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AMERICAN BUILDER

and Building Age

NAME REGISTERED U. S. PATENT OFFICE AND CANADIAN REGISTRAR OF TRADE MARKS

MAY, 1935

57th Year **Vol. 57—No. 5**


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Contractors everywhere are finding it Good Business to Modernize with 4-Square Precision Lumber.
Ask your dealer for information concerning this improved product and the modernizing and financing services available to help you sell jobs.
WEYERHAEUSER SALES COMPANY
SAINT PAUL, MINNESOTA

Which Depression Shall We Fight NOW?

THE home building industry is fortunate. In the National Housing Act it has the *only* measure passed in Washington within the last two years that is actually *promoting economic recovery* by increasing private expenditure and private business.

Congress has been in session four months. What has it been doing? Virtually nothing except considering the five billion dollar work-relief bill, social security, veterans' bonuses, and how to take the profits out of war.

THE work-relief bill deals with the *effects*, not the *causes*, of the depression. It will give *temporary government* employment. Those in need should be given relief. But the vital problem is to provide *permanent* jobs for the unemployed, and to restore *the pre-depression incomes of the 40,000,000 who are employed.* This can be done only by reviving private business.

Reasonable security legislation may have good effects during the next depression, but *will contribute nothing toward ending the present depression.* The more taxes for security are imposed now on business and the 40,000,000 now employed, the more they will be handicapped in doing what only they can do to end the present depression. The time to levy taxes for security will be when the incomes of business and the employed have been restored by restoration of production and commerce.

Likewise regarding veterans' bonuses. Their payment now will delay recovery by taking, through sale of government bonds or increased taxation, funds that their present owners should be allowed and encouraged to use.

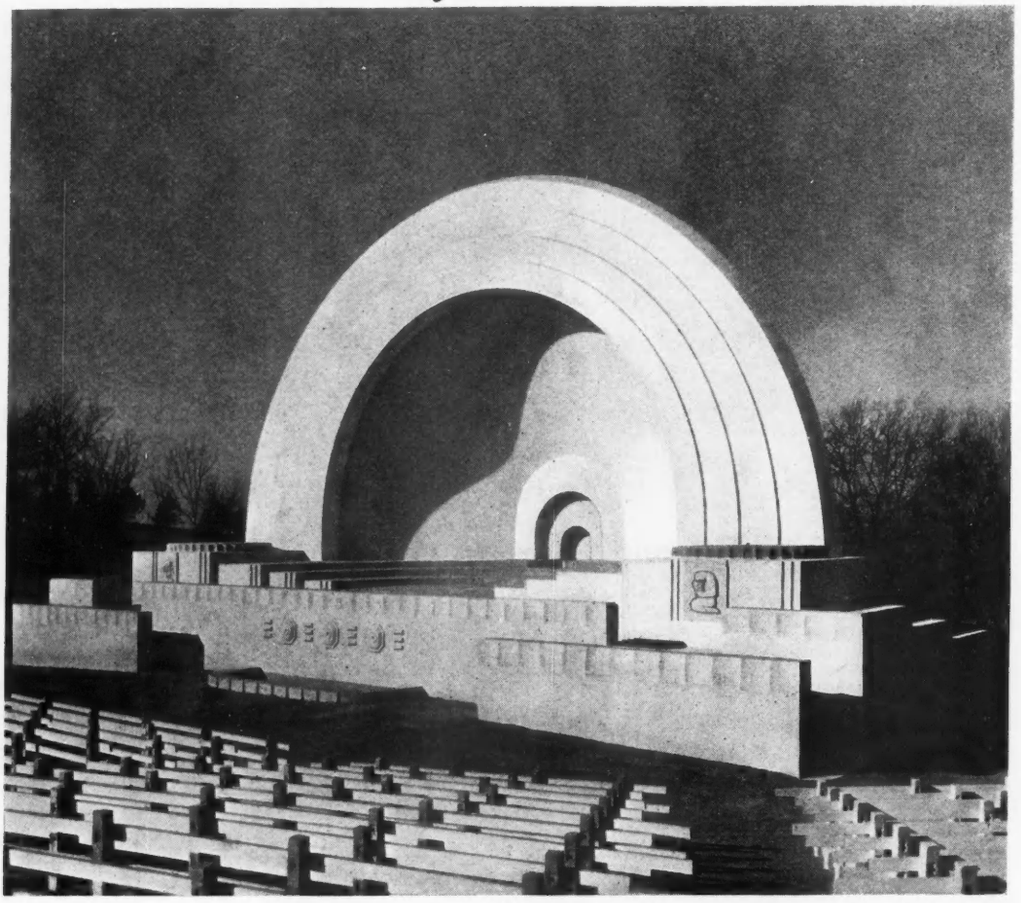
And why all the bother about war profits now, *when lack of profits in all business is postponing recovery?* The terribly depressed "capital goods" industries can be revived only by providing other industries with enough actual and prospective profits to cause them largely to increase their buying from the "capital goods" industries.

WE are beset by the twin devils of *ignorant selfishness* and *politics.* Ignorant selfishness causes almost every class to demand policies regarding prices, wages and government spending that are inimical to recovery. The sole aim of most politicians, in talking and taxing, is vote-getting.

The National Housing Act is working because it is a *non-political, non-taxing, constructive measure to help revive private business.* This depression would soon be ended if all classes, and especially the politicians, would fight it more with similar measures, and devote less time, talking and taxing to fighting the next depression and the next war.

Samuel O. Dunn,
CHAIRMAN,
AMERICAN BUILDER PUBLISHING CORPORATION
SIMMONS-BOARDMAN PUBLISHING CORPORATION

DURABLE...*finished in* STUCCO



Winters are not mild in Sioux City—and it takes plenty of *hot* summer weather to grow Iowa's famous corn. So this music pavilion has to take plenty of weather. It *will* take it, and come up smiling, because it is built of concrete with a permanent, durable finish of Atlas White stucco.

BECAUSE of something Architect Henry L. Kamphoefner said about this unusual concrete music pavilion erected as a CWA project in Sioux City, you will be interested, from the building angle, in its finish.

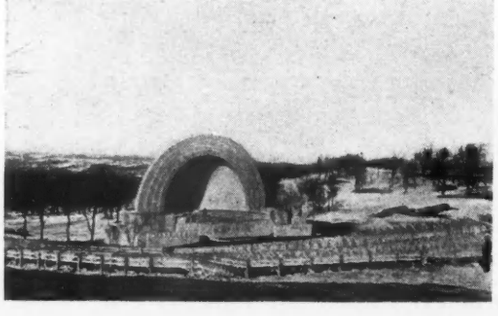
"The work," said the architect, " . . . gives promise of *great durability*."

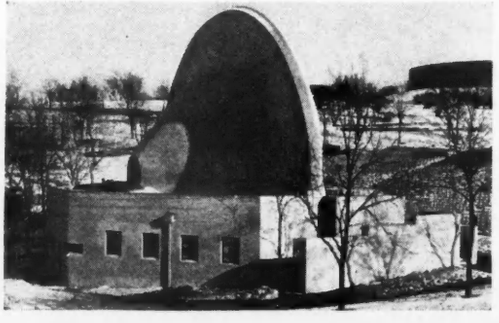
The finish—and here's where your interest lies—is stucco, made with Atlas White portland cement.

Here's a structure exposed to the toughest kind of weather conditions, unprotected on all sides, built of concrete for *permanence*. And the finish is white portland cement stucco. Doesn't that mean something in connection with the finish of new and remodeled commercial structures, homes, apartment buildings? If you agree with us that it does, and will drop us a postcard, we'll send you quickly complete information on durable, beautiful, economical stucco that you'll find useful and profitable. Write Universal Atlas Cement Co. (*United States Steel Corporation Subsidiary*), 208 South LaSalle Street, Chicago. 209

STUCCO *made with* ATLAS WHITE PORTLAND CEMENT

"Because of the winter dampness on the interior of the building," says Architect Kamphoefner, "the six dressing rooms and toilet rooms were plastered the same as the exterior." That means with durable, beautiful Atlas White portland cement stucco.





AMERICAN BUILDER
AND BUILDING AGE

Upturn Calls for Renewed Effort

ENCOURAGING news of building starting up is coming in from all parts of the country. Dodge residential contract figures for March showed a gain of 92 per cent over February; and now April bids fair to add 55 per cent more. Estimating the April total on the basis of the recorded performance of the first 15 days gives April a residential contract total of over $41,000,000, which is the largest of any month since November 1931. This rise from $16,600,000 in February to $41,000,000 in April is the most spectacular seasonal upturn since the spring of 1930.

Geographically, this increase in home building activity is well distributed, ranging from 20 per cent in New England, as compared with last year, to more than 500 per cent in the South Atlantic region and 116 per cent in Illinois, according to an analysis of new residential permit figures made by the U. S. Department of Labor.

Also, the mortgage money situation is greatly improved. Reports from the building and loan associations show that for the first quarter of 1935 more loans were made than for any like period for the past three years; this year registers a 69 per cent increase over last in volume of association financing. Other sources of mortgage money also are coming forward, thanks to FHA encouragement, to refinance existing properties and to provide money for new home building. Federal Housing Administrator James A. Moffett announced on April 16 that a total of $138,000,000 of mortgage applications was then on hand for FHA insurance, and that new loans were coming in at the rate of half a million to one million dollars *daily*. Thirty percent, he stated, is for new construction. April 15, he said, was the "biggest day" the FHA has had so far, with $1,261,000 of mortgages to be insured under Title II and $750,000 of modernizing loans under Title I.

Gloomy Outlook for Renters

Rising rents and scarcity of suitable houses in many communities are laying a solid economic ground work for an extensive home building program. A survey just completed by the Mortgage Bankers Association of America shows that residential occupancy in many cities is close to the 100 per cent mark. In Detroit, Mich., and Des Moines, Ia., practically every house and apartment is occupied. In Milwaukee occupancy is 98 per cent, in Chicago 95 per cent. A sound, conservative home building program is called for; and the contractors and builders who step forward now to meet this demand will be well rewarded.

The buying public is expecting something new, and much better, today in home construction, style and equipment than satisfied them ten years or even five years ago. They know that great advances have been made and they want to be shown. AMERICAN BUILDER has been urging that model or demonstration homes should be built in every community so that the home seekers can get a practical education in present day home comfort standards—also a taste of home buying or building enthusiasm. Now is the time for the enterprising men among the builders in every town to get busy on a display home.

Build Demonstration Homes!

Fortunately there are right now two big nation-wide movements for demonstration homes which builders can tie in with. They are the FHA Model Homes Campaign and the G-E Prize Competition New American Design Demonstration.

The plan and scope of the FHA campaign calling for the erection of a new model home in every important city and town are outlined in official instructions under date of April 11, to regional, state and district directors. These instructions read, in part:

"May 25 will be designated as National Better Housing Day. Field representatives will immediately take steps to urge the construction of one or more new model homes in every important city and town in their area, ground to be broken simultaneously for all of these homes on that day.

"There will be a nation-wide ceremony in which President Roosevelt will be asked to take part. Local Committees will be asked to arrange suitable ceremonies as part of the national program. Nation-wide publicity will be arranged through the press, the radio and other mediums.

"The Field Organization should set as the goal of local committees at least 1,000 new model homes, to be launched simultaneously on this day. This means at least one home in every city of 10,000 or over, and in addition several homes in the largest cities."

The General Electric Company, also, is planning to assist in the immediate construction of about 1300 model demonstration homes featuring modern electrical equipment and the new styling of homes as developed in the recent $21,000 architectural competition. Builders are urged to participate actively in this nation-wide demonstration.

New ideas, progress, more comfort, greater value—all these helps to popular interest, approval and sales are at the command of the home building industry this year as activity gets under way in volume after almost five years of hibernation. New houses can be and are being built to compete in price with the old distress houses

still on the market. Enterprising builders in practically every locality have demonstrated that this can be done. Every house built this spring should be a demonstration of the latest and best in design, materials and equipment. Renewed effort now on the part of every individual connected with the home building industry will push this present upturn of activity to higher and higher levels throughout the year.

ENCOURAGE MORTGAGE BUYING!

CONTRARY to the assumption on which much recent federal mortgage action is premised, private individuals hold a very considerable share of present home mortgages. They are the capital source for what appears to be approximately one-third of the home mortgages of the country, according to estimates made by correspondents of the National Association of Real Estate Boards in 82 cities. The cities included represent a population of more than 13½ million persons.

Out of the 83 cities, 55 report that 25 per cent or more of all mortgages on homes are held by private individuals. And of these, 25 cities report that 50 per cent or more of their home mortgages are so held. Some cities report as high as 75 per cent or even 80 per cent of existing home mortgages are held by or for private individuals.

AMERICAN BUILDER still contends that FHA rules should be liberalized to permit these private investors to acquire home mortgages insured under Title II of the National Housing Act.

COMPETENT PLANS REQUIRED

SOME of the old time builders and even a few of the architects are finding themselves in the embarrassing plight these days—applying for FHA mortgage approval—of having their plans and specifications handed back with the request—polite, but firm—to make said plans and specs. more definite and more presentable. Drawings hastily sketched on brown paper, tentative plans and brief outline specifications will not serve as an adequate basis for a loan commitment and the Housing Administrator is acting with ordinary business prudence when he insists that really competent working papers must accompany each application for loan insurance under Title II of the National Housing Act.

Very likely the result will be that a good many practical builders will have to take a course in drafting and a good many draftsmen will have to improve their style. Greater care will have to be exercised in writing up the specifications. Planning and deciding as the job goes along won't do on FHA financed houses; everything must be definitely fixed in advance; and this will mean a better job at a lower cost.

For the information of AMERICAN BUILDER readers, we are privileged to print the memorandum of the Chief Architectural Supervisor to the district offices of FHA, outlining the requirements for plans and specifications to be submitted in connection with new construction:

"The minimum requirements of the Federal Housing Administration regarding exhibits required in connection with applications for new construction are quoted as follows:

"'Where new construction is involved, the applicant must submit with the application *complete plans and specifications* both of which must have been approved by both mortgagor and *general contractor,* if any. The inspection of proposed new buildings prior to commitment to insure, involves the examination and approval of the working drawings and specifications. *The drawings should include plot plans, floor plans (including basement and attic), each elevation, sections, and details sufficiently complete to indicate clearly the extent of the work and the design and construction. The specifications should cover quality of materials, equipment, construction and workmanship.*

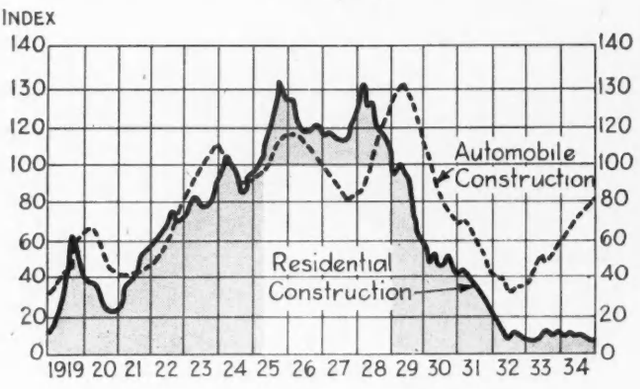
"'Working drawings and specifications will be examined from the standpoint of their *adequacy as contract documents* to produce a suitable building complete and ready for occupancy.'

"All drawings must be made to scale and clearly dimensioned. While only one set of plans is required for submission with the application, it should be noted that *this set will not be returned to the owner or contractor,* since it is necessary for the Federal Housing Administration to retain it. Consequently, plans should be made on tracing paper or cloth, or other material from which additional blue prints can be obtained for the use of the contractor during construction operations. Drawings submitted on wrapping paper or similar material will therefore be considered ineligible. They should be blue prints, or some similar process, indicating that additional copies are available."

THE COST OF FEAR

THE accompanying diagram based on figures from the Cleveland Trust Company Business Bulletin illustrates not only a remarkable parallel between automobile and residential construction, from 1919 to the fall of 1932, but also shows how disastrous the unsound money policies current since the fall of 1932 have been to the home building industry. Automobile buying, involving a relatively small and short time commitment, has forged ahead under the stimulus of consumer demand, while home building, requiring a larger investment and a long term financing program, has been stagnated.

The greatest need of the home building industry has been and still is a sound credit and long term financing basis under which funds can be borrowed and pledges exchanged without fear of moratorium or repudiation. According to the chart, fear has cost the home building industry 60 points of increase since the fall of '32.



Unstable Money Policies Blamed for lack of Building Recovery since Fall of '32. (Chart by Cleveland Trust Company)

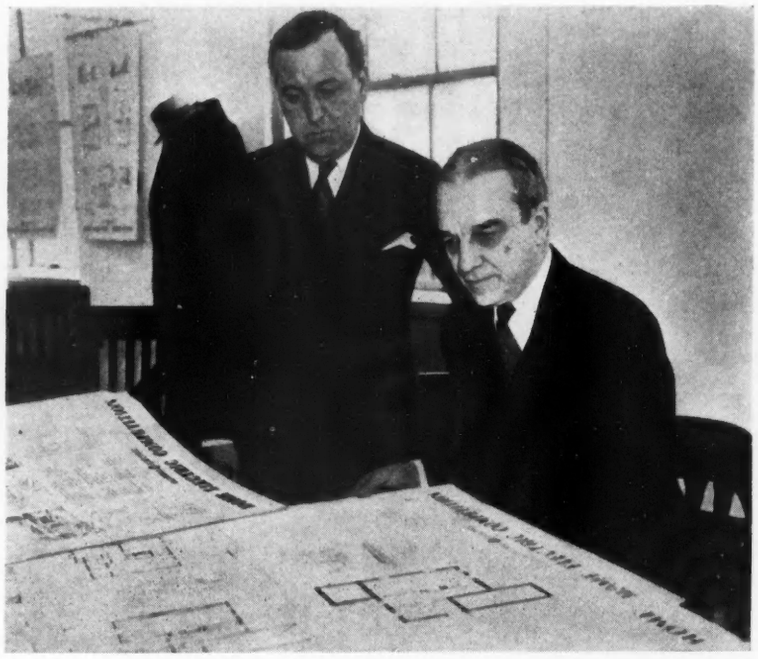
New Materials New Methods Progress

THE JOYOUS SOUNDS of busy hammers and saws once more ring forth in the Building Industry; new homes are being erected in increasing numbers. Among them are to be seen new designs and ideas of recent development. Into them are going new materials. New methods are being used. Standards of convenience and comfort are raised by including all the latest features, yet these new homes compete in sale price with the old—thanks to progress being made in production efficiency. Other structures, still fundamentally sound, are being salvaged by the installation of modern equipment and remodeled throughout. AMERICAN BUILDER presents in this issue four outstanding groups of NEW IDEA material for progressive industry men.

Electric Homes Win Prizes

First Three Prize Winners in General Electric Home Competition

Program Announced for Construction of Many Demonstration Homes



Architect Ralph T. Walker (standing), Chairman of Jury of Awards and Owen D. Young, Chairman General Electric Company, Examine the Competition Drawings

ARCHITECTURAL firms in Cleveland and Chicago shared the two grand prizes and architects in New York carried off the two first awards in the home electric architectural competition sponsored by the General Electric Company in co-operation with the Federal Housing Administration. The contest opened January 1, continued 10 weeks, and more than 2,000 sets of plans were submitted, competitors coming from every state in the union.

A total of $21,000 was awarded in 52 prizes. The two grand prizes, each for $2,500, were awarded to Hays and Simpson of Cleveland and to Paul Schweikher and Theodore Warren Lamb of Chicago. The two first prizes, each for $1,500, were awarded to Stephen J. Alling, a young architect who finished his studies at the Massachusetts Institute of Technology but a year and one half ago, and to J. Andre Fouilhoux and Don E. Hatch, jointly, both of New York City.

The Jury of Awards consisted of eleven members; seven architects representing the different sections of the United States; one expert in child training; one domestic science expert; one general contractor; and one realtor. Ralph T. Walker, of Voorhees, Gmelin and Walker, New York City architects, was chairman.

The home of the future, as indicated by these plans, will be of the flat roof, modern type, somewhat as displayed at the Century of Progress in Chicago.

Fully 75 per cent of the plans not only depicted this type but offered other radical changes in home construction. The tendency is for the garage to be placed at the front of the house with the kitchen adjoining, and the living room across the rear, facing the yard and garden. All plans gave particular attention to the layout of the yard with its shrubbery and flowers. Although all plans permitted any type of construction, the tendency as shown by the flat roof type of home would be to build it of concrete, stucco or brick.

Greater utilization of the cellar or basement, now commonly used for the furnace and perhaps the laundry, was also brought out in the many designs. The new tendency is to use this space for a recreation or play room for children. This is made possible by the use of automatic heat, such as supplied by the oil or gas furnace.

The drawings showed that time-saving, step-saving, and labor-saving had been the rule in the studies of the architects. The plans indicated that the majority of competitors sensed that this was to be a competition in which emphasis would be laid upon planning, rather than on exterior design.

A comprehensive program is planned by the General Electric Company for model demonstration homes to be built in many cities using some of these prize winning designs. Quoting from the preliminary announcement:

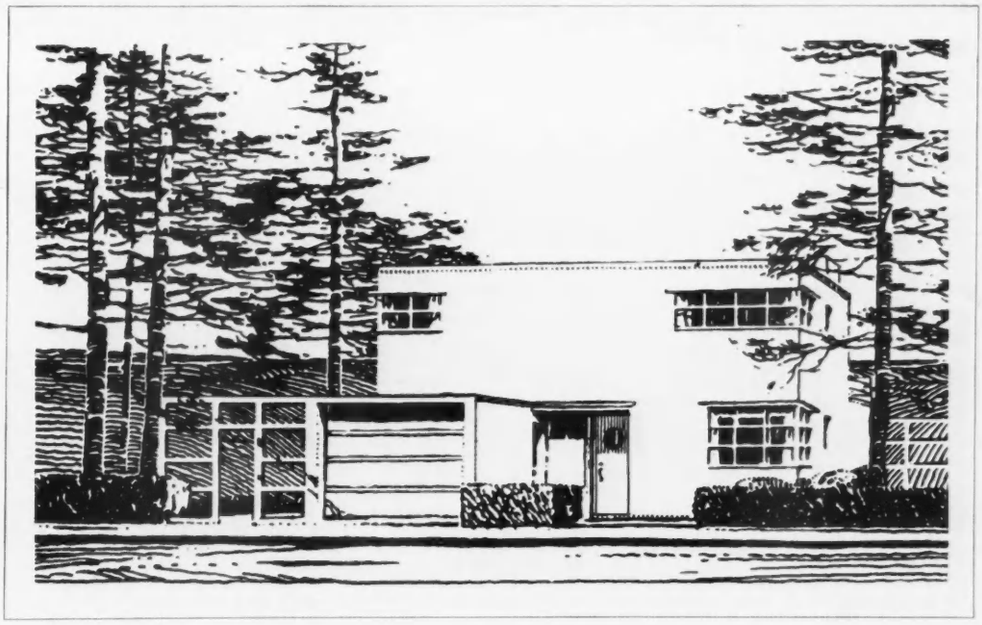
"The general plan is to offer selected builders throughout the country, new ideas, prize-winning drawings, substantial discounts and terms on electrical equipment, and national and local advertising and support; all in consideration of the construction by these builders of demonstration "New American" style houses.

"The public is receptive. There is a surprising undercurrent of curiosity and interest in housing. People want to be 'sold.' They can only be 'sold' by actually showing and demonstrating the latest and best in houses and doing it in such a way as to spread confidence and create a demand for them. These new houses will establish new standards and the modernization of old homes will naturally follow on a large scale.

"Our aim is to have built one house for each 100,000 of population by September 1, 1935, so that it will be opened for demonstration to the public during the months of September and October. There are no limitations as to the size of the communities or the total number of houses except as may be provided by the local committees."

AMERICAN BUILDER is informed that, in carrying out this contemplated program of demonstration home construction, builders will be selected or approved by the local General Electric distributor and that these three points will be observed:

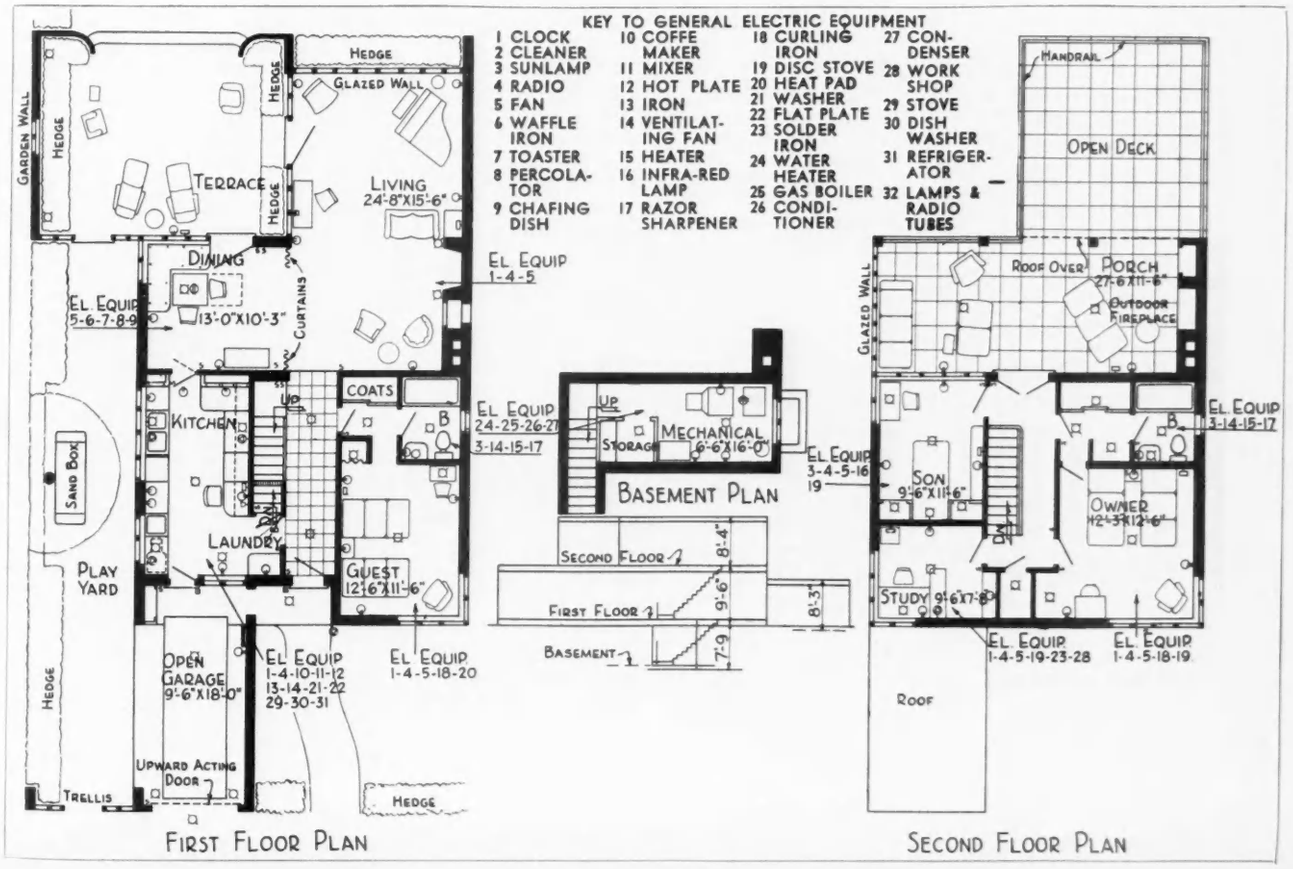
1. Each demonstration should be built substantially in accordance with the prize-winning plans selected. 2. Eligible houses must include the General Electric equipment specified, all of which will be furnished at a discount of about one-third off the established prices, as may be decided locally. 3. Builders will not be required to pay for the electrical equipment until the approved houses are actually sold.

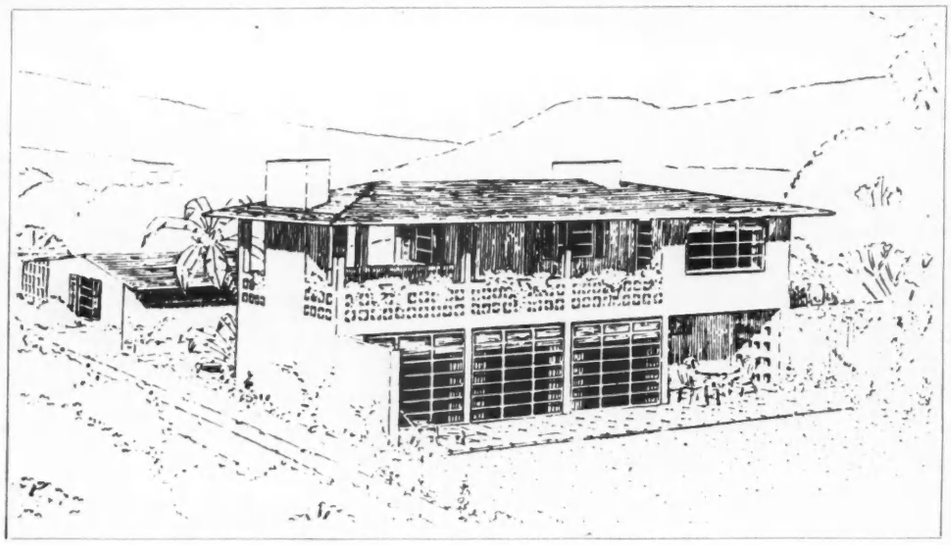


Grand Prize, $2500 Small Home, South

Submitted by
JOHN BYERS HAYS
and RUSSELL SIMPSON
of Cleveland, O.

