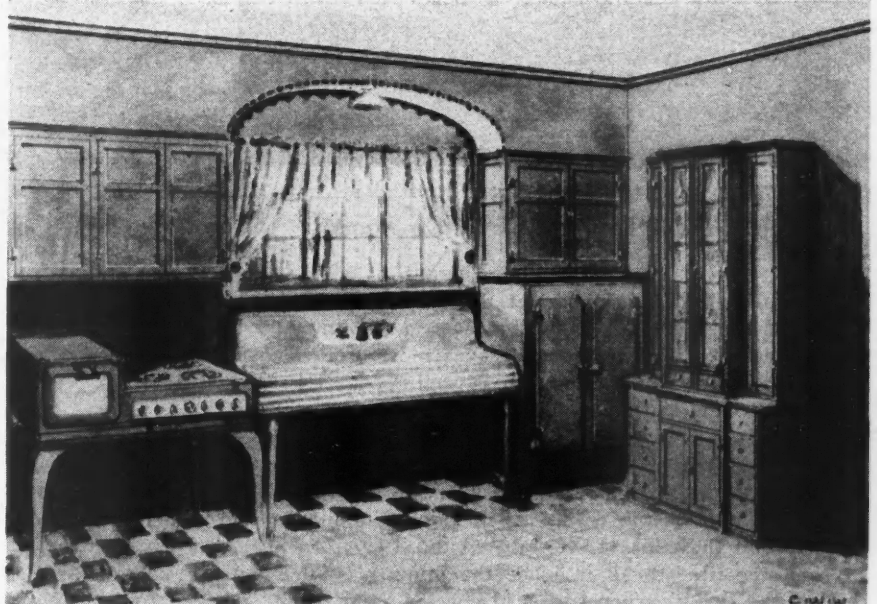
Regardless of whether we have a depression our population increases year by year. Each year thousands of young couples get married and require homes of their own; the increase in the number of "home units" required for maturing population each year greatly exceeds the number of "home units" which are eliminated by death, etc.

Also, no matter how great the depression, natural disasters such as fire, flood, tornado, etc., continue to make their appearance. These things create more building work. (Continued to page 72)

Good Construction Simplified

New Materials and Service Are Designed to Help the Builder
Produce Better Work at Lower Cost

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.



One of a Series of Kitchen Designs, in Colors, Offered with Plans and Specifications Prepared by Experts to Aid the Builder, Architect and Owner.

NOTHING could be of greater interest to the builder and his client than better work at lower cost. Toward that end, the producing side of the building industry is lending splendid co-operation. Old materials and equipment are being improved, new ones are being developed, and services are being produced which make for more effective designing and planning.

Of all the parts of the home, the kitchen offers, probably, the greatest problem. It requires special study to design a kitchen which is at once attractive, practically arranged and into which the correct equipment is correctly fitted.

Kitchens Planned by Experts

Many builders, contractors, dealers and architects do not have the opportunity to make a special study of kitchen design. The prospective home owner, the housewife who

will use the kitchen, does not have the facilities to make such a study. All these have long recognized the need for special kitchen service. Now such a service can be obtained.

A copyrighted series of kitchen designs has recently been developed. Each plan includes a colored perspective, a blueprint floor plan, and a specification sheet suggesting possible equipment available to fit the plan. Each plan is detailed to provide for the correct amount of space, the proper arrangement of equipment, the right size refrigerator, and range, storage space to meet the family needs, ample ventilation, proper light and electrical outlets, and even suitable wall material.

The designers of this series are women with years of experience in kitchen planning and appointments.

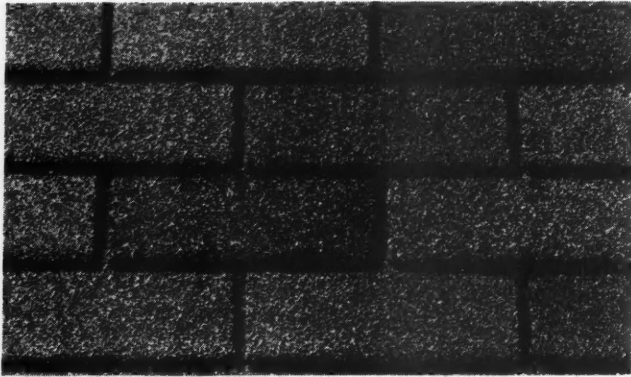
Equipped with this service, the architect, builder or dealer is fully prepared to sell kitchens, in new homes or in remodelling work. The prospective owner is afforded an opportunity to select a particular design which fits her taste and need, knowing that it has been scientifically worked out and can be reproduced from materials and equipment readily available.

Tile Walls for Everybody

The desirability of clay tile for bathroom and kitchen walls has long been recognized; but because of their cost they could not be included in planning



Ceramic Tile Clipped to Metal Lath Is Inexpensive to Install, and Does Not Crack.



Asphalt Shingles with Coated Edges Last Longer and Afford Beautifully Effective Roofs.

most homes. A large portion of the cost has been in the setting of the clay tile. Now, however, a new method of setting has been perfected which saves most of this costly labor and produces a superior job as well.

With this new method a piece of sheet metal is nailed to the wall, right over the old plaster in remodeling work. It is so punched as to form clips or grippers which project at right angles. To set the tile it is only necessary to "butter" the bottom of each tile with a small amount of mortar and press it into the clips.

When the tile are all in place the joints are filled with cement, the surface trued with a board and hammer and the excess cement wiped off. The work takes only a fraction of the time required for old fashioned tile setting and because of the metal lath backing the tile will not crack if the building settles or there is shrinkage.

Sealed Edge Shingles

Turning to the exterior of the house we find some new developments in the way of roofing which should be of interest. One of these is a coated asphalt shingle made by a new process, designed to afford longer life and greater beauty without increased cost.

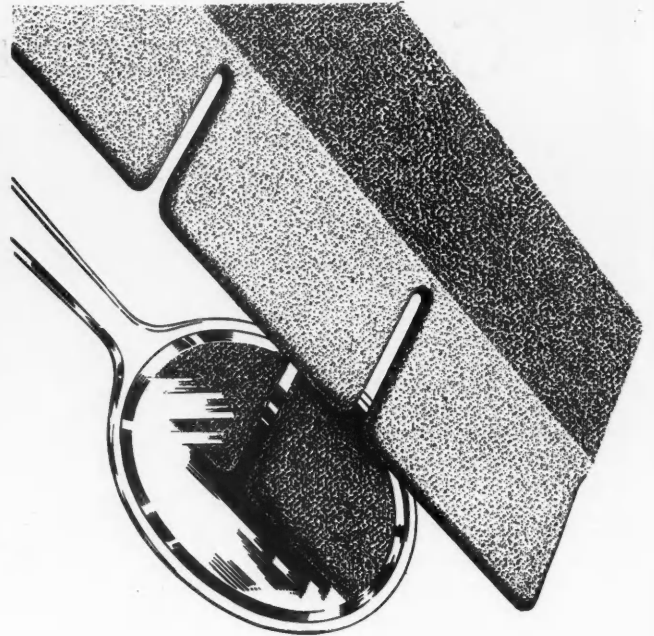
These shingles have no cut edges. The edges are coated with asphalt and a layer of mineral granules. It is stated that tests show that this edge coating adds years to the life of the shingles. At the same time it forms a beautifully rounded edge which, with increased thickness and deep shadow lines, enhances the beauty of the roof. The increased thickness of the exposed portion, where the wear comes, also increases the durability of the roof.

All Types of Roofing Offered

A company which has long been known for its fine line of stained cedar shingles, has made additions to its line which include a complete line of portland cement and asbestos shingles. These are offered in a wide variety of colors and textures, and with rough and square butts, adapting them to almost any type of roof and architecture.

This company is also offering hand split shingles, which are sawed smooth on the back. These provide for the rough texture so greatly desired today.

A Wide Variety of Colors and Textures Are Available in Asbestos Cement Shingles.



They come both stained and unstained. Stains for preserving wood and renewing the color of old shingles have also been made available to meet a growing demand.

Building Paper That Stretches

Another of the manufacturers of stained shingles has recently come out with a building paper that stretches. The stretch, which is said to be more than one inch to the foot, prevents tearing and breaking at the nails.

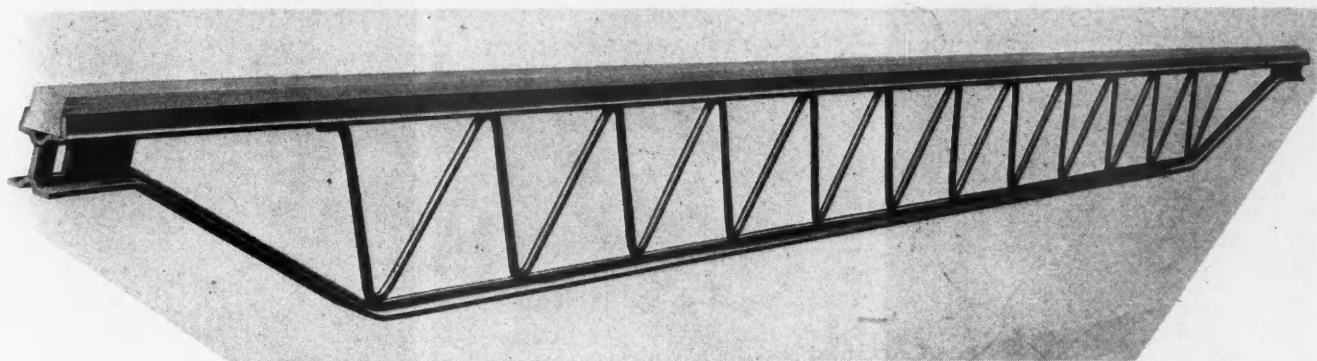
This paper is also proof against wind, water and moisture. It is made of two sheets of high grade kraft paper crinkled and impregnated with a special asphaltic compound. It looks much like leather and will resist a pull of 20 pounds per nail without tearing. When punctured it clings to the nail preventing the penetration of moisture at the nail hole.

Steel Nailer Joists Improved

-During the last few years, the steel nailer joist has won well-deserved popularity because it eliminates shrinkage cracks, permits the passage of pipes and conduits through its open web and allows the flooring to be nailed directly to the wood strips.

Wood strips, no matter how thoroughly seasoned, are subject to expansion and contraction and have a tendency to loosen from the steel. One manufacturer is now produc-





Nailer Joists, with Wood Strips That Have Been Treated to Prevent Moisture Absorption and Are Clamped between Flanges with Indentations That Grip the Wood, Eliminate the Shrinkage Problem.

ing a nailer joist in which the problem of expansion and contraction of the wood is eliminated.

The nailer strip is dried to a certain degree of moisture content and is then immersed in a waterproofing compound for a period of two hours. Results show that a strip so treated is practically impervious to the absorption of additional moisture and so will not loosen from the joist.

To make the strip doubly secure, the two upstanding flanges of this joist are provided with a series of indentations, placed along the upper edges at intervals of $3\frac{1}{2}$ inches. These are staggered from one side to the other. These are embedded in the wood.

All-Steel Floor Construction

Following the development of the light steel joist, attention has been centering on steel floor construction. One of the recent developments in this field is a floor constructed from a solid, rolled steel shape, with fillets and sharp, true edges, which is not subject to buckling, warping or bending.

The longitudinal ribs formed by the interlocking flanges of the sections used, form a horizontal plate girder of great stiffness which distributes the stresses uniformly.

The sections of this floor may be riveted, bolted or welded together. For light floor loads, such as dwellings, apartment houses, hotels, institutional and educational buildings, the individual sections need not be attached to each other.

These floors eliminate all temporary plank flooring, all wood forms, all reinforcing steel for floor slabs, and all reinforcing mesh or fabric for floor slabs. They can also be used in roof construction.

And All-Steel Roof Decks

Steel roof decks are also attracting a lot of attention these days. The plates for the deck illustrated are rolled from special copper-bearing steel, and finished with a coat of light gray semi-gloss paint. On special order either tight coat galvanized or toncan sheets can be furnished.

