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AMERICAN BUILDER AND BUILDING AGE

Improved Outlook for Home Building

AN IMMEDIATE revival of home building is in prospect as a result of the new financial and economic policies inaugurated during the past month by the Roosevelt administration.

On April 13 the President sent a message to Congress outlining legislation to provide 2 billion dollars of small home mortgage money.

"As a further and urgently necessary step in the program to promote economic recovery," he said, "I ask Congress for legislation to protect small home owners from foreclosure and to relieve them of a portion of the burden of excessive interest and principal payments incurred during the period of higher values and higher earning power.

"Implicit in the legislation which I am suggesting to you is a declaration of national policy. This policy is that the broad interests of the nation require that special safeguards should be thrown around home ownership as a guaranty of social and economic stability, and that to protect home owners from inequitable enforced liquidation in a time of general distress is a proper concern of the government."

The administration's home mortgage bill is sponsored by Representative Steagall and Senator Robinson (Ark.) and on April 28 passed the House by the almost unanimous vote of 383 to 4. Early passage of this Home Owners Loan Act by the Senate is also assured. Its effect on the home mortgage situation, both for refinancing present distressed home owners and for providing funds for new home building, is certain to be prompt and favorable.

The other development of the month, promising quick stimulation to home owning and home building, was the rise in commodity prices and the upturn of the stock and bond markets following the Treasury's announcement that our national currency is no longer tied to gold.

The rise in farm product prices has been little short of sensational, adding hundreds of millions of dollars to the purchasing power of the farmers. With all prices going up, buying has started, putting men back to work and still further stiffening the prices of commodities.

Because of so much talk of inflation confidence is shifting away from money and is favoring usable commodities and investments in real estate, more particularly homes, as the one asset of most reliable value.

Inflation and talk of inflation will make 1933 out-

standing in its contribution to the volume of owner-occupied homes, the United States Building and Loan League predicts. Homes are still at new low prices, but the monetary developments of the last few weeks have served notice on the renting population that the days of waiting for home ownership to become even less expensive are at an end. Some of the wiser renting families have stepped into the market before inflation has become a reality, thus avoiding moves on the part of the seller to take advantage of the rising prices in the offing.

One of the large building and loan associations reports that April has been the biggest month in its history from the point of view of loans and sales of properties. Others report an increase of popular interest in home properties which held little interest this time last year.

The entire outlook for home buying and new home building is definitely improved. With a "back log" of more than 7 billion dollars accumulated need for home building and improvements, the industry is all set to go when the necessary funds are available.

PRICES SHOULD BE STABILIZED

IT IS a significant fact that reductions in the prices of building materials have not brought about increased business. In fact, it might almost be said that the more building prices have been reduced—and in many cases this has been done to the point of ruin for manufacturers—the more building volume has tended to drop off. This should be a lesson to the effect that price reductions alone cannot make business.

The building industry needs stabilized prices, and a proper and legal organization of manufacturers to make such a condition possible.

By "stabilizing prices," we most certainly do not mean stabilizing at a 1929 figure unless, of course, inflation should make restoration of such prices necessary. Manufacturers are entitled to prices that will enable them to operate at a fair profit, and they should be allowed to do what they can to prevent the ruinous price-cutting competition that has wrecked so many firms.

The cement industry has recently been subjected to unfair criticism by many newspapers for its action in stabilizing cement prices. There is no evidence of un-

fair tactics, and much evidence to show that cement manufacturers have behaved in a fair and above-board manner, and that the prices charged for cement are not unreasonable.

The cement industry is rather to be congratulated for its stand for solvent prices and for its attempts to combat continued uncontrolled deflation of values. The entire industry would be better off for more of stabilization and less of price cutting.

CONTRACTORS' LICENSE LAW

A BILL is now before the Michigan legislature providing for the licensing and regulation of residential building contractors. This bill is of special interest because, following, as it does, licensing action in other states, it shows the trend of public thought towards greater control of building industry activities.

California was the first state to pass a contractors' license law. Its first law, passed in 1929, placed a small license fee on all contractors and provided some supervision. In 1931 this law was revised, and some very sharp teeth put into it. It is reported that between three and four thousand incompetent or irresponsible building industry operators left the state within a year after its passage. There was such an influx to surrounding states that Arizona and Nevada in self-defense passed license laws very similar to the California one. North Carolina and Tennessee also passed licensing laws of this type, and a number of other states are considering similar bills.