COMMENT BY THE COMPETITORS: As befits its southern location, this house makes possible through its plan, construction and details a maximum of outdoor living. The east wall of the garage is opened, providing besides economy of shelter, easy circulation from service and play yard to the combined laundry-kitchen. The basement has been reduced to a minimum for heating and storage. The guest room is located on the first floor, its adjacent bath serving the double function of the first floor lavatory. Large, flexible living room and dining room are placed on the rear, a fireplace on the west wall and a provision for dividing the rooms by curtains when desired. Both rooms have access to a terrace, covered with trellis, or awnings, which invites outdoor dining, reading and relaxation.

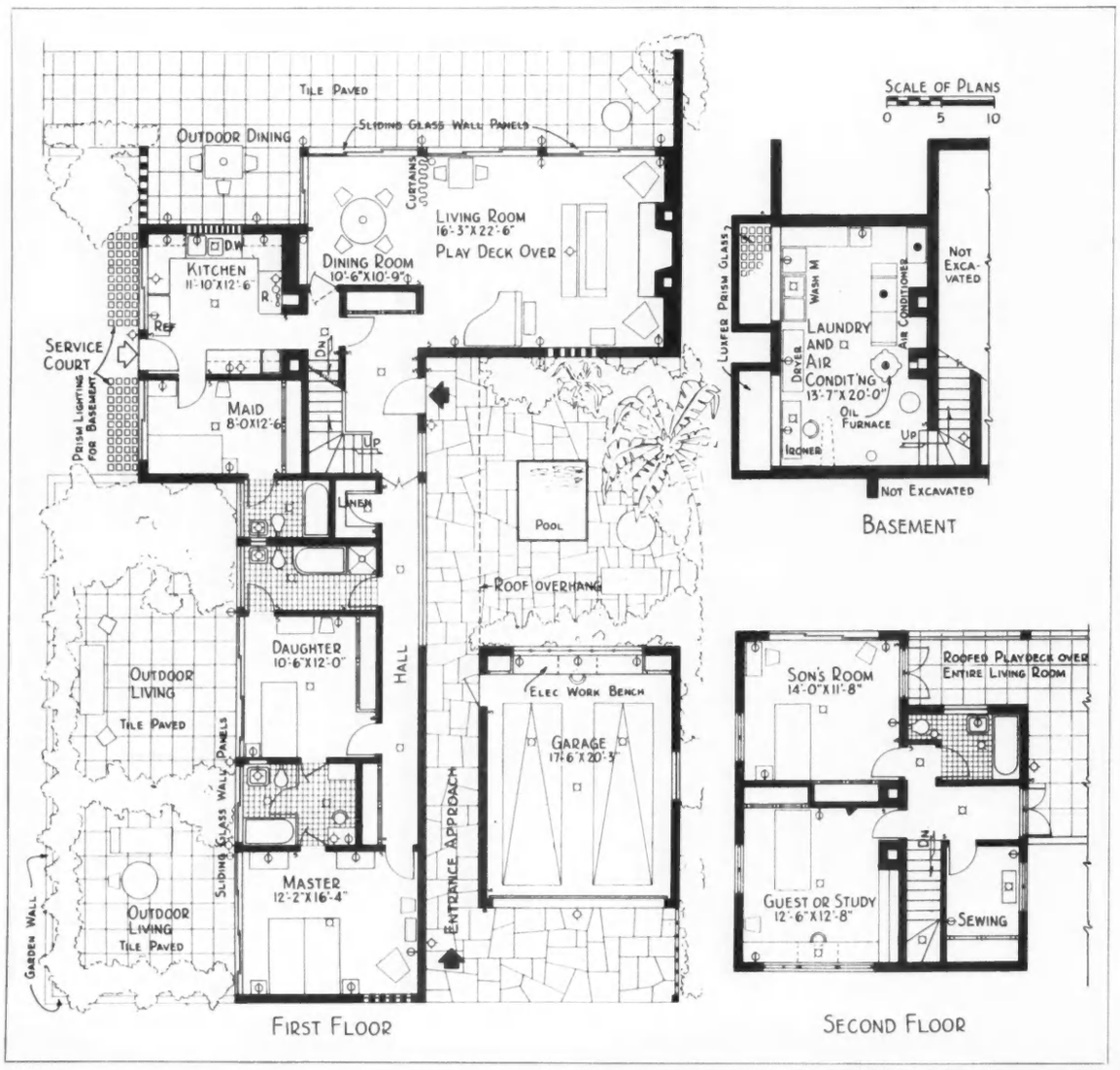




Grand Prize $2500, Large Home, South

Submitted by
PAUL SCHWEIKHER and
THEODORE WARREN LAMB
of Chicago

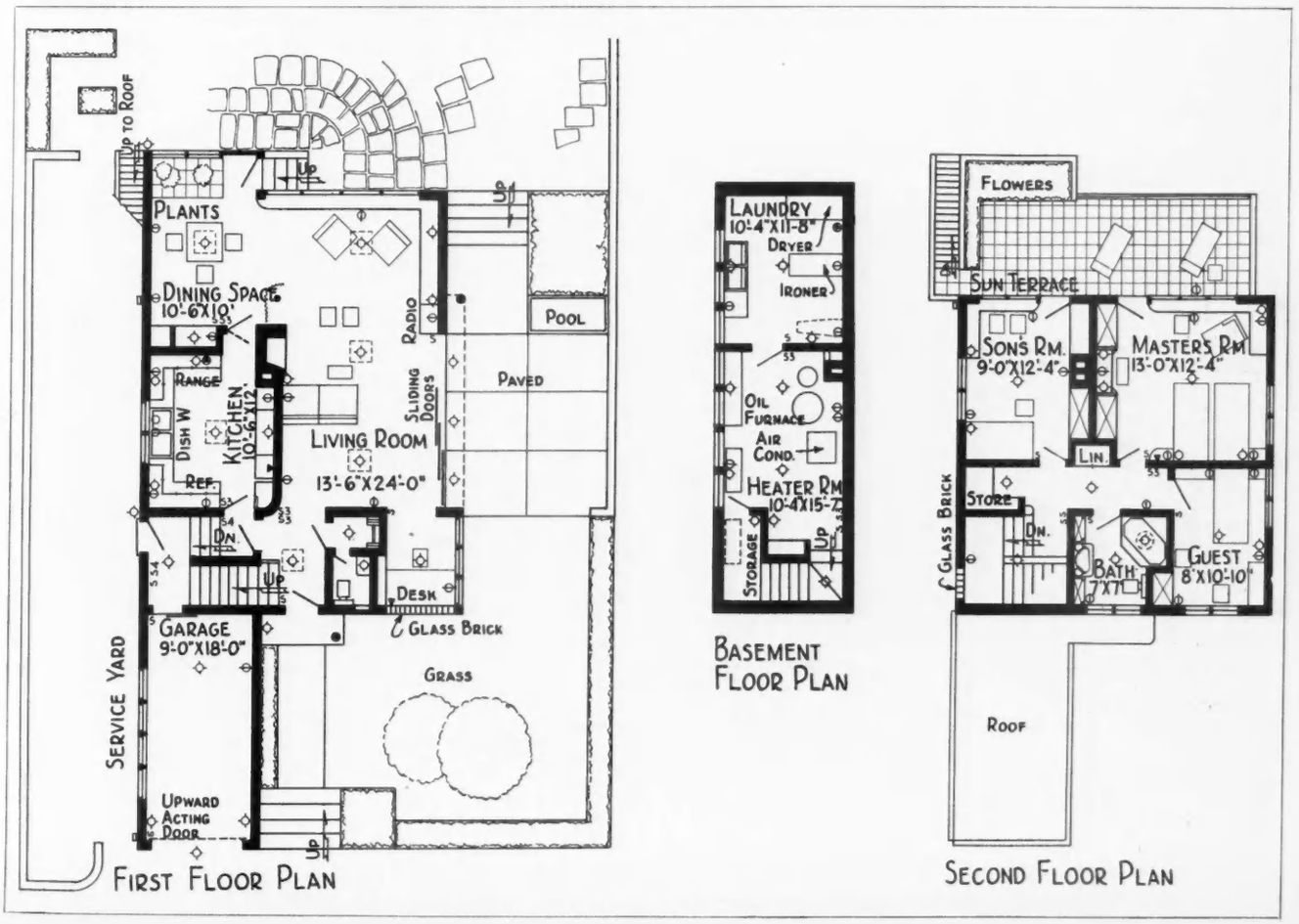
COMMENTS BY THE COMPETITORS: This southern home designed for outdoor living. Each room for living has its own secluded garden or deck. Entire walls of sliding glass panels, Japanese style, open into gardens. Floors of gardens nearest rooms all paved in tile, only two inches lower than interior. Roof extends three feet over windows thus extending the shelter of the interior to a portion of the exterior. Kitchen accessible to front door and to laundry. Natural light from two sides. Artificial light by indirect cove lighting. U-shaped arrangement of equipment. South wall of glass blocks, brings south light without heat while insuring privacy of dining terrace.



COMMENT BY THE COMPETITOR: It is intended that the house be of a modern steel construction, fully insulated, with exterior of plaster and a copper roof. The windows have aluminum casements. Glass bricks are used on the stair landing, and before the desk on the first floor. All columns in the plan are chromium-plated. The living and dining rooms are combined, but may be separated by curtains. Sliding doors in the west wall open onto a terrace. In the electric kitchen the alcove opposite the windows is lined with blue mirrors and has a planning desk below, the top of which, when closed, forms part of the serving center. The second-floor master bedroom opens onto a sun terrace, which may also be reached from the garden by a companionway staircase.

First Prize, $1500
Small Home, North

Submitted by
STEPHEN J. ALLING
of New York City



Code Protested by Home Builders

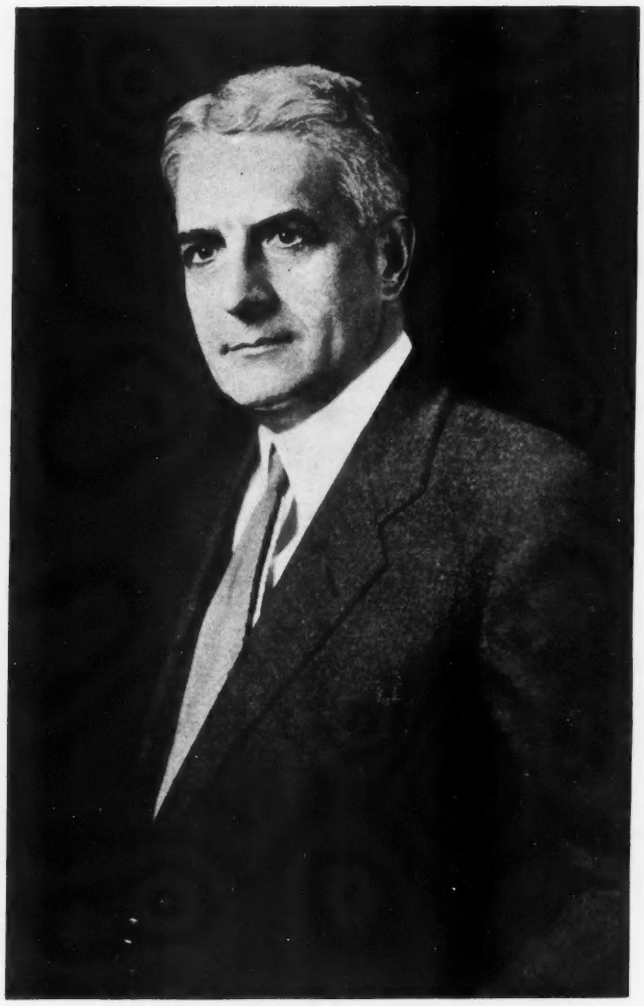
Realtor Organization Petitions Senate Finance Committee to Abrogate Construction Code or Remove Home Building from Its Provisions

PROTEST against application of the construction code to homebuilding is made by the National Association of Real Estate Boards in a statement which was filed early in April with the Senate Finance Committee, which has under study the whole question of N.R.A. operations. The Association requests the Committee to report to the Congress:

First: That the Construction Code should be abrogated.

Second: That in any event the business of development and selling of building sites and the business of building and selling of residential accommodations should not be included under the Construction Code.

In a letter addressed to President Roosevelt the Association also makes clear its opinion that the Construction Code should not in any way be applied to home building, and that the efforts to do so have retarded recovery in this important field.



WALTER S. SCHMIDT, of Cincinnati, President National Association of Real Estate Boards

Construction Code Adverse to Public Interest Has Increased Home Building Costs, Is Decreasing Employment

The Construction Code is adverse to the public interest. It has increased costs, discourages new construction, and is decreasing employment, the Association declares. Addressing the Senate Finance Committee, it states:

"To aid home ownership and home building, the Congress has passed a number of important measures, including the Home Loan Bank Act, the Home Loan Corporation Act and the National Housing Act. The effects of these acts, which were welcomed by the nation at large, have been nullified by price increases due to codes.

"The average cost of a small home today is approximately thirty per cent greater than it was two years ago. In the home building field, price increases do not stimulate activity if such price increases merely result in placing home ownership out of the reach of the average man.

"Early in 1933 there were some evidences of recovery in home building. In the fall of 1933 when a Construction Code seemed assured, and prices of building began to increase rapidly, home building immediately began to decline again. As a result, in 1934 new family accommodations erected dropped to a new all-time low point."

The whole matter of code freedom for home building has been pending for more than a year. To protect the interests of its members the Association has filed a special code for land development and home building and has received from the National Recovery Administration a stay with respect to the provisions of the Construction Code except those having to do with child labor, minimum wages and maximum hours.

In the National Recovery Administration three Advisory Boards, namely the Consumers Advisory Board, the Industrial Advisory Board, and the Research and Planning Board, have recognized that home building should not be subjected to the costs and innumerable regulations which the Construction Code seeks to impose, and have recommended the granting of the independent code for home building filed by the Association.

Six-Count Indictment of Construction Code

The Association, in addressing the Senate Finance Committee, objects to the Construction Code not only as adverse to the public interest, as delaying new home building, retarding home ownership and deterring employment, but also on further grounds stated as follows:

"1. The Development of Land and the Construction of Building Is Not Inter-State Commerce. The fact that certain objects and materials used in the building of a house may have been transported from one state to another does not make the process of building the house itself interstate commerce as contemplated by the National Recovery Act. If the words 'inter-state commerce' can be expanded to include an activity of this kind, the term will have lost its meaning and all business must be classified as inter-state commerce.

"2. The Construction Code Seeks, by Definition, to Control Activities Not Commercial in Character. Under the definition in the Construction Code, any construction in the United States costing more than two thousand dollars is subject to its provision. This means that the farmer who undertakes to build a barn is subject to the Code. So is the man who undertakes to build his own house with his own hands. So is the man who desires to build an addition to his home and employs for this purpose a local carpenter or small contractor. It seems to us questionable whether such persons, of whom there are millions, can be said to be engaged in either commerce or industry in preparing such facilities for their own use or enjoyment. Nevertheless, the Construction Code now requires that all such citizens, located on farms, in villages and in cities, must report their intentions and activities to the Code Authority of the Construction Code in Washington, and must conduct their operations under regulations so detailed and complex that they cannot be understood by a layman. We believe that such activities are of such private and personal character that it was never contemplated by Congress or by the law that they be classified either as 'industry' or as 'interstate commerce.'

"3. Construction Is Not an Industry. The Construction Code seeks to define all construction costing two thousand dollars or over as a part of the so-called 'Construction Industry'. We believe that this defines a function but not an industry. In the field of construction there are a great number of varied lines of business, often highly competitive, seeking to sell goods and services to the public. These various lines of business have no common purpose, no common policy, no common management. In fact, they have few common problems. To seek to group all these lines of business, of which there are scores, as a coherent unit which might be called an industry is contrary to all fact and all experience. All efforts to organize the construction field through voluntary association in past years have failed. The Construction Code will fail to do so because the attempt is illogical. The attempt to group all construction activities under one heading as an industry is just as illogical as it would be to attempt to set up a code governing all machinery and the activities concerned with all machinery under one heading and to seek to designate this as an industry to which a code should be applied.

"4. The Code Authority of the Construction Code Is Not Representative. The present Construction Code was formulated by a group of architects and contractors. The Code Authority of the Construction Code consists today largely of similar persons.

"5. The Construction Code Levies Forced Contributions on Those Not Represented in the Code Authority. That millions of citizens should be constrained to make such contributions to a Code Authority in which selection they have had no voice and of whose plans and purposes they have no knowledge, or else be in violation of federal law, is repugnant to all American tradition and usage.

"6. The Construction Code Is Impractical Because It Can Not Be Administered. In addition to the general Construction Code, there are a number of supplementary codes, governing in detail various phases of the process of building. All of this constitutes a mass of material, having legal effect, which it would require weeks of study of well qualified lawyers to understand. To seek to apply this mass of regulations to the activities of millions of citizens and small business men, most of them unsympathetic with the objects sought, is an undertaking beyond the power of any administrative body, and possibly of any government."

Code Authority Answers Charges by Realtors

ANSWER to the foregoing protest against the application of the Construction Code to house building was filed with the Senate Finance Committee by the Construction Code Authority in a letter signed by its Chairman, Stephen F. Voorhees, a New York City architect. High lights from this letter follow:

"The National Association of Real Estate Boards sponsored a code for Land Development and Home Building which is still pending approval in the National Recovery Administration. This proposed code is composed of certain functions of recognized industries, viz., real estate operations as applicable to distribution and sales, construction as it applies to building dwellings for sale or rent, and banking as it applies to transactions in mortgages. It is the uniting of these functions of other industries used primarily to further a selling plan that forms the basis of their claim to the standing of a trade or industry as required under the terms of the National Industrial Recovery Act.

"Home building is one of the major features of the building branch of the construction industry. The proponents of the proposed code for Land Development and Home Building claim that from one-third to one-half of the single family dwellings are constructed by realtors. It is our opinion that less than twenty-five percent of the homes annually built in the United States are built by the proponents of the proposed code. By far the greater number of homes are built by members of the construction industry.

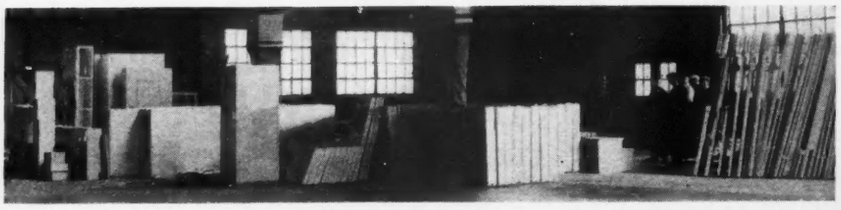
"Speculative home building has been one of the greatest disturbing factors in the construction industry, not only from a labor standpoint but from a value standpoint.

"It has been found essential to public welfare to divorce banks from agencies selling securities. It should be equally desirable to divorce building from those selling mortgages thereon. Many speculative builders have derived an unfair profit in the three-year financing and re-financing of mortgages. To overcome the repetition of these three-year commissions the Federal Government has deemed it necessary itself to grant a fifteen-year amortization plan. When a family builds a home of its own it is careful to see that the house is built in accordance with its needs and requirements. When a house is built by a speculative builder who does not know who will purchase or live in it, the individual pride of ownership is absent. It is the recognized function of the construction industry to construct homes as required. It is the function of the real estate operator or broker to sell this structure as and when completed. The builder or contractor is a producer; a realtor is generally a distributor.

"The construction industry offers no bar nor does it prevent anyone from operating under the Construction Code so long as the uniform rules of conduct are observed. There appears no logical reason for separating the construction of houses and the preparation of land therefor from the construction industry. The proposed code of the Land Developers and Home Builders would disrupt all elements of the construction industry including planners, contractors, material dealers, and labor.

"Regarding the claim that is made that the Construction Code seeks by definition to control activities not commercial in character we wish to advise the Committee that certain exemptions from the Construction Code

(Continued on page 64)



ONE complete house on the site before erecting.

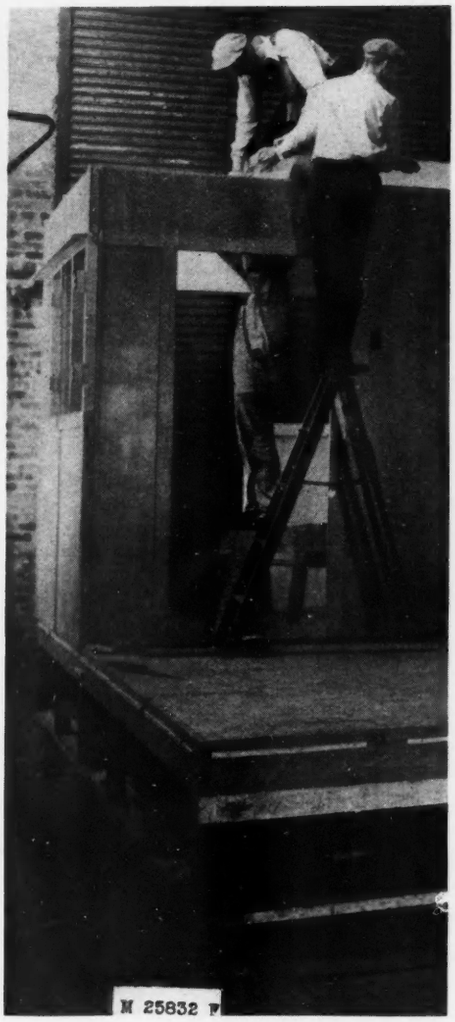
Forest Service Experiments with PLYWOOD PANEL HOUSE

AT the Madison (Wis.) Home Show, March 27 to 31, the headliner exhibit was the first showing of the low cost all-wood "prefabricated house" developed experimentally by the engineers of the Forest Products Laboratory. A 4-room and bath, straight line, one-story design, it was erected in the exposition building by two carpenters and five helpers in 21 hours.

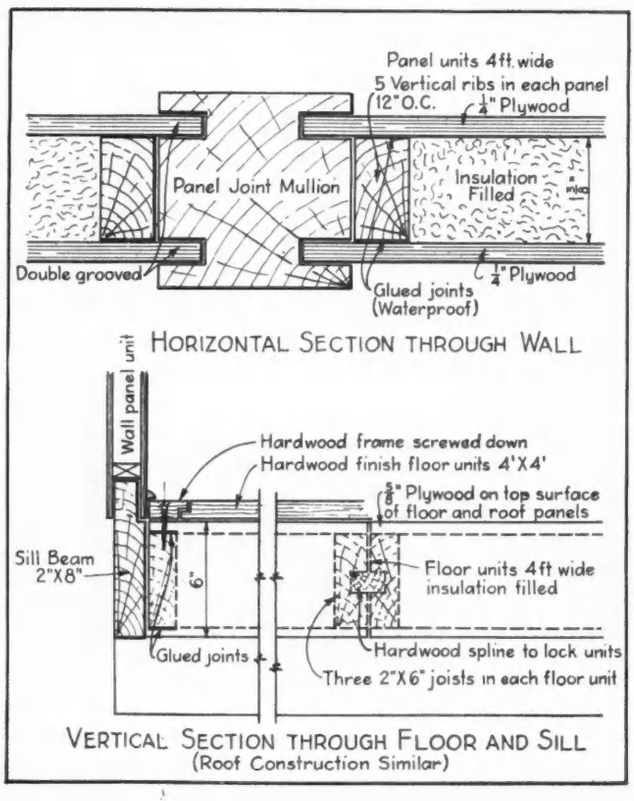
Wallace W. Weber, engineer in charge of publication of results of the Laboratory research, explained to AMERICAN BUILDER that neither this house as shown nor any other like it is on the market today. It is an experiment, he said, indicating a logical next development in the nation-wide housing movement, and it illustrates possibilities which industrialized wood fabrication has to offer in economical and efficient home building.

George W. Trayer, senior engineer, has been conducting studies for some time in plywood as a structural covering for wall and floor panels and was the designer of this sample house. He went over the job in person with the writer.

The unit panels of which the house is built are all of the same width, approximately four feet. In length they range from 8 to 14 feet. All utilize the "stressed covering" principle, so successfully applied in aircraft construction to secure strength and lightness; that is, plywood sheets forming the panel faces are glued to both sides of the structural framing and thus become a definite part of the load-carrying system instead of being a dead load on the supports as in ordinary nailed construction. In this way the framing members can be materially lightened without any sacrifice of strength or rigidity. For example, the depth of the joists in the floor and roof panels has been reduced from the conventional 10 inches to 6 inches.



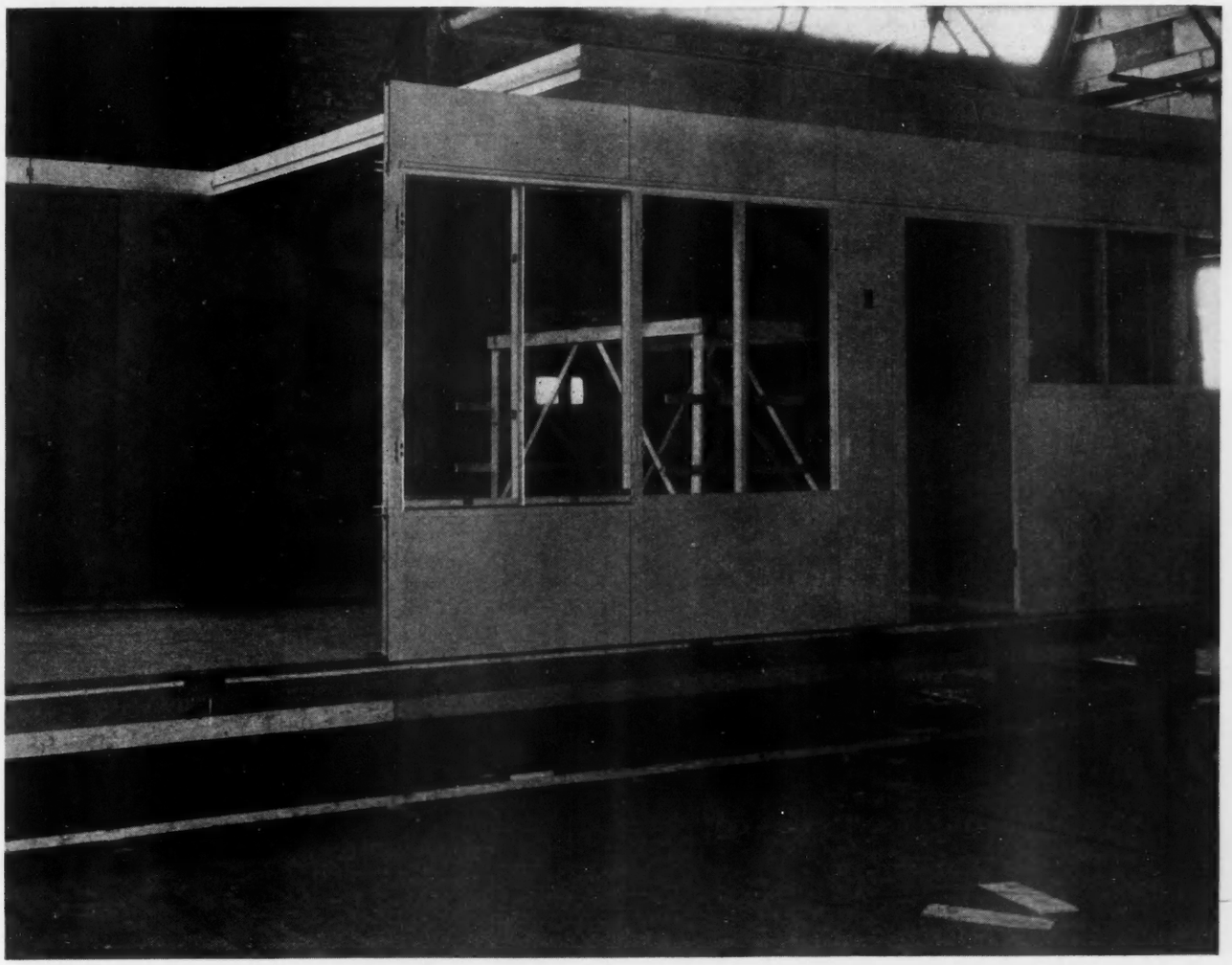
ERECTING roof panels on the show house. Floor panels are of similar construction.



The roof panels, to insure ample strength and permanent alignment, are of the same construction as the floor panels in the present design, but are made two feet longer to provide for overhang at the eaves. The sides of the floor and roof panels are recessed and splined to secure a strong interlocking fit with adjacent units.

The wall panels, by utilizing effectively the strength of the exterior and interior plywood, need to be less than 2 inches thick instead of the customary wall thickness of 6 to 8 inches. Secure but easy-fitting joints are provided by upright mullions with double grooves to receive the edges of the inner and outer plywood.