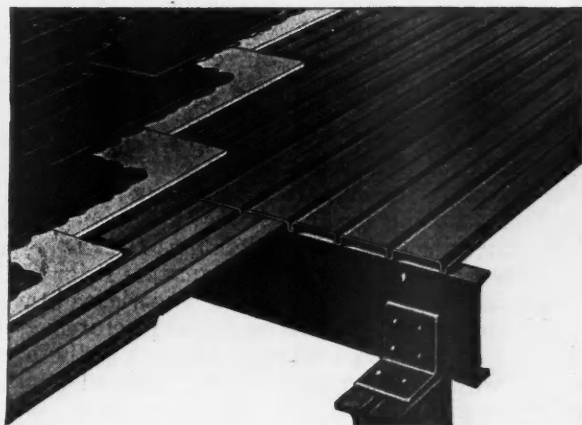
The plates are formed in three widths, 6, 12 and 18 inches, the 18-inch being standard. Reinforcing ribs, $1\frac{1}{2}$ inches deep, with a $\frac{1}{2}$ -inch base, are rolled into the plate 6 inches on centers. These ribs are uniform in cross-section until near one end where they become sufficiently smaller to permit easy end lapping without distorting the deck in any way. The laps are always made directly over the purlins.

The sides of the plates are designed so as to interlock. In erection, the depending flange of one plate nests into the channel flange of the next.



Left: All-Steel Floors Are Exceptionally Rigid and Facilitate Rapid Construction.

Below: These New Steel Roof Decks Are Incombustible and Inexpensive.





Bernard L. Johnson



Robert H. Morris



Delbert W. Smith

Veteran Staff Men Honored

Johnson, Morris and Smith Chosen as Vice-Presidents of American Builder Publishing Corporation

AS a sequel to the election of Henry Lee and Samuel O. Dunn, formerly vice-presidents, to the chairmanship and presidency, respectively, of the American Builder Publishing Corporation, as noted in last month's issue, other elections and appointments have been made as follows: Bernard L. Johnson, editor of the AMERICAN BUILDER AND BUILDING AGE, has been elected vice-president and a director; Robert H. Morris, business manager of this publication, has been elected vice-president and a director; and Delbert W. Smith, dean of the advertising sales staff, has been elected vice-president.

The service of these three individuals in the building and publication fields has been notable. Mr. Johnson has been editor of the AMERICAN BUILDER AND BUILDING AGE and of its predecessor publications, the AMERICAN BUILDER, and the *American Carpenter and Builder*, for more than twenty-two years, starting in February, 1908. Mr. Smith began a year earlier, joining the advertising staff of the old *American Carpenter and Builder* early in 1907. Both of these men were born in eastern Michigan and together attended Kalamazoo College and the University of Chicago, graduating in 1906. When first out of college, Mr. Johnson specialized in architecture and engineering, and Mr. Smith in business administration and merchandising. From the first they have been effective units in the development of the AMERICAN BUILDER.

Mr. Morris came into the AMERICAN BUILDER organization through the purchase of *Home Building* and its merging with the *Building Developer*, and afterwards with the AMERICAN BUILDER. Prior to this, Mr. Morris had had a great deal of experience in working with contractors, dealers and manufacturers. Following the war, he was engaged overseas in the export business, was field secretary of the National Builders' Supply Association, was then associated with a promi-

nent merchandising and research agency, and was active in the organization of the National Better Home Builders' Association.

As business manager of the AMERICAN BUILDER AND BUILDING AGE, Mr. Morris has collected all pertinent facts and data to put the sale of advertising space on a thoroughly modern and scientific basis. He has directed intensive fact-finding surveys of the building industry, amassing such a fund of information that he is now recognized as one of the best informed merchandising counselors in the building and construction field.

Mr. Johnson, in addition to editing the AMERICAN BUILDER, has found time to write and compile a number of books on home building, construction details and allied subjects. He has also served as editor of the *Woodworkers' Review*, *Dealers' Building Material Record*, *Cement World*, *Farm Mechanics*, and the *Building Developer*. He was awarded Honorable Mention in the 1930 Editorial Awards by the Associated Business Papers for the best editorial. He is a member of the President's Conference on Home Building and Home Ownership, serving on the Home Modernizing Committee.

Mr. Smith's contribution to the cause of good business and constructive merchandising in the building field has been outstanding for more than twenty years. Covering the states of Ohio, western Pennsylvania, Indiana and Michigan, he has built up a relationship of confidence and loyalty among manufacturers, sales executives and advertising agency counselors that is almost unique in the business paper field.

The addition of these three new vice-presidents to the official family of the Simmons-Boardman organization emphasizes the control of the AMERICAN BUILDER AND BUILDING AGE by men long experienced in this field and intimately associated with the publication throughout the period of its development.

Building Activities

The Month's News of the Industry

Construction Investment Trust Now in Operation

THE Construction Investment Trust, Oscar Rosenthal's project to put the Chicago building industry back on its feet, received the approval of the State of Illinois and was officially launched on November 14, and started functioning immediately.

The Illinois Securities Commission has authorized the issuance of an initial 1,000,000 shares of \$50 each, or a total par value of \$50,000,000. Another million will be issued when needed and then another, and so on. Already, according to Mr. Rosenthal, this first \$50,000,000 has been pledged by labor and by labor employers and manufacturers.

125,000 Union Men Pledged

The Chicago Building Trades council, comprising 125,000 union men, has pledged the subscription of each member to 10 shares, which would total \$62,500,000. At present, according to Mr. Rosenthal, there are only about 30,000 men working, so this would mean only \$15,000,000 at the start. He points out, however, that gradually the other men will start making payments as work begins and wages are paid.

In addition, the building trades council, by resolution, has asked the unions to take as much as possible from their treasuries and invest in the trust. Already the Painters' District council has invested \$10,000; the Electrical Workers No. 134, \$10,000; the Bridge and Structural Iron Workers, \$5,000, and the Hod Carriers and Laborers, \$5,000. Other unions are acting as rapidly as the matter can be brought up at regular meetings, it was said.

Builders Take Up Plan

In addition to the unions, practically all the important building industry organizations of employers have approved the Rosenthal plan, and employes of builders, architects, realtors, and material dealers, as well as the big construction and material interests themselves, are expected to subscribe heavily for shares in the trust.

Money will be available at reasonable rates, with the commission only large enough to cover the actual expense of operation.

One of the first steps taken by the new organization was a decision to call on the governor of Illinois to start a modernization program, similar to that

Coming Events

- Dec. 2-5, 1931—The President's Conference on Home Building, final General Session, Washington, D. C.
- Dec. 7, 1931—National Homes Finance Corporation, First Annual Stockholders Meeting, Congress Hotel, Chicago.
- Dec. 7-8, 1931—National Builders Supply Association, Annual, Hollenden Hotel, Cleveland, Ohio.
- Dec. 7-9, 1931—Associated Leaders of Lumber and Fuel Dealers of America, Annual, Congress Hotel, Chicago.
- Dec. 12, 1931—Massachusetts Retail Lumber Dealers' Association, Annual, Hotel Statler, Boston.
- Jan. 9-15, 1932—American Road Builders Association, Annual Convention and Road Show, Statler and Book - Cadillac Hotels, Detroit, Mich.
- Jan. 12-15, 1932—Ohio Association of Retail Lumber Dealers, Annual, Toledo.
- Jan. 13-14, 1932—Retail Lumber Dealer's Association of Indiana, Annual, Claypool Hotel, Indianapolis.
- Jan. 14-16, 1932—Mountain States Lumber Dealers Association, Annual, Cosmopolitan Hotel, Denver, Colo.
- 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 Lumbermen's Association, Annual, Minneapolis Auditorium, Minneapolis, Minn.
- Jan. 20-22, 1932—Pennsylvania Lumbermen's Association, Annual, Bellevue-Stratford Hotel, Philadelphia.

undertaken in Indiana, in the interest of unemployment relief.

Rosenthal Heads the Trust

Mr. Rosenthal, president of the Construction Investment trust, is president of the National Association of Building Trades Employers and also head of the Builders Association of Chicago and the Illinois Builders league. He is an officer or director in a long list of national organizations.

N. C. Mather, vice-president of the

trust, is vice-president of the Lord & Bushnell Lumber Company and president of the U. S. General Underwriters. J. B. Cornell is secretary-treasurer of the trust.

In addition to Mr. Rosenthal and Mr. Mather, the other directors of the trust are Patrick F. Sullivan, president of the Chicago Building Trade council; A. J. Druecker, president of the Material Dealers Association of Chicago; William Schlake, president of the Illinois Brick Company; and T. J. McGuire, president of the Moulding-Brownell corporation.

Promote Rotating Employment

ARRANGEMENTS for a series of meetings throughout the country for the purpose of securing adoption of the rotating employment plan wherever practicable on construction operations are being completed by Col. William A. Starrett of New York, vice-president of the Associated General Contractors of America and the member of President Hoover's Organization on Unemployment Relief who has been delegated to promote employment rotation in the construction industry.

Oil Burner Firms Merge

A MERGER of the Silent Automatic Co. and the Timken-Detroit Co., under the name of the Timken Silent Automatic Co., has been announced. The merger is to be effective as of Jan. 1, 1932. In the meantime the two companies will be operated independently, but with a community of interest non-existent in competing firms.

Col. Fred Glover, president of the Timken-Detroit Axle Co., has been named president of the Timken Silent Automatic Co. No change in the personnel is contemplated for the present.

Wales Named President

FRED A. WALES has recently been elected President of Aluminum Colors, Inc. Mr. Wales became associated with this company shortly after it was organized in 1929, and in the capacity of Vice-President, was actively engaged in the development of the Alumilite process for treating and coloring aluminum and its alloys.

Ralph E. Pettit has been appointed Sales Engineer and will be identified with the promotion and sales service of the Alumilite process. The offices of Aluminum Colors, Inc., have recently been moved from 401 Michigan Street to 537 East Washington Street, Indianapolis, Ind.

CURRENT CONSTRUCTION FIGURES

Residential Building Shows Improvement in Face of Slight Total Decline

OCTOBER was marked by a revival of business and financial confidence which appeared to be a definite indication of better conditions, especially since the period of depression has continued, to a large extent, on the basis of general pessimism.

This step toward recovery had not, however, gathered sufficient momentum to affect the volume of building contracts, which decreased slightly more than two per cent from the September total. Residential building, on the other hand showed a gain of nearly six per cent over the preceding month. Total October contracts amounted to \$338,205,597, which was divided between the various important classes as follows:

Residential Buildings	\$138,496,087
Commercial Buildings	45,965,700
Factories	9,735,770
Educational Buildings	16,125,340
Hospitals and Institutions .	8,642,150
Public Buildings	5,359,970
Religious and Memorial ..	4,431,020
Social and Recreational...	18,741,690
Public Works and Utilities	90,707,870

Total\$338,205,597

These figures cover the volume of contracts awarded for the entire United States as estimated by the AMERICAN BUILDER AND BUILDING AGE. They are based on the figures for contracts awarded in the 37 eastern states, as reported by the F. W. Dodge Corporation, with factors added to account for contracts in the 11 states west of the Rocky Mountains, and for the smaller, unreported work not covered by the Dodge reports.

The construction volume for the 11 western states normally amounts to about 10 per cent of the volume for the balance for the country. During September the western volume fell below its normal proportion but increases during October restored it to its normal place at 10 per cent.

The Dodge reports cover only a portion of the new building, modernizing and repair work of less than \$5,000, a large portion of which is carried out in the rural districts and small towns. This work normally amounts to about 25 per cent of the reported volume, varying with the seasons and changing conditions.

The stimulation of rural building follow the harvest season, the movement to provide grain storage on farms and the exceptionally favorable weather this year have pushed this volume above normal proportions in October and a

factor of 27 per cent is necessary to account for it.

Practically all of this work is residential or farm buildings and has, therefore, been classified under the heading Residential Buildings in the tabulation.