The Michigan law under consideration differs from the California one in that it provides for the licensing of residential building contractors only. The bill defines this profession as follows:

"Any person engaged in residential building construction or a combination of residential and commercial building construction who, for a fixed sum, price, fee, percentage, valuable consideration or other compensation, other than wages, undertakes with another, or offers to undertake or purports to have the capacity to undertake with another, for the erection, construction, alteration, repair, addition to, or improvement of the walls and structural parts of a residential building or combination of residential and commercial building, and who is skilled in the planning and superintending of residential construction, or a combination of residential and commercial building construction and has a practical knowledge of the same, and who is familiar with the housing laws of Michigan and other laws, rules and regulations governing residential building construction or a combination of residential and commercial building construction: Provided That the words shall not be construed to include anyone who merely furnished materials or supplies without fabricating the same into, or consuming the same in the performance of, the work of a residential building contractor as herein defined."

A license fee of \$30.00 is to be charged, and the contractor is required to show proof as to his honesty, truthfulness and good reputation. He must also demonstrate his clear understanding of the laws and principles of real estate, conveyancing and ability to read plans and specifications, a fair knowledge of building material costs, the obligations of a residential building contractor to the public and his principal.

The residential contractor's license must be renewed annually at a cost of \$20.00. Administration of the bill is in the hands of the Michigan Securities Commission which is given power to revoke a license or refuse to issue a new license for due cause.

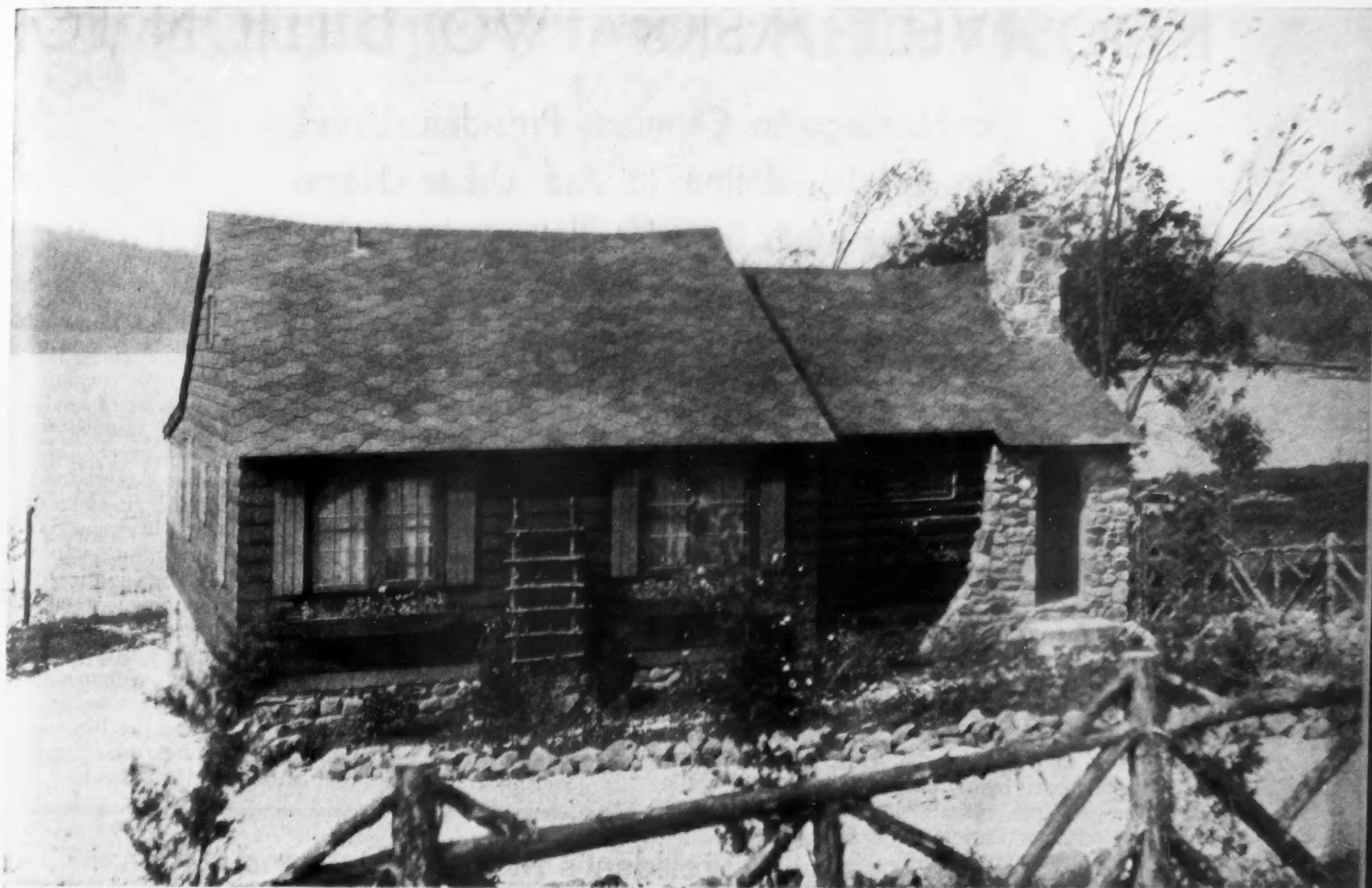
A contractor's license may be revoked or suspended at any time where the licensee is performing, or attempting to perform, any of the acts as follows: (a) Abandonment of any contract without legal excuse; (b) diversion of funds received for specific contracts, and their application or use for any other contract, obligation or purpose with intent to defraud or deceive creditors or the owner; (c) fraudulent departure from or disregard of plans or specifications—or the doing of any wilful fraudulent act in consequence of which another is substantially injured; (d) wilful and deliberate disregard and violation of the housing laws of Michigan or any political sub-division, or of safety or labor laws; (e) making any substantial misrepresentation, or making any false promises of a character likely to influence, persuade or induce; (f) pursuing a continued and flagrant course of misrepresentation or the making of false promises through agents, salesmen or advertising or otherwise; (g) changing business and residence location without notification to the commission within 30 days; (h) any conduct which constitutes dishonesty or unfair dealings.