The standard unit wall panels are of four main types. Doors and high and low windows are carried in three types, while the other type, for both exterior and partition walls, is plain. All panels are insulated against sound as well as heat and cold, and all necessary electrical wiring and outlets for servicing the house are built into the units. The entire system is being developed with a view to quick

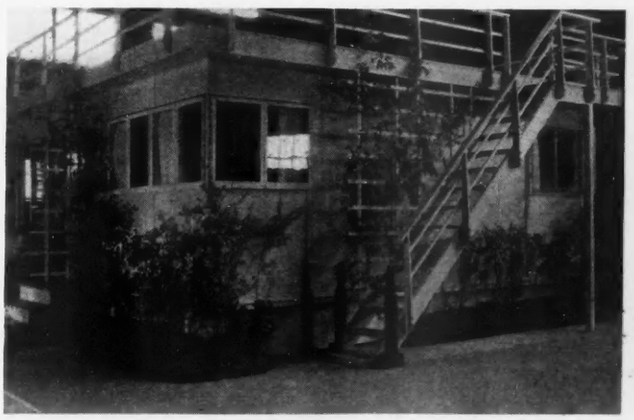


and ready final assembly on the site with a minimum of tool work and without cutting or trimming.

The finished floors of the house are prefabricated. The small pieces of which they are made are factory-produced and assembled on 4-foot squares of plywood, so that all that remains to be done on the site is to lay them in place and secure them to the floor panels by means of the parting strips which surround each square. The bathroom floor is a new wood product under development at the Forest Products Laboratory. Maple sawdust, chemically treated, is molded under pressure to form a dense, black impervious plastic. Discs 4½ inches in diameter, the largest size made with present experimental equipment, are machined into hexagons and squares to form the main body of the floor and its border. In quantity production the whole floor would undoubtedly be molded from this plastic in a single unit.

FLEXIBILITY OF DESIGN: The fact that the house is made up of standard parts does not mean that any two houses so built must be identical in design and appearance. By interchanging various units, different conditions can be met; for instance, if the orientation of the house were different, another totally different floor plan could be used, windows could be moved to other locations, roof design could be altered, and entrances could be placed to suit the requirements of the site. The use of standard factory-made parts does not mean standard house units identical in every part, but it offers, so the Forest Products Laboratory engineers feel, the possibility for individuals to have individual houses at lower cost than is possible today. Industrialization of house building merely substitutes wall, floor, and roof panels for timbers, boards, and shingles.

The adaptability of the all-wood section house system to construction in any region and at any time of the year is thought to be a special advantage. The plastering problem is definitely eliminated with this use of plywood interiors. There is no waiting for plaster to dry, no warping of woodwork from lurking dampness. The interior lends itself to any scheme of decoration and furnishing that owners may demand—plain or ornate, modernistic or conventional. Decoration and finishing in the house displayed was under the direction of the Related Art Department of the home economics faculty of the University of Wisconsin.



MAIN ATTRACTION at the Madison Home Show was this Plywood Panel House by the engineers of the Forest Products Laboratory.

OPERATIVE BUILDERS

A monthly department for the men who plan, erect and equip homes for sale

Operations Start in River Forest

¶ *FIRST FHA Insured Loans in the Chicago Area on Homes Built to Sell Made by the Prairie State Bank of Oak Park to Frank P. Ross of the Rossell Real Estate Improvement Co.*

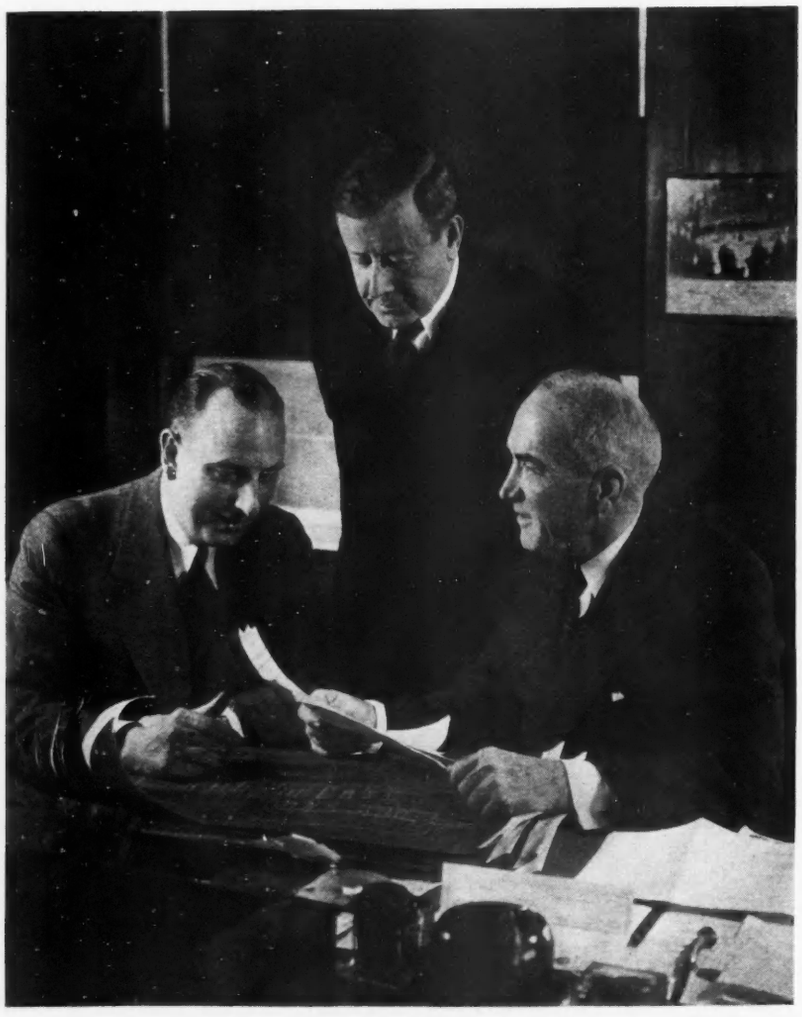
¶ *JOHN Cummings Lindop to Handle Sales; Buurma Bros. to Do the Building; Charles A. Kristen the Architect; Specifications call for modern equipment and high grade construction.*

"WE are building new homes today—modern in every respect—at costs to compete with the old houses now on the market," declared L. Buurma, president of the Buurma Home Builders Corporation and pioneer operator in River Forest, Chicago Suburb, where he has 300 good homes to his credit, when encountered "on the job" out on Bonnie Brae, where he is erecting Chicago's first FHA financed home *built to sell.* "New construction is on the bargain counter now," he added, "because everybody connected with the job is contributing his services practically without profit, so as to help get things started."

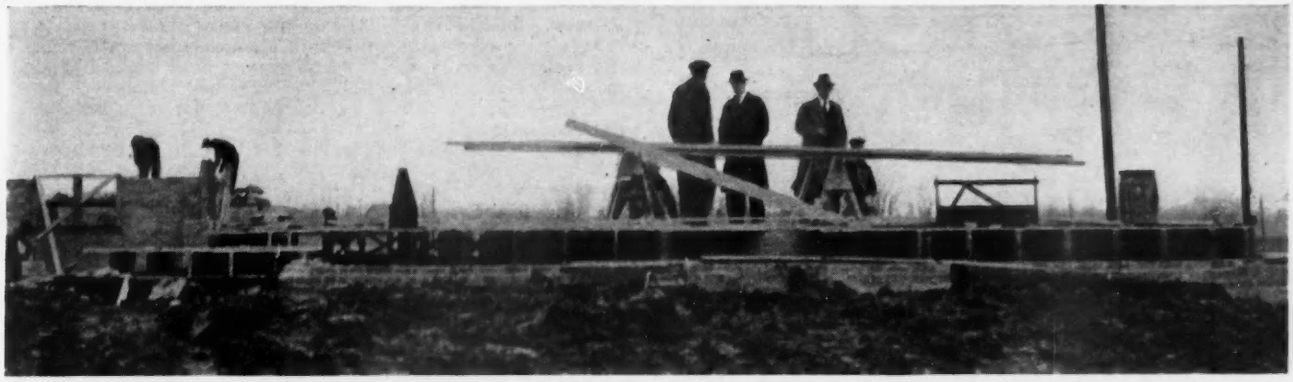
This probably accounts for the big values that are being offered by operative builders in many suburban communities right now as home building for sale is being revived. In spite of the numerous old "distress" properties still available, the low cost and the up to date features of the new offerings seem to be sufficient to interest the buyers.

This first Chicago FHA financed operatively built house is interesting because of its quality featuers as shown in the architect's perspective and plans and in the builder's specifications presented on page 38. This 8-room home to cost approximately $20,000 is now under construction. The cost is being covered in part by a $12,500 FHA loan, made through the Prairie State Bank of Oak Park.

This is one of several dwellings being erected by Frank P. Ross on an operative basis and receiving mortgage insurance under Title II of the Na-



JOHN CUMMINGS LINDOP, exclusive agent for Frank P. Ross of Oak Park, L. R. Putman, associate director of Northern Illinois, (American Builder marketing editor on leave), and Carroll H. Sudler, district director, FHA, conclude approval of Government insurance for a loan to build a $20,000 residence in River Forest, the first to be built for sale in this area.



ON APRIL 9, when inspected by American Builder, the work had progressed to the laying of the first floor. Contractor Buurma called attention to the "pre-shrunk" joists, used in all his work, secured from Barr & Collins, local lumber yard. Each timber is stamped less than 12% moisture content and the ends are painted in the warehouse with gloss oil and red oxide of iron to prevent moisture absorption.

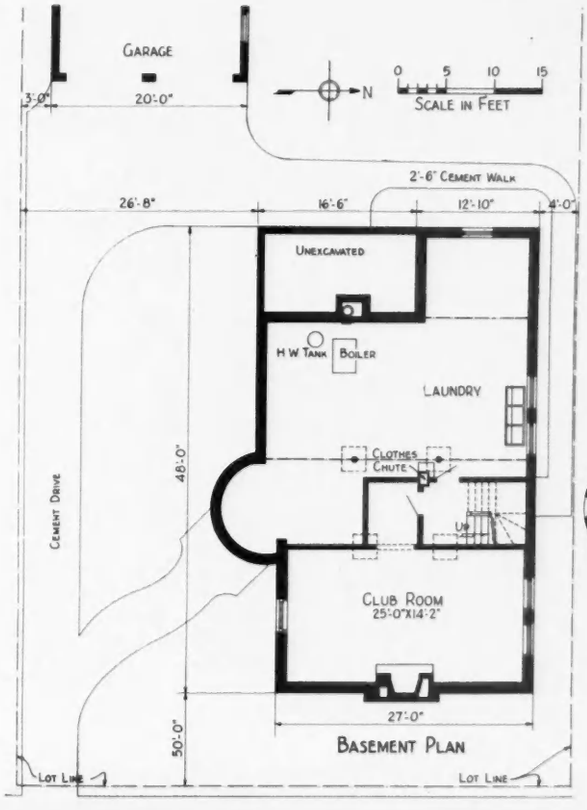
tional Housing Act. According to John Cummings Lindop, exclusive agent for Mr. Ross, seven other residences in the $15,000 and above class are to be completed this year with anticipated aid of FHA loans.

The houses now being built are owned by the Rossell Real Estate Improvement Company, an Illinois corporation which is in turn owned by Frank P. Ross and members of his family. Mr. Ross, with his brother-in-law, organized the Jewel Tea Company in 1900. The business was started with the operation of one wagon selling direct to the consumer; and when Mr. Ross retired from the business in 1919, it had grown to be one of the largest food distributors in the United States, doing a business at that time of about eighteen million dollars per year. A few years ago he acquired six blocks of vacant property in River Forest and subdivided the same under the name of Bonnie Brae Addition to River Forest, and it is on this property that he is now beginning active building operations.

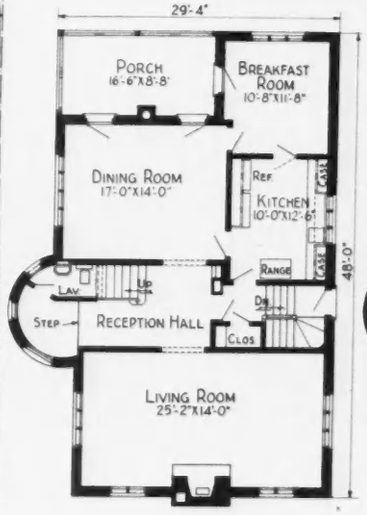
The home shown here, designed by Charles A. Kristen, Oak Park architect, and built by Buurma Brothers on a site 60 x 188 feet, includes two baths, and a modernistic clubrooom in the basement. The exterior is of whitewashed brick. "Built-in" features, air conditioning, automatic gas heating, liberal use of rock wool insulation and other modern improvements are featured. Specifications for this house are on the following page.

"There is a brisk demand this spring for architectural service," Mr. Kristen informed AMERICAN BUILDER. "I

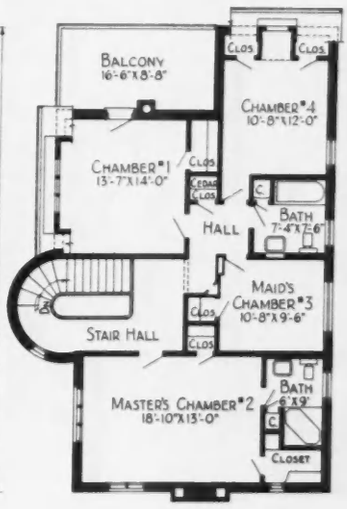
PERSPECTIVE and plan by Charles A. Kristen, architect, for Chicago's first FHA-financed, speculatively-built home. Snapshot at top of page shows this job under way.



BASEMENT PLAN



FIRST FLOOR PLAN



SECOND FLOOR PLAN

Another Buurma job now going up on Williams St., River Forest. This he calls a modern "streamlined" French design. Floor plan is similar to Kristen sketch on this page, but reversed.

have had to double my drafting staff and office space. Professional men who formerly invested in stocks and bonds are now turning to home buying as their best investment."

ROSS SPECIFICATIONS ARE FAVORED TODAY BY RIVER FOREST HOME BUYERS

The specifications for the house being constructed by Buurma Bros., under the supervision of John Cummings Lindop Real Estate, Inc., for Frank P. Ross are as follows:

CONCRETE AND CEMENT WORK: All foundation walls footings, area walls, of 1:3:5 mix concrete, stair slabs, reinforced concrete and floors of 1:2:4 mix concrete.

The outside of all walls in the excavated portions to be waterproofed with hot pitch, while the inside of all exposed concrete walls is plastered with portland cement plaster. All cement floors, walks, etc., to have ½" thick top finish. The basement floor will be 3½" thick.

BRICKWORK: All exterior walls of both house and garage are to be faced with common brick, backed up in the basement with common brick and in the balance with 5x8x12 hard burned load bearing clay tile. Both tile and brick to be laid up in lime mortar with 10 percent portland cement added. Header blocks to be used to obtain the proper tie.

All chimneys to be lined with flue lining the full height and provided with clean-out door at the bottom. Living room fire place to be of stone with slate hearth, fire brick lining, Colonial damper and ash dump.

CUT STONE: All door and window sills to be cut stone laid up in cement mortar.

STEEL SASH: Furnish and install steel basement sash as shown on drawings. Same to be "Fenestra," "Truscon" or equal.

SHEET METAL WORK: All gutters, downspouts and flashing of 16 ounce copper. All gutters to be moulded cornice gutters.

There will be a clothes chute of galv. iron from the basement to the second floor with openings at each floor. Furnish and install galv. kitchen vent where shown.

HEATING: There will be an air conditioned system installed in this home manufactured by the Mueller Furnace Company equipped with a furnastat, humitrol, and Minneapolis thermostat.

CARPENTRY: Insulation: The entire second floor ceiling is to be insulated with 4" of rockwool between the joists. All doors and windows will have plaster returns, except the kitchen, bathrooms, and lavatory which will have a back-band trim. Overhead doors for the garage.

PLUMBING: MAIN BATH: Water closet to be Crane C 11125-J Neuton vitreous china plain rim closet with jet, 2" back spud and C 13558 Ipswich 6 gallon vitr. china tank and plain seat and cover.

Lavatory: Crane C 155 22x27" Norwich vitr. china lavatory with rectangular basin, supported on C 33725-C square metal legs, fitted with combination lavatory fitting with pop-up waste. 1¼" P-trap to wall.

Bath tub: P*2315 Pembroke enameled iron bath tub for recess, fitted with all metal handles and escutcheons, all metal over rim spout, trip lever waste. All exposed metal parts to be chromium plated. Top to be 5'6".

Shower: 1—K-151-Y-½" chromium plated shower combination consisting of mixing valve with all metal dial plate, metal offset arm from wall, with 5" metal shower head with ball joint arm. All exposed metal parts to be chromium plated.

BATH ROOM No. 2: Shower: Same as for main bath.

Water closet: Same as for main bath.

Lavatory: Crane C 155-WM11 Norwich 24x21" white vitreous china lavatory with rectangular basin, supported on C 33725 square metal legs, fitted with all metal handles and escutcheons and combination lavatory fixture with pop-up waste.

All plumbing fixtures in this bath room to be white and all exposed metal parts to be chromium finished.

FIRST FLOOR LAVATORY: Lavatory: Crane C 506 Norwich 18x20" vitr. china lavatory on leg with rectangular basin, fitted with compression basin cocks and pop-up waste. 1¼" P-trap to wall.

Water closet: Same as in Bath Room No. 2. These fixtures white and all exposed metal parts chromium plated.

Kitchen sink: 1—2 part white flat rim enameled iron sink. Chromium plated lift strainer, chromard swing spout faucet with metal soap dish, metal handles and 1½" chromard P trap. All exposed metal parts to be chromium plated.

Laundry tubs: 3 part, 24"x72" granitine laundry trays without back, set on iron legs, fitted with combination swing spout with hose end.

Hot water heater: 35 gal. capacity Superior Gas Hot Water Heater. This contractor will guarantee all of his work for the term of one year from the time of final acceptance and will repair and replace any defective work or material during this time.

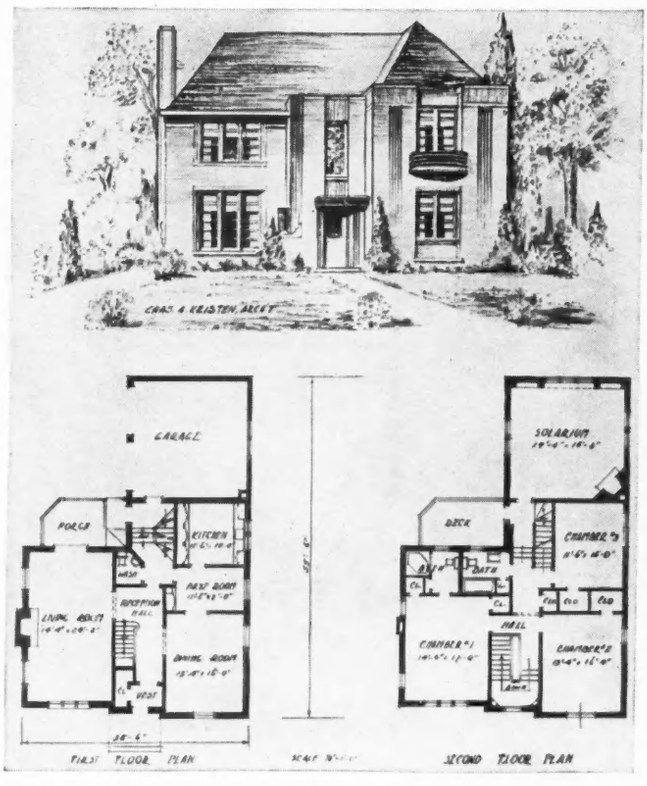
ROOFING: All pitched roof surfaces are to be covered with 3/16" thick Black Bangor Slate secured to the roof boards with copper nails. Before applying slate the roof boards are to be covered with 30 pound saturated felt. The roof of garage is to receive a 4-ply built-up asphalt roof, consisting of one layer of 30-pound felt and two layers of 15-pound felt, mopping between layers.

TILE WORK: There will be a ceramic tile floor in both bath rooms and in the first floor lavatory.

Wainscotes in master bath to be 4'6" high, showers 6'0" high, this to be Exite tile with necessary fixtures.

The vestibule will have a tile floor of fire-flash tile.

WEATHERSTRIPPING: Segar or equal metal weatherstripping to be installed on all outside doors and windows for first and second floors, using interlocking type, and brass thresholds for the doors.



Sketch by Charles A. Kristen, architect, for the second house for Mr. Ross to be built for sale under FHA financing.

Crowds Flock To See New Jersey Model Homes

By JOSEPH B. MASON

THIS IS THE STUDIO Model Home, which sold the night before the opening for $8,990. It has oil burner, concealed radiation, slate roof, recreation room in basement.

Fifteen homes sold in one week by Walter Mezick, builder, Teaneck, New Jersey

THE eyes of all Eastern operative builders were turned on Teaneck, New Jersey, Sunday, April 14, watching the first spectacular model home opening of the year, conducted by operative builder Walter Mezick in conjunction with the New York Evening Journal. "Would people come out?" they asked. People certainly would, and did.

It was a rainy day but long before noon cars were parked for blocks in all directions. More than 12,000 people jammed through the three model homes on exhibit Sunday. Five houses were sold Sunday; a sixth on Monday, and by the end of the week fifteen deals were closed.

It was the most successful model home opening since 1929. Building men take it to mean that the public is once more interested in home-buying.

Walter Mezick has sold 85 homes in his Teaneck, New Jersey, section in the past two years. Last year was very slow. Since February this year Mezick and practically every other operative builder in the Eastern territory has seen a remarkable change in public sentiment and in home-building prospects. March was so good that he decided to stage a real model home opening. The results are encouraging to builders everywhere, for when people start coming out in spite of bad weather in such

THE UNUSUAL RESPONSE to this advertisement which appeared in the Saturday, April 13, N.Y. Journal was the greatest since 1929. Crowds surpassed all expectations, indicating that for the first time in five years a real revival in home-building interest is taking place.

crowds as they did on this Sunday, it means they are really interested.

Mezick buys his materials and equipment locally, is a careful student of quality products and selects all items himself. He is a long-time AMERICAN BUILDER reader.

The houses are being financed with 20-year amortized mortgages paid off on low monthly installments. Mezick advertisements feature "no renewal fees."

MEZICK SPECIFICATIONS

The following specifications for the Colonial Model Home illustrated below are given only in part, but they will give some indication of the nature of the house he is selling complete with land for $6,900:

FOOTINGS—Base course under all walls and piers, concrete 1 part portland cement, 3 parts clean sharp sand, 5 parts clean course gravel.

FOUNDATION WALLS—First quality cement blocks laid in cement mortar; 1 part portland cement; 4 parts clean sharp sand. Walls to be solidly bonded, built to a line, perfectly plumb and straight, close joints flushed full with mortar.

CHIMNEY—Hard burned bricks laid close, cement mortar 1 part portland cement, 3 parts clean sharp sand. Line flues with well burned terra cotta flue pipe, ends cemented tight.

CEMENT WORK—4" floor; 1 part portland cement; 3 parts sand; 5 parts clean gravel, finish with ¾" top coat composed of 1 part portland cement, 2 parts clean sharp sand. Trowel to a smooth hard surface, plastered below grade with 1 coat 1 part portland cement, 3 parts of clean sharp sand, 1/10 part of hydrated lime by volume, applied ¼" thick.

LATH—Bathroom walls to be metal lath to height of 4'.

PLASTERING—Metal lath walls of bathroom to be plastered to a height of 4' with 1" coat cement plaster; 1 part portland cement; 3 parts clean sharp sand; 5% of lime putty to bulk of sand and cement. Lathed walls and ceilings to be plastered with ⅝" coat neat plaster, thoroughly mixed according to manufacturer's directions, using only clean coarse sand, applied with force to secure good clinch. Plastering shall be worked straight and plumb throughout with long darbeys and floats, carried down close to floors, close to all openings. White finishing coat 1st quality lime well slacked and screened at least 72 hrs. before using. Finish coat to be thoroughly mixed, ⅛" thick troweled to hard, smooth, even, polished surface.

FIRST FLOOR SECOND FLOOR

SKETCH OF THE COLONIAL HOME priced at $6,990, plans of which are shown above.

TILE WORK—Floors of bathroom 1st quality unglazed hexagon floor tile. Wall tile of bathroom 4"x4" glazed tile, color to be selected, laid to a height of 4', 2"x6" tile with cove cap and a 4"x4" base. Bathroom accessories; soap holder, tooth brush holder, tumbler holder, grip and soap holder, towel bar, roll paper holder. Tile work set in cement mortar composed of 1 part of portland cement, 3 parts clean coarse sand and not more than 5% lime putty to bulk. Joints struck out and grouted flush with white portland cement.

TIMBERS—Sawn die square, well-seasoned, free from shakes, large knots or other imperfections. Floor beams 3"x8"; 2nd floor beams 2"x8"; rafters 2"x6".

FRAMING—Building to be box framed in thoroughly substantial manner. Joints well spiked at ends to bearings and to each other. Doors and window stud headers and trimmers doubled. Cellar girder set on 3½" Lally columns.

FLASHING—Copper flashing wherever required to make water tight.

SHEATHING AND ROOF PLANKING—Sides and roof 1"x10" tongue and grooved N.C. pine boards laid tight to all openings and nailed to each stud or beam. Cover all roofs with 1"x6" roofers.

EXTERIOR TRIMMING—Trimming, mouldings, fascias, etc., clear white pine or cypress, as detailed on plans. Double hung window frames 1st quality, stock, white pine, fitted with noiseless steel pulleys.

SHINGLES—Slate laid 5½" to the weather, to a line and well nailed, using galvanized nails.

INTERIOR PARTITIONS—2"x4" studs on 16" centers, set straight and plumb, forced into place securely spiked. All door and window studs to be doubled.

SASH—Clear white pine, hung with 1st quality hemp sash cord. Sash glazed with 1st quality clear double-thick glass, metal weather-stripped.

FLOORINGS—Kitchen floor rough floored with 1"x2" T. & G. white pine flooring ready to receive linoleum to be cemented to floor. All other floors on 1st story to be double floored with 1"x6" under flooring and ⅞" No. 1 oak flooring, blind nailed.

INTERIOR FINISHING—1st floor clear white trim, kiln-dried, put together in cabinet-like manner.

DOORS—Interior doors 1st floor 1⅜", "Climax" 1 panel doors; front and rear door white pine.

STAIRS—⅞" pine risers, 1" N.C. pine treads, both to be tongue and grooved together and housed into 1" N.C. pine strings. Strings and stairs to be finished with base wall moulding; treads to be finished with a light cove.

CLOSETS—All bedroom closets 1 shelf 12" supplied wtih coat hooks. Linen closet 4, 12" shelves.

MEDICINE CABINET—Venetian steel cabinet with 2 glass shelves.

PLUMBING AND HEATING—Cast iron pipes uncoated, free from cracks. Joints gas and water tight with picked oakum well caulked into hubs flushed with soft pig lead. Horizontal roughing to have a pitch at least ¼" to the foot. Wrought iron pipes and fittings used in connection with roughing to be galvanized. Water piping ½" brass pipe. Exposed pipes in kitchen and bathroom heavy nickel-plated brass. Wastes to have traps as accessible as possible; brass and nickel-plated clean-out caps. 1 30-gallon copper boiler, to be hung horizontally, with brass fittings. Boiler to be connected to steam boiler.

WATER SUPPLY—From tap at curb run ¾" lead pipe into cellar and continue with ¾" brass to various risers. All risers to be at least ½" brass pipe. Grade supply lines so they can be completely emptied at the lowest points. Place brass connection cock to each of the hot and cold water risers, boiler supply pipe, and hose line and a treated bibb on extermination of hose line.

BATHROOM FIXTURES—"Standard" or equal 5'-6" recessed tub, "Standard" 20"x24" lavatory, syphon-action water closet, fitted with seat and cover.

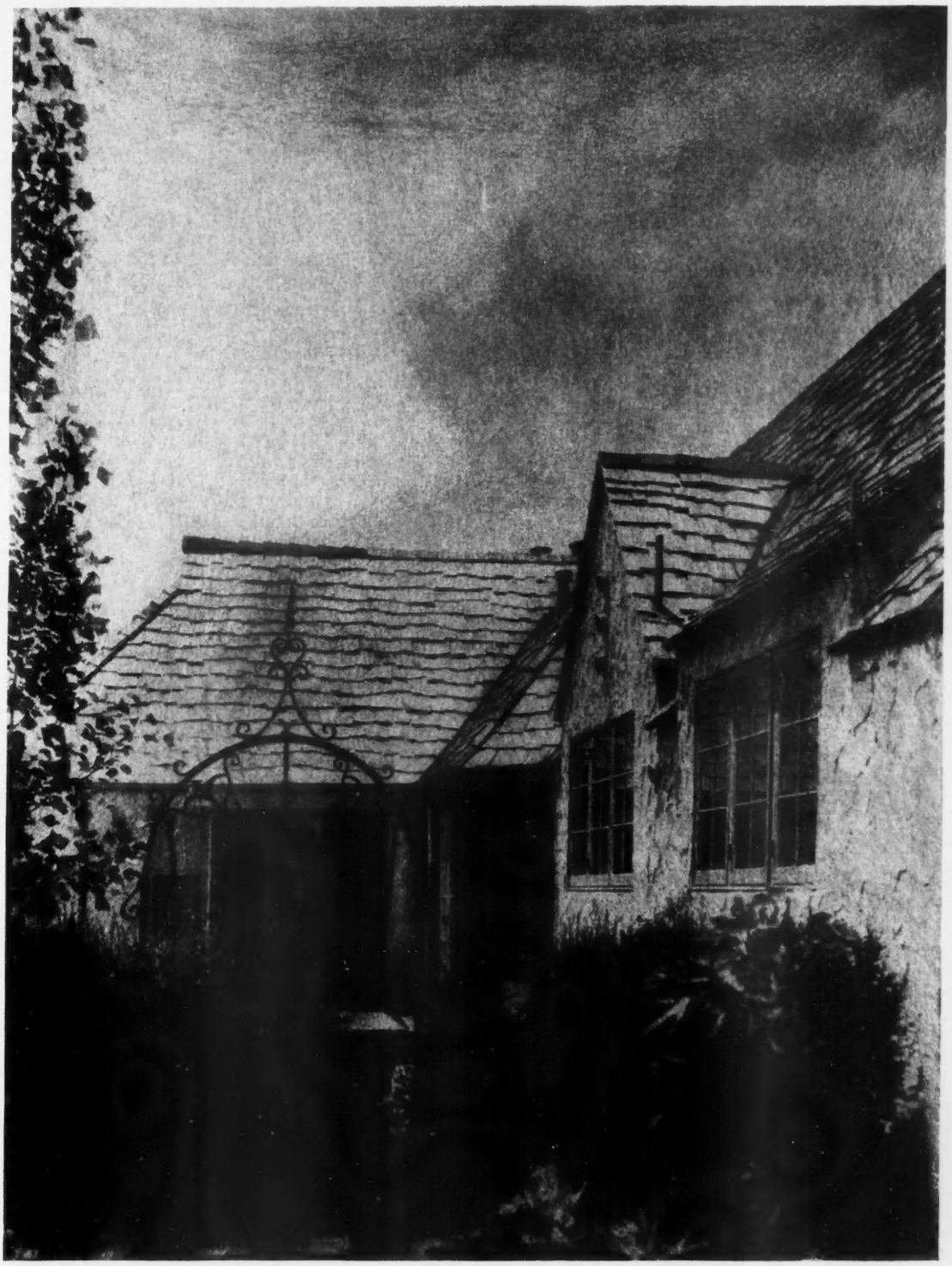
KITCHEN—Porcelain-enamelled iron I-piece sink and drain, 4-burner console type, insulated gas range.