Associations Merged

A MEETING of manufacturers and association staff men of the North Carolina Pine Association, and the Southern Pine Association, was called recently for the purpose of completing the details of an amalgamation of the two associations.

This means that one board of directors will dictate the policies of the organized production of Southern yellow pine from the entire eleven Southern states, and that yellow pine will be made and marketed under one set of grade rules and policed by one staff of inspectors.

Moulding Standard Revised

A COMPLETE revision of the No. 7000 series of American Standard Moulding has been made and is being published by the Central Committee on Lumber Standards. This revision, which was prepared under the direction of a committee representing all branches of the lumber and millwork trades and the American Institute of

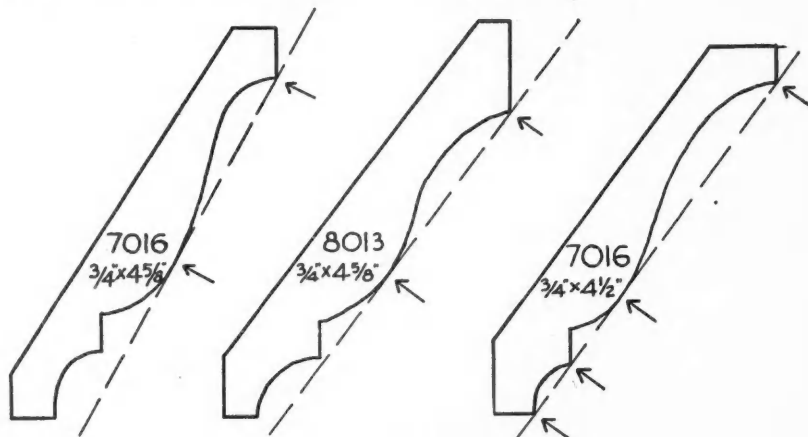
Architects, was designed to provide standard designs which would be consistent with good architecture and also with the current American Standard sizes for finishing lumber. The new designs are the original work of Emory Stanford Hall, A.I.A., who was a member of the special moulding committee.

Dealers Reelect Hager

THE Fifteenth Annual Convention of the National Retail Lumber Dealers' Association, was held October 27 to 30, at the Book-Cadillac Hotel, Detroit, Mich. A. J. Hager, Hager and Cove Lumber Company, Lansing, Mich., was reelected president for the coming year.

Plan All-Tile House

THE Associated Tile Manufacturers, Inc., have signed a contract for construction of a residence built inside and out of tile, to be shown as part of the Housing Exhibit of A Century of Progress Exposition, Chicago's 1933 World's Fair. This is the first contract signed for the construction of a building in the Housing Group. Other groups of building material producers and large individual units in the industry are making plans to erect buildings in the Housing Group to demonstrate the uses of their materials to visitors to the 1933 World's Fair. The object of the exhibit is to demonstrate how attractive living quarters can be provided at reasonable cost for people in moderate circumstances.



Corresponding Designs of a 5-inch Crown Moulding in the Three Series. The pattern from the old 8,000 series, shown in the center, is too wide to be produced from kiln dried strips used for the manufacture of American Standard 5-inch finish; it has but two points of contact for machining with one point coming in the center of the moulding making it difficult to run without mismanufacture; and its contours are uninteresting from an architectural standpoint. The pattern on the left is from the original 7,000 series and while embodying better architectural lines, it has the deficiencies of the old 8,000 pattern from the standpoint of width and machining. The pattern on the right, from the revised 7,000 series, eliminates all the deficiencies of the other two patterns.

BEST PROSPECTS FOR BUILDING INDUSTRY LIE IN NEW DWELLING CONSTRUCTION

Many Eastern Communities Are Active in Residential Building

REPORTS from many leading building centers point to a definite need for single family houses and for two and three story apartment buildings. Already, in many communities, advantage is being taken of the rock-bottom prices now prevailing and homes are being constructed in good numbers.

New York Area Active

The metropolitan area of New York is particularly active at this time in residential construction. In the suburb of Larchmont, 135 dwellings have been sold this year and an active demand is reported for houses of the \$15,000 class.

Building in Queens County, New York, has risen 20 per cent during the past year. Plans filed so far this year provide for the housing of 11,197 families. Preference for housing costing from \$6,500 to \$8,500 is reflected in the sales. Moderate-priced apartments, renting from \$14 to \$20 a room and six and seven-room houses selling for \$6,500 to \$8,500 have been specially successful. Long Island developers report a steadily increasing real estate market that indicates activity of boom proportions in the spring of 1932.

Report Sale of 254 Dwellings

One firm of Long Island developers, recently reported the sale of 254 dwellings during a period of six months for a total of \$1,728,000. In this number were represented practically every type of house from a modest bungalow for \$2,500 to a pretentious residence for \$25,000.

Another developer reports that three hundred homes have been built on his 1,000 acre tract in less than two years.

At Bayside, Long Island, N. Y., a development organization has just opened for inspection the first of 400 brick and stone houses which it plans to erect. These builders have erected more than 2,000 houses in other sections of the island.

New Jersey Also Active

A new development that will cost more than \$2,000,000 has just been announced for Nutley, N. J., where a tract to accommodate the building of 250 single family dwellings has been purchased and is now under development by the Harsam Realty Company. Six homes of English and Colonial design are at present in various stages

of construction. The owners are confining their dwellings to the moderate priced class.

Reports from southern Jersey indicate that this section will be more active now than it has been in many months. Several apartment buildings are being contemplated in Atlantic City alone.

The Board of Realtors of the Oranges and Maplewood, New Jersey, reports for the month of September the largest number of residential sales of any September since 1926.

Connecticut Cities Not Inactive

Many communities in Connecticut are now enjoying a fair volume of residential building. Building activity in the city of Bridgeport continues to maintain a steady level. Architects announce that with the present low cost of material there is a considerable increase in the number of inquiries by prospective builders of one family houses and it is anticipated that the coming winter will see a marked activity in small building construction in and around the city.

Increased Activity in Philadelphia Area

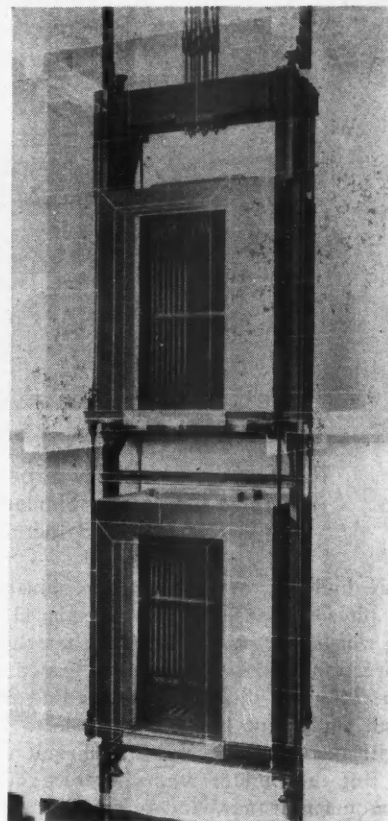
Homes seem to be leading the upward trend in the building industry in Philadelphia and vicinity. Many recent permits have been taken out for house operations. More operative builders are entering the field again and others are now considering operations. Dwelling construction accounted for approximately 50 per cent of all work started in Philadelphia during the month of September. From all indications, there will be a fair amount of new dwelling construction during the fall and winter months, and it is likely that it will continue right into spring.

New Apartments in Philadelphia

An increase in apartment construction in Philadelphia has recently been noted. Local builders and subcontractors are interested in a number of apartment building projects for erection. An apartment building, containing 102 suites, is being planned by Karl F. Otto, architect. Another apartment of four stories of brick, cast stone and steel construction, is soon to be erected. Several large apartment buildings are contemplated for Germantown and in Delaware County.

Use Double-Deck Elevators

FOR the first time in the history of building construction double-deck elevators have been installed in a skyscraper. The building in question is the new 67-story home of the Henry L. Doherty and Cities Service Companies in the heart of New York's financial district. In addition, another innovation in office building transport-



America's First Double-Deck Elevators Now Being Installed in the Cities Service Building, New York City.

tation has been installed—escalators to handle the rush hour crowds between the 6th floor and the basement.

Damages Are Awarded

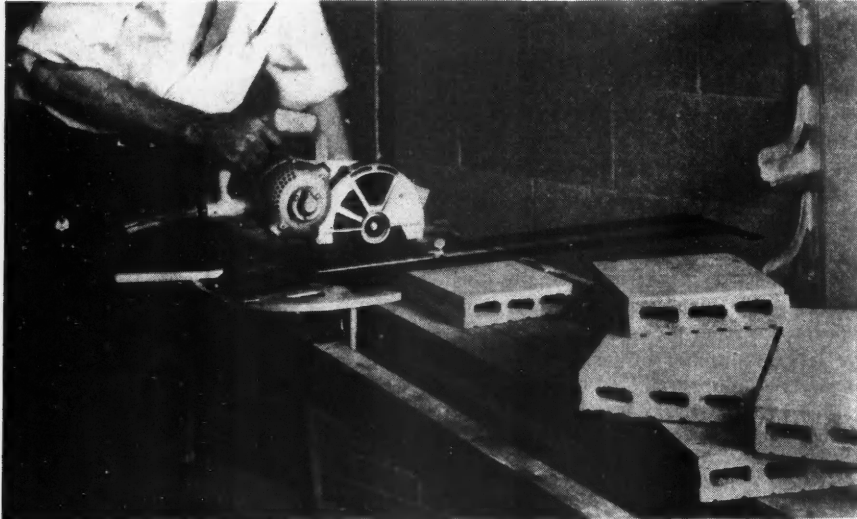
A DECISION, important to the building industry as a whole, was recently rendered by the Supreme Judicial Court of Massachusetts, in a case where the contractor substituted two layers of tar paper for the Cabot's Quilt insulation specified in the contract.

This decision plainly states that, although the defendant (the contractor) claimed to have acted in good faith, he is liable for damages to the extent of the reasonable cost of making the structure comply with the specification, where he has intentionally defaulted by failure to follow the specifications.

This is a point on which there has been considerable legal confusion.

Machines Perform the Labor

Man Power Is Being Displaced by Mechanical Power,
Directed by Brain Power, in This Modern Machine Age



This Electric Hand Saw, Speeded Up for the Cutting of Stone, Tile, Terra Cotta and Similar Materials Speeds Up Work on the Job, and Increases Profit Possibilities.

In building, as in all other industry, man power, in the physical sense, is being displaced by machines. In other words, the man's place in the scheme is to supply brains, direction, control, instead of brawn. The builder who fails to recognize this development and depends on old methods and equipment has little chance to meet competitive prices with quality work, and in sufficient volume to show a profit.

But the builder who does recognize the developments of the machine age, and adapt his methods to them, is in a better position to win success today than ever before. This is just as true for the small organization as for the large. Modern machines are being developed for every type of work. Take, for example, present day methods of cutting stone, tile and terra cotta with those of a few years back.

Electric Hand Saw Cuts Stone

Within comparatively recent times the cutting of masonry materials on the job was a slow, laborious task, and of course costly because of the labor involved. Today a small portable, electric hand saw does the same job in a small fraction of the time, and does it better too. One such saw is shown in use cutting glazed tile during the construction of the Mellon Institute, in Pittsburgh.

This saw is similar to the familiar electric hand saw for cutting lumber and, in fact, can be used for that purpose also, but has been speeded up to 3,000 r.p.m. for work on the hard materials. It is equipped with special abrasive discs, in place of saw blades, which are adapted to the various materials to be cut, or scored. The cutting depth is adjustable from zero to 2 inches, which is the maximum capacity.

This saw can also be mounted on a saw table for light cutting instead of being used for a hand saw. This takes

Light and Easily Portable But with Ample Power,
a Floor Surfacer Which Can Be Used to De-
velop a Profitable Business.