These causes for the revoking of the contractor's license are similar to those stated in the California license law, except that the California bill adds an addition, "Failure to keep records showing all receipts and disbursements of the licensee, in all of his transactions as a contractor as that term is defined in the act."

There is naturally some hesitation on the part of many building men to turn such drastic powers of supervision and control over to a state commission. Experience in California and other states, however, seems to indicate that this is a desirable safeguard. Responsible firms that do honest, reliable work—which are far in the majority—stand to profit by the fair administration of such a bill. In California, both contractors and dealers backed the bill, and the Michigan legislation is being aggressively pushed by the Greater Detroit Builders' Association, as well as by contractors and dealers throughout the state who are anxious to see the building industry "clean house."

It is possible the passage of contractors' license laws will be a help in restoring the confidence of the public in the profession—a confidence which has been considerably shaken in some parts by the unethical and unfair tactics of a few men.

As a matter of fact, the licensing of plumbers, electricians, architects, realtors and others in the building business has long been considered a benefit to these professions. There is reason to believe that a contractors' license law patterned on the California act, put in the hands of a non-political board or commission and fairly administered, should be of benefit to the building industry.



Back to the Land

BACK THEY go, to the farms, the acre lot in the suburbs, the country and the woods. A growing sales opportunity for builders is offered by this trek back to the land. Ex-city dwellers have enjoyed comforts they will try to replace in the country—this means modernizing. The biggest field of all is for the small country house within reach of the city where the worker can produce much of his own food. Several of this type are shown

in detail in this issue. Of similar interest at this season of the year are those other kinds of inexpensive homes—camps and cabins, of which several are shown above. The modern tourist cabin is almost a complete home. Cabins of rustic charm are still popular, and can be built this year for less than ever before. Back to the land may mean more business for the building industry in the long run. It offers a source of needed work this spring.

ROOSEVELT ASKS TWO BILLION FOR

In Message to Congress President Urges Prompt Legislation to Aid Urban Home Owners—Bills Introduced in Both Houses

LEGISLATION to revamp and liberalize the Home Loan Banks, setting up a fund of 2 billion dollars for small home mortgage refinancing and for new home building was introduced on April 13 in both houses of Congress with a ringing message from President Roosevelt. He asked for legislation to permit readjustment of existing mortgage debts, together with a postponement of both interest and principal payments in cases of "extreme need."