LAUNDRY—2-part cement laundry tubs set on iron frame, fitted with rubber plug stoppers, brass compression bibbs, iron covers.

HEATER—Thatcher Oil Master steam boiler to provide 70° temperature in zero weather. Steam-gauge glass water column, safety valve, regulating damper.

OIL BURNER—Electrol oil burner with summer hot water attachment, 275-gallon inside tank.

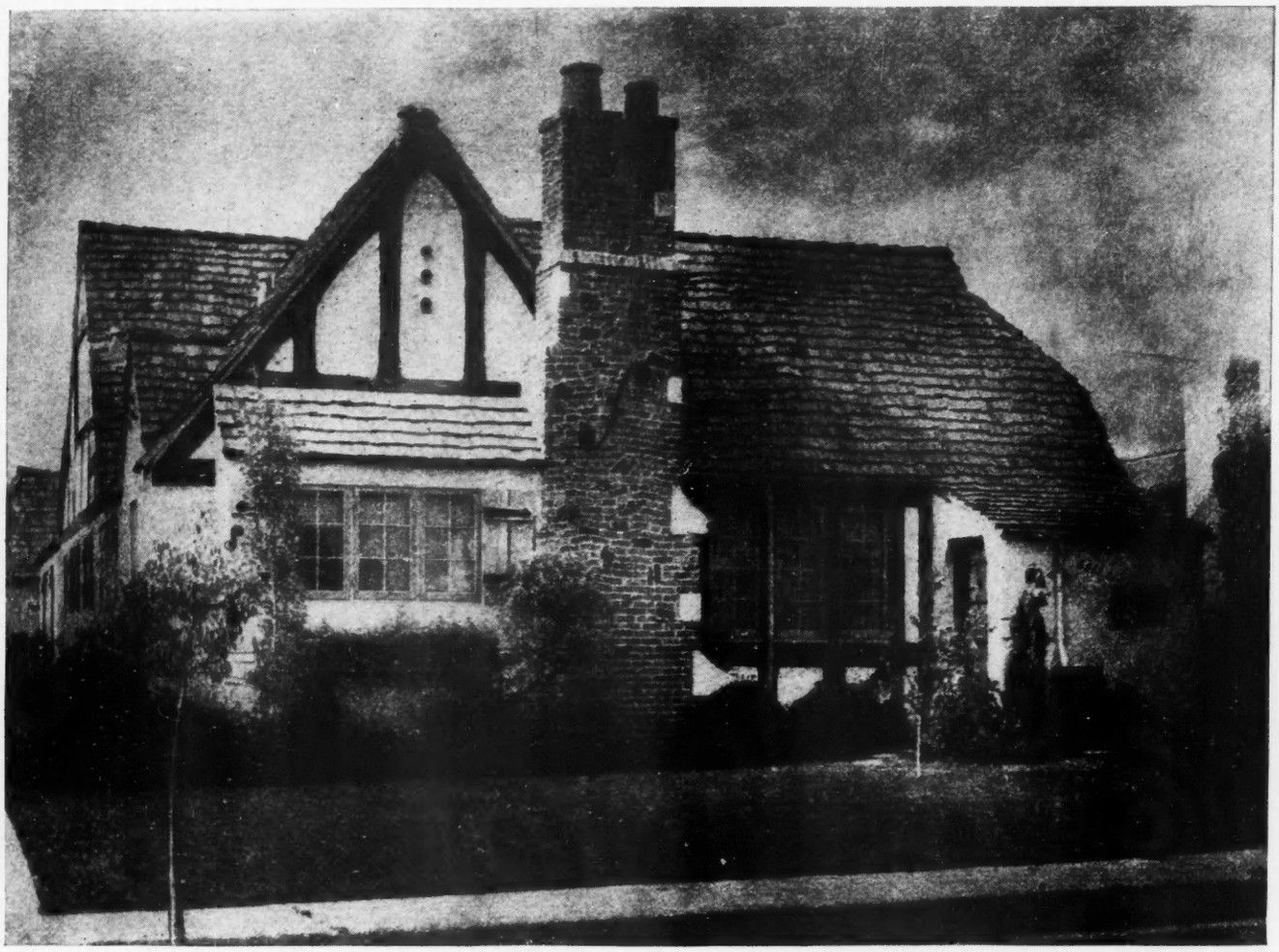
PIPING—Noiseless in operation, free and positive circulation, water tight. Risers concealed in partitions, mains carefully run and properly graded. Piping in cellar to be covered with asbestos covering.



Albert M. Pyke, Los Angeles, architect

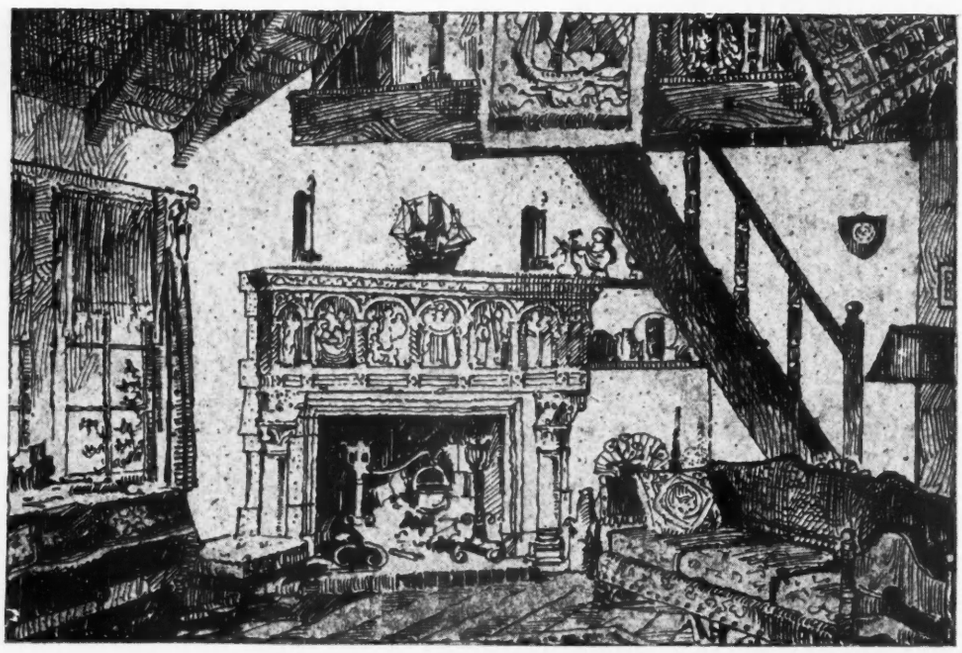
BUILDING BEAUTY

OF EQUAL IMPORTANCE to the present day trend of building to last, is the choosing of the style of architecture in which the home shall be done. Two important factors that enter into this choice are the climatic and geographic conditions of the locality and the type of homes already built, to provide that the structure shall be in harmony with nature and the neighborhood. Such is the home Albert M. Pyke designed, a garden view being shown above. Other illustrations and plans follow on the next two pages.

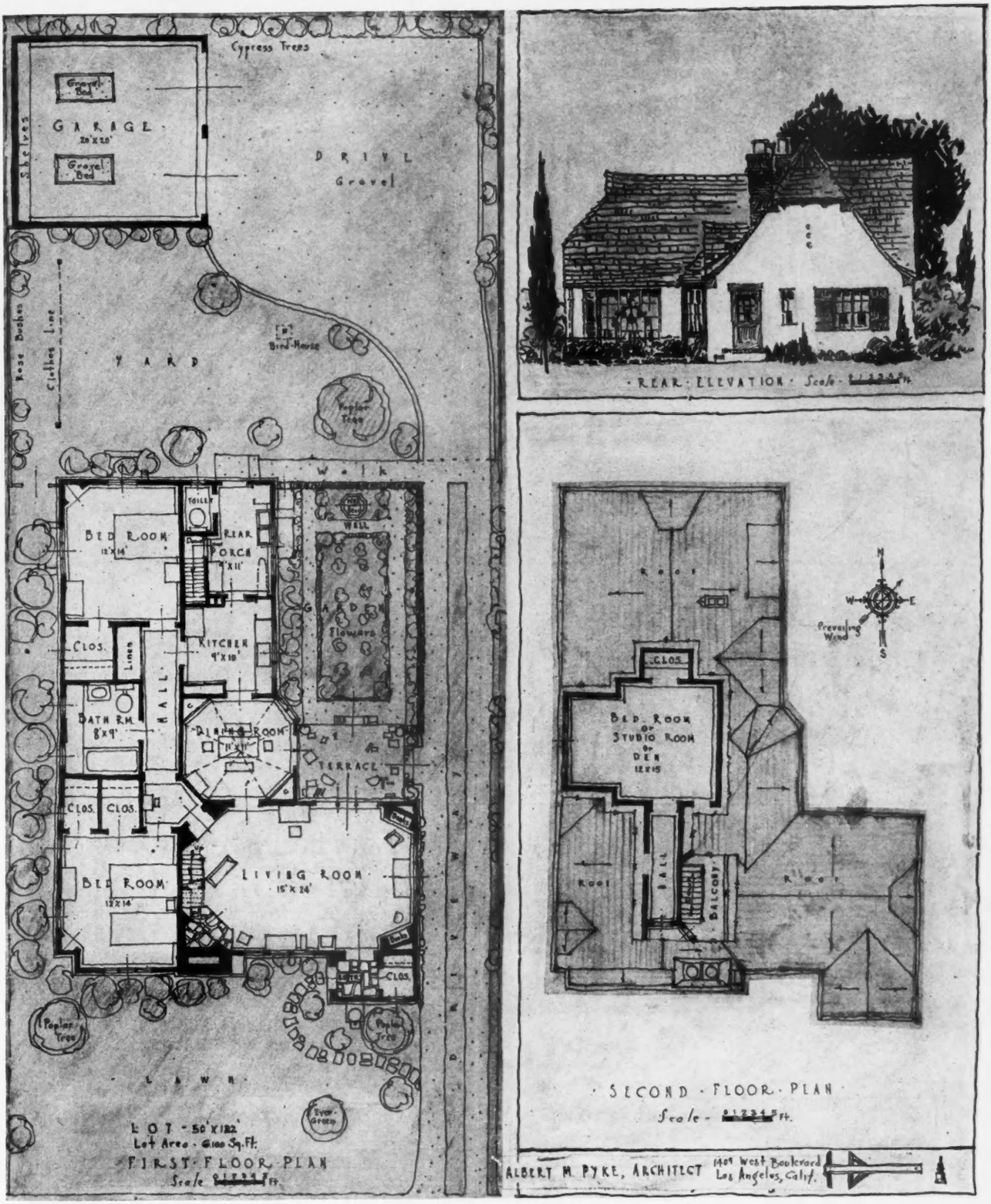


French Norman Charm

THIS 6-ROOM HOME reflects the personal preferences of an architect, since Albert M. Pyke designed it for himself. It gives the atmosphere of the French Norman influence characteristic of the houses along the Loire Valley. Details are well done and create a charming rustic effect.



THE LARGE LIVING ROOM can be entered from the front or by way of the terrace. Characteristic are the wide medieval fireplace, stairway to the balcony and wood batten doors with iron strap hinges.

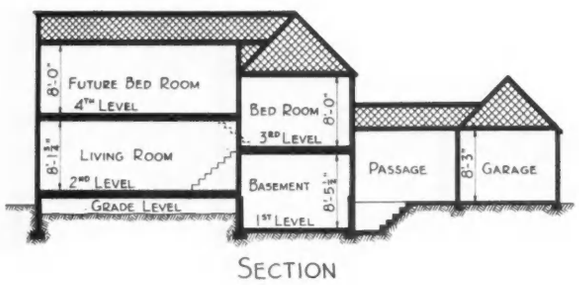


THE PLANS OF THE PYKE HOME are interesting both in the interior arrangement of the rooms and the placement on a 50-foot city lot. A successful solution gives economy of space and allows the garden to become a livable part of the plan. Both the living and dining rooms have an enjoyable garden view and easy access to the terrace for outside living. The octagonal dining room has a vaulted ceiling decorated in medieval style. The well lighted kitchen has a large enclosed rear porch.

Cost Key (second floor unfinished) is 1.976-185-1453-61-23-28.

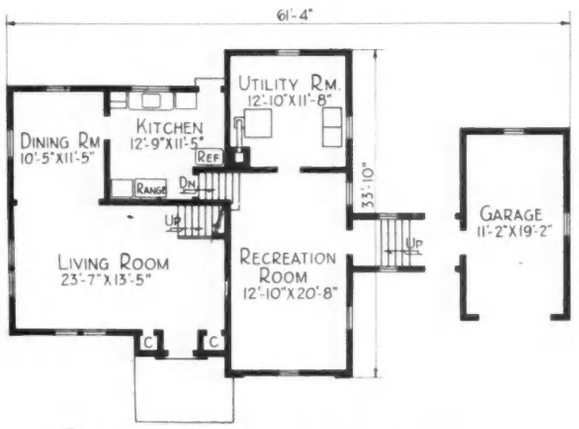
A Four-Level House Cuts Building Costs

THE FOUR-LEVEL HOUSE is not a new idea, and a number of designs of this type have been popular for years. An increase of interest in this style has been shown recently, however, and one of the houses at A Century of Progress featured the four-level arrangement. This design gives unusually spacious living quarters at very reasonable cost, eliminating all waste basement space. Excavation and filling costs are kept at a minimum. Cost Key is 2.230-145-(1120)-(47)-25-23.

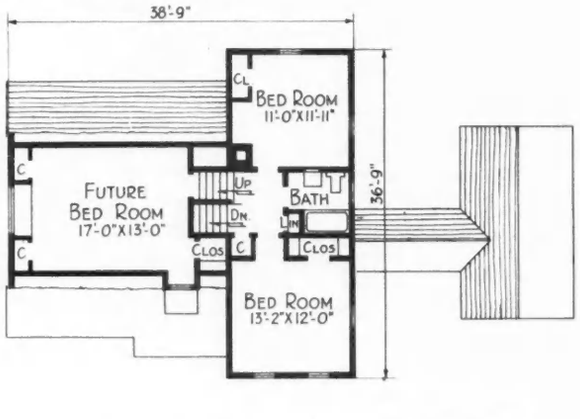


SECTION

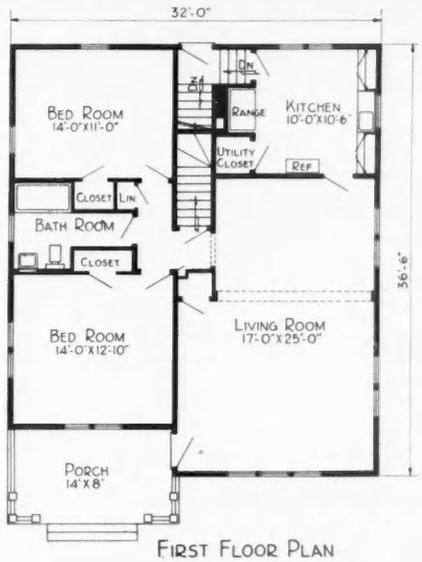
THIS IS AN EXCELLENT FLOOR PLAN with living room-dining room arrangement one of the most popular today. The large recreation room is just a few steps down from the kitchen, and can be handsomely finished. Opening out of it is the heating room and laundry, which is also light, warm and comfortable for working purposes. Two bedrooms and bath are located above the recreation room, a few steps up from the living room. The large bedroom above the living room can be finished later if desired.



BASEMENT AND FIRST FLOOR LEVELS



SECOND AND THIRD FLOOR LEVELS



FIRST FLOOR PLAN

THIS IS THE POPULAR Western bungalow floor plan. If desired, dining room can be shut off from living room by doors instead of the arched opening. This opening is desirable, however, as it gives spaciousness to both living room and dining room. Although the second floor is not shown, there is ample space upstairs for two or three bedrooms and a bathroom.—Cost Key is 1.305-137-1112-46-17-16.

Western Bungalow Style Still Popular

THIS SOMEWHAT MODERNIZED VERSION of the old Western bungalow home was built in Green Bay, Wis., late in 1934, and comments show that this type of house is still popular with many people. It was designed by O. R. Knab of Green Bay.

STUDY OF THE FLOOR PLAN will show one reason why this type of house is popular. It is simple to build and supplies all the needed requirements for the average home. Although only the first floor plan is shown at left, there is ample room for two bedrooms and a bathroom on the second floor. If the home owner desires, the dining room can be separated from the living room by doors instead of the wide arched opening as indicated on this plan.

THERE IS A DISTINCT TREND in popular taste in regard to smaller cornices. The old type Western bungalow had a huge overhanging cornice. This has gradually been reduced and today most modern homes have very small or inconspicuous cornices. In the design above the overhang has been greatly reduced and the Western bungalow design simplified.

ECONOMY NARROW-LOT HOME

R. C. HUNTER, Architect

Charming English Style Design Provides 8 Rooms, 3 Baths and Attached Garage

Cost Key 1.968—129—790—33—26—18

Current investigations among home buyers indicate the continued popularity of the English type in homes of medium size. Simplified and chastened somewhat by the influence of modernism or, more properly designated as contemporary trends in styling, these sharply pitched roof houses with their interesting variety of exterior materials, their casement windows and look of stability and homelike charm have a lasting appeal. The well known New York City home designing architect, R. C. Hunter, offers a compact design in 47 feet 7 inches by 37 feet 9 inches over all, containing 4 bedrooms and 2 baths on the second floor, maid's room and bath on the third floor, an ample entrance hall, large living room, commodious dining room, well arranged kitchen and a well placed garage or motor room on the first floor, while in the full excavated basement is space for a large recreation room, a laundry, fruit and vegetable storeroom and fuel storage. The outside walls are of brick up to the line of the second floor, wide siding to the eaves, half timber stucco work in the gable end, and a slate roof. The specifications which accompany the rather complete drawings show this house to be well insulated and provided with those features of modern equipment which assure a thoroughly comfortable, easily maintained home. Such a house can be placed on a comparatively narrow city lot and still assure good light and air to all rooms.

SPECIFICATIONS

By the Architect

THE more important items in the specifications as prepared by R. C. Hunter, architect, are as follows:

EXCAVATING: For foundation walls to extend at least 12″ outside of the walls.

LEADERS AND DRAINS: GARAGE DRAIN: Rain water leaders to be connected up at grade with 4″ salt glazed tile drain pipe, to dry wells. Provide as dry wells, a barrel of dry fieldstone sunk beneath each leader, and about 10′ from the foundation wall.

Run 4″ salt glazed tile drain pipe from drain in garage floor through foundation wall and discharge in dry well. Build dry well 3′ in diameter.

FOOTINGS, FOUNDATIONS: Build all footings, foundation and trench walls, cellar floor, air space floor, garage floor and runway, platforms, steps, porch floors, window areas, etc., of concrete as shown, using 1-2½-5 mix of portland cement, sand and coarse gravel or broken stone.

Cellar floor, garage floor and runway to have 3″ of concrete and 1″ of 1 to 3 cement finish; build pits where required. Furnish and set 8″x8″ C.I. floor drain in garage. Pitch garage floor to drain.

Living porch floor and platforms to have 12″ cinders, 3″ concrete screeded level. On top of concrete bed of entrance platform lay a complete finished brick floor, brick to be selected face brick bedded in 1 to 2 cement mortar, and tool all joints. Living porch floor to have 1″ of 1 to 2½ cement mortar finish colored and marked off and a complete brick edging. Brick same as for entrance platform. Rear platform and runway to have 1 to 2½ cement mortar finish colored and marked off.

Window areas to have concrete bottoms, and one length of 4″ agriculture tile set in floor and leading to stone pocket below.

CHIMNEY: Build chimney as shown, of common brick laid in 1 to 3 cement mortar. All exposed surfaces to be faced with clinker brick and all joints neatly pointed and struck. Foundation to 1st floor to be concrete. Construct ash pit with iron cleanout doors in cellar. Line flues their entire length with terra cotta flue lining. Provide and set C.I. cleanout doors for all flues. Provide trimmer arch for hearth.

Construct fireplace in living room. Face hearth and jambs with face brick as will be se-

(Specifications continued to page 48)

ELECTRIC SYMBOLS

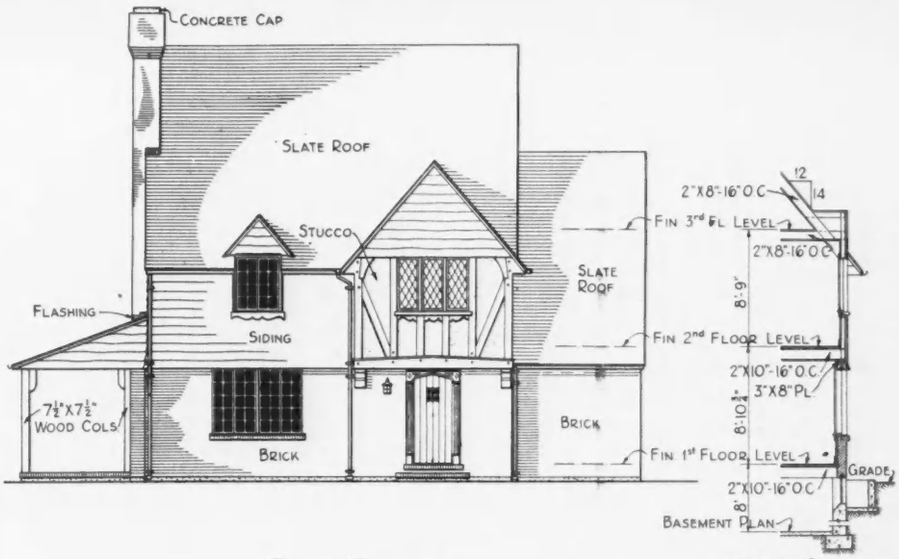
- CEILING OUTLET
- SIDEWALL OUTLET
- BASE RECEPTACLE OUTLET
- SWITCH OUTLET
- GAS CONNECTION

KEY TO MATERIALS

- CONCRETE WORK
- BRICKWORK
- STUD PARTITIONS

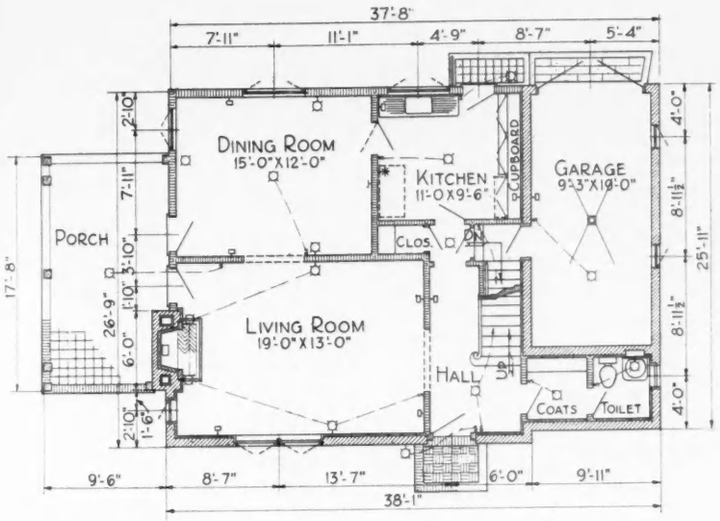
0 5 10 15 20

SCALE IN FEET

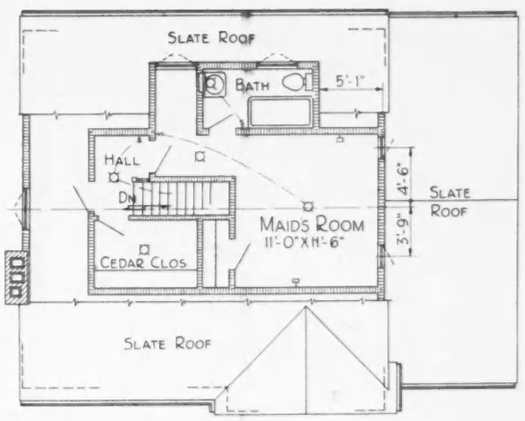


FRONT ELEVATION

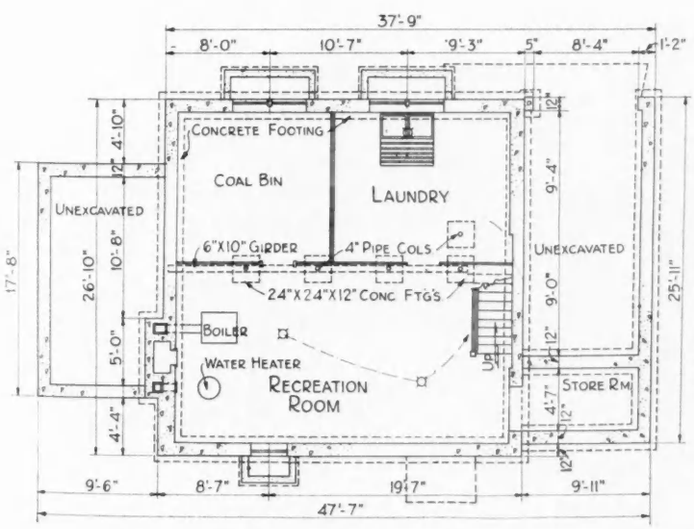
WALL SECTION



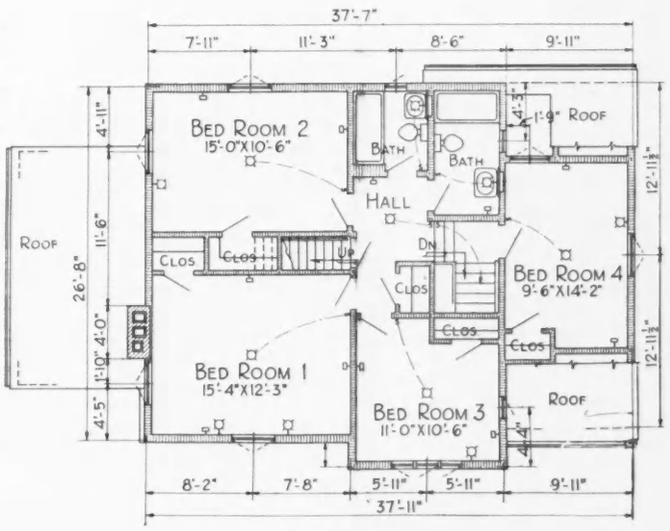
FIRST FLOOR PLAN



THIRD FLOOR PLAN



BASEMENT PLAN



SECOND FLOOR PLAN

Specifications for House of The Month

(Continued from page 46)

lected. Line with fire brick and provide "Covert" or equal cast iron throat and damper of proper size, also a cast iron ash dump.

DAMP PROOFING: Inside of all masonry walls above grade to be given one good coat of Toch Bros. R.I.W. damp proofing paint.

STEEL LINTELS: ANCHORS: Furnish and set all steel lintels where shown. To be of proper length, riveted and painted one coat of red lead at shop. Provide and set ½"x16" anchor bolts in tops of brick walls for wood plates. Bolts to be set 3'0" o.c. and have nuts and washers. Provide and set all beam anchors, etc., as required.

STUCCO: Cover all exterior walls, cornice soffits, porch ceilings, etc., except brick walls and where wood siding is shown, with No. 24 gauge self-furring galv. metal lath, weighing 3.4 lbs. per sq. yard before galvanizing. Lath to be well fastened in place with special galv. nails. Then apply three coats of stucco. First and second coats to be 1 to 3 portland cement and sand with 10% hydrated lime and proper amount of plasterer's hair. Finish coat to be Exterior California Stucco, in color as selected. This coat to be ¼" thick. Total thickness of the three coats of stucco to be ⅞". Finish coat to be rough trowelled.