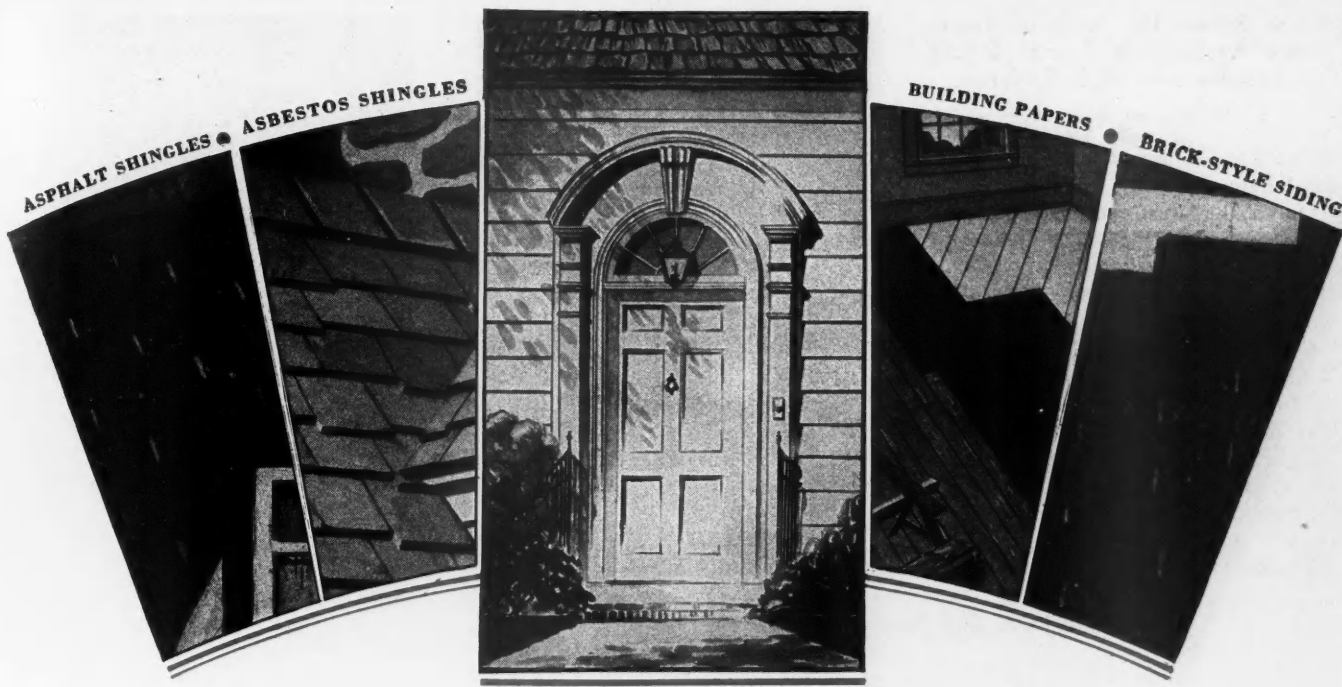
For further information on any of the products mentioned on these pages write American Builder and Building Age, Information Exchange, 105 W. Adams St., Chicago.

care of operation where much cutting must be done in one place and portability is of less importance.

Profit in Floor Finishing

It is not hard to remember the old laborious method of scraping and finishing floors by hand, in fact some work is still done that way. But it can't be very profitable. Modern floor surfacing machines do better, faster work and make possible greater profits. The floor finishing and refinishing business holds big possibilities, either as a special





MAKE MONEY

ringing doorbells

RU-BER-OID WILL HELP YOU

THERE is profitable RU-BER-OID business inside most every property owner's door. Ring door bells and RU-BER-OID will help you get your share of this business.

To some a new colorful fire-resisting roof laid right over the old wood shingles will appeal. RU-BER-OID has a complete line of both asphalt and asbestos shingles. You can offer weights, designs and colors to fit every pocketbook and please every taste.

To others the thrifty suggestion of a brick-style siding job will arouse interest. This beautiful heavy slated and deeply recessed "brick-like" siding in buff, red or tapestry "face brick" does a double duty job. It inexpensively insulates as it beautifies. It stops the cost of painting forever.

Still others may be interested in a remodeling job or a new home. RU-BER-OID roofs will give them the most in both beauty and protection for their roofing dollar. Safe-dry Reinforced Building Paper used behind window frames, clapboards, brick veneer or under hardwood floors will repay its cost over and over again in fuel savings and freedom from draughts and dampness.

All these distinctive RU-BER-OID products are nationally advertised and known. You don't have to waste time proving their quality. They also save time in application.

Make money on this complete line. Ring door bells. Your RU-BER-OID dealer or the nearest RU-BER-OID office listed below will gladly help and equip you. Call or write for full information, but get started today.

The RUBEROID Co.

ROOFING MANUFACTURERS FOR OVER FORTY YEARS

Sales Divisions: RUBEROID MILLS—CONTINENTAL ROOFING MILLS
SAFEPAK MILLS—H. F. WATSON MILLS—ETERNIT

ASPHALT SHINGLES AND ROLL ROOFINGS—ASBESTOS-CEMENT SHINGLES AND CORRUGATED SHEETS—ASBESTOS, ASPHALT, COAL TAR PITCH AND FELT BUILT-UP ROOFS—ASBESTOS: SHEATHINGS, FELTS, MILL BOARD, PIPE COVERINGS—KRAFT WATERPROOF PAPERS—COAL TAR AND ASPHALT FELTS AND SHEATHINGS—ASPHALT WATERPROOFING PAINTS AND CEMENTS—DRY FELTS AND SHEATHINGS

Offices & Factories: New York, N. Y.—Chicago, Ill.—Millis, Mass.—Erie, Pa.—Baltimore, Md.—Mobile, Ala.

WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

**Low Priced 1½ to 2-Ton Trucks
Are Available in 9 and 12-Foot
Lengths and All Body Types.**

business or as extra work during the dull building season.

One of the latest and most improved machines which has been designed for such work is illustrated. It has a large capacity on large areas but is also efficient on small areas which makes it highly adaptable. While provided with plenty of power it is, at the same time, light and compact and easily portable. One man can carry it without effort.

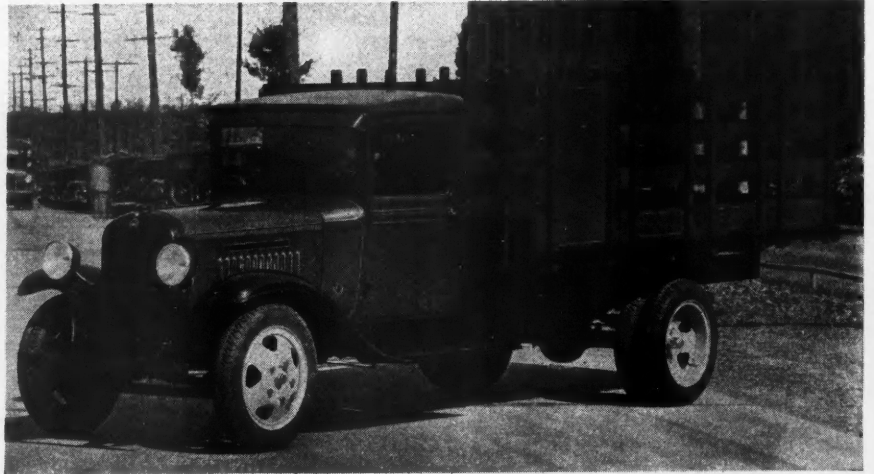
This machine, which has been put out by a company of long experience in floor surfacing machine manufacture, is available on convenient terms to anyone who is interested in getting into the floor surfacing business.

Making Keys Also Pays

Another machine which offers extra profit opportunity is a new key cutting machine, the operation of which offers a striking contrast with the old method of filing keys by hand. Its operation is entirely automatic. With it, a smooth, finished, perfect-fitting key can be made in one operation.

There is an automatic screw feed which feeds the carriage for duplicating all makes and sizes of cylinder keys without the attention of the operator; and a tension lever assures uniform contact between the file and key. An automatic release cuts out the machine when the key is finished. There is also a micrometer adjustment which permits the new key to be cut slightly oversize if the old key is worn.

The cutting of automobile keys by code is greatly simplified by this new machine. It does not require any depth keys, guides, masters or patterns of any kind. One spacing guide takes care of the spacing of all automobile keys and one depth controller for each make of key gives the correct depth.



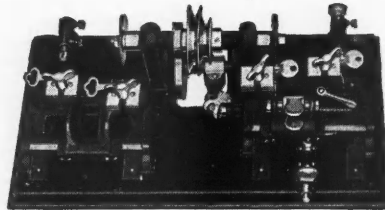
Sixty Horsepower Instead of Two

Not only man power but horse power is being replaced by machines. Today the motor truck has almost entirely replaced horse drawn wagons and the truck manufacturers are turning out models to meet every practical requirement. One of the latest of the new models is illustrated.

This is a light, 1½ to 2-ton unit with a six cylinder 60-horsepower motor. It is said to be the lowest priced unit of its rated capacity and the lowest priced truck ever produced by the well known company which puts it out.

Both 9 and 12-foot body lengths are made possible with this unit through the use of two wheel bases, 131 and 157 inches, while dual wheels are offered as optional equipment. On the 157-inch base they are provided at no additional cost.

A complete line of bodies is also offered to adapt this truck to all types of work.



**Completely Automatic Key
Cutting with This Machine
Is a Good Sideline.**

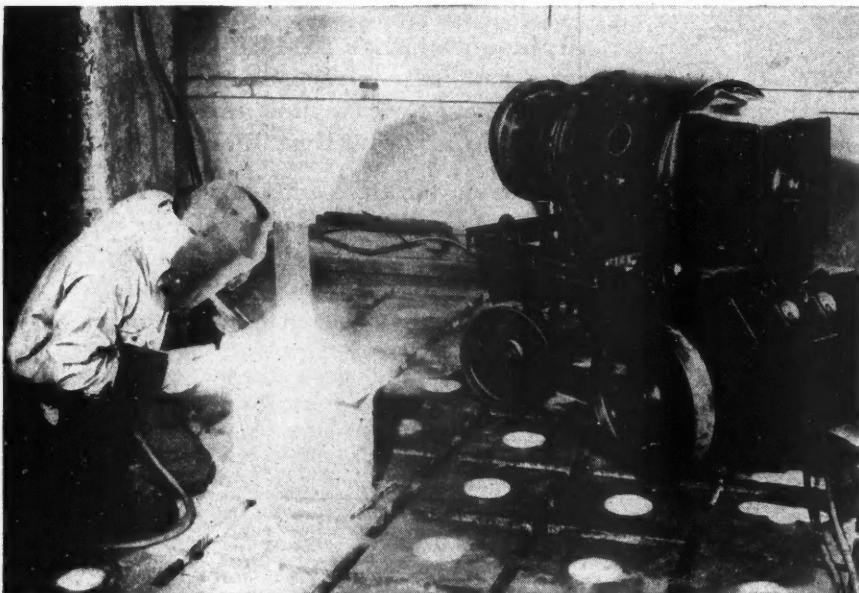
Improved Welding Equipment

Within the last few years welding has been coming to the fore quite rapidly as a method of steel building construction, with the result that manufacturers have greatly improved the equipment for field welding. One of the latest announcements in this field is a complete new line of single-operator welding sets covering 100 to 600 ampere ratings.