He suggested action along the same lines as the refinancing of agricultural mortgages, previously recommended, with a bond issue to meet the needs.

He told Congress the plan of settlement "will provide a standard which should put an end to present uncertain and chaotic conditions that create fear and despair among both home owners and investors."

The bill the President sent to the capitol provides for the refinancing of mortgages on homes not exceeding \$10,000 (later amended in the house to \$15,000) in value. The proposed legislation contemplates the scaling down of the principal, reduction of the interest and amortization of the unpaid balance over a period of fifteen years.

Under the administration of the federal home loan board a home owners' loan corporation would be created with a capital of not to exceed 200 million dollars subscribed by the government. The funds for such subscription would be furnished by the R. F. C., for which purpose its limit of obligations is increased 200 millions. Inasmuch as the federal treasury is the only subscriber for R. F. C. debentures, this fund would be furnished in reality by the government.

The home loan corporation would be authorized to issue tax exempt 4 per cent bonds up to 2 billions which would be exchanged for existing mortgages on homes on such terms as mortgagor and mortgagee agree upon. Payment of the interest, but not of the principal, would be guaranteed by the federal government.

As in the case of the farm mortgage refinancing these bonds are to be obligations not of the government but of a corporation set up by the government. Presumably the government would not be responsible for payment of the principal of the bonds, but in the event of default congress unquestionably would be urged to make good any deficit.

Bonds would be exchanged for

mortgages on a basis of not more than 80 per cent of the value of the home. Any reduction in the face value of the debt by the mortgagee would be credited to the mortgagor, who would amortize his debt to the corporation at five per cent within 15 years. The board could grant a 3 year extension on payment of interest or principal.

To stimulate the building of new homes there would be set up a system of federal savings and loan associations to afford the services of building and loan associations in such localities as lack these institutions, which would be in approximately one-third of the counties in the country. The bill authorizes the government to subscribe 100 millions of the capital required "to provide mutual thrift associations in which people may place their savings and invest their funds and in order to provide for the financing of homes."

These associations would be authorized to loan on homes secured by mortgages and to invest their funds in government securities and home loan bank bonds.

President's Message Declares National Policy for Home Ownership

TO THE CONGRESS:

As a further and urgently necessary step in the program to promote economic recovery, I ask the Congress for legislation to protect small home owners from foreclosure and to relieve them of a portion of the burden of excessive interest and principal payments incurred during the period of higher values and higher earning power.

Implicit in the legislation which I am suggesting to you, is a declaration of national policy. This policy is that the broad interests of the Nation require that special safeguards should be thrown around home ownership as a guaranty of social and economic stability, and that to protect home owners from inequitable enforced liquidation, in a time of general distress, is a proper concern of the Government.

The legislation I propose follows the general lines of the farm mortgage refinancing bill. The terms are such as to impose the least possible charge upon the National Treasury consistent with the objects sought. It provides machinery through which existing mortgage debts on small homes may be adjusted to a sound basis of values without injustice to investors, at substantially lower interest rates and with provision for postponing both interest and principal payments in cases of extreme need. The resources to be made available through a bond issue to be guaranteed as to interest only by the Treasury, will, it is thought, be sufficient to meet the needs of those to whom other methods of financing are not available. At the same time the plan of settlement will provide a standard which should put an end to present uncertain and chaotic conditions that create fear and despair among both home owners and investors.

Legislation of this character is a subject that demands our most earnest, thoughtful and prompt consideration.

FRANKLIN D. ROOSEVELT.

THE WHITE HOUSE
April 13, 1933.

HOME BUILDING AND REFINANCING

Permanent Plan of Loan Agencies Provided — New Home Building to be Fostered by Broadened Home Loan Banks

In refinancing the home owner, the corporation could advance cash for the payment of taxes or assessments, or provide for necessary maintenance or repairs.

Cash advances for these purposes also could be made to home owners whose property was not mortgaged up to 80 per cent of the value.

Each federal savings and loan association would automatically become a member of the federal home loan bank of its district in the same manner as other institutions.

The Treasury would subscribe to capital in such associations up to \$100,000 at the request of the board, but the amount paid by the government could not exceed capital subscribed by other shareholders.