SHEET METAL CONTRACTOR'S WORK: Furnish and erect all sheet metal work required to complete the building, including metal roofs and decks, gutters, leaders, flashings, etc. All to be 16 oz. copper.

Flash all walls adjoining roofs and flash and counter flash chimney. Cap flash all cornice returns. Flash all horizontal half timbering.

ROOFING: All pitched roofs to be covered with 1st quality roofing slate. Slate to be 8"x14" x⅛" to ¼" laid 5½" to weather. Slate to be variegated colors, greens, grays and about 10% purple. Each slate to be fastened in place with two copper nails.

Hips and ridges to be finished "Boston" style. All hips and ridges to be laid in slater's cement.

Underlay all slate roofs with one thickness of tarred roofing felt, weighing not less than 30 lbs. per sq. Lap joints 2" and fasten to roof sheathing with tin capped nails.

TIMBER: Frame of building to be of the braced frame type. Studs and head pieces to be doubled at all openings. Frame floors as required doubling beams at all openings. Provide all trimmers, headers, etc., all double and when over 4' long to be hung in wrought iron hangers of proper size. Frame trimmer arch for fireplace.

Roofs, dormers, etc., to be framed in best manner. All cuts on rafters must fit. Double rafters at all openings and cut in all caps and nailers and do all framing and furring as required.

SCHEDULE OF SIZES: All timber to be of good quality air-seasoned stock, of yellow pine, fir or spruce, and of sizes as shown:

1st and 2nd floor joists, 2"x10"—16" o.c.
3rd floor joists, 2"x8"—16" o.c.
2nd and 3rd floor ceiling joists, 2"x6"—16" o.c.
Rafters, 2"x8"—16" o.c.
Porch rafters, 2"x6"—16" o.c. and ceiling beams 2"x4" hung.
Ridge, 2"x10".
Girders under 1st floor joists, 6"x10", framed flush with 2"x3" spiked on both sides.
Floor bridging, 1¼"x3½" every 7'6" or less.
Studs, 2"x4", set 16" o.c.
Sills, 4"x6", halved at corners.
Corner posts, 4"x6" with 2"x4" spiked on.
Wall plates, 3"x8" bolted to brick wall.

LALLY COLUMNS: Furnish and set up complete in cellar under 1st floor girders where shown, 4" cement filled "Lally" columns. To be of proper length with caps, bases, etc. Anchor caps to wood girders.

PARTITION FRAMING: Frame partitions as shown, with 2"x4" studs set 16" o.c. except where otherwise noted. Double all studs and head pieces at openings. Plates to be doubled and well spiked together. Partition shoes to be 2" thick.

Openings over 4' wide to be trussed.

Partitions to be continuous where possible.

Cut in 2"x4" bridging between studs around entire 1st and 2nd stories.

GROUNDS, CENTERS AND FURRING: Provide proper grounds at all openings for ¾" plaster work on lath, also provide grounds for base, etc.

Fur all masonry walls above grade except in garage with 1"x2" strips set 12" o.c.

Fur brick walls above 1st story windows for siding.

Chimney breast in rooms to be furred.

SHEATHING: Cover all outside walls, all roofs, dormer fronts and sides, etc., with ⅞"x6" T. & G. pine, well driven up and nailed to each bearing. Sheathing to be laid diagonally on side walls and straight on all roofs.

SHEATHING PAPER: Cover all outside walls with Sisalkraft Waterproof sheathing paper.

INSULATING: Entire main roof and roof of garage extension to be covered with Celotex Standard Building Board ½" thick, applied to the under side of the rafters from plate to ridge, before partitions are set.

Portion of floor of B.R. No. 3 over exposed ceiling of entrance porch to be filled with 4" of Mineral Wool laid on deafening boards. Install deafening boards between floor beams for this work.

EXTERIOR FINISH, AND PORCHES: Wood for exterior finish to be No. 2 cypress.

Living porch to have wood columns, sawed brackets, etc. Bay over front entrance to have half timber 1⅛" thick rabbeted for stucco, sawed wood brackets from solid 8"x10" timber, etc. Timber work to be sawed to radius where shown. Bore for and set 1" wood pins, projecting ¾". Ceiling of living porch and soffit of bay to be ⅝" M. & B. pine.

SIDING: Cover all side walls of dormers, gables, etc., where shown, with ¾"x10" beveled cedar siding. Butt edge of siding to be cut irregular with a drawing knife to produce a wavy line.

EXTERIOR DOOR FRAMES: Frames for front and rear doors to be 1¾" thick rabbeted for regular and screen doors. Rear door to have 2¼" red oak sill. Garage door frames to be cypress 1¾" thick rabbeted for 1¾" doors. Front entrance door to have ornamental frame to detail, all of white oak. Rear door frame to have narrow outside casing all of No. 1 cypress.

FLOORING: Furnish and lay rough floor of ⅞"x6" T. & G. pine throughout the first and second stories, then lay a finished floor of "A" or best quality plain sawed white oak, ⅛"x2¼" throughout, except in kitchen, toilet room, bath rooms and garage. Kitchen and cellar stair landing to have a finished floor of comb grain yellow pine, ⅞"x2¼".

Entire third floor, except bath room and over bedroom No. 4 to have a finished floor of comb grain yellow pine, ⅞"x2¼" laid directly on beams.

Underlay finished floors of 1st and 2nd stories with one thickness of building paper.

Lay deafening boards for bath room and toilet room floors, nailed between beams 4" below tops. Chamfer tops of beams.

INTERIOR TRIM: All interior trim and finish to be of first quality kiln dried stock.

Interior door jambs ⅞" thick with ½" stop.

Door trim to be 1⅛"x2¼" moulded and mitered and with wall moulding. Door trim will not have plinths. Windows to have 1⅛" moulded stool.

Trimmed openings finished same as for doors.

Base to be ⅞"x3" with moulding at top and quarter round at floor.

Picture moulding to be ⅞"x2¼" placed near the ceiling throughout 2nd story except bath rooms, and closets.

Mantel: Construct moulded mantel shelf over brick fireplace in living room, with sawed brackets, moulded frame around opening, etc.

All trim in living room, dining room, coat closet, 1st and 2nd floor hall to be oak. All other trim to be whitewood. All work must be properly sandpapered and left ready for the finish.

DOORS: All doors to be 1st quality stock and free from imperfections, they are to be of sizes and thicknesses as shown.

Interior doors except where otherwise noted are to be 2 cross panel birch veneer, "Morgan" or equal.

Glazed doors to have narrow stiles and rails, wood muntins and glazed with clear glass. Doors white pine.

Door to garage to be kalamein with tin covered frame.

Cellar door to be solid pine or fir with trim complete.

CLOSETS: Fit up closets with shelves and hook strips.

Each bed room closet and cedar to have 1" pipe clothes rods long way of closet under shelf.

Line cedar closet with fragrant cedar, ⅜"x2" matched.

Closet base same as room base.

CUPBOARDS: Construct kitchen cupboards as shown. To have 1⅛" glazed doors above with shelves and counter shelf and 1⅛" wood doors below. All work to be properly framed together, wedged and glued. Cupboard over refrigerator to have upper compartment only. Cupboards will not have wood backs.

STAIRS: Construct stairs from 1st to 2nd floor as shown. Stairs to be properly housed, framed, wedged and glued. Handrail to be moulded and with complete ramps and easements and semi-cage at bottom. Balusters to be turned and set 3 to each tread. All to be plain sawed white oak.

PAINTING: All exposed exterior woodwork to receive two coats of Cabot's creosote shingle stain, weathered gray shade.

Doors, and door and window frames to receive an additional coat of flat varnish. Paint all steel windows two coats of enamel paint, color as selected. Paint iron pipe rail and concrete chimney cap two coats of dead black paint. Paint exposed portions of steel lintels to match sash.

All interior wood work in living room, dining room, coat closet, 1st and 2nd floor hall to be given one coat of stain, one coat of paste filler and then waxed and polished.

All other interior wood work of 1st, 2nd and 3rd stories, except floors and garage to be given one coat of lead and oil paint, one coat of enamel undercoater, and one coat of Vitralite enamel.

Wood floors of 1st and 2nd stories to receive one coat of stained paste filler and two coats of floor wax. Wax to be well rubbed with weighted brush.

HOUSE SEWER AND DRAIN: From the 4" running house trap at inside of foundation wall, run 4" extra heavy cast iron pipe through wall and to a point 5' beyond, connect at this point with 4" salt glazed tile pipe and continue to the street sewer. Install 4" extra heavy cast iron running house trap at inside of foundation wall, trap to have two cleanouts with brass screw caps. Connect 4" fresh air inlet to house side of sewer and run same to outside of building, terminate in cowl.

Continue soil and waste lines to all fixtures. Tap soil pipe above highest fixture to receive vent. Provide complete system of back vents for all fixtures, etc.

SIZES OF PIPES: Sizes of pipes to be as required for each case. The sizes must comply with the rules of the Local Plumbing Code.

All waste and vent pipes except main stack are to be standard weight wrought iron galvanized, all put together with red lead.

COCKS: Provide on water supply the following approved lever handle cocks, each to be of size as required by pipe:

Main supply at point of entrance.
Inside control for hose bibbs.
Each group of fixtures.
Inlet on water feed to boiler.

WATER SUPPLY: Tap street main with ½" tap and run ¾" A. A. lead main supply pipe from the street main to inside of foundation wall, place a cock as before specified, provide standard meter, and continue to all fixtures.

The distance from foundation wall to street main not to exceed 50 feet.

All pipes and fittings to be of proper size. All to be heavy solid brass. No pipe to be less than ¾" inside diameter.

Provide two ¾" lawn outlets at outside of building where directed, with key sill cock, etc.

Provide ¾" water feed within 6' of boiler.

Provide ¾" water outlet in garage with hose threaded faucet.

All pipes to be properly supported. Joints to be screw pattern set with white lead.

All fixtures except closet cisterns to have both hot and cold water. Closet cisterns to have cold water only.

HOT WATER HEATER: Provide and set up in cellar where shown one (1) Crane Co. No. 4 "Premier" Automatic Storage Gas Water Heater, 48 gal. as shown and described.

Connect vent flue to chimney with 16 oz. copper pipe. Connect water heater to all plumbing fixtures except W. C. with brass pipe. Connect heater to waterback in boiler with brass pipe.

FIXTURES: Furnish, set and connect up complete where shown, the following fixtures:

Cellar: 1 set of two compartment "Albarene," stone laundry tubs, 24"x48" brass cocks, plugs and chains, iron legs, hinged metal covers, supply pipes, trap, etc.

First Floor:

Kitchen: 1 sink, 20"x74".

Toilet Room: 1 W.C. "Saneto"; 1 lavatory, 21"x24" "Norwich."

Second Floor:

Bath Room No. 1: 1 W.C. "Saneto"; 1 bath tub, 5'0", "Corwith," complete with shower; 1 lavatory, 22"x27", "Norwich."

Bath Room No. 2: 1 W.C. "Saneto"; 1 bath tub, 5'6", "Corwith," complete with shower; 1 lavatory, 21"x24", "Norwich."

Bath Room No. 3: 1 W.C. "Mauretania," with "Church" white seat and cover; 1 bath tub, 5'0", "Carlton"; 1 lavatory, 17"x21", "Nevada."

Above fixtures except laundry tubs to be made by Crane Co. All fixtures to be complete in every respect.

GAS FITTING: Tap street main and run 1¼" pipe to inside of foundation wall, provide stop cock and curb box at curb and arrange for meter at inside of foundation walls, or the contractor may arrange with the Local Gas Co. to have this work done, but the contractor must pay all costs.

Run pipe from meter to gas range and water heater and connect up to same complete, also run to fireplace for gas log. Provide outlet in laundry. No pipe to be less than ¾" dia. Provide stop cock at inside of foundation wall.

HEATING: There is to be a complete low pressure, gravity return, one pipe steam heating system, with direct radiation.

BOILER: Furnish and set up complete on top of floor in cellar where shown, one (1) 1-S-8 Ideal Redflash cast iron steam boiler, having a rated capacity of 950 sq. ft. of direct radiation.

WATER BACK: Furnish and set in heating boiler one (1) Ryan & Fitzpatrick cast brass water back of proper size.

PIPE AND FITTINGS: There is to be a complete system of flow and return pipes to all heating surfaces.

Pipes to be standard weight wrought iron with heavy beaded fittings, and to be of ample size to allow a rapid and noiseless circulation.

RADIATORS: Furnish and set all radiators of sizes as shown on the drawings. They are to be American Radiator Co.'s "Corto" pattern and are to be free from defects.

Radiators in garage to be wall type, supported on proper wall hangers.

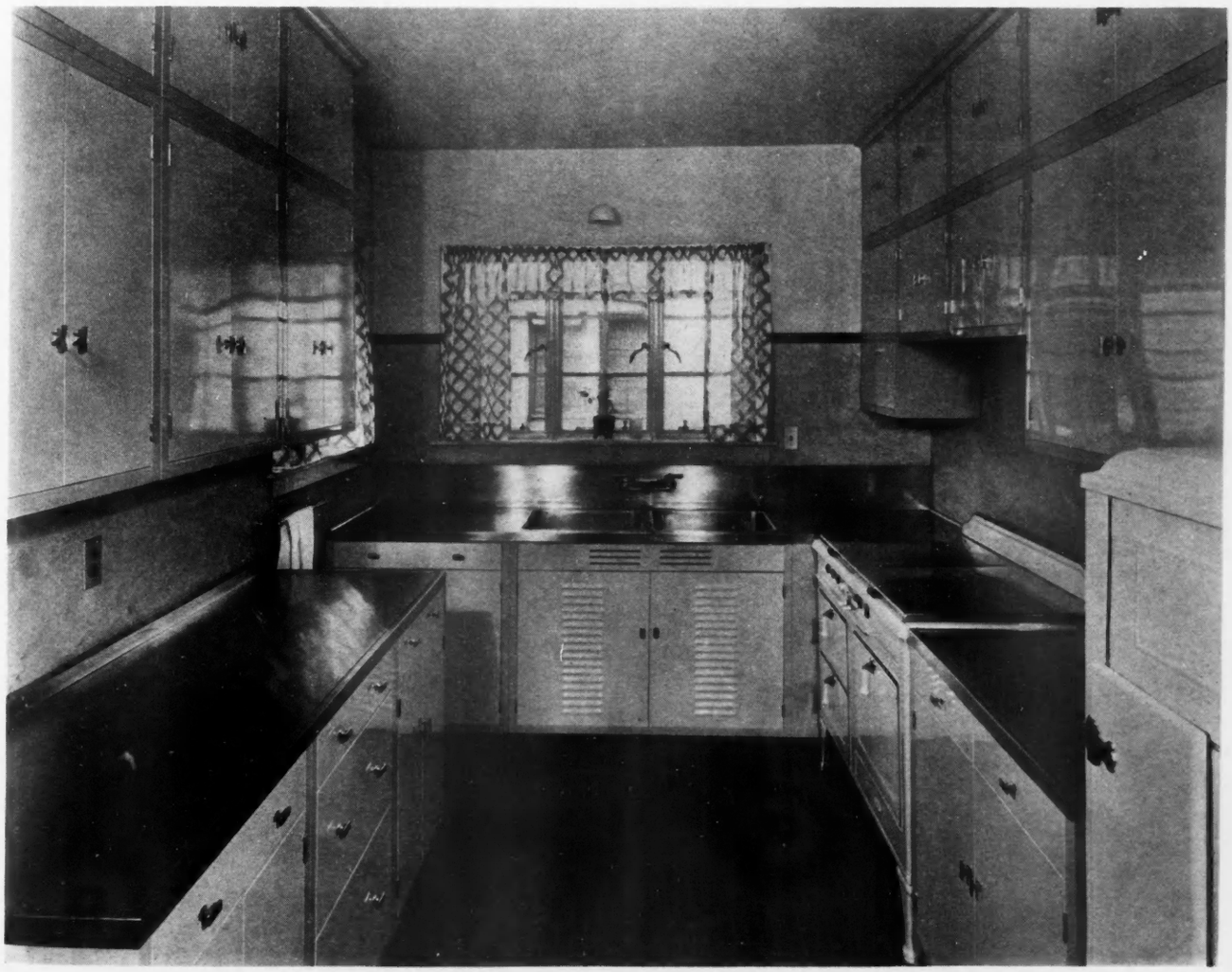
NON-CONDUCTING COVERING: All concealed piping, also piping in cellar, etc., to be covered with 1" asbestos air cell covering, canvased and banded in place.

MODERNIZATION

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

Kitchen Magic Is Making Sales

MUCH can be done to make almost every kitchen more convenient and attractive. The accompanying illustration shows a kitchen on Lunt Avenue, Chicago, which was far from unserviceable before modernization. The principal objection was that there was considerable waste space, with consequent lack of storage facilities, and it was felt that both utility and appearance could be improved without too great expense. The first change was removal of an old style self-supporting sink and replacement with a modern cabinet type, two-bowl monel metal fixture; the new unit was moved to a location under the larger window, with an additional lighting fixture above, to insure better light at all hours. This change provided almost as much working surface as the entire original kitchen equipment; however, this was not considered sufficient, so two additional cabinets with monel metal tops to match the new sink were supplied. A cabinet type range was then installed, giving still more working space.



No Defeat At Waterloo (Iowa)

Successful Remodeling Job Sponsored by Chamber of Commerce Sets Example for Midwestern Groups

By MERRILL S. GAFFNEY

TO stimulate home remodeling and repair, the Waterloo (Iowa) Junior Chamber of Commerce last winter completed a project which entailed the remodeling of a 63-year-old, three-family dwelling into a modern Colonial six-room home.

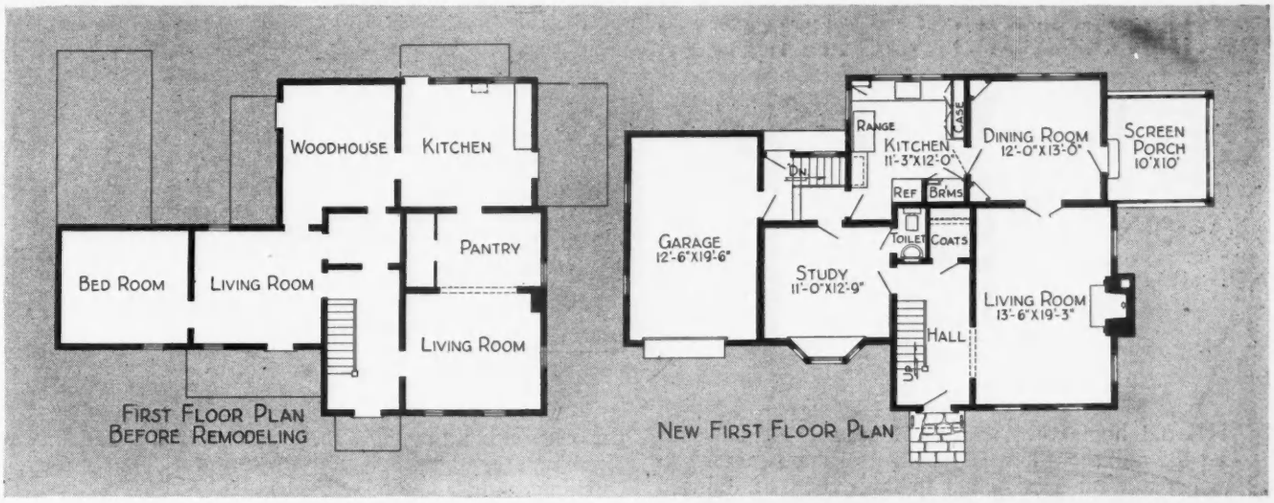
In February, the delegates to a five-state Junior Chamber of Commerce convention at Des Moines heard a complete report of the project. As a result, many junior chamber groups in Iowa, Minnesota, Nebraska, South Dakota and Missouri decided to inaugurate similar schemes. Twenty Iowa organizations have announced their intentions of remodeling homes to stimulate building and repair. Cities in which such plans are being considered, or are under way, include Cedar Rapids, Boone, Ames, Iowa City, Dubuque, Ottumwa, Hawarden and Marshalltown, all in Iowa, and Freeport in Illinois.

The Waterloo Junior Chamber group, which is composed of young business and professional men, between the ages of twenty and thirty-one, purchased the residence and the lot on which it stood in a residential section just outside the business district. Although affiliated with the senior Chamber of Commerce, the younger men carry out their plans without active participation by the older group.

Building crafts unions and dealers in building materials and furnishings co-operated by donating most of the materials and labor, but computations showed that the full cost would have been approximately $4,000.

Mortimer B. Cleveland, architect, drew the plans for converting the dilapidated structure into the comfortable home which attracted 4,000 visitors on the day it

UPPER: The 63-year-old house just prior to its purchase. This dilapidated building served as a three-family dwelling. Lower: Modernizing transformed a run-down structure into this six-room Colonial home. The total cost was approximately $4000.

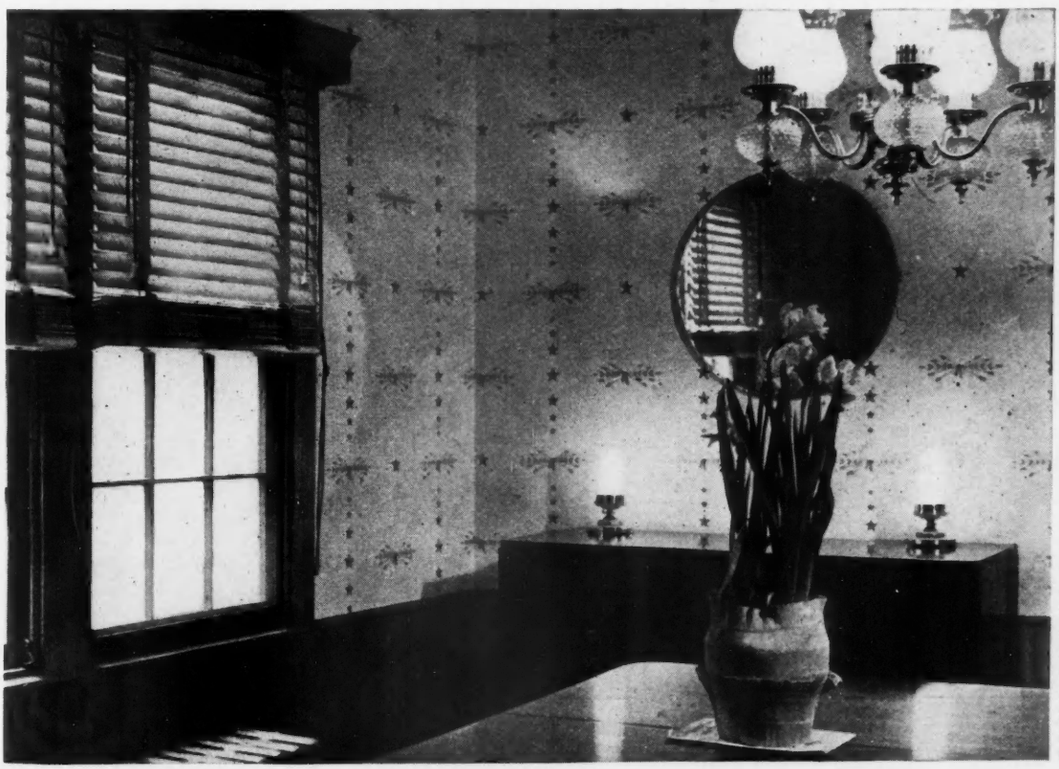


was dedicated. There was no general contractor employed, the whole project being under the supervision of A. K. Pingeno, a local paint merchant and vice-president of the Junior Chamber of Commerce.

The house of frame construction, typical of a half century ago, contained heavy timbers and sills of six-by-eights. Few marked structural changes were made, the original dimensions of 32 by 48 feet being unchanged. Another second floor bedroom was built over the wing on the back of the house and a four-foot addition to allow for the study and garage was made as shown in the plans.

When the remodeled home was opened for public inspection, many of the visitors were prompted to purchase materials and modern equipment.

A house to house canvass made in Waterloo the latter part of March under the auspices of the Federal Housing Administration revealed $62,380 in needed improvements on 668 homes. A majority of the owners announced their intention of making the improvements.



The old kitchen (above) was remodeled into the dining room shown at the left. The two-foot dado, trim and ceiling are of redwood slightly grayed and waxed. Venetian blinds and roller screens add attractiveness and convenience to the windows.

Will Rogers Can Now Buy His Gas in Style

$4,000 ALTERATION JOB at Claremore, Okla., Brings New Life to "Horse-and-Buggy" Type Station

THE old home town in the Southwest demonstrated the ability to keep up with its famous actor son when it went Hollywood to the extent of doing a good job of "face-lifting" on this gas station. The Cross Construction Co., general contractors of Tulsa, Okla., were the "doctors" in charge and did the work in such a manner that the operators were open for business all during construction.

The station is owned by the Barnsdall Oil Company. Before modernizing, the appearance was that of the type of service station built by distributors in the first boom days of the business. Stations went up "over night," mushroom-like—some gaudy, others drab stucco. Very few were planned to serve their customers efficiently and still fewer had architectural beauty.

With competition so keen, these obsolete structures must give way to the more modern ones. The owners found that remodeling into an up-to-the-minute service station of this type increased business. For that reason, the plan has been adopted for all future Barnsdall stations.

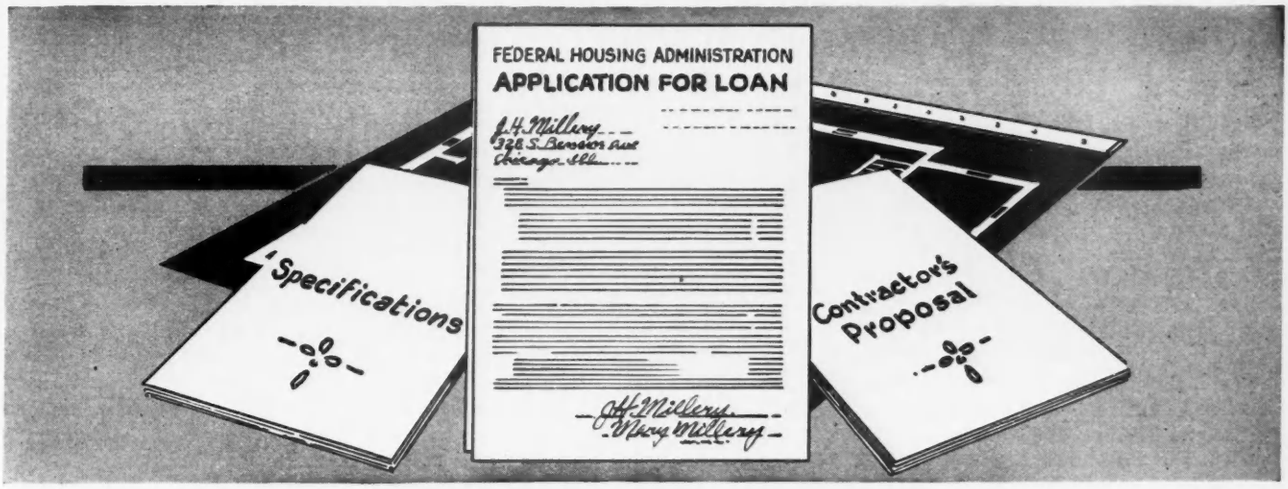
Modernization done on the building included eliminating the low, overhanging roof and giving the building simple, modern lines. The glazing of windows and doors and their placing were changed to harmonize with the general design. A wash- and grease-room was added to the original building. The Barnsdall name and trade mark stand out against the snow-white exterior in an eye-catching manner.

The new equipment necessary to handle the increased facilities of the enlarged unit was installed; a concrete driveway with approaches and curbing completed the job. The total cost of all these changes amounted to $4,000.

At night the exterior of the building is brilliantly floodlighted by fixtures set flush with the driveway in such a manner as to give indirect lighting. Beams playing on the white walls produce a dazzling spectacle; sharp contrasts increase the attention value to attract patronage. The show windows, which now can be better arranged to display various lines of accessories attractively, have 200 watt lamps and reflectors to supplement the outside lights.

William M. Cross of the Cross Construction Co., the builders employed on this job, said, "Work of this type may be financed through the Federal Housing Administration opening up another field for re-employment in the building industry." The soundness of such modernizing, as an investment that pays with increased business, appeals to the operators. With the passing of these obsolete relics, the driving public is better served, the appearance of the property is improved, and civic pride is heightened.

AT THE TOP OF THE PAGE, the obsolete "horse-and-buggy" type station is shown before a $4000 modernizing job changed it to the attractive and efficient service station pictured in the lower illustration. Increased business justifies such remodeling projects.



HOME EQUIPMENT

Nothing Down—5% Interest—Up to 20 Years to Pay

New opportunities for lower costs under FHA financing. Heating, plumbing, electrical, air conditioning planned in advance and included under one contract give added responsibility.

By V. L. SHERMAN

Department of Mechanical Engineering, Lewis Institute of Technology, Chicago

THE Federal Housing Administration is definitely opening the way to the prospective home owner by placing the loan under a single, long-term mortgage at the very low interest rate of five per-cent. The FHA is protecting the prospective home owner by requiring full plans and specifications which are to be inspected and endorsed before building operations begin. For the owner conditions are nothing short of ideal compared to what they were in years gone by.