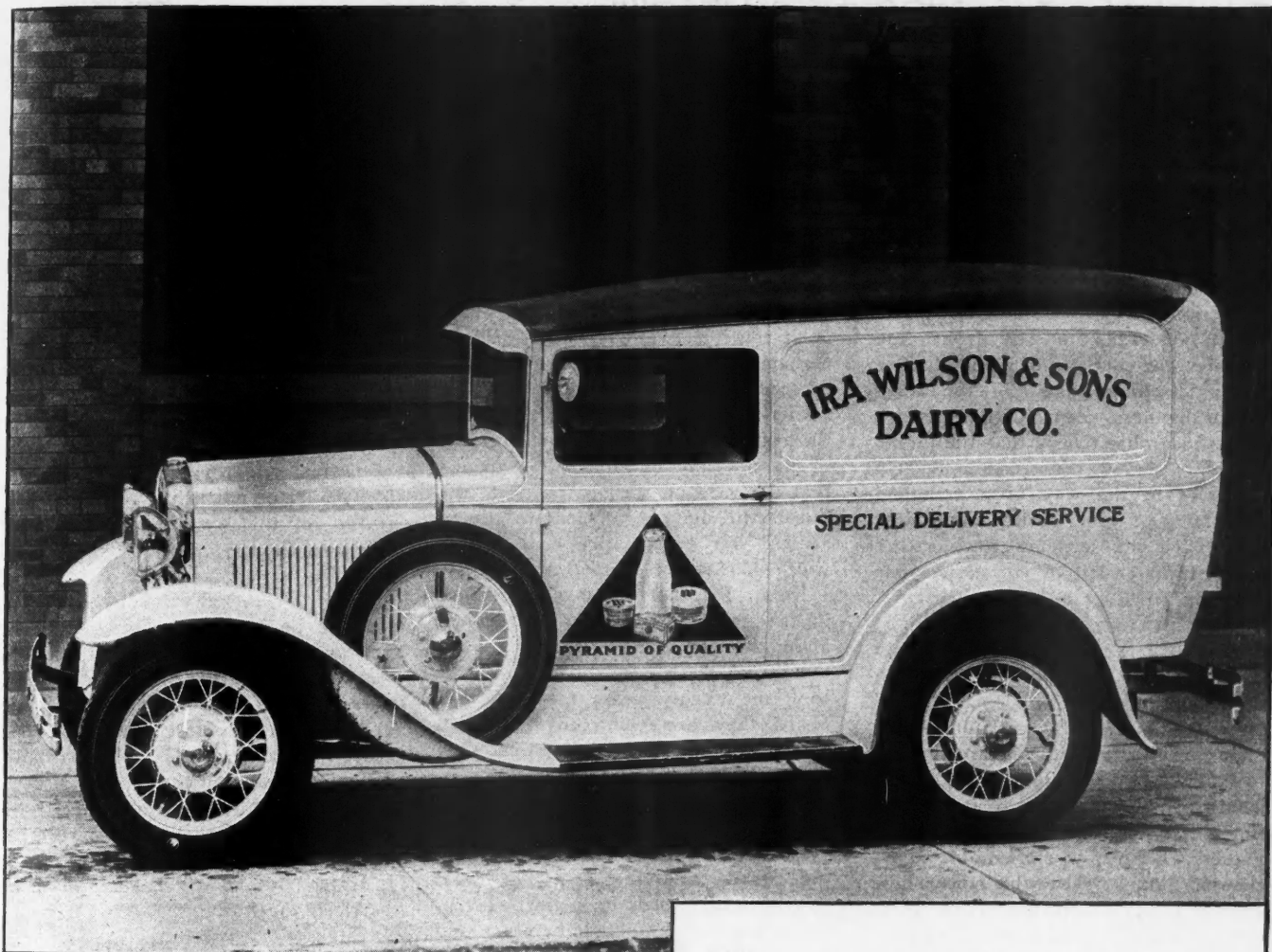
This line includes both portable and stationary sets, the basic form being stationary, with but a slight change needed to make it portable. The various types include those for operation on either alternating or direct current at all standard voltages and, in the case of alternating current, standard frequencies. Two and 3-phase gasoline-engine-driven sets are also available.

These sets offer compactness and light weight together with improved welding characteristics. They are simple in operation and a method of control is used for which a majority of welding operators show a preference.

**Here Is One of the Improved
Types of Welding Sets Developed
for Welded Construction.**



BUILDING A BUSINESS



THE standardization on Ford equipment by one of the country's most successful dairy companies is significant. Starting from scratch a little more than a year ago, this concern now operates on a one-thousand-can schedule, serving forty-nine retail and fifteen wholesale routes.

Ira Wilson & Sons Dairy Company is one hundred per cent motorized, depending on seventy-six Ford units to maintain efficient and economic delivery service.

The reliability and economy of their delivery service as well as the advertising value of the handsome Ford units have proved to be important contributing factors to this Company's success.

Ford delivery cars, trucks, and salesmen's cars are used to fit Wilson's varied needs. The same Ford reliability and true economy are at your command.



WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE



IRA WILSON & SONS DAIRY CO.



2155 TILMAN AVENUE
DETROIT, MICHIGAN

October 20, 1931

Ford Motor Company
Detroit, Michigan

Gentlemen:

Our success with Ford cars and trucks has been so satisfactory in every respect that we feel we should give you the applause you merit.

We adopted Fords exclusively after a careful investigation had convinced us that they would give us economical and reliable service. After a little more than a year of experience it gives us pleasure to say that our expectations have been fulfilled.

Seventy-six Fords are now operated in our wholesale and retail business. They include trucks, light delivery cars, and salesmen's cars. Our deliveries are made on time. Our transportation costs are unusually low for the creamery industry. Maintenance expenses are exceedingly low. We believe that the handsome appearance of our Fords has real advertising value.

Many creameries are asking us how we keep our transportation costs so low. We tell them all there is no secret. We merely choose the best equipment — Fords.

Sincerely yours,

IRA WILSON & SONS DAIRY CO.

C. L. Wilson

C. L. Wilson
President

CLW/S

"Hedging" on the Zoning Law!

Being Number Two of "COUNTER-ATTACK"

By C. B. GRIFFIN

Department of Buildings, Seattle, Wash.

YOU public counter jumpers know the kind! That particular type, against the unreasonable ire of which four feet of solid oak counter brass bound, unscalable under ordinary circumstances, seems but inadequate protection!

You, veterans of the front line trenches, the counters of a public office—the "listening posts" of the army whose banners read "Civil Service," and whose objective is that the public be civilly served, often encounter real obstacles in the way of a complete attainment of your worthy aims. How often have you seen an attack gather to the right or left of you along your linoleum-covered breastworks! (A counter man can teach a psychologist many things.) How often have you been reluctant to approach knowing that your first word will be the signal for a fusillade deadly in intent—poisonous in effect! Yet, you are hopeful to the last! You are prepared for punishment—you take a lot of it. Sometimes (confess it) you waiver a bit, wither a bit, yet you are not sold on the too popular idea that the public servant is but a step higher, or lower (or something) than a public enemy!

On the Building Department Front, Zoning Sector:

Lady, irate, "Say, you tell me if a man can build two houses on three lots! He's started to dig right up close to my hedge and —"

Clerk, "In what part of the City is this happening—in what zone? Do you know how much street frontage he has?"

Irate, "Why, he's got seventy-five feet and I planted that hedge myself twenty years ago when we built our house and —"

Clerk, "Now let's see, if they divided the property in half each lot would be thirty-seven and half feet wide, how wide do you suppose —"

Irate, "The hedge is at least seven or eight feet wide now and —"

Clerk, "How big do you suppose the houses are to be? There is no permit yet, they are evidently just digging the —"

Irate, "Yes sir, that's exactly what they ARE doing! They are practically digging it up by the roots and they

surely cannot be permitted to ruin the looks —"

Clerk, "The law does not prohibit them from building up to three feet of the lot line in a residence zone provided that —"

Irate, "Yes, providing that they don't touch a twig of my hedge. It's a shame that a taxpayer can't get any protection for all —"

Clerk, "The law does not prohibit them from building up to three feet of the lot line on one side provided that the yard on the other side of the house will be of sufficient width to account for twenty per cent of the width of each lot. In other words—"

Irate, "In other words, just because my hedge sticks over in their old lots about three or four feet they can come along and slash it all down. Why it took me twenty years to— Why I heard they are going to build two thirty-foot houses there! Can they crowd them up like that?"

Clerk, "Well now let's see—in a First Residence Zone they must leave twenty per cent of each lot open in side yards and that's— The total width of side yards on a thirty-seven-and-a-half-foot lot should be seven and a half feet. Yes, they could build two thirty-foot houses there."

Irate, "Humph! I wish somebody would tell me just why I've been paying taxes for all these years! Surely I'm entitled to some protection! It's a shame that anybody can do as they please like that."

Clerk, "Well, I'm sorry, madam, but—"

Irate, "Yes, and 'I am sorry but' I am a taxpayer and I've been paying your FAT SALARY for the last TWENTY YEARS and it seems to me you MIGHT show a little DECENCY and consideration for my hedge and—"

Clerk, "As I understand the situation, there is nothing we can do."

Irate, "But I am not paying you for doing NOTHING! I am paying you for doing SOMETHING!"

Clerk, "I can do nothing. I am not responsible for the law but must obey it the same as yourself and this man who is evidently trying to secure for himself the maximum possible return

SURELY YOU HAVE
SOME INTELLECT



on the taxes he has been paying, out of which, a very small sum has been contributed to my salary during the two years I have been employed by the City. His contribution (the term will please you!) may actually have been greater than yours but, regardless of whether or not it has been, the protection of the law must be afforded him as well as yourself. This is only just."

Irate, "Well, now I didn't come up here to be insulted but I suppose it was foolish to expect anything better from a politician! It's come to a pretty pass when a tax—when a man can crowd houses so close together that— why, I heard that he is going to build a double garage on that property! Are YOU going to let him do that?"

Clerk, "I think that the law will permit it."

Irate, "But he will have to drive in between the houses!"

Clerk, "That will be permissible."

Irate, "But are you capable of realizing that there will be only about seven or eight feet between the houses? Surely you have some intellect! Or have you?"

Clerk, "Well, I'm not so sure, now, but I think that seven or eight feet is enough to drive a car through."

Irate, "But how, in the name of goodness, are they going to get out?"

Clerk, "Get out!"

Irate, "YES! GET OUT! You are exceptionally bright today, aren't you! Don't you see that they'll drive in between the houses and then how in the world are they going to be able to open the doors so's they can get out of the car?"

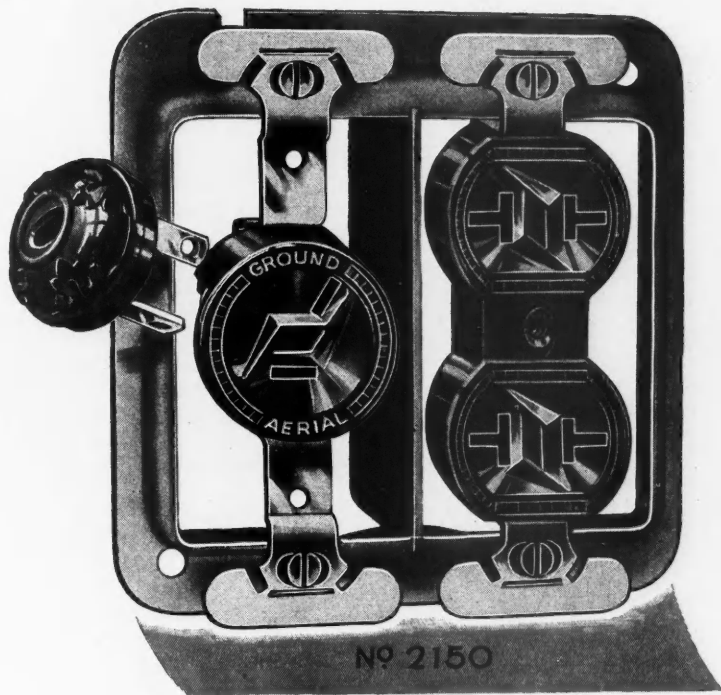
Clerk, "Couldn't they get out of the car in the front or in the rear of the houses?"

Irate Lady, after a startled pause,— "Young man, you can be just as dumb as you please!"

Flounces out.