After five years, each association would set aside one-third of its receipts to retire the Government holdings.

Any member of a home loan bank could convert itself into a federal institution by vote of its stockholders and subject to the regulation of the board.

A separate appropriation of \$250,000 is authorized by the bill to enable the board to promote organization of these associations.

The bill would repeal that section of the existing home loan bank law under which federal home loan banks are authorized to loan directly to home owners.

Senator Robinson of Arkansas, in an explanation of the bill, said there are \$20,000,000,000 outstanding in home mortgages.

"The administration is making an effort by this bill," he said, "first and primarily to give immediate relief to the small home owner now in distress and to the mortgagees holding these mortgages, and to provide for the payment of taxes to prevent the loss of homes, and, at the same time, to promote the development of a sound system of permanent home financing.

"The federal home loan bank system, which is now advancing about \$10,000,000 a week, the major portion of which is going into home loans, is not disturbed in any way, and it is expected that these banks will issue bonds, as provided in the federal home loan bank act, to further expand the resources of their members to continue lending operations until the home mortgage market is fully served."

Explaining the provision for emergency refinancing of home mortgages, Senator Robinson said:

"It is intended by this provision to provide special relief for the small home owner and it is estimated that these figures will include approximately three-fourths in number of American homes.

"It is hoped that this plan will give relief to many small home owners whose mortgages are held by institu-

tions unable to carry the same, and at the same time give these institutions the reasonable present value of their mortgages in a bond with interest guaranteed by the United States and give the home owner a 5 per cent mortgage, amortized over a period of 15 years, which will result in home owners having a very low required monthly payment for interest and principal."

Robinson said the proposal for federal subscription to the stock of the savings and loan associations was "very similar to the investment of the government in preferred stock of national banks."

"All their funds are to be loaned on homes in the community, and provision is made for further expansion of their funds by borrowing from a federal home loan bank so that about \$3 can be loaned on home mortgages by this means for every

dollar put up by the United States," Robinson said.

"These associations are provided for as permanent institutions which will continue to provide the people a means of saving their own money to finance their homes in communities which are not now served."

Robinson said it was estimated these associations would be formed in about one-third of the counties of the nation which now have no means of financing their homes.

Repeal of the direct loan section of the home loan act is provided, Senator Robinson said, because it has "proved to be unworkable."

EARLY PASSAGE SEEN *

According to Washington dispatches of April 25 the administration's home mortgage refinancing bill was that day reported favorably to the house by the banking and currency committee and immediate passage predicted.

Several amendments were effected by the committee, among them one under which loans up to \$10,000 may be made on homes with an appraised value of not more than \$15,000. Under the bill as originally drawn the limit of appraisal value was set at \$10,000.

Another committee amendment would permit loans for the payment of taxes on small urban homes if it can be shown that money for tax payments is not available to the home owner.

* **Q**A news flash from Washington (April 28) announces that the two billion dollar home building and refinancing bill passed the House of Representatives and was speeded on to the Senate where quick passage is predicted. Mortgage interest was fixed at "not to exceed 5 percent," loans may be made on houses appraised at not more than \$15,000; otherwise the bill remained essentially as introduced.

"BACK TO THE LAND" HOMES

Five Years Have Brought Great Popularity to "A Little Piece of Land" In the Minds of the Public. How Will This Change Affect the Building Industry?



Mrs. E. Winkler examines garden of their country home.

THE urge to own at least a few square rods of Mother Earth is particularly strong in Mr. Average American. Sometimes this urge is subordinated for a few years, as happened during the boom period, only to reappear in greater power during the "headache" years following. In 1926 the movement back to the land did not receive its full share of publicity; but since that time, and particularly as conditions became more difficult, it has become increasingly apparent that a great movement is well under way.

A Motorized Migration

The widespread distribution of automobiles during the last ten years has played an important part in making more popular the areas previously considered inaccessible. Preliminary estimates show 21,045,000 passenger cars registered in 1932, plus 99,000 motor buses, with about 868,000 miles of surfaced highways to accommodate their use, making it possible for practically every family in America to travel in comfort many times the number of miles from home that could be traversed even a decade ago. Since 1920 thousands of families have acquired week-end or vacation properties located from fifty to several hundred miles from their regular domiciles. Without the modern automobile, this development in living habits would not have been possible; the "motor habit" of Americans makes it feasible to believe that the next ten years may see

our population still further spread out to cover many thousands of square miles of territory now undeveloped.