But for the intelligent general contractor who knows the ins and outs of building the proposals of the FHA should present an even rosier future. He is now in a position which, in the past, has seemed to be at the end of a rainbow. The welcome requirements of the FHA call for a substantially built and completely equipped home. He is in a position to talk sense into the head of the owner and to show how the costs can be suitably apportioned to provide for completeness and permanence. What future home owner can argue less than quality equipment or complete equipment when the full cost is spread over a long term of years and at a very low interest rate. In truth there is no argument at all between an intelligent contractor and a sensible borrower. But the future owner must have reasons for depending on the judgment of the general contractor. The latter's knowledge of equipment is essential, and his ability to judge of its quality. He must point out the liabilities of poor equipment and the reliabilities of genuine materials.

What is meant by a completely equipped home? Does it have to have a built-in radio? Does it have to have heat in the garage? Does it have to have lightning rods? There are a multitude of such questions broached. But if the matter of completeness of equipment for a home is turned over in the mind of one with some experience the answer is reasonable. A completely equipped home is one that, for its location and capacity, provides the dwellers with complete physical and mental comfort. Perhaps it might better be said that a completely equipped home is one that meets the necessities of the owner with reasonable permanence.

Lightning rods are hardly necessities on homes with grounded connections in a well populated district. Country homes are not to be classed rigidly with suburban homes, and still less with town houses. But they all have certain common requirements to meet when we consider the daily family life. The kitchen, the laundry, the bath, illumination, ample supply of electric current outlets, the heating plant with its humidifying provision, perhaps a cooling and dehumidifying plant, refrigeration, and most of all reliability in all of these every-day comforts.

One has only to study the charts of the country's temperatures to note where the heating units are of the greatest importance and where the possibility of cooling and dehumidifying has the greatest attraction. To be comfortable through all of the months of the year is surely most important.

But there are many things that the prospective home owner may know nothing of, and yet with reason expect the contractor to provide for. In one town nearby it would be folly to suppose that a home was completely equipped if it lacked a water-softener. I do not mean to say that it is a matter of the complexions of the folks living there. It is a matter concerning the water supply

MECHANICAL EQUIPMENT FOR 20-YEAR FINANCED HOUSES

in general, for drinking, for the heating plant, for the laundry, for the plumbing. Over a period of years the expense of living without the uses of a water-softener would be a considerable item in money and comfort. Such a water softener as shown in Figure 1 is as much a part of a completely equipped home in some localities as is any of the rest of it. Especially where we are dealing with the higher temperatures that are coming commonly with automatic heating, stoker, gas, or oil, is it necessary to provide water that will not injure the heating and the plumbing lines and fixtures and the porcelain surfaces. If these points of advantage are not open to the owner's eye some one or two are quite likely to call his attention in a severe way to the tough work in the laundry department.

Besides the make-up of the water throughout the home there is the question of controlled pressure of the water in the system. Where city provision is adequate there may be no need of a pump, but there are so many instances where water-pressures are variable or even nothing at all. In such cases a reliable pump which can be conveniently located without obstructing and without endangering by exposed moving parts is surely a part of complete equipment. Figure 2 is such an up-to-date piece of equipment. It does not have the appearance of the older types or of the cheaper types, and it goes to show that manufacturers have been thorough in their progress over the last few years.

There has been a definite change in regard to the protection of water supply in the home. For a number of years the study has been carried on to provide against seepage at the main source and in the pumping stations. But within the last year or two there has been a strong movement made against the chances which we used to pass without thought. The distinct feature brought out under this study is the vacuum breaker. One of these is shown in the section sketch of Figure 3.

On a windy day, when the pressure at the top of the soil stack varies, the level of the water in the bowl of the water-closet rises and falls with the pressure. If the soil stack were to be closed at the top, and the pressure reduced therein, the water from the bowl of closet would flow into the stack. Now there are an increasing number of flushing valves being used in residential work to replace the tank and valve, and in these cases as in all newer types of equipment, troubles may develop unless the equipment is complete.

Without a vacuum breaker connected into the supply line to the closet there is a through connection between the water-supply system and the water and contents of the closet bowl whenever the level in the bowl rises above the point of the flushing discharge. So long as the water pressure in the immediate connections is maintained there is no particular harm. But if through any one of many ways in which pressures suddenly drop there is a slight vacuum produced on the supply side of the connections then the polluted water from the closet bowl will be drawn back into the supply side. It takes little pollution from one small source to contaminate a whole supply source.

To the right in Figure 3 is a sketch of the fittings between the supply line and the water-closet when a flushing valve is used. The fitting C is called a stop, but it is also a supply regulator. This is to prevent any overflow from the closet bowl if for any reason the flushing valve, D, fails to close properly or delivers too much flushing water. It is of course plain that the discharge from the bowl through the bowl trap is controlled by the rise of water within the bowl, and if too much water is used for flushing there is some danger of the bowl overflowing.

When properly adjusted the flushing valve will discharge the right amount of water and then close automatically whether the handle is pushed once or held over for some time.

The vacuum breaker which is attached below the flush-valve is shown cut away in the sketch to the left. When there is no flow of water from the valve above the ring

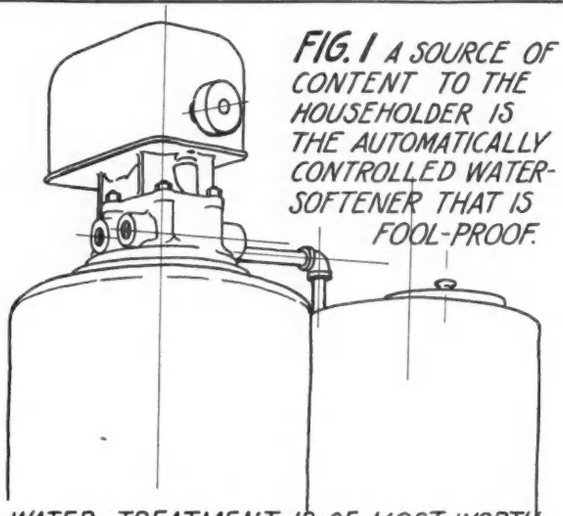


FIG. 1 A SOURCE OF CONTENT TO THE HOUSEHOLDER IS THE AUTOMATICALLY CONTROLLED WATER-SOFTENER THAT IS FOOL-PROOF.

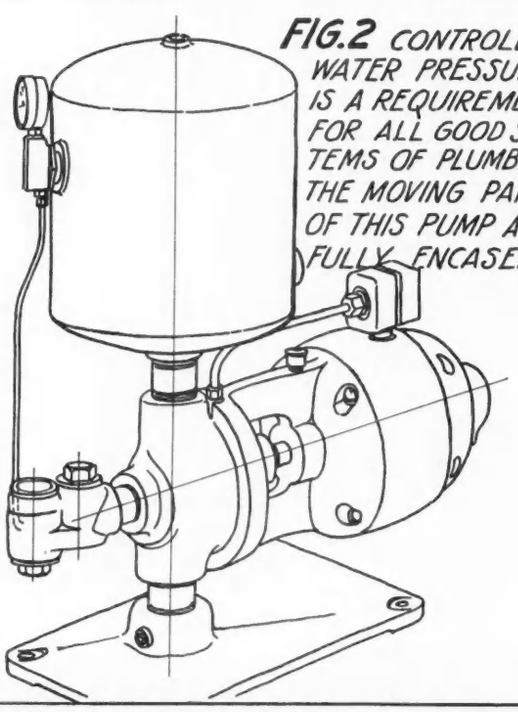


FIG. 2 CONTROLLED WATER PRESSURE IS A REQUIREMENT FOR ALL GOOD SYSTEMS OF PLUMBING. THE MOVING PARTS OF THIS PUMP ARE FULLY ENCASED.

WATER TREATMENT IS OF MOST WORTH IN COMFORT. BUT WATER-SOFTENING IS MONEY-SAVING IN PRESERVING THE LIFE OF PLUMBING AND HEATING SYSTEMS, AND A MONEY-SAVING IN BOTH OF THESE SYSTEMS BY ITS EFFECTIVENESS.

HEATING—AIR CONDITIONING—PLUMBING AND WIRING

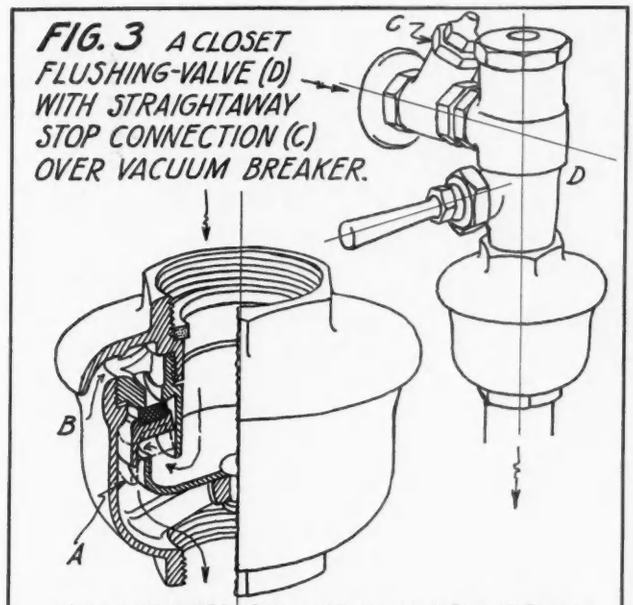


FIG. 3 A CLOSET FLUSHING-VALVE (D) WITH STRAIGHTAWAY STOP CONNECTION (C) OVER VACUUM BREAKER.

VACUUM BREAKERS ARE NOW REQUIRED TO PREVENT SUPPLY-WATER POLLUTION BY SYPHONAGE IF THE FLOW-IN LEVEL IS BELOW HIGH-WATER LEVEL OF ANY FIXTURE.

within, the vacuum breaker drops to a seat on the cup, as is shown by the dotted lines. This allows the outside air to vent through the fitting at B. When the flushing valve is operated the flow of water immediately lifts the ring to its seat to prevent any of the rushing water to escape. Thus there is no connection between the supply line and the closet bowl except when the water pressure is on the supply side.

There are an amazing number of instances where the openings for the water supply to a fixture, wash-bowl, bath-tub, sink, or laundry tray, are below the possible level of the contents of the fixture. In any one of these cases there is the chance for back-syphonage from the fixture into the water main. Plumbing design is changing to meet this very obvious condition (now that our attention has been called to it). But there are many instances where the use of a vacuum breaker is to be preferred to a change in design.

And city ordinances are being changed to provide against this often overlooked chance of supply pollution. The contractor may well look into this side of it because his foresight will add to his reputation for thoroughness.

Would it be too much to say that a man's temper is often determined by the state of the faucets in his home? He has only one temper and if the faucets are many and cheap his temper is a total loss. One plumber told me that unless he installed the best quality of faucets he soon found himself on the defensive. There is every argument for the best quality in faucets and none at all for the cheaper sort.

"Faucets will wear out." That is true, if they are given time. But it is the parts of a faucet which do the wearing out. If these parts can be depended on to live out their natural span of life and can readily be replaced then the faucet becomes an unthought of convenience instead of an ever-present aggravation. The one shown in Figure 4 is smoothly surfaced for the cleanser, flat faced around the stuffing-box for the wrench, broached at the top of the stem for increasing the surface of contact with the handle. If there is one particular requirement for a satisfactory faucet it is a snug fitting handle.

I have seen so many misstatements regarding some phases of air conditioning that I would like to make one or two points clear in these last paragraphs. The statements were wrong through carelessness or lack of understanding. If a house is to be air conditioned throughout by means of a single unit there must be complete control of the air coming into the house. And there should be complete control of the temperatures along exposed walls, windows, doors, and other openings. When the house is to be air conditioned by means of individual units, placed as required, the capacity of the unit determines the amount of possible ventilation.

In the first case a unit is provided to take fresh air from out of doors, probably to mix it with some recirculated air, bring the mixture to its proper temperature and percentage of relative humidity, deliver it to the rooms where it can give up heat and moisture or pick up heat and moisture, and thence part of the air to be exhausted and part returned for recirculation through the conditioner.

If, in the summer, outside air is allowed to come into the house by infiltration or carelessness the heat and moisture of this air merely imposes an extra load on the refrigerating unit if it is set to maintain certain conditions. If, in the winter, the outside air gets in because of infiltration or carelessness there is an additional load on the conditioner for heat and humidification.

The conditioner can not be regulated to lessen its load for promiscuous ventilation. Ventilation is a certainty through proper air conditioning, and promiscuous ventilation is the very opposite of air conditioning.

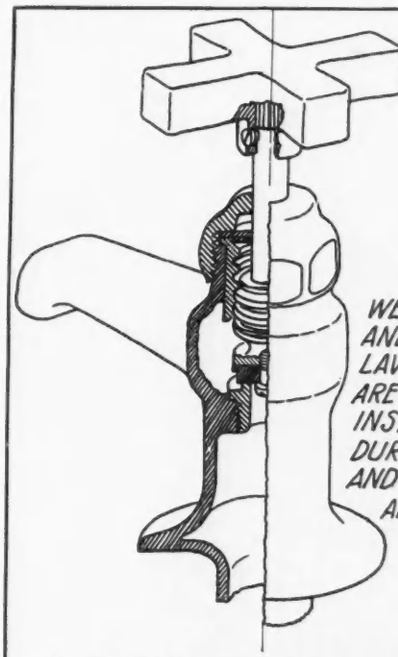


FIG. 4

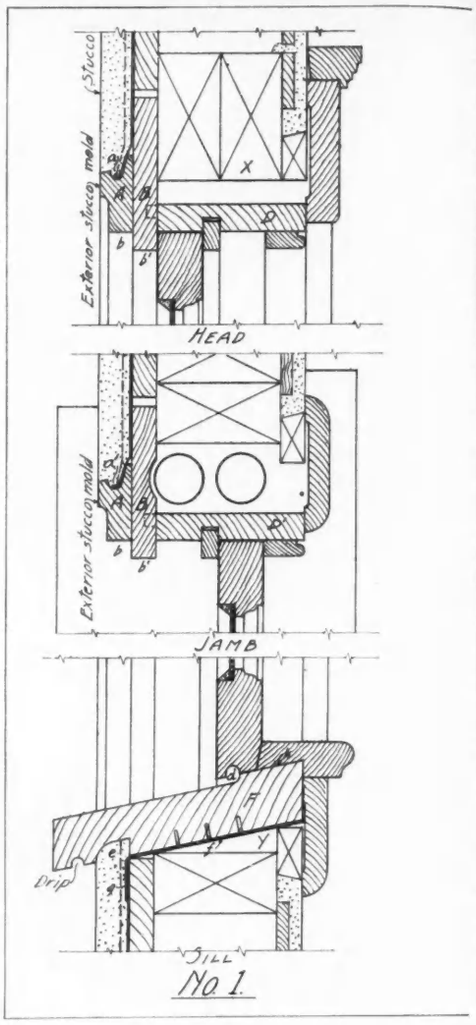
WELL DESIGNED AND WELL BUILT LAVATORY FAUCETS ARE THE AIM IN ALL INSTALLATIONS. DURABLE FINISHES AND EASY SURFACES ARE IMPERATIVE.

LOOSE HANDLES, DRIPPY SPOUTS, BINDING STEMS, ETC., ARE ELIMINATED WHEN PARTS CAN BE READILY RENEWED. THIS TYPE SHOWS A BROACHED SPINDLE FOR HANDLE-GRIP.

HOW TO MAKE Leak-Tight, Economical WINDOWS

By OSCAR G. KNECHT
Chief Building Inspector, San Diego, Calif.

IN HIS 14 years as Chief Building Inspector of San Diego the author of this article has corrected many building errors. In this article he tells how to avoid leaky windows in stucco houses. This is the second of a series by Mr. Knecht; the first was last November. In a later issue he will write on "Some Stair Framing Suggestions"—The Editor.



TO make windows leak-tight with no thought of cost should be an easy task, but to accomplish leak-tight economical construction, and avoid special milling, special moldings, weather stripping and other extra frills require much study and careful planning. On the accompanying drawings will be seen four economical methods of simple design. These windows are designed for ordinary frame stucco houses plastered both interior and exterior. The drawings are more or less self-explanatory. Consequently, certain essential and special features only will be pointed out and described.

There is a great demand for framed details showing very little, if any, outside casing. The details shown have reduced the exterior exposed woodwork to a minimum. The designs are plain, simple and economical. We have purposely avoided extra heavy sills, boards, 1⅛ inch pulley stiles, rebate and groove connections between outer casing and yoke, metal flashings, etc. It is our intention to provide low cost, simple leak-tight frames. When good kiln-dried appropriate finishing lumber and good workmanship are available, the designs as detailed will prove a success and accomplish the desired results.

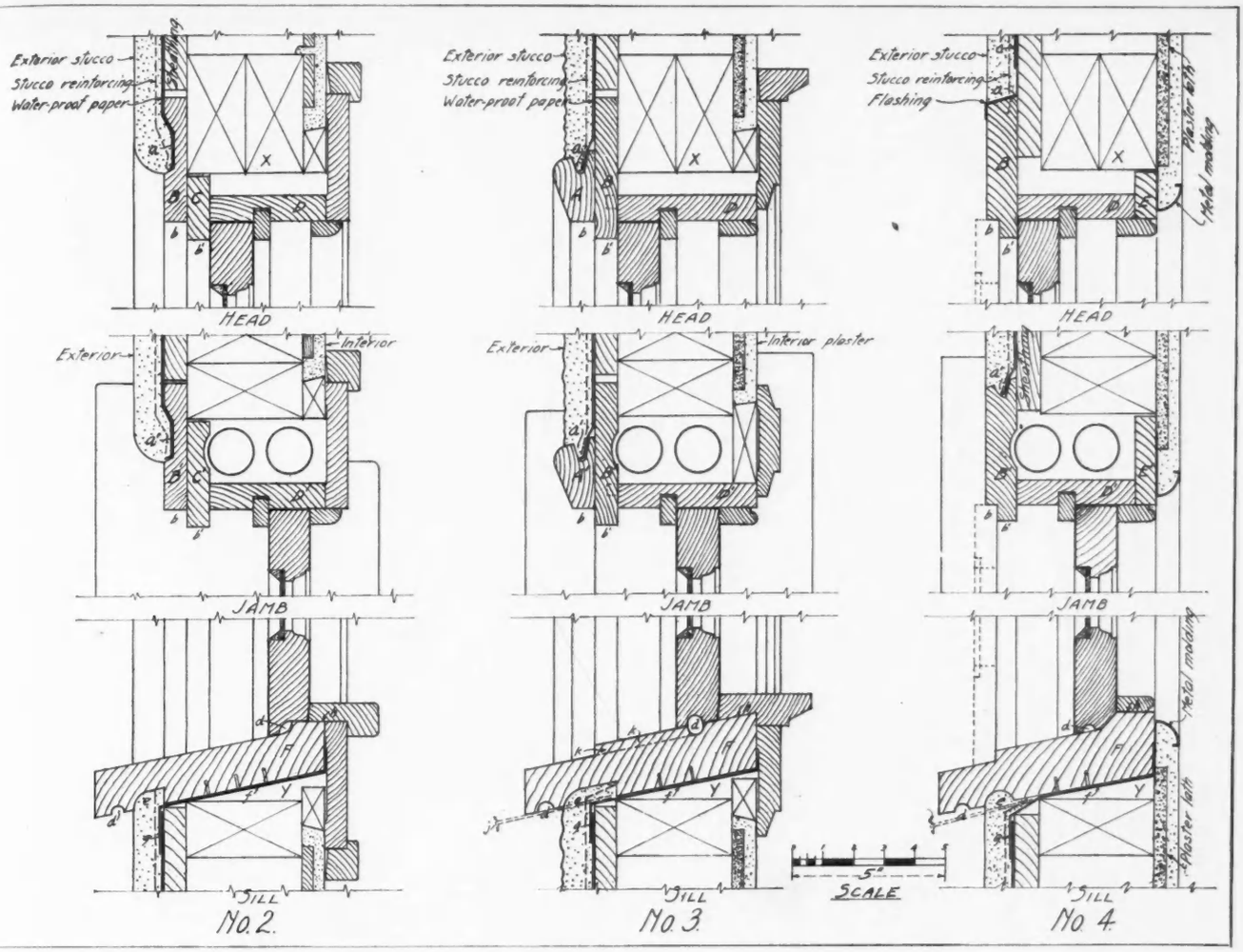
The rough framing consists of 2x4 studs sized to exactly 1⅞x3¾ inches in size, which is the custom followed by a majority of our local builders. Also, the rough sheathing is usually sized to ¾ of an inch in thickness. Consequently, the window frames are designed accordingly. Note that the doubled header at (X) is placed vertically and not flatwise. Our local building laws, as well as the Uniform Code, require this, on account of the fact that the doubled header, when placed as shown, develops twice the strength of a doubled header placed flatwise.

The stucco reinforcing usually consists of 16 gauge 2 inch galvanized wire mesh furred out ¼ inch from the backing and secured with galvanized nails and furring clips. The waterproof paper must be not less than 15 pound saturated roofing felt doubled back at least 4 inches around all openings. For obvious reasons, the turned back 4" piece should be next to the sheathing when placed across top of window, thus making a double layer at these points. This acts as a flashing and will last indefinitely under the stucco. The flashing marked ("f") under the sills consists of a single layer of 30 pound saturated felt, "or sheet metal," and is made to extend out and lap down at ("g") over the vertical waterproof membrane. The membrane at "f" is made about 16 inches in length and is placed near and under the jambs and not full length under entire sill.

Attention is called to the temporary nails marked ("j") beneath the sills. See figure 3 and 4. When the plasterer completes his exterior plastering these nails are withdrawn. This permits the nail holes through the plaster to act as weep holes for the escape of moisture or condensation, which may accumulate immediately beneath the wooden sill (F). The shim space ("Y") is often filled with a waterproofing compound, but this is not necessary when the membrane ("f") is used. A waterproof coating, one which will not run or thoroughly harden, is recommended for the location marked ("h") between stool and sill.

A window sill should NEVER be let or gained into the pulley stile. The sill must extend beneath the pulley stile to the rough studding. The pulley style should be let into a dado formed in the sill, and the bottom of this dado should slope with the sill in order to prevent leaks at this point. Immediately upon being assembled, the entire window frame, with the exception of the sash runways, should be thoroughly covered with an approved priming coat of paint. The sash runways should be heavily coated with linseed oil or an approved oil stain.

The members (D) and (B) should be thoroughly and effectively nailed together. Some builders provide a rebate and groove connection at this point. But this is not absolutely necessary for the average dwelling house window. Screens may be placed at (b) or (b¹). How-



ever, for obvious reasons, the location at (b) is to be preferred. The different drips are marked (d) and are self-explanatory. These drips, though often omitted, are quite essential. The sill flashing must always bend down over the wall waterproof membrane. This is clearly shown at (g). Also, note that the exterior stucco is forced into the groove (e) beneath each sill. Sill members F should have a slope or pitch of not less than one inch rise to a five inch run. (1 in 5)

The groove shown along top at (a) will not be affected by dampness when thoroughly painted and filled with stucco. Note that the waterproof paper and the stucco reinforcing extends into the groove marked (a). Both should be carefully and effectively secured at this point, using appropriate nails suitable for the purpose. Wooden lath are shown in Figures 1 and 2 and plaster lath is shown in Figures 3 and 4. Either may be used.

Figure 1: This detail is especially provided with a stucco mold "A". This mold also acts as a ground for the exterior stucco. The stucco reinforcing, waterproof paper and the stucco must be carefully and effectively worked into the groove (a). Note the location and the design for the lower sash drip marked (d).

Figure 2: This detail omits the stucco mold and provides for a bull-nosed stucco effect. A special groove is provided at (a). This furnishes a partial key and permits an extra and necessary depth of stucco at the bull nose. The deep groove at (a) weakens the casing (B), and it is advisable to add the reinforcing strip or "blind stop" (C).

Figure 3: Here we have detailed a stucco mold marked "A". This mold does not act as a ground and is used where the rough "Spanish effect" stucco is applied without grounds. At (k) the dotted lines indicate drainage grooves leading from the gutter below the drip (d) at bottom of sash. The gutter and grooves may be entirely omitted under ordinary favorable conditions.

Figure 4: Here we show a common method of substituting a combination metal ground and molding in lieu of interior trim. Note that the reinforcing strips (E) have been added and usually prove necessary unless the members (D) are increased to not less than 1⅛ inches in thickness.

The exterior casing (B) is made one inch in thickness and also serves as a ground. (C) shows that the waterproof paper laps down over the metal cap flashing. The metal flashing may be omitted at (a) and the groove (a^1) substituted, provided that the groove (a^1) be partially filled with a waterproof compound (mastic) after the mesh and waterproof paper have been secured in place. The detail marked (a^1) works nicely for the side casing.

All frames should be manufactured from thoroughly seasoned clear kiln-dried lumber, Douglas fir being the most commonly used lumber in this vicinity. Redwood exterior finishing lumber, clear kiln-dried California sugar pine and Western white pine sash are also used extensively.

THE EDITORS OF AMERICAN BUILDER invite builders and architects to submit sketches and descriptions of construction details which they have found to be particularly good.

Does the Builder Get Business from Local Newspaper Advertising?

By ARTHUR J. PEEL

President, Keystone Associates, Inc., Boston, Mass.

THIS question has exercised the minds of many building contractors, and many more have answered it with an emphatic "No!" Nevertheless, here and there we discover building construction men who are doing effective newspaper advertising . . . that is, effective from the point of view of the professional advertising man, who in one form or another, applies the advertising test rule: Does it get *attention?* Does it *interest?* Does it *create a desire* for building service? And will it *produce action* on the part of the interested reader? But the answer to these questions, is, after all, only the theoretical opinion of an individual. Whatever theories one may have about advertising, it is the advertising that *sells* the product or service, that is good advertising. And we may as well admit that some advertising that would pass the primary requirements of the professional advertising man, fails to produce results, while other advertising that would not pass the critical judgment of the professional, does sell the product or service it advertises. However, no advertising, good or bad, can sell a thing or an idea unless it shows a reason why the reader should need or want the thing advertised.

Examples of Advertising

Let us take two examples (1 & 2, Page 60) of building contractor's advertising, both occupying the same space in the newspapers; neither having any advantage over the other in position given, and both appearing the same week in the same city. Because of the prominence that is being given to modernization at this time, one mentions building alterations, the other stresses it. One of these advertisements drew a blank as far as traceable results could be shown. The other brought in inquiries from interested parties. Though these advertisements did not appear in the same paper, the media were comparable in circulation and class of reader . . . both were first-class newspapers.

It is not necessary to state which pulled and which didn't . . . The answer is obvious.

In a previous article on the subject of contractors' advertising, I called attention to the fact that the building contractor has only one thing to sell . . . his service. But this implies a lot: Competency, character, and costs; and when advertising, service should be interpreted in terms that mean something definite to the prospective buyer of the builder's service. This is just as true of newspaper advertising as it is of direct-mail promotional effort, such as letters, and printed literature.

There is one vital difference, however, between letters written to sell building service, and newspaper copy for advertising. In a letter one can say a great deal, even on a single page; in a piece of newspaper copy the message is so concentrated that every word must be essential and hand-picked. The chances of getting even twenty words of newspaper advertising read by the public depends entirely on the character of the message, the set-up, the position on the page, and, of course, the interest the reader has in the product or service advertised. For these reasons the preparation of a newspaper advertisement involves more than merely writing copy.

In order that we may see the problem of newspaper advertising the building contractor's service in proper sequence, let us take each factor in the order in which it should be considered by the prospective advertiser: (1) *The message.* What have you to tell people about building service? Many building contractors think they have nothing to say beyond the fact that they do building construction work, remodeling, modernizing, and so forth; and they think that the mere announcement of this fact can interest newspaper readers. In the first place it is hard to imagine that anyone wanting to engage a builder would look in the advertising columns of a newspaper to find the name of a suitable contractor. On the other hand anybody who is interested in a building project, or anticipates building, might be arrested by some advertisement that showed a little originality and presented an *argument* for building.

Often one comes up against this argument: "What can I say about my service that would be different from what other building contractors can say?" Probably, nothing. But you can mention a lot of things about building service that other contractors don't talk about, even though they could. This is being done all the time by advertisers in other lines of business and industry. "Lucky Strike" cigarettes are not the only cigarettes made from "toasted" tobacco, though the advertising might lead one to assume that only "Luckies" are toasted. People *are* influenced by definite statements, and the building contractor . . . more, perhaps, than many other classes of advertisers . . . should not take for granted that the majority of people realize what they are buying when they buy good building construction service. On this page will be found additional pieces of newspaper copy prepared for a building construction firm in New York, each of which emphasizes a special angle, which suggest reasons why owners of property should give consideration to building or building alterations. No doubt there are many good building con-

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IN THIS ARTICLE, Mr. Peel, an advertising executive, lists the essential features of newspaper advertising, as they are of value to the builder. Details about such publicity are discussed under six headings: (1) The message; (2) The medium; (3) The time; (4) The physical appearance; (5) The size; (6) Continuity.

The author has previously (in the May, 1934, issue) taken up the problems of direct mail campaigns under the title "How to Advertise Profitably."—The Editor.

Community of 100 homes in northern Indiana where Paint Test was made. Three leading kinds of paint were tested. Two of the paints failed in two years. Eagle Pure White Lead gave satisfactory service for five years!

5-YEAR PAINT TEST PROVES WHAT PAINT IS LONGEST WEARING, MOST ECONOMICAL!

● Mail coupon for complete story.

No contractor needs risk paint failures on the houses he builds. A sensational paint test just completed now proves there is one paint that you can safely specify for all exterior work.

That paint is Eagle Pure White Lead. It out-wore other paints tested in the Indiana community paint test by more than 3 years!