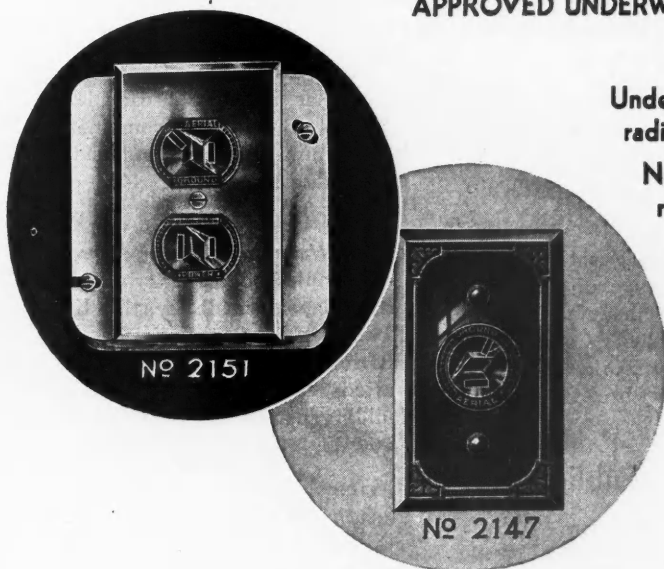
Clerk to himself, "I wonder if there is a job as janitor open anywhere."

NEW ARROW Complete Line of RADIO OUTLETS



Providing connections for
POWER·GROUND·AERIAL
with box cover and barrier

to meet the new requirements
of the National Electric Code
APPROVED UNDERWRITERS GUIDE CARD NO 361 A4·SEPTEMBER 29, 1931



Underwriters have revised their requirements covering low tension radio circuit and power circuits in the same box.

Numbers 2150 and 2151 are specifically designed to meet these requirements for installation in standard 4" square outlet boxes. Furnished complete with box cover and barrier for easy installation by your Electrical Contractor.

Number 2147 for aerial and ground connections only, fits any standard switch box.

Receptacles take standard plates, brass or BAKELITE. Finding grooves in face of receptacle lead the plug fingers easily into place.

The Builder can point to this new device as the last word in electrical accommodations for his prospects.

These Outlets installed with MULTICOUPLER make complete radio receiving systems for apartments, hotels and institutions. Let us send you complete information.

THE ARROW-HART & HEGEMAN ELECTRIC CO.

HARTFORD, CONNECTICUT, U. S. A.

WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE

The Builder's Library

Offered by Book Publishers

"Applied Architectural Drawing"

This book, by Towne R. Abercrombie, has been prepared with the idea of presenting new ideas, and also conveying old ideas in a more usable form, for use as a text book on architectural drawing. It is published by The Bruce Publishing Company, 524-544 N. Milwaukee St., Milwaukee, Wis. Price, \$2.00.

"School Ventilation"

"School Ventilation—Principles and Practices" is the final report of the New York Commission on ventilation, published in book form by the Bureau of Publications, Teachers College, Columbia University, New York City. It exposes the antiquated theories on which 20 state laws are now based and makes recommendations for a model ventilation law. Price \$1.

"Underpinning"

This book, by Edmund Astley Prentis and Lazarus White, published by the Columbia University Press, New York City, is an important contribution to the study of foundations and underpinning. The authors are members of the firm of Spencer, White and Prentis, engineers who have been leaders in the study of this subject. Price \$7.50.

"The Orders of Architecture"

This book covers the Greek, Roman, and Renaissance groups with eighty plates illustrating selected examples of their application. It was written by Arthur Stratton, Architect, and is published by J. B. Lippincott Company, Philadelphia, Pa. Price \$8.00.

Equipment for Buildings

Heating Equipment

Three new booklets on heating equipment have recently been issued by the Heater Division of the Motor Wheel Corporation, Lansing, Mich. "Comfort for All Seasons" covers the Weather Control Unit for air conditioning, "The Most Modern Way of Heating Homes" is on the subject of oil-burning boilers, and "Hot Water" applies to automatic oil-burning water heaters.

Closet Equipment

"Tidy Clothes Closets" is the title of a new booklet from the Knappe & Vogt Mfg. Co., Grand Rapids, Mich., which catalogs and illustrates the various types of hangers for modern closets which are made by the company.

Fireplaces

A new fireplace unit booklet, de-

scribe the Heatilator Fireplace unit and illustrating a number of attractive installations, has just been published by the Heatilator Company, Syracuse, N. Y.

Concealed Radiators

Two new pieces of literature are offered by the Rome Radiation Company, Rome, N. Y., one covering Robras radiators and the other devoted to Rocop convectors.

Boilers and Radiators

A new catalog, No. 1468, on boilers and radiators manufactured by The H. B. Smith Company, Westfield, Mass., is now being offered by this firm.

Concealed Radiators

Erskine copper radiators are described in a recent booklet from the Erskine Copper Radiator Corporation, 1 East 42nd St., New York City.

Contractors' Equipment

Electric Welded Buildings

The Lincoln Electric Co., Cleveland, Ohio, has issued a folder on the advantageous use of bar frames in arc-welded mill buildings.

Paint Spray Equipment

A new catalog of portable spray-painting outfits has recently been published by the DeVilbiss Company, Toledo, Ohio.

Welding Equipment

An entirely new type of oxy-acetylene welding rod, manufactured by The Linde Air Products Company, 30 East 42nd St., New York City, is described in a new broadside being mailed by this firm.

Miscellaneous Publications

Wood Preservation

"For Wood Preservation" is the title of a booklet offered by the Curtin-Howe Corp., 405 Lexington Ave., New York City, dealing with the ZMA pressure treatment for wood preservation.

"Farm Buildings"

This is the title of a new booklet from the Southern Pine Association, New Orleans, La., which contains

twenty-four pages of plans for various types of farm buildings.

Better Homes in America

Better Homes in America, 1653 Pennsylvania Ave., Washington, D. C., has published two guide books for its 1932 campaign. The one covering the campaign for rural communities and small towns is available at five cents a copy, while the one covering the campaign for cities and towns costs ten cents a copy.

"A School Field House"

Lumber Facts No. 29 is the new folder of the National Lumber Manufacturers Association, Washington, D. C., which has been issued under this title. It contains plans and a bill of materials for this building.

Construction Materials

"Steel Reinforcing Bars"

This is the title of Simplified Practice Recommendation R26-30 of the U. S. Department of Commerce. It may be obtained from the Superintendent of Documents, Washington, D. C. Price, 5 cents.

Coated Wall Fabrics

The Columbus Coated Fabrics Corporation, Columbus, Ohio, has prepared a sample book of a few patterns from its 1932 Wal-Tex line. The complete line includes about 190 patterns and will be ready for the trade about the middle of October.

Thermal Insulation

The Flax-li-num Co., St. Paul, Minn., has issued a broadside on its products Bi-Flax, a combination of Flax-li-num insulation and metal lath, under the title "Save 44% of your labor cost."

Waterproof Building Paper

A sample book of all types of waterproof papers made by the Keystone Roofing Mfg. Co., York, Pa., is being distributed by this concern. It includes various waterproof and reinforced building papers.

Paint

Samuel Cabot, Inc., 141 Milk St., Boston, Mass., has published a booklet entitled "The Architects Green Book," which quotes the letters of a large number of architects in regard to their experience with Cabot's Collophanes.

Insulation

Two new folders on house insulation have been prepared by The Wood-Fibre Board Corporation, 51 E. 42nd St., New York City, manufacturer of Arborite All-Wood insulation.

W. C. and A. N. MILLER
tell one of the "Secrets" of their success



A GOVERNMENT OFFICIAL OF A SOUTH AMERICAN REPUBLIC bought this fine home in Wesley Heights. Both kitchen and breakfast room boast floors of Armstrong's Embossed Inlaid Linoleum.

They use Armstrong's Linoleum Floors to help sell fine homes

IT was no haphazard guess that decided what floor material W. C. and A. N. Miller were to use in the rooms where floors receive the hardest wear. These successful realtors in Washington, D.C., knew just what they were doing! Here's what they write—

"In the rooms in which we have used linoleum, four elements have determined its selection. First, it is more resilient than most flooring materials, and consequently is easier on the person who must spend considerable time standing. Second, its insulating qualities result in its being generally more healthful than a colder floor.

Third, the ease with which it is cleaned makes it more desirable for rooms the floors of which might become spotted. Fourth, with proper care, it is practically indestructible.

"We do not confine ourselves to any particular pattern, but generally leave the selection of the design to the purchasers of our homes."

To help you sell!
 A copy of the "Home Decorator's Idea Book" is a mighty useful thing. Fully illustrated in color. It's free. Armstrong Cork Company, Floor Sales Division, Lancaster, Penna.

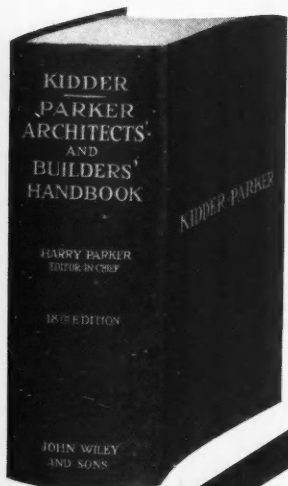


Armstrong's Linoleum Floors

for every room in the house

PLAIN ~ INLAID ~ EMBOSSSED ~ JASPÉ ~ PRINTED ~ LINOFLOR ~ ARMSTRONG'S QUAKER RUGS

WHEN WRITING ADVERTISERS PLEASE MENTION THE AMERICAN BUILDER AND BUILDING AGE



NOW READY!

18th
EDITION

A Complete Revision
Packed With
New, Live, Usable
Information

Kidder-Parker ARCHITECTS' and BUILDERS' HANDBOOK

By the late Frank E. Kidder
Compiled by a Staff of Specialists and
HARRY PARKER, Editor-in-Chief
Professor of Architectural Construction,
School of Fine Arts, University of Pennsylvania

A World-Famous Work-and-Reference Book

Among architects throughout the world Kidder-Parker's "Architects' and Builders' Handbook" stands supreme. It has attained its high position through almost fifty years of continuous and reliable service and today represents the best in architectural practice.

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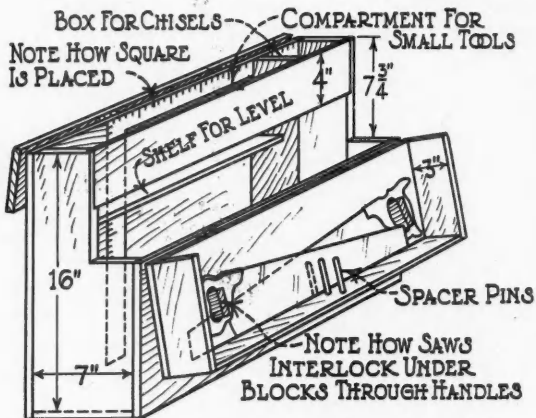
A.B.

Practical Job Pointers

A Practical Tool Chest

I HAVE seen many types of tool chests and made quite a number myself, but until recently I have found none that were satisfactory. Recently I constructed the chest shown in the sketch and am so well pleased with it that I would not use any other type.

The feature of this chest is the compartment for saws.



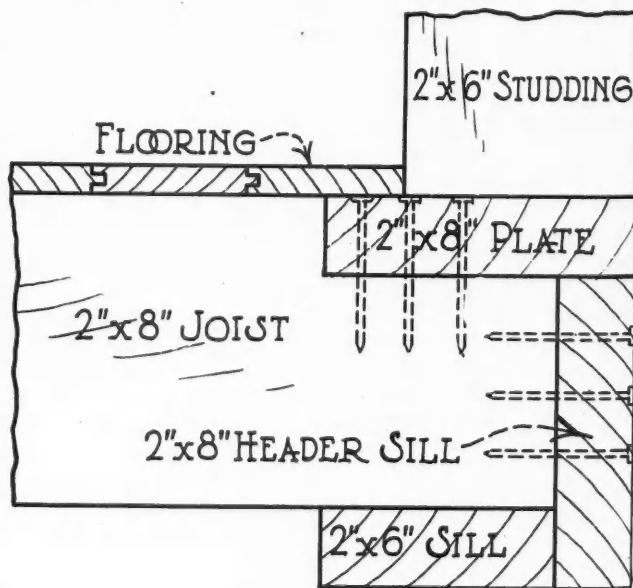
Here is a Practical Tool Chest with Special Provision for Holding the Saws Firmly and Conveniently.