Likewise, the sale of commutation tickets by railroads shows almost unbelievable increases in suburban-urban travel; for example the Illinois Central carried 14,145,000 more Chicago suburban passengers in 1929 than in 1925, this being a good typical case of increase in commuter traffic. Bus lines in various parts of the country have grown from the one-man-business stage to great corporations in less than ten years, based in many cases on the growth in suburban-urban passenger traffic.

Whether by bus, train or passenger automobile, it is evident that thousands of families have removed from crowded city areas to suburban or rural sections; with the depression emphasizing the value of home-grown crops of vegetables and poultry, the movement back to the land has been stimulated rather than otherwise.

Influence On Building Industry

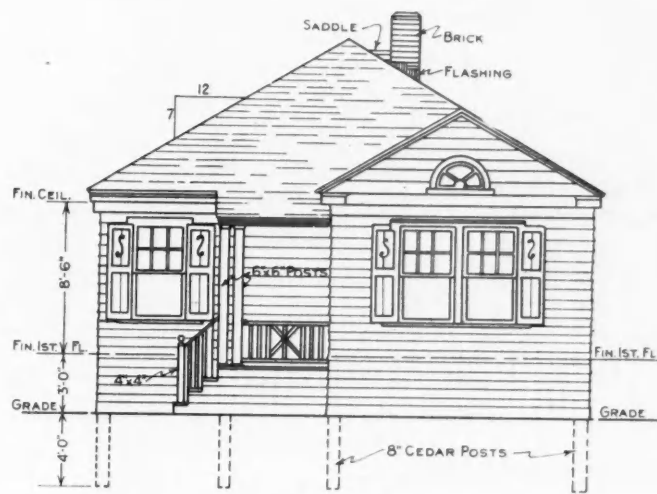
When a movement of this kind affects any considerable portion of the population, it necessarily changes in some way the conditions incident to so important an industry as building. Builders and dealers find the motorization of their businesses a real asset and many have already found new markets in the rural areas adjacent to the towns in which they have operated for years. Naturally, it is easier to sell any product which is in demand, so when people want homes in outlying sections the wise builder provides what they want and increases his sales.

The suddenly accelerated interest in log cabins is but

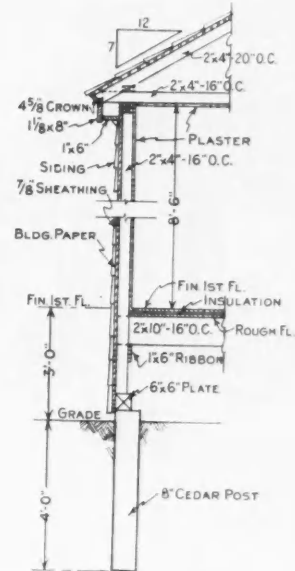
The Chicago Realty Finance Corp. is building little 5-room homes like this (plans on opposite page) and selling them on 90 by 125 foot fertile land plots for \$2975. The house exclusive of land figures \$1975. Cost key is 1.012-126-902-38-14-13.