One hundred houses were painted in this impartial test. Two of the paints cracked and peeled in less than 2 years. But the third paint, although its initial cost was approximately the same, did not fail. Houses painted with Eagle Pure White Lead were not repainted until the end of the fifth year!

Eagle Pure White Lead wears down by a gradual, even chalking process. It doesn't crack or peel. Mail coupon for complete picture story of the Indiana community paint test. You'll be convinced that Eagle Pure White Lead is the longest-wearing, most economical paint you can use.

Eagle

pure **WHITE LEAD**

Choice of good painters since 1843

White lead lasts!

DEALERS: Quick profits on this new item! ● Eagle Self-Fluxing Paste Solder sells itself. This new product is a metal solder—not a glue. Ideal for all metals except aluminum. Handy tube retails at 25c. Also comes in 1 and 5 lb. cans. Write for complete information.

MAIL COUPON ● The Eagle-Picher Lead Company, Dept. AB5, Cincinnati, Ohio. Please send me a copy of the folder that tells the complete story of the Indiana community paint test.

*Name*_____

*Address*_____

*City*_____ *State*_____

*Dealer's Name*_____

struction firms that could use this kind of advertising copy, but very few advertising building contractors are using this "reason-why" type of copy.

(2) *The Medium.* Having decided what one wants to talk about, and how to express it, the next thing is, where shall we tell our story? This necessitates not only the choice of a newspaper or papers, but the page, and the position on the page where the advertising should appear.

As to the choice of the newspaper medium, it is obvious that the building contractor should select those papers that are read by people who have the financial ability to pay for building service, and while it is true that practically all newspapers include some of this class, there are newspapers . . . usually with smaller circulation . . . that have a circulation that includes the higher income classes. A jobbing builder would have a different proposition; he could select the most widely read newspaper circulating among small home owners. But the building contractor who is interested in new buildings, or remodeling and other structural alterations that involve fairly large expenditures, and often requiring architecural service, must choose his media more carefully. The papers that have a circulation among the higher income classes, that are read by executives and principals, are logical media for this type of advertising.

When we come to consider page, position, or section, we are faced with another problem. All metropolitan papers have, some time during the week, a Home or Building section or page. This page is read by people interested in buildings, architecture, building service, real estate, and properties for rental. Obviously it should prove a good page for building contractors' advertising.

But there may be occasions when a feature story concerning some new construction or big structural alteration project, is being run in some other part of the paper. In such cases the building contractor's advertisement might well be run on the same page, particularly if he was employed to carry through the project.

Another point to consider is the company in which the contractor's advertising will run. This means not only class of advertisers but the physical appearance of contiguous advertisements; whether they have heavy borders, striking illustrations, and what-not. A good advertisement . . . judged from the point of view of typography, make-up, space and border . . . may be almost nullified by its neighbors and so lose its original attention-value as an independent piece of advertising.

Few building contractors are appreciative of the value of advertising agency service; nor do they know what a good advertising service can do for them. But it is just at this point that the trained advertising man can help to secure for the builder's advertising, a place on the page that will give it the greatest chance of being read and noticed. And for this service the advertiser pays only 15 per cent above the cost of the space bought for the advertiser, if he has the advantage of what is known as the "local rate" which is given to local advertisers. If the advertiser pays "national rates" however, the agency service costs him nothing more than the cost of the space, because the publishers allow a 15 per cent commission to the agency, and this covers the cost of his service to the advertiser for preparing the advertisement, writing the copy, and securing position.

Time Element Is Important

(3) *The time.* When the advertisement should be run, is another important consideration. If the building contractor uses the Home or Building section, or the Real Estate page, he is limited to the days on which these feature pages are run, of course. But if he uses any other part of the paper, depending on the march of events of local or national importance, and which may have some bearing on new building or remodeling, he should plan to have his advertising run when the thought of the public is specially directed towards home-building, or other types of construction. The publication of the Government's home-building loan plan, for example, provided a splendid opportunity to advertise building service. The publicity given to the building Code, was another opportunity to bring home to the people interested in building, the possibility of increasing building costs as a result of the operaton of the Code.

(4) *The physical appearance of the advertisement.* Whether the readers of newspaper advertisements are conscious of it or not, they are influenced by the physical set-up of an advertisement. Here, again, the competent and experienced advertising man can do a great deal to make the builder's advertising more arresting and interesting, by the selection or creation of a good lay-out, the right type, and unusual borders. Even white space round an advertisement may be as valuable as type matter, if it

(Continued on page 62)

(1) & (2) BOTH THESE ads appeared on the same day in the same city. (3) & (4) Two small advertisements in a metropolitan paper which brought live inquiries to the contractor.

Modernized Buildings Can Be Profitably Leased

For over thirteen years we have specialized in remodeling and modernization of all types of buildings in New York and environs, to make them more profitable to owners and managers.

Consult us regarding your building problem. We will gladly furnish estimates after surveying your building.

(NAME)
(ADDRESS)

1.

To Members of Church Building Committees

If your building capacity is overtaxed, the need may be met satisfactorily by remodeling at considerably less expense than rebuilding.

We are experienced in this type of work as well as in new construction, and will gladly submit estimates to building committees in New York and environs.

(NAME)
(ADDRESS)

2.

THE BLANK CONSTRUCTION COMPANY

Estimates furnished on all types of building construction and building alterations.

(Address)

(Telephone No.)

3.

Have You a "White Elephant" on Your Hands?

Property that does not yield a profit to its owners is a burden. Remodeling or modernization will increase opportunities to obtain profitable rentals.

We will gladly furnish estimates to owners of buildings in New York and environs, after surveying buildings.

(NAME)
(ADDRESS)

4.

The Barrett Monthly Payment Plan opens the door to Better Roofing Sales

In your community there are scores of homes which need new roofs. You can help yourself to sales by calling on the owners. The story of Barrett quality and the Barrett Monthly Payment Plan is bound to interest them.

The Barrett Company provides what the aggressive roofing dealer or applicator needs to build up a sound and profitable business—

1. **Finest quality asphalt shingles, roll roofings and roof repair materials, backed by a manufacturer with 81 years of successful roofing experience.**
2. **A simple, easy-working, practical monthly payment plan which enables applicators to sell roofs on terms as convenient as offered to buyers of automobiles, radios, refrigerators, etc.**

If you are not familiar with the terms of the Barrett Monthly Payment Plan, we will send a representative to see you. The Barrett Monthly Payment Plan enables building owners to purchase Barrett Roofs without down payment and with as long as three years in which to pay. The applicator is paid with cash in full when the job is finished.

Take advantage of this Barrett Monthly Payment Plan to build your business. It's simple, safe, profitable. All we ask is assurance of good workmanship. Phone, wire or write our nearest office today.

Barrett
ROOFINGS

WE ARE CO-OPERATING
BETTER · HOUSING
PROGRAM

THE BARRETT COMPANY, 40 RECTOR STREET, NEW YORK, N. Y.

2800 So. Sacramento Avenue, Chicago, Illinois • Birmingham, Alabama

Does the Builder Get Business by Advertising?

(Continued from page 60)

brings out the advertisement on the page.

(5) *The size of the advertisement.* Bigness is not always an indication of attention-getting value for an advertisement. Few builders could afford to take large space in a metropolitan newspaper, for instance; it would cost too much and the returns might not justify the expenditure. In local newspapers, other than metropolitan papers, space is much less expensive, and the small-town or neighborhood builder can often afford to take a quarter-page or even a half-page to tell his story. The advertisements shown here (3 & 4, Page 60) are two-inches on one column. They were used in metropolitan papers and cost in the neighborhood of $10 each. Small advertisements . . . yes! . . . but they produced results, interpreted in inquiries from interested parties.

(6) *Newspaper advertising continuity.* How long should the building contractor run his advertising in the newspapers? This, perhaps, is the most difficult question to answer, and it is not easy to convince a building contractor that a one-time advertisement is almost worthless. The chief value of advertising in any form is constant reiteration of the advertising message. Resistance is broken down only by multiple impressions . . . this is as true of the human mind as it is of breaking stones.

The general building contractor, or the specialized building contractor, who has the courage and the determination to run his newspaper advertising week after week, changing the message to meet new conditions as they arise, and introducing new appeals to cover the widest range of prospects for building service, sooner or later will discover that his advertising is being seen . . . and read. His name will become more widely known; his work will be better publicized; and the realization of the fact that he is a permanent factor in the industrial life of his town or locality will eventually bring him more business.

Many contractors claim that they can do more by personal calls on architects and other prospects for building service than by advertising by mail or in the newspapers. For the sake of argument we will admit this; but is it not an indisputable fact, that . . . like insurance agents . . . the problem is to know where are the prospects? Advertising spots the prospects; it opens avenues for approach to people who are interested in new construction or building alterations. And it gives the advertising building contractor an opportunity to get his name before the public, and explain his service to large groups of people he could not possibly call on, even if he had the time and the selling organization to make the attempt.

For building contractors with sufficient funds to appropriate for advertising purposes, and who are doing the kind of work which can be presented effectively in pictures, the illustrated advertisement in which a picture of completed construction, or some interesting remodeling job, is shown, can be very compelling. The great majority of people are interested in new construction in their town or city. A well set-up advertisement showing the completed or remodeled building, such as is commonly shown on the real estate pages of metropolitan papers, but featuring strongly the name of the contractor, is good advertising for the builder. Usually the name of the architect is made prominent in write-ups of new buildings; the name of the contractor is nearly always subordinated; and very rarely does the write-up or advertising stress the service rendered by the builder.

Up-to-Date Building Books

Types of Houses

A Century of Progress Homes and Furnishings

Edited by Dorothy Raley

Outside and inside views with descriptions of modern homes in the housing exhibit at the Century of Progress Exposition. Shows the Armco-Ferro-Mayflower House and Guest House; the Brick House; Crystal House; Cyprus Log Cabin; Florida Tropical House; General Houses' Steel House; "The House of Tomorrow"; Lumber House; Masonite House; Stran Steel-Irwin Town House and Garden Home; Universal House's Country Home; Weiboldt-Rostone House.

1934. 127 pages, illus., 8 x 11 inches, bound in permatex, $2.50.

▼

The Colonial and Federal House

By Rexford Newcomb

The Dean of the College of Fine and Applied Arts of the University of Illinois describes America's most important architectural type of house. Features of good Colonial homes are described and detailed plans of 100 antique and modern houses are shown. The author tells how to build an authentic Colonial house.

1933. 174 pages, 100 illus., 7 x 9½ inches, cloth, $3.50.

▼

Houses of Stone

By Frasier Forman Peters

The author is a practical builder and in this book he describes with pictures some of the 100 stone and concrete houses which he built in Oak Hill Village, Newton Center, Massachusetts. Following a discussion of the stone masonry house the author explains their planning and gives "Technical Details of Flagg Masonry Construction."

1933. 163 pages, 43 illus., 8 x 11 inches, cloth, $2.50.

Plan Books

The House to Live In

Views of 40 houses with floor plans and brief descriptions of each. Includes wood, stucco and brick veneer in English and Colonial design. Each house has been designed for a particular need or climate by an experienced architect. Plans are available at small extra cost.

1932. 22 pages, illus., 8½ x 11 inches, paper, $1.00.

Face Brick Homes

Sketches of small houses with floor plans and brief descriptions of the building, construction details and lot size. Plans are available.

1931. 32 pages, illus., 8½ x 11 inches, paper, $.65.

▼

The Home Moderne, Vol. 1.

By Duncan Hunter

Plates showing homes of various sizes and types designed in modern style and giving wide variety in treatment of details and materials. The plan layouts are suited to conditions of modern living. Complete working drawings for any of these buildings can be supplied.

1930. 25 plates, 6¾ x 8¾, paper folder, $.60.

▼

Bungalows

By Harry Marchak

Sketches, floor plans and brief descriptions of 16 bungalows of modern style and of Eastern design. These houses are practical and can be built at low cost. Plans and specifications are available.

1932. 20 pages, illus., 9 x 7 inches, paper, $.35.

▼

Camps in the Woods

By Augustus D. Shephard

Photographs, sketches and floor plans explaining the designing of camps which serve as summer homes. These are in the higher cost class, built for permanent occupancy and provided with every modern convenience.

1931. 104 pages, illus., 9½ x 12½ inches, cloth, $6.00.

▼

Summer Cottages, Log Cabins and Garages

By J. W. Lindstrom

Plans and photographs of exteriors, including 10 in color. This is a good selection of Minnesota types. Blueprints are available.

1931. 64 pages, illus., 7½ x 11½ inches, paper, $1.00.

▼

Log Camps and Cabins

By W. A. Bruette

Explains the construction of log cabins in the woods where luxurious equipment is not possible. It shows how to build simple fishing, hunting and week-end camps out of materials at hand. Illustrations and plans were drawn by prominent architects and include details.

1934. 96 pages, 88 illus., 8 x 5½ inches, cloth, $1.50.

FREE—Book Guide

A copy of the "Building Age Book Guide," brought up-to-date with a mimeographed supplement, is free upon request. All of the books described, including those listed on this page, are sold on a "money back if not satisfied" guarantee.

Book Service Department

AMERICAN BUILDER and BUILDING AGE

30 Church Street **New York, N. Y.**

Code Authority Answers Charges

(Continued from page 33)

have been granted to farmers and others; however, no exemptions have been granted which permit a speculative builder to build homes on a different basis from that on which the larger majority of homes are built.

"Referring to the allegation that construction is not an industry, we wish to advise that construction is not only an industry but, in importance, is second only to agriculture and is codified as an industry in its entirety, not as a component part of any other industry, which is entirely in accordance with the National Industrial Recovery Act. It has always been recognized that construction is an industry. The primary importance of the Code lies not in establishing construction as an industry but in bringing about its integration and coordination.

"The National Association of Real Estate Boards asserts that the Code Authority of the Construction Code is not representative. The reason they express is that the business of land development and home building is not represented. Your attention is invited to the fact that a member of that group serves as a member of a divisional code authority of the Construction Code. Further, under the provisions of the Construction Code if this group qualifies with sufficient representation to become a Chapter of the Code, a representative is automatically seated on the Construction Code Authority and becomes a member with full privileges. As set forth above, at least 75 per cent of the homes built in this country are constructed by contractors who are members of the construction industry as codified. The National Association of Real Estate Boards represents less than 25 per cent of home building of the country but as such attempts to dominate the field of home construction.

"It is alleged that the Construction Code is impractical because it cannot be administered. The Construction Industry Code represents the integration of the industry and is a charter of fair trade practice and regulations for the government of this industry in its entirety. It consists of the basic Code, known as Chapter I, which covers general rules and regulations for the government of the industry and the rules governing the relations between employers and employees. In addition to this basic code, each division of the industry has a separate chapter which includes rules necessary to the particular problems of its branch. Progress in administering this Code has been more successful than has been contemplated in the integration and coordination of so great an industry.

"With respect to the allegation that the Construction Code is averse to public interest because the effects of the Home Loan Bank, the Home Owners Loan Corporation and the Nation Housing Act have been nullified by price increases thus placing home ownership out of range of the average citizen, your attention is respectfully directed to the fact that the Construction Code does not embrace materials, therefore, any price increase with respect to materials must be chargeable to some factor other than the Construction Code. May we again repeat that the Construction Code has increased cost only by the establishment of a forty-hour week and a forty cents an hour minimum wage. It is respectfully presented that this increase is infinitesimal when compared with the average cost that the prospective home buyer is called upon to pay in the purchase of a home from a speculative builder governed by no code, particularly with reference to the original cost of the land and the price at which it is included in the final sale. Likewise, in the actual building of the structure the opportunity of using the cheapest material and workmanship that it is possible to secure exists, and lastly, the finance charges including a possible re-sale of existing mortgages at a discount which is all part of the price the buyer pays for the home.

"In conclusion, this attack upon the Construction Code can only be construed as an attempt by a minority group to exclude itself from all rules and regulations of the National Recovery Administration so that it may proceed without interference with the above outlined practices, to the detriment of the consumer.

"Respectfully submitted,

"Stephen F. Voorhees, Chairman
Construction Code Authority, Incorporated."

An average service of 30 years has been established by test for Samson Spot Cord.

More than forty years of actual use substantiates these tests.

Samson Spot Cord is specified by architects because such specification is definite and positive—Spot Cord is made in one grade only and is identified by the trade mark, the colored spots. Substitution is easily detected and is unnecessary because Samson Spot Cord is available to contractors and builders through Hardware and Supply dealers in every section of the United States.

SAMSON CORDAGE WORKS
89 Broad St. **Boston, Mass.**

TWO VALUABLE AIDS to Contractors

Here are two valuable painting and decorating helps now available to contractors. They are the Lowe Brothers Pictorial Color Chart and the Lowe Brothers Specification Book.

The Pictorial Color Chart eliminates all guessing about color schemes for interiors and exteriors. It contains large, full color illustrations of various types of houses and every kind of room—*all painted with actual paint.* And the dealer who handles Lowe Brothers products in your community will be glad to have you use one of these charts, at any time, without cost or obligation.

The Specification Book will save time for you in preparing bids. It will assure a complete understanding by all parties concerned regarding what work is to be done and how it is to be done. This aid to contractors can also be obtained from your local Lowe Brothers dealer—free.

When bidding in competition with contractors who specify "cheap" paint be sure that the prospective purchaser understands the reason for the difference in price between "cheap" paint and high quality paint. Analysis shows that some "cheap" paints contain as much as 63% water and other evaporating liquids. In contrast, Lowe Brothers High Standard Paint contains 90% film-forming solids. Thus, it covers more surface, lasts longer, costs much less in the end.

It will pay you to become acquainted with the many ways in which the Lowe Brothers dealer can help you. See him today. The Lowe Brothers Company, Dayton, Ohio.

Lowe H·S Brothers

PAINTS • VARNISHES

QUALITY UNSURPASSED SINCE 1869

NEWS OF THE MONTH

Building Activities

Moffett on Leave of Absence

FEDERAL HOUSING Administrator James A. Moffett is to make a ninety-day trip around the world as a semi-official observer of foreign trade conditions for the United States government, according to recent word from the White House.

Mr. Moffett, whose resignation had been reported as imminent for some time, was asked to take a leave of absence instead or resigning, and it was also stated that the Moffett organization would remain as is, with Stewart McDonald, one of Moffett's chief aids, as acting administrator.

Mr. McDonald was formerly a midwest manufacturer of automobiles, farm implements, electrical apparatus, and allied industries; one time police commissioner of the City of St. Louis; and identified with financial affairs as director of banks and trust companies.

Mr. Moffett, a former official of the Standard Oil company of New Jersey, has been intensely interested for some time in foreign trade of the United States, revival of which would go a long way toward helping restore prosperity.

12-Year Repair Loans Promised

FORTHCOMING revision of the regulations under Title I (modernization and repair loans) of the Housing Act applicable to savings, building and loan associations, agreed upon by Federal Housing authorities will make it possible to insure long-term loans of the associations up to 12 years instead of the present 5 year maximum.

As to the effect of such change, Morton Bodfish, executive vice-president of the United States Building and Loan League, stated, ". . . . . In four months beginning with September, our institutions placed $38,500,000 in remodeling loans, and December was the highest of the four months. This total compares with $32,700,000 insured by the Federal Housing Administration, for other types of modernization lenders. With the liberalization of some of the rules and regulations under Title I, there will be more substantial use of the insurance feature by the associations and therefore a greater stimulus to their stepping up modernization activities."

Briggs Extends Plumbing Ware

ANNOUNCEMENT that the Briggs Manufacturing Company will become a major producer of plumbing ware and fixtures has been made by W. P. Brown, general manager of the company. Revolutionary new methods and processes of mass production, which will make possible new designing and styling of bathtubs, wash stands, sinks and other fixtures, will be applied to the manufacture of the new line. Brown declared that the development will make Detroit one of the largest plumbing manufacturing centers in the world.

John A. Callahan, for more than three years actively identified with the Briggs Manufacturing Company, Detroit, has been appointed to take complete charge of all operations of the company's new plumbing division, it was announced. Mr. Callahan has directed the company's developmental work in plumbing for more than two years and has had a wide training in both the manufacturing and selling field.

John A. Callahan

Further word comes that the company's Hamtramck plant, which has been remodeled and equipped for the production of plumbing ware, definitely is scheduled to begin operations the latter part of April.

Low Cost Housing Job Started

FEDERAL Housing Administrator James A. Moffett donned overalls, climbed into the operator's seat of a big steam shovel and started construction on the first low cost housing project insured under Section 207 of the National Housing Act to get under way. The ceremony was held on the site of Colonial Village, Inc., near Clarendon, Va.

Arrangements to start actual construction were made immediately after Mr. Moffett had signed the final papers for insuring the $875,000 mortgage on the property, taken by the New York Life Insurance Company. Total cost of the entire project is estimated at $1,128,600.

Approved plans call for the erection on the 11½ acre site, six groups of two-story brick Colonial apartment dwellings, 45 buildings in all, containing 276 units of three to five rooms each. There will be playrooms and laundries in the community basements, and playgrounds, gardens and 76 garages located in the center of the plan. Rentals will range from $37.50 to $62.50 a month. Harvey H. Warwick is the architect.

$8,000,000 Housing Project

ANNOUNCEMENT has been made regarding formal approval of the insurance of a mortgage loan of $5,500,000 on an $8,000,000 project in Brooklyn. Joseph P. Day, prominent realtor, is sponsoring the corporation to which approval has been given. Similarly connected with the enterprise is Andrew J. Eken, of Starrett Brothers and Eken, builders. The New York Life Insurance Company has accepted the loan.

The project is named the Brooklyn Beach Garden Apartments, Inc. and will consist of a group of eight, fire-proof apartment buildings, each six stories high to be built on thirteen acres of ground. There will later be thirty-eight additional acres of made ground along the water front. The property has approximately 2000 feet of frontage overlooking lower New York Bay, and the same amount on Cropsey Avenue. Shreve, Lamb and Harmon are the architects.

It is estimated that the construction will employ 2500 workmen as soon as actual operations are started, and 7500 more will be required in the production of materials.

Glass Factory Reopens

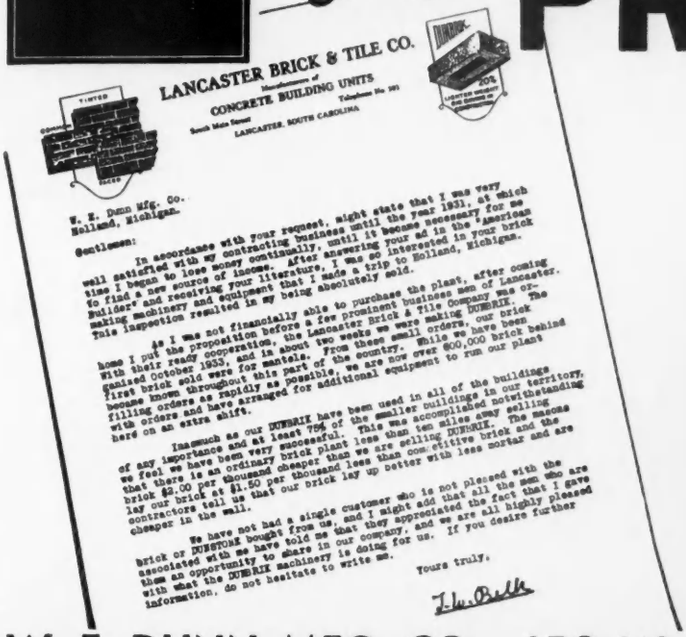
OPERATIONS at the window glass factory of the Pittsburgh Plate Glass Co., Mt. Vernon, Ohio, are being resumed, this company has announced. The factory has been closed since December, 1931. The starting of the plant puts 400 men to work and it relieves local unemployment to a great extent.

The Pittsburgh Plate Glass Company, in conjunction with the Westinghouse Manufacturing Company, is producing five visomatic films on the subject of store modernization, both from the structural and the illuminating standpoints. These films should be of interest to groups of business men who have any interest in property because it will deal not only on the theory of modernization but will show many actual examples of what has been done. These films will be made available through the many branch offices of the Pittsburgh Plate Glass Company, and the Westinghouse Company. Trade organizations or business groups can arrange to make use of this material both to stimulate interest in this phase of modernizing, and to provide technical information to the trade groups.

FHA School Contest

A NATIONAL Better Housing Educational Contest open to all high schools in the country was launched April 1st, it has been announced by the Federal Housing Administration. Its purpose is to focus the attention of the youth of America on the Better Housing Program and its influence on home life. The contest will be based on an essay written in speech form not to exceed six minutes to deliver orally.

Tom Belk's PROGRESS



LANCASTER BRICK & TILE CO.
Manufacturers of
CONCRETE BUILDING UNITS
South Main Street Telephone No. 301
LANCASTER, SOUTH CAROLINA

W. E. Dunn Mfg. Co.
Holland, Michigan.

Gentlemen:

In accordance with your request, might state that I was very well satisfied with my contracting business until the year 1931, at which time I began to lose money continually, until it became necessary for me to find a new source of income. After answering your ad in the "American Builder" and receiving your literature, I was so interested in your brick making machinery and equipment that I made a trip to Holland, Michigan. This inspection resulted in my being absolutely sold.

As I was not financially able to purchase the plant, after coming home I put the proposition before a few prominent business men of Lancaster. With their ready cooperation, the Lancaster Brick & Tile Company was organized October 1933, and in about two weeks we were making DUNBRIK. The first brick sold were for samples. From these small orders, our brick became known throughout this part of the country. While we have been filling orders as rapidly as possible, we are now over 600,000 brick behind here on an extra shift.

Inasmuch as our DUNBRIK have been used in all of the buildings of any importance and at least 70% of the smaller buildings in our territory, we feel we have been very successful. This was accomplished notwithstanding that there is an ordinary brick plant less than ten miles away selling brick $2.00 per thousand cheaper than we are selling DUNBRIK. The masons lay our brick at $1.50 per thousand less than competitive brick and the contractors tell us that our brick lay up better with less mortar and are cheaper in the wall.

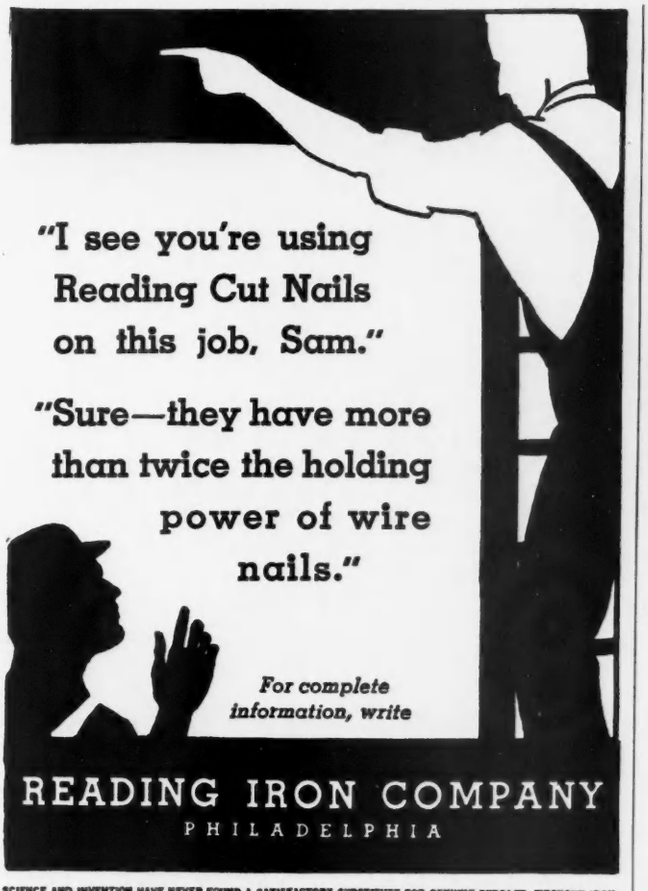
We have not had a single customer who is not pleased with the brick or DUNBRIK bought from us, and I might add that all the men who associated with me have told me that they appreciated the fact that I gave them an opportunity to share in our company, and we are all highly pleased with what the DUNBRIK machinery is doing for us. If you desire further information, do not hesitate to write us.

Yours truly,

T. W. Belk

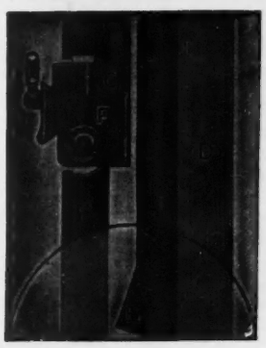
Tom Belk tells how DUNBRIK made money for him—A good investment for his associates—A going industry for his town—Cut building costs for his community and built a business for himself. Read his letter—Then send for "4 Keys to Success" and learn how DUNBRIK can do as much for you in your territory.

W. E. DUNN MFG. CO., 450 W. 24th ST., HOLLAND, MICH.



SCIENCE AND INVENTION HAVE NEVER FOUND A SATISFACTORY SUBSTITUTE FOR GENUINE PUDDLED WROUGHT IRON

The "SEAL-TITE" Feature GETS THE BUSINESS!



Note how the Ro-Way Door opens without a particle of "drag."

Most important improvement in the history of overhead doors. A simple gravity operated cam (Fig. B) instantly frees the lower section of the door in opening, and just as effectively seals the door draft-tight on closing. This valuable feature—the patented Seal-Tite Molding—eliminates 90% of the usual amount of friction and is found only on—

RO-WAY OVERHEAD DOORS

Other reasons why you have a better chance to land orders with Ro-Way Doors, are, first—they are priced right, and second—Ro-Way installations are simpler in new building and require fewer alterations in old buildings. They leave you more net profit on every job.