They can be removed or replaced quickly and when in place are held firmly no matter what position the chest may be in. The sketch shows, quite fully the details for building this chest.

OLAF N. GRANVOLD, Comertown, Montana.

A Non-Leaking Granary

I HAVE found, in every community where I have been, that most granaries allow the grain to leak out. This is because most carpenters nail the studding to the floor joists and floor around them. This is a lot of trouble to start with and, if the



Here is a Tight Construction for Granary Floors That Will Prevent Leakage of Grain.

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studding moves out, due to settling or shrinkage, the grain will leak out around the studs. Some of them actually burst out at the end or the floor pulls loose from the end floor joist.

The sketch is a sectional view of the construction I use to avoid this difficulty. All the floor joists are notched in for a plate which is nailed to the studs before they are raised. This plate is two inches wider than the studding. This allows two inches on which to start the flooring without notching it around the studding. It also allows more nailing at the ends of the floor joist.

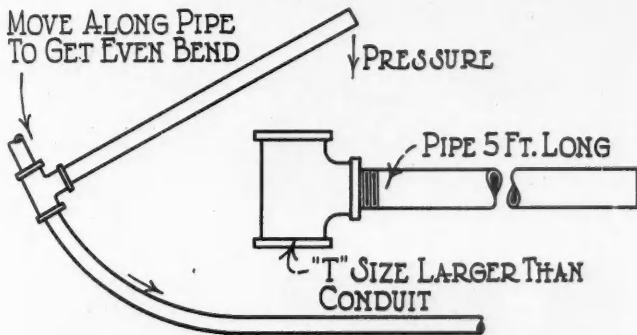
This construction will never allow grain to leak out of the granary if the plates at the bottom of the studding are nailed properly to the floor joist.

ARTHUR MORGAN, Perryton, Texas.

For Bending Conduit

WHEN it is necessary to bend conduit to fit around a curve, a piece of pipe with a Tee end comes in handy. The Tee should be of such a size that the conduit slips through it freely. With the conduit passed through it the pipe acts as a lever as shown in the sketch, and is moved along the conduit to get an even bend.

W. A. WHITFIELD, 1245 E St., Lincoln, Nebr.

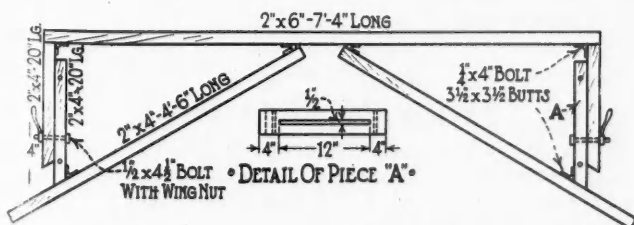


A Length of Pipe and a Tee Form an Excellent Tool for Obtaining a Smooth, Uniform Bend in Conduit.

For Chimney Work

THE sketch shows a roof jack which has proved very handy in building and repairing chimney tops. The construction is plainly shown. When not in use, the bolts in the legs can be removed and the jack folded up. In this way it requires little space in storage and transportation. A pair of these jacks will pay for themselves on two or three setups. They are adjustable for roof pitches of one-fourth to one-half.

C. W. STEINER, Prairie du Chien, Wis.



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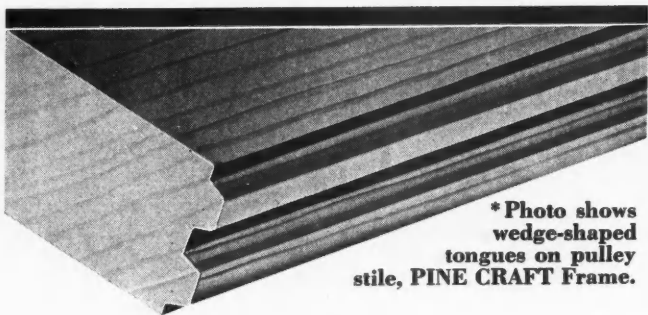
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* Photo shows wedge-shaped tongues on pulley stile, PINE CRAFT Frame.

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Practical Job Pointers (Continued)

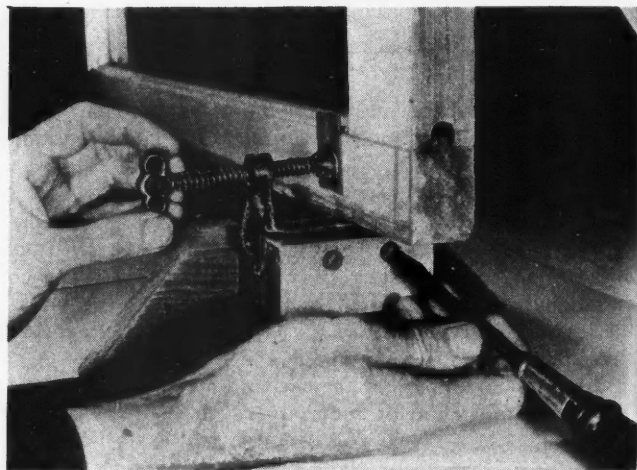
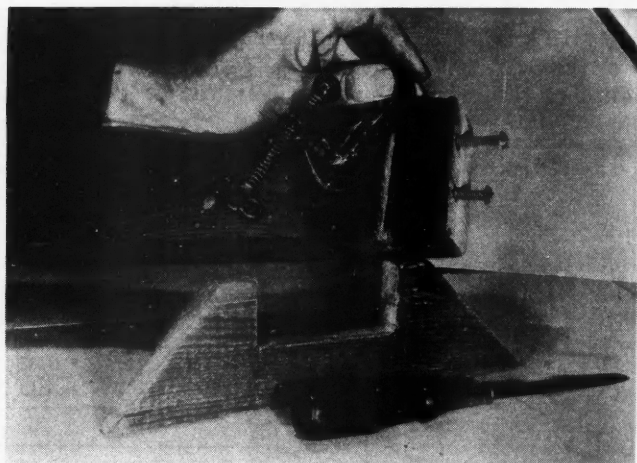
Rack for Planing Sash

WHEN working on window sash, planing the sides of a tight window or installing all-around weather strips, the rack shown in the sketch will hold the sash upright and prevent unnecessary breakage of glass. This rack knocks down for convenient hauling and can be assembled in two minutes with a screw driver.

The rack consists of a piece of two by four about three feet long. This piece is slotted at each end, deep enough to hold the flange of a C clamp. The clamps are held in the slots by two long stove bolts inserted in the ends of the two by four.

Feet for the rack are made by notching pieces of hardwood as shown in the sketch to receive the end of the two by four. The window sash is held in the jaws of the clamps and protected from marring by rubber discs cut from an old inner tube. Once the sash is fastened in the clamps, the rack and sash can be moved, together, to any convenient place, light, or work bench.

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



Handy Vise and Rack for Holding Window Sash on the Job.

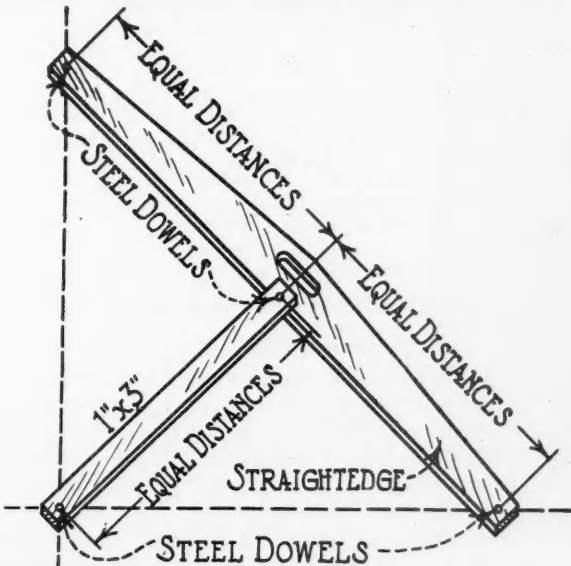
Laying Off Right Angles

ON certain, somewhat rough work, accurate right angled corners are a necessity. Many tools and methods are used for getting these angles but if the ordinary straight-edge is fixed up as shown in the sketch, that is all that is necessary.

Three-pointed steel dowels are driven into the straight-

Practical Job Pointers (Continued)

edge, one at each end and the third exactly half way between. On this center dowel, a length of 1 by 3 lumber is pivoted loosely and a fourth dowel is driven into it at the other end. This piece must be about half the length of the straight-edge and the fourth dowel, which is driven into it, must be exactly the same distance from the pivot dowel in



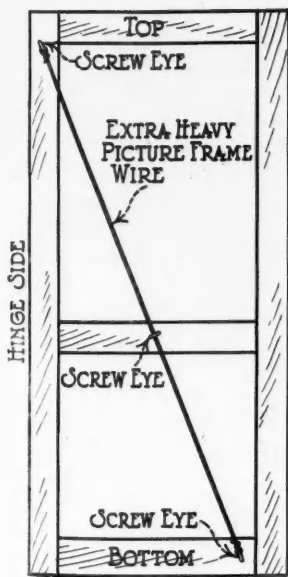
This Attachment for the Straightedge Makes It Possible to Lay Out Right Angles Accurately.

the center of the straight-edge as the center dowel is from the end dowels. In other words, the distances between all the dowels must be exactly the same.

To use this, the dowel at the outer end of the attached piece is set at the corner where the angle is to be laid off. Then one end dowel of the straight-edge is placed on one line of the angle. The other end dowel will then be on the other line of the angle. The user can sight along the dowels and make his marks at any points close or far. Regardless of the position of the attachment, the three outer dowels will always be in a position on two lines at right angles to each other.

MORRIS A. HALL, White Plains, N. Y.

This Takes Up the Sag



SCREEN doors have a habit of sagging at the bottom, after they have been in use for a while, so that they will not close tightly. This can be corrected quite easily by the method shown in the sketch.

Place a 1-inch screw-eye at the top of the hinge side of the door, and another in the bottom rail near the other side. Pull extra heavy picture wire through these eyes, tying it at both ends. Then screw up the eyes, twisting the wire around them, till the sag is all taken up.

CHARLES OUELLETTE, 880 Hudson Ave., Bayonne, N. J.

A Simple Method of Taking the Sag Out of Screen Doors.

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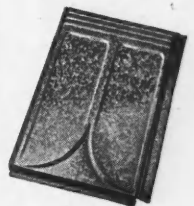


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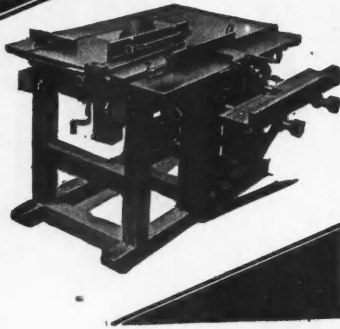
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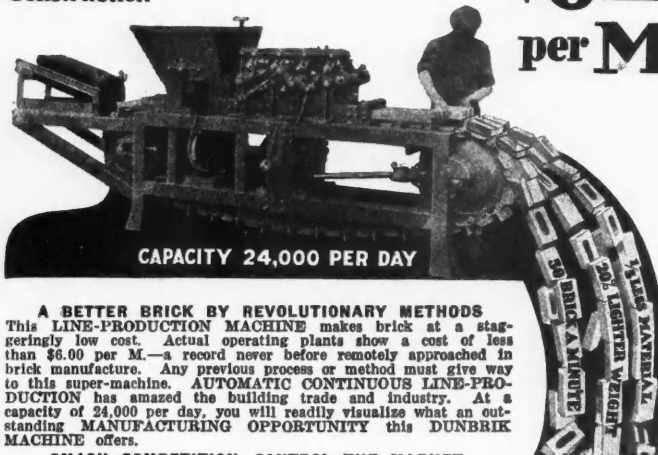
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How to Get Things Started

(Continued from page 26)

Executive Committee of eleven, composed of one representative from each of the following general divisions of the industry: architecture, banking, bonding, engineering, general building contracting, general engineering contracting, insurance, materials and equipment, public utilities, real estate and building, owners and managers, and sub-contracting.

Operating Costs

Approximate distribution of operating costs of the Philadelphia Federation will be made as follows:

Architects, engineers, and construction groups.....	35%
Materials and equipment.....	25%
Banks, bonding and insurance.....	30%
Real Estate	5%
Utilities and transportation	5%

Elaborate Organization Not Necessary

In smaller cities than Philadelphia, it should not be necessary to build so elaborate an organization to achieve the ends that are so essential just now for the local and national welfare of the building business.

The city of Rochester is an example of a community that has conducted for a number of years a simply organized Community Conference Board for the lengthening of its construction year. "I believe," says the secretary of this board, Mr. William A. Burdick, "that the improvement in building activity in this community bears evidence that Rochester has not been as severely affected during 1931 as have most Eastern cities."

The personnel of Rochester's Community Board includes interests both inside and outside the building industry. It comprises two representatives from the Builders' Exchange, two from the Rochester Society of Architects, two from the Real Estate Board, two from the Municipal government, the superintendent of the Bureau of Buildings and the Superintendent of School Buildings, two from the Rochester Chamber of Commerce, and one each by the City Planning Council, the Monroe County government and the Rochester Association, an organization representing the public in the Rochester building industry.

Duties of a Community Board

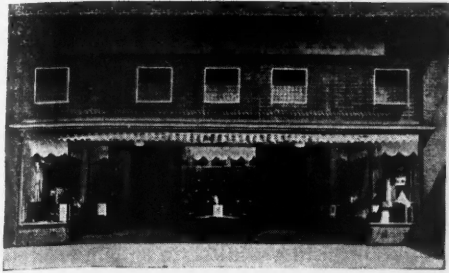
During its ten years of operation, the duties of the Community Conference Board of Rochester have been to act as a fact finding body for the building industry, plan building programs so as to help reduce the season of unemployment, and, in general, endeavor to place the building industry in the position that the earning power of Rochester's 8,000 building mechanics will be more evenly distributed during the whole year.

The advantages of the Community Conference Board are as follows:

1. Helps provide steadier all-year 'round employment for building trade workers.
2. Reduces contractors' overhead by stimulating continuous work.
3. Aids the architect by partially cutting down seasonal peaks in his office.
4. Helps merchants by providing steadier work to their customers.
5. Keeps good mechanics in Rochester district by stabilizing conditions.

The Rochester Board meets once a month in quarters furnished by the Rochester Chamber of Commerce. Be-

(Continued to page 72)

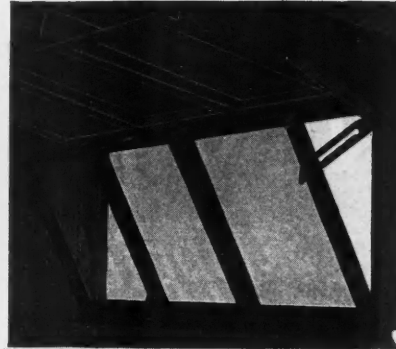


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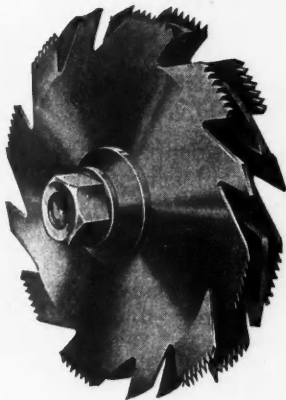
Any basement equipped with wooden sash now can be given 50% to 80% more light, proper overhead ventilation and the many other conveniences, provided by the Vento "Premier"—Ace of Basement windows—at a surprisingly small cost regardless of wall construction. An ordinary mechanic averages not more than one hour per opening. Don't overlook this possibility of extra profit on any of your remodeling jobs. You'll find your customers receptive to this idea which adds several times its cost to the value, convenience and comfort of a home.

See the "Premier" at your building supply or lumber dealer. Catalog on request.

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tween meetings the work of the Board is performed by a paid assistant secretary of the Chamber of Commerce who devotes approximately one-fourth of his time to this work. The Board operates on approximately a \$2,000 annual budget. Among the services rendered are an employment survey, published monthly; a running record of building projects; a tabular report of building permits; and special investigations.

A sufficient number of local co-operative bodies have been organized in the building industry to show that this method of stimulating local business is quite practicable. Rochester's experience proves that such organizations can be operated at very modest cost. Where builders in towns and cities wish to "start the ball rolling" in their communities for organization of this kind they can draw freely on the experience of cities like Philadelphia and Rochester. Unquestionably, the local board, composed of men actively interested in building and allied fields, offers the best hope of stimulating the construction business this winter.

The Row Homes

(Continued from page 39)

which the prospective buyer enters, and from which he will get his first and most lasting impression of the house interior. It is indeed the most important room, from a selling standpoint, of any in the house.

Row housing is particularly adaptable to the wants of the present-day home buyer for the reason that such type of construction enables the builders to offer all these interior features at a low cost. It was the public demand for a low-cost home, with a high standard of livable qualities, that brought about the development of row housing as the most satisfactory means of meeting their requirements. Row building permits many economies in construction costs. Building procedures may be standardized and building materials may be bought in mass quantities. One of the biggest savings is in the trench type of cellar excavation, which is possible only in row construction.

Although, at the present time, the trend in row housing is in favor of the English Georgian type of architecture, I am firmly convinced that the near future will bring greater favor to the American Colonial style. It is very adaptable to row building, and offers a simplicity of style that has a lasting appeal. Also a great deal of individuality can be accomplished for each home by varying the various elements that are component parts of the American Colonial exterior.

Winter Building Statistics

(Continued from page 50)

The depression slowed down residential building to such a degree that, as fast as general business conditions improve, a stronger and stronger demand will be felt for new residential building. The spring of 1932 should prove to be very different from the same periods of the last two years—for already there are many indications that business has turned the corner toward steady improvement.

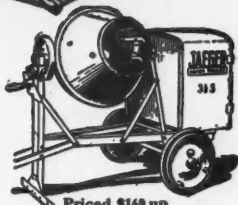
Statistically, there is every indication that the next four months can be very kind in the way of profits to the builder who will go out after winter building work. Statistics show that the big builders know winter building is profitable; many builders with a more limited volume of business are learning this too. Statisticians will tell you that far more than twenty-five per cent of the total year's volume of building work is executed during the months of November, December, January and February—in other words, business is there for the builder who will go after it.

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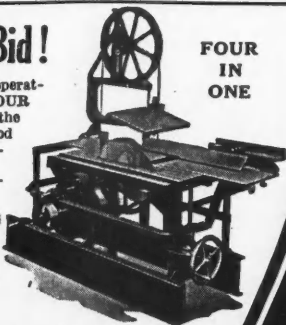
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The Low Bid!

Low price and low operating costs enable the "FOUR IN ONE" owner to get the business and make a good profit. Gives long and accurate service. Complete catalogue on request.

THE PARKS WOODWORKING MACHINE CO.
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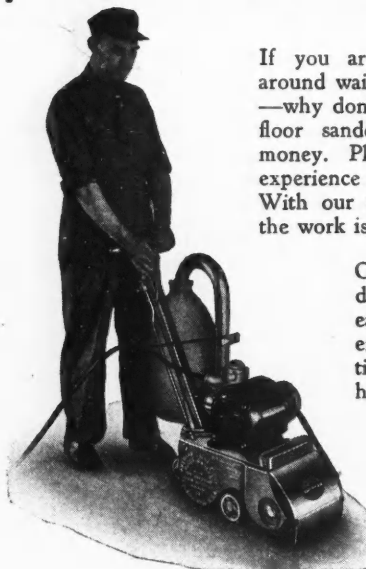
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WOODWORKING MACHINES

Circular rip and cross-cut saw, 22" hand saw, 12" jointer and boring machine.

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Make Good Money THIS WINTER



If you are sick and tired sitting around waiting for a job to turn up—why don't you get an "American" floor sander and make some real money. Pleasant inside work and no experience necessary. We start you. With our tested plan supplied free, the work is easy to get.

Our new fast electrically driven Light Eight sander easily carried by one man enables you to handle entire job alone—No extra help required.

Write today and see how easy it is to get started in this money-making business.

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Light Eight Floor Sander

AMERICAN FLOOR SURFACING MACHINE CO.,

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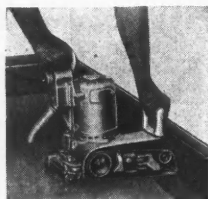
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AMERICAN SANDERPLANE

A big labor and time saver. Sands floor edges and butt ends right up to the baseboards. Fine, too, for stair and bench sanding.

An Answer to "What is Good Architecture?"

(Continued from page 49)

it properly mechanically, guides its sound financing, and in addition, adorns it in good taste. To equip oneself for all this, requires years and years of association with life's practical operations and constant training in the lovely things of life. His attitude of mind toward a building problem is the result of this training and it inevitably creates sound design, sound construction and sound equipment. Also, as a result of his training, he's the poorest salesman in the world; which is the large reason for the general misconception of his functions.

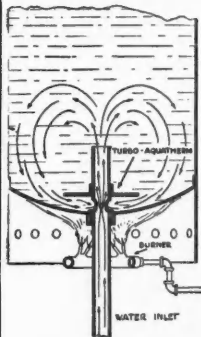
The home-builder, unless he is trained as an architect in these matters of construction and design, cannot hope to compete with the architect. It is not reasonable to expect, is it? It requires years of study and practice to understand strains and stresses, and to know scale and proportion—these things cannot be just picked up. The same reasoning applies to the matter of economy in layout. The home-builder is, however, a salesman, and he has much to tell the self-effacing architect in the matter of sales psychology.

It is certain that, if this salesman would take the architecturally designed home and throw it at the prospect in the same quantities that he has heretofore heaved the hodge-podge, we would soon see the public taste in homes raising to meet this new standard, and then what was sold, would be good architecture.

This then, is the fashion in which to co-operate. Let's each to the calling for which he has been particularly trained. Many of the wiser builders have already seen the sound sense in this. They are employing an architect, adding his fee to the sales price.

U. S. PATENT
No. 1762215

DAHLQUIST TURBO
Stops Dirty Hot Water



Every Home Owner, Heating and Plumbing Engineer will welcome this device which takes advantage of the velocity of the incoming cold water in the hot water storage system to create a suction and a whirl which constantly sweep and scour the bottom of the boiler carrying every particle of foreign matter out of the system, allowing no sediment (mud) to accumulate.

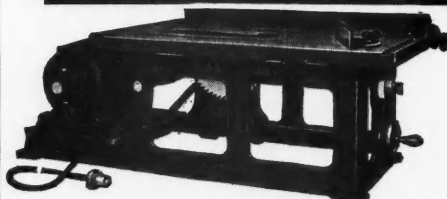
PLAIN FACTS

Hot water storage tanks of all kinds are actually sediment traps and eventually deliver muddy hot water unfit for any use. Once sediment has accumulated, it is impossible to clear the system.

With a Dahlquist Turbo-Aquatherm installed in your hot water tank sediment cannot accumulate—it keeps all foreign matter on the move assuring the householder fresh clean hot water fit for cooking and drinking purposes at all times—those in the trade who know about the Dahlquist Turbo-Aquatherm will not install a hot water storage system without it.

DAHLQUIST MFG. CO.

10 West 3rd St., So. Boston, Mass.



COSTS CUT to a FRACTION as

H & A Machines Speed Up Work

This No. 10 Saw Table performs a wide variety of jobs at low cost in hurry-up manner. Highly accurate. Handles heaviest work right on the job—material up to 2 1/4 inches thick—grooves 1" wide, 1 1/4" deep. Use it for cross cutting, ripping, mitering, dadoing. Plugs in nearest light socket. Economical to operate. Lasts a lifetime. Priced reasonably. Write today for full information on complete line of H & A portable electric woodworking equipment including Band Saws, Rip Saws, Wood Lathes, Bench Jointers, Shapers, etc. Handsomely illustrated Catalog FREE. Act at once, and watch H & A equipment cut your costs and speed up production.

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