16 Different Types for Commercial and Residential Use

with headroom requirements of 8½ to 21 inches. All standard sizes, as well as special sizes and heavy duty doors with special heavy tracking are available. Ask especially about the Ro-Way low priced doors for residence garages and the Ro-Way specially designed torsion spring high lift doors for use in public service stations.

Write for Complete Catalog Folder

ROWE MANUFACTURING CO.

719 Holton St. Galesburg, Ill., U.S.A.

OUR CATALOG IS FILED IN SWEET'S

FHA News Flashes

ACCELERATED by the FHA Better Housing Program building activity, including modernizing, repairs and new construction, is proceeding at an encouraging pace throughout the country.

On April 19, pledges for modernization and repair jobs obtained by the canvasses being conducted in numerous communities had reached $351,274,822. This is an increase of $6,614,960 for the week. The total funds that had been advanced under the Modernization Credit Plan on the same date amounted to $56,507,871, an increase of $2,538,806 for the week. Individual credit advances by April 19 numbered 134,794, an increase of 6,313 over the previous week's figure.

* * *

Insurance contracts issued to lending institutions totaled 13,201 on April 19. This represents an increase of 54 for the week. There were 7,119 community campaigns organized or being organized on that date, which is an increase of 111 over the preceding week's total.

* * *

In each of the 48 states in the country rural advisory committees have been formed. These committees are co-operating with the farm representatives and the state offices of the Federal Housing Administration in promoting the better farm homes program.

* * *

A comparison of building permits issued in the five boroughs of New York shows that repairs amounted to $3,664,027 in March, 1935, as compared with $2,344,357 in March, 1934. New residential construction shows a startling gain, with $1,423,300 in March, 1935, as compared with $371,250 for the same month last year.

C. G. Johnson, Door Executive, Dies

C. G. JOHNSON, president of Overhead Door Corporation, Hartford City, Ind., died on March 22. Mr. Johnson was the creator of the upward-acting garage door and pioneered in its development. He was well known in the field, having spent much time in Washington doing work on the Code of Fair Practice for the garage door industry. Mr. Johnson was 45 years of age.

New Crane Co. Officers

Mr. C. B. Nolte has been elected president of Crane Co. to succeed J. B. Berryman who became chairman of the Board. Mr. Berryman has been connected with the Crane organization since 1892, and has been its president since 1931.

C. B. NOLTE, new President of Crane Co.

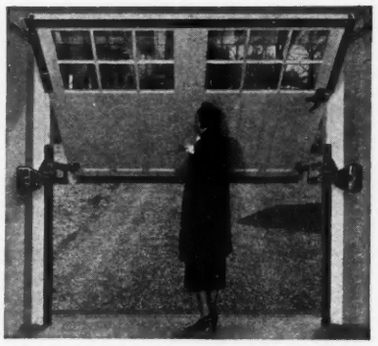
Since receiving his Bachelor of Science degree in Mechanical Engineering at the University of Illinois in 1909, Mr. Nolte has been with the Robert W. Hunt Company, consulting, testing and inspecting engineers. Successively he became division manager, manager, vice-president and general manager, until in 1930, he was appointed president and general manager of the Hunt Co. This position he held until he was elected to his new office with Crane. He is a member of the American Society of Civil Engineers, American Society of Mechanical Engineers, American Society for Testing Materials, American Railway Engineering Association, Western Society of Engineers, and Pacific Railway Club.

NEW PRODUCTS

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

New Garage Door Hardware

A NEW garage door hardware set, known as Tip-Top Door Hardware, which contains the necessary equipment for converting standard garage doors, of the swinging, folding and sliding type, into a one-piece, upward-acting door, has just been announced by The Kinnear Manufacturing Co., Columbus, Ohio. Features of the set are: counterbalance is obtained by interchangeable compensating weights placed on the jambs at each side of the door; verticle sealing movement forces the door against weatherstrips (supplied with set) which is said to make the door weathertight; a cylinder type lock secures the door at 5 points.



New Asbestos Siding

THE RUBEROID CO. of New York City has announced a new Eternit Timbertex, thatched siding made of asbestos-cement. A wood-textured surface and irregular butt line simulate an effect of weathered cypress "thatched" shingles.

Details of the product are given as, size: 12 x 24 inches, requiring 60 shingles per square to be laid over strip asphalt roofing (illustrated to left) with bronze casing nails for face nailing. Weight, approximately 200 pounds per square. Colors: silver gray and silver green.

Cabinet Type Gas Boilers

THE FIRST SHOWING of the new 1935 models of "Empire" gas fired boilers was held April 12 in the Peoples Gas Building, Chicago. American Gas Products Corp., a division of American Radiator Co., New York, is the manufacturer of this line which is comprised of 18 sizes for small or large homes. The cabinets have no exposed mechanisms; all pipe connections and flue openings are placed in the rear to attach to concealed connections.

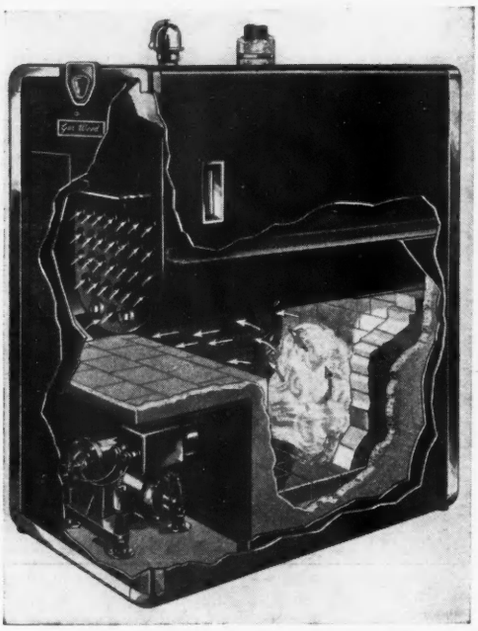
New Products Department

(Continued from page 72)

Larger Boiler-Burner

DUE to popular demand, a larger size of the Gar-Wood Model R Boiler-burner units is now being built, with a capacity of 750 square feet of net steam radiation, by the Gar Wood Industries, Inc., Detroit, Mich. The original unit has been redesigned and its capacity increased from 450 to 475 square feet of net steam radiation.

These ratings appear in the January, 1935, Net Load Recommendations for Heating Boilers, published by the Heating, Piping, and Air Conditioning Contractors National Association.



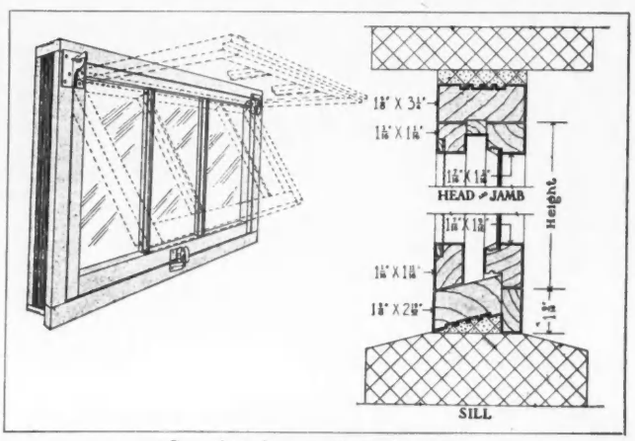
Boiler-burner unit with increased capacity

Basement Window

A COMPLETE basement window unit including frame, sash, screen and hardware, ready for use with sash and screen fitted and hardware applied, is now being manufactured by the Andersen Frame Corporation of Bayport, Minn.

The frame is manufactured of clear pine and completely primed with aluminum paint before assembly. The design of the frame makes it suitable for any wall. Mortar clinch grooves anchor the frame and eliminate leaking of water, dust and air around the frame. The frame is set up and all hardware is applied at the factory.

The screen is factory fitted, 16 mesh aluminum screen cloth. Stiles and rails are completely primed with aluminum paint before assembly. The screen is installed in frame at factory.



Complete basement window unit

Only WITH "OVER-THE-TOP" DOOR EQUIPMENT

CAN REPLACEMENT BE MADE SO INEXPENSIVELY...EASILY

● This radically *different* device transforms hard-to-operate doors into modern, *overhead* operating doors—in a few hours and for a few dollars. "Over-the-Top" Door Equipment is just the thing for remodeling jobs released under the National Housing Act. With the old doors fitted into the opening, the hardware is quickly bolted in place. Low ceilings are no problem—"Over-the-Top" Door Equipment requires only 3¼" above the standard opening. There is a size for every opening. Write for complete information.

FRANTZ MANUFACTURING CO. **Sterling, Ill.**

AMERICAN STEEL SHEETS

FOR ALL KNOWN USES

KEYSTONE COPPER STEEL — AMERICAN SHEET AND TIN PLATE COMPANY — PITTSBURGH

KEYSTONE Copper Steel Sheets
Excel in the Building Field

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

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

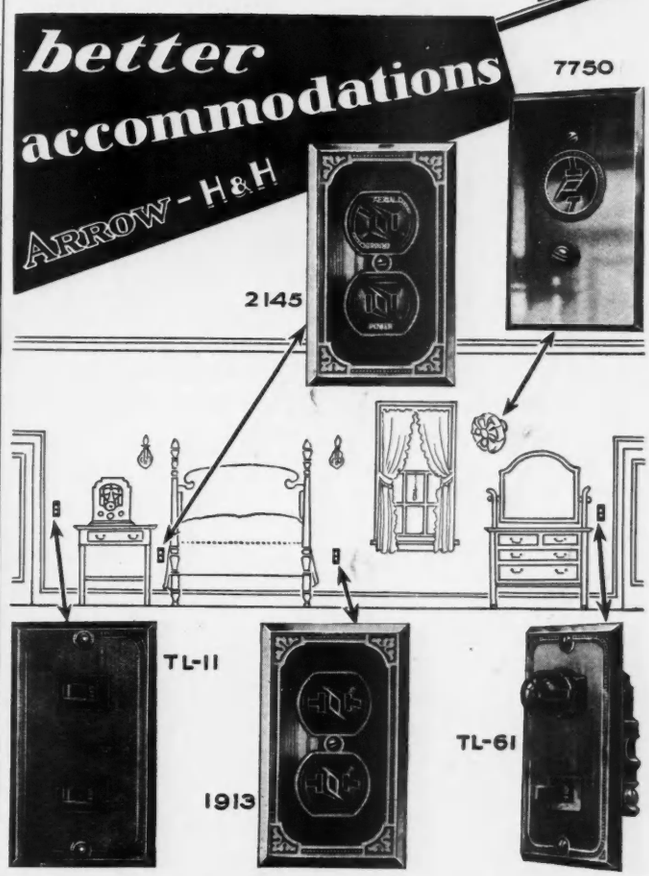
This Company also manufactures U S S STAINLESS and Heat Resisting Steel Sheets and Light Plates for all uses to which these products are adapted.

AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa.

SUBSIDIARY of UNITED STATES STEEL CORPORATION

BEDROOM wired for *better accommodations*

ARROW - H&H



2-Switch Combination No. TL-11 controls bracket lights and overhead. Duplex Convenience Outlet No. 1913 provides for plugging-in bed light and appliance such as electric heating pad. (Other Outlets should provide for electric cleaner and dresser conveniences such as curling irons, table lamps, etc.). Pilot Light and Switch Combination No. TL-61 controls light in closet and signals *red* when light is left ON. Radio Outlet No. 2145 provides aerial, ground and power connections for radio set. Fan Hanger Outlet No. 7750 provides mechanical support and electrical connection for wall fan. . . Mail the Coupon below for illustrated data-sheets on any or all of the above numbers indicated for the modern bedroom.

THE ARROW-HART & HEGEMAN ELECTRIC CO
HARTFORD, CONNECTICUT, U.S.A.

COUPON: *To* **Arrow-Hart & Hegeman Electric Co., Hartford, Conn.**
***SEND ME* illustrated data-sheets on the following numbers:**

.....

Name and address .....

.....

My Electrical Contractor is .....

LETTERS from readers on all subjects

Facts, opinions and advice welcomed here

We Are NOT in the Stock Plan Business

Washington, D.C.

To the Editor:

We are constantly receiving requests from retail lumber merchants asking that they be directed to sources where good plans for small homes may be obtained.

If you are in a position to furnish plans to home owners and dealers, we wonder if you could give us full information on your service so that we may accurately report to our inquirers.

NATIONAL LUMBER MANUFACTURERS ASSOCIATION,
By C. R. French.

Answer: Replying to your letter, although the AMERICAN BUILDER illustrates a great many well designed homes, we are not in the architectural or stock plan business. The majority of AMERICAN BUILDER readers are rendering an efficient home planning and architectural service in their local communities, and we prefer not to put ourselves into competition with them in the matter of furnishing stock plans. While we recognize the value of such plans over no plans at all, or rough sketches drafted on the side of a board, nevertheless we feel that in the majority of cases the best service to the property owner is through consultation with competent local men.

We have a new book of home designs entitled, "American Builder New Era Home Designs and Modernization Plans." It is a book of 178 pages, size 8½x11½, containing 16 chapter title pages in full color and illustrating a large number of home designs by leading architects and builders across the country. A considerable department on farm buildings is also included. The price is $1.00.

The designs in this book, like those published monthly in the AMERICAN BUILDER, are presented for their suggestive value to architects and builders, to assist in their own planning functions. —Editor AMERICAN BUILDER.

Eleven More from Canada

Winnipeg, Man., Can.

To the Editor:

I wish to compliment you on the class of matter which has appeared in your publication during the past year. In fact, I am so impressed with its value as to desire having it placed in the hands of the Heads of each of our eleven Departments, and with this in view, you will note from the above list that I am having the magazine sent to the residence of the Heads of each of the Departments of the Monarch Lumber Company, Ltd., in order that it may be on their reading table where it is available and will be picked up from time to time and studied.

A. K. GODFREY, Pres. & Gen. Mgr.,
The Monarch Lumber Company, Ltd.

Small House Fan

Hazardville, Conn.

To the Editor:

Would say that I am under the impression that there is a real pent-up demand for the small homes and am going to build a couple out of brick this spring. Now when I say small houses, that is just what I mean.

A living room, good size, say 12x18 or better; absolutely no dining room; one and two bedrooms, and a good size kitchen. And last of all there must be a garage as a part of the house as everybody has a car, and they are keen on getting out of the car into the house. Now I think the artists who draw up the plans in all the plan books should wake up and turn out some plans in this small field with a garage.

CLARENCE L. MARTIN.

Classified Advertising

Rates:
Small letters 50c per word.
Capital letters $1 per word.
Minimum twenty words.

Business Opportunities
For Sale and Exchange
Help and Situations Wanted

To Insure Insertion Remittance Must Accompany Order

WANTED:—Commission or consignment accounts for good lines of building supplies or specialties already established as jobbers of steel products, Dallas and adjacent territory. Continental Fence & Wire Co., Dallas, Texas.

LETTERS—Continued

Personally, We Favor Porches

Tacoma, Wash.

To the Editor:

We have received the pamphlet which you mailed us March 7, together with letter enclosed. We note that every house design in the pamphlet shows unprotected entrances. We do not consider this proper architecture, inasmuch as provision has not been properly made for the comfort of the home dweller and his guests. To have the entrance of the home opening directly into the weather with no protection whatever, strikes us as being the height of poor taste.

The opinion we have expressed above is not our own opinion entirely, but is based upon thousands of contacts we have had with home-dwellers and architects.

We do not know who is responsible for the fad of porchless homes, and homes with unprotected entrances that swept the country during the last few years, but we are convinced that the owners of the homes themselves, or the dwellers therein, realize the great discomfort to which they are being subjected by this improper home planning.

WASHINGTON MANUFACTURING COMPANY,
By T. L. Manley, Secretary.

Fun on the Side

Independence, Ia.

To the Editor:

Since writing you a year ago, I have completed another border station on the west side of the Rockies, shot a grizzly bear and had a rug mounting made of the hide, fished considerably for fighting mountain trout; was transferred last summer to the Chicago district office where I served for several months as administrative assistant to the District Engineer; now find myself supervising post office construction in Iowa.

I have read with a good deal of interest your statistical studies and stimulating articles on the home building industry. The AMERICAN BUILDER is a welcome monthly visitor to my office.

J. D. LEVIN,
Construction Engineer, Treasury Dept.

Thank You!

Spring Valley, N.Y.

To the Editor:

I have read your magazine for several years. You are certainly doing *more* than your share to further general construction and help builders.

VICTOR HAUBNER,
Contractor and Builder.

Likes the Barn Plans

Chicago, Ill.

To the Editor:

I wish to compliment you on the article and plans of a big barn by H. A. Heimbeck, Rock Island, Ill., in the February issue of the AMERICAN BUILDER. Let's have at least one farm building in detail in every issue of the AMERICAN BUILDER hereafter. I am sure that there are many problems that a lot of us would like to have solved in this class of buildings.

As a suggestion, why not detail several types of farm roofs, graineries, corn cribs, machine sheds, farm houses, dairy buildings, etc.

W. C. SPOUSTA,
Industrial Engineer.

To Restore Confidence

Crossville, Tenn.

To the Editor:

The AMERICAN BUILDER is attempting a very difficult but certainly an essential thing in trying to bring about a restoration of confidence in the present generation of building.

Confidence once lost cannot easily be regained, but it must be done all the way along the line before we see good times again—especially is this so in our industry. And so you have my approval for what you are now doing. The AMERICAN BUILDER is doing its part.

HOWARD CLARK.

Selected List of Manufacturers' Literature

For the Service of Builders, Contractors, Architects and Dealers

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

OF TIMELY INTEREST

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

337—Profits—"It Pays to Own a Fireproof Home—Here's How It's Built"; 20 pages, illustrated. A step-by-step description with photos and drawings of the principal details of a concrete home.

338—Designs—"Suggested Designs for Small Fireproof Homes"; 20 pages presenting 8 designs with estimates of concrete materials. Includes outline specifications. Recommends employment of local architect to adapt designs to specific needs.

SKILSAW, INC., 3310 Elston Ave., Chicago, Ill.

339—For Landscape Gardeners—"A Home Owner's Manual of Hedges"; 29 pages of most interesting material on ornamental hedges and how to trim them, featuring the new Skilsaw Electrimmer.

JOHNS-MANVILLE, New York City

340—Profits from Modernizing—"The Johns-Manville 'Before and After' Sales Plan for 1935," a detailed presentation of all the helps to remodeling and modernizing business prepared by the J-M merchandising experts for the assistance of dealers and contractors.

FREDERICK BLANK & Co., New York Central Bldg., New York City

341—Washable Wall Coverings—"A Period Collection of Wall Coverings for the American Home"; 8 pages illustrating and describing Salubra wall coverings.

NORTH BANGOR SLATE Co., Bangor, Pa.

342—Roofing Slate—Information and illustrations showing how to lay slate roofing in standard lay, thatch lay and random lay. The durability and economy of slate roofing are demonstrated.

INSULATION AND ACOUSTICS

THE INSULITE Co., Minneapolis, Minn.

343—Summer Cottage Plans—"How to Build Comfort into Your Summer Cottage"; working plans and bill of material for a very attractive 5-room summer cottage of Insulite board. How to keep a summer cottage cool in hot weather.

WOOD CONVERSION Co., St. Paul, Minn.

344—Poultry Insulation—"There's Something About Eggs," an informative folder showing why it pays to insulate poultry houses.

THERMAX Co., Farmers Bank Bldg., Pittsburgh, Pa.

345—Acoustical Construction—"Absorbex Acoustical Corrective"; 16 pages of diagrams and data presenting the three types of Absorbex, A, B, and C, and explaining their uses.

AMERICAN FLANGE & MANUFACTURING Co., INC., 26 Broadway, New York City.

346—Metal Insulation—"Ferro-Therm Metal Insulation for All Purposes," an 8-page illustrated data sheet on cold storage construction and house insulation with Ferro-Therm.

ALFOL INSULATION Co., INC., Chrysler Bldg., New York City

347—Foil Insulation—"Stop Burning Your Dollars!"; a 4-page illustrated data sheet on this new type insulation and its many uses.

EQUIPMENT FOR BUILDINGS

THE BESSLER DISAPPEARING STAIRWAY Co., Akron, O.

348—Folding Stairs—Information regarding the 10 models now available in Bessler disappearing stairs, ranging in price from $15.00 to $700 00.

THE SWARTWOUT Co., 18511 Euclid Ave., Cleveland, Ohio

349—Ridge Ventilator—"Dextor Heat Valve," a 6-page technical bulletin showing details of the ventilating ridge for cooling attic spaces and contributing to home comfort.

OTIS ELEVATOR Co., 260 Eleventh Ave., New York City

350—Dumbwaiters for Stores—"The Otis Undercounter Dumbwaiter for Stores, Hotels, Hospitals and Restaurants" is a technical folder presenting this improved device for merchandise handling.

SEDGWICK MACHINE WORKS, West 15th St., New York City

351—Dumb Waiters, Elevators, Fuel Lifts—"Sedgwick Mechanical Servants in the Home," an 8-page booklet, illustrated, giving recommended sizes for four types of equipment used in thousands of homes.

352—Residence Elevators—"Toward the Distant Hills of Life," a 6-page brochure, illustrating and describing the different types of residential elevators.

THE KINNEAR MFG. Co., Columbus, Ohio

353—Simplified Garage Door—"Makes the Ideal Door Using Old or New Panels," a 2-page circular on the Kinnear Tip-Top door hardware which was demonstrated at the retail lumber conventions last winter.

TUTTLE & BAILEY, INC., New Britain, Conn.

354—Grilles and Registers—New catalog No. 40 on "Air Conditioning Grilles and Registers" including a full line of this equipment for modern homes.

THE DONLEY BROTHERS Co., 13900 Miles Ave., Cleveland, Ohio

355—Donley Devices—"The Donley Catalog of Helps for the Home Owner and Builder"; the 16th Edition dated February 1935 of this valuable reference book presents 36 pages of detailed information on fireplace construction and equipment, coal chutes, package receivers, built-in mail boxes, garbage receivers and mason's iron work.

COLONIAL FIREPLACE Co., 4603 Roosevelt Rd., Chicago, Ill.

356—Fireplace Necessities—"Mantel-Pieces and Fireplace Equipment"; 2 catalogs presenting in great detail the line of mantels and fireplace hardware and fittings offered by this old, established concern.

THE SHELBY SPRING HINGE Co., Shelby, Ohio

357—Builders Hardware—"No. 35 General Catalog" presents the Shelby double-acting and single-acting checking door hinges and other items in the Shelby line.

THE ADVANCE METAL WEATHERSTRIP & SCREEN MFG. Co., 1283 Hayden Ave., Cleveland, O.

358—Window and Door Weatherstrips—Information in 12-page illustrated catalog of the Advance metal weatherstrips and how to apply them.

L. O. KOVEN & BROTHER, INC., 154 Ogden Ave., Jersey City, N.J.

359—Industrial Equipment—A portfolio of data sheets on Koven industrial equipment for hotels, restaurants, institutions and buildings, including tanks and special metal work of all kinds.

NORTON Co., Worcester, Mass.

360—Alundum Safety Treads—"It's Easy Now to Make Stairways Safe," a 12-page brochure on stair construction showing different methods of installing safety treads.

METAL DOORS AND WINDOWS

KAWNEER Co., Niles, Mich.

361—Kawneer Rustless Metal Doors—New 8-page data sheet illustrating built-to-last heavy-duty doors for use with Kawneer store fronts and in all types of buildings.

VENTO STEEL SASH CO., Muskegon, Mich.

362—Steel Casements—"Vento Steel Casements for Residence Construction of Any Type or Size, Hotels, Apartments and Commercial Buildings," a 16-page handbook with price list illustrating this line from cottage to largest structure.

THE AMERICAN ROLLING MILL CO., Middletown, Ohio

363—Metal Work—"Suggestions for Galvanized Sheet Metal Specifications"; 8 pages of practical information regarding metal roofing, gutters, conductor pipe, valleys, hips, ridges, flashings, skylights, etc.

LUMBER AND MILLWORK

BRADLEY LUMBER CO. OF ARKANSAS, Warren, Ark.

364—Flooring—"How to Nail a Better Job," a clever little folder demonstrating Bradley "Nail-Seated" flooring, showing how you can lay more feet per day.

MAPLE FLOORING MANUFACTURERS ASSN., McCormick Bldg., Chicago, Ill.

365—Maple Floors—"How Architects and School Officials Regard School Room Floors of Hard Maple"; actual experience in the use of maple floors for schools and other public buildings presented in a 10-page illustrated folder.

ARKANSAS SOFT PINE BUREAU, Little Rock, Ark.

366—Pine Paneling—"A Quaint Custom Returns"; a clever folder in colors illustrating some beautiful pine panel work for homes both large and small.

WHEELER OSGOOD SALES CORP., 122 S. Michigan Ave., Chicago, Ill.

367—Concrete Form Lumber—"Laminex Plyform," a 12-page handbook on concrete form building using plywood. Line drawings show details of form construction and photographs illustrate their uses.

HARBOR PLYWOOD CORP., Hoquiam, Wash.

368—Concrete Forms—"Harbord Plycrete for Concrete Forms," a 12-page handbook on concrete form construction using plywood, with details of the forms and recommended concreting practice.

TENNESSEE EASTMAN CORP., Kingsport, Tenn.

369—Wood Preservation—"Preservation with NO-D-K Natural Wood Creosote," a 16-page handbook on NO-D-K and its uses for the preservation of lumber and timbers.

AIR CONDITIONING—HEATING

MOTORSTOKER CORP., 25 W. 45th Street, New York City

370—Coal Stokers—"The One Right Way to Heat Your Home." A remarkable portfolio of photos, diagrams and descriptive text pointing out the good and the bad in oil, gas and coal burning. The "Motorstoker" and its operation are discussed.

FRIGIDAIRE CORP., Dayton, Ohio

370A—The Comfort Zone—"Air Conditioning by Frigidaire," a 24-page handbook on the new Frigidaire line of air conditioning equipment, both room units and central systems. A book understandable alike to the novice and the professional.

DAIL STEEL PRODUCTS CO., Lansing, Mich.

371—Air Conditioning Units—"Dailaire System of Heating & Air Conditioning," a 12-page portfolio of equipment to furnish pre-heated, washed, humidified and filtered air in winter, and circulated or cooled air in summer.

AUTOVENT FAN & BLOWER CO., 1807 N. Kostner Ave., Chicago, Ill.

372—Summer Comfort—Information regarding the Coolvent system of ventilation, with data on the Autovent propeller fan. Illustrated data sheets with up to date tables.

GENERAL REFRIGERATION SALES CO., Beloit, Wis.

373—Lipman Air Conditioning—Illustrated data on the Lipman Self-Contained air conditioners featuring their design and construction, and availability for all cooling purposes.

SHAW-PERKINS MANUFACTURING CO., Oliver Bldg., Pittsburgh, Pa.

374—Radiation—A 20-page handbook giving all information regarding the Shaw Convector-Radiator, a new and pleasing design of exposed heating unit. Details of recessed radiation.

GORTON HEATING CORP., Cranford, N.J.

375—Vapor Heating—"Specifications for the Gorton Single Pipe Vapor Heating System"; technical data describing this cost-saving method of heating and piping.

NATIONAL RADIATOR CORP., Johnstown, Pa.

376—Radiator Heating—Interesting information on National equipment in a series of bulletins, "Three Times Your Money's Worth" on modernizing, "While You're Thinking of Building" for new homes, "37c a Day" explaining financing modernization, and "National Line" illustrating equipment.

ELECTRICAL

GENERAL ELECTRIC CO., Merchandise Dept., Bridgeport, Conn.

377—Electric Wiring—"G-E Conduit Products Catalog"; 96-page indexed catalog fully illustrated, presenting the extensive G-E line of electric wiring materials.

THE AMERICAN BRASS CO., Waterbury, Conn.

378—Electric Wiring—"Everdur Electrical Conduit, a New Anaconda Product"; 12-page handbook, fully illustrated, featuring this new line of non-rusting conduits.

NATIONAL ELECTRIC PRODUCTS CORP., Pittsburgh, Pa.

379—Switch Boxes—Full information regarding the National Nos. 7 and 12 switch boxes presented in a 12-page illustrated pamphlet.

CONTRACTORS' EQUIPMENT

D. W. ONAN & SONS, 43 Royalston Ave., Minneapolis, Minn.

380—Electric Plants—Full information regarding the Onan electric light plants for suburban homes and industrial units.

ALBION MANUFACTURING CO., Albert & Martha Sts., Philadelphia, Pa.

381—Caulking Gun—"The Modernized Pressure Gun" is presented in a new leaflet showing numerous uses handled through a variety of nozzles.

TEMPLETON, KENLY & CO., 1020 S. Central Ave., Chicago, Ill.

382—Simplex Jacks—A 40-page vest pocket handbook on jacks for contractors, railroads, mines, motor trucks, etc.

JAEGER MACHINE CO., Columbus, Ohio

383—Jaeger Lakewood Equipment—A 36-page illustrated catalog on Jaeger construction and road machinery, including mixers, pumps, hoists, truck mixers and road builders' equipment.

American Builder, **(May, 1935)**
105 W. Adams St.,
Chicago, Ill.

Please have the following Catalogs listed in this issue sent me—

Numbers.....

.....

.....

Name.....

Street.....

City..... **State**.....

OCCUPATION*.....

***Please note that occupation must be stated if full service is to be given.**