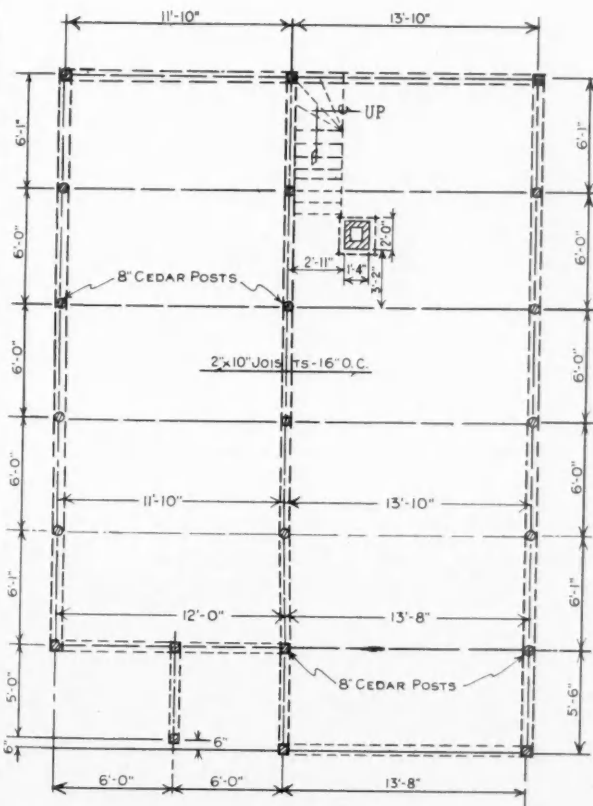
THE MOST POPULAR IN 1933 MARKET



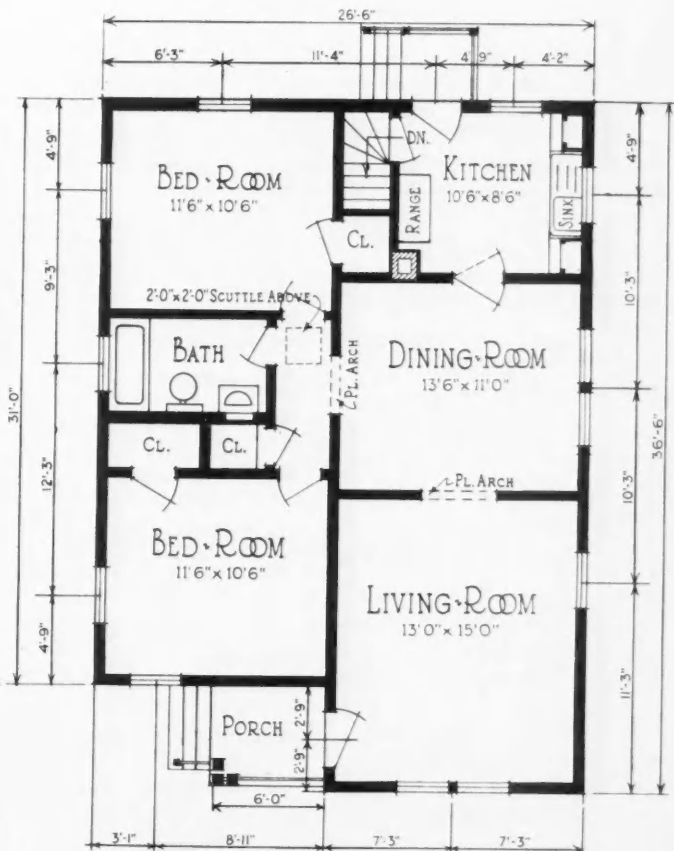
• FRONT • ELEVATION •



• SECTION •



• FOUNDATION • PLAN •



• FIRST • FLOOR • PLAN •



"Back to the Land" Home of Cape Cod Type Designed by Bemis Lester, Architect, Evanston, Ill., and Built by the Chicago Realty Finance Corp. for \$2425.00

one indication of the back to the land movement. An active demand for small "farms" (one-half to five acres) has become so evident that several developers in large Eastern cities have acquired acreage and announced their intention of placing such properties on the market this summer. If you will drive around the rural section of your county (especially if you are located near one of the larger cities) you will be surprised at the number of "abandoned farms" which have been sold to new owners in the last six months.

A Cape Cod Cottage for Far Suburbs or Open Country

Here's a charming little home that your clients or customers will never tire of. In fact, there is little doubt but what they will grow more fond of it the longer they live in it.

And back of its true home qualities is that all important supporting factor—low cost. It was the combination of these two facts that prompted its selection as a suitable design for today's needs. It is presented primarily for the family which desires a so-called "garden home" where the land can be made to produce a part of its cost.

Under such a plan, one of Chicago's prominent real estate and building firms, the Chicago Realty Finance Corp., will build this home for \$2,425, leaving the second floor to be finished later. The financing plan provides for a small down payment with the balance spread over a period of years.

Working drawings of this house are shown on the page opposite. This house might be described as a "home with a future as well as a past." In other words it can be made to grow with the owner's needs.

As designed by Bemis Lester, architect, the plans specify an eventual full two-story and basement house. To start, however, only the first floor is to be finished.

Here can be located the equivalent of a five-room bungalow—dining room, living room, kitchen, two bedrooms and bath.

Provision is made for a stairway to the second floor, which, when finished off will accommodate two additional bedrooms and bath. We now have a seven-room house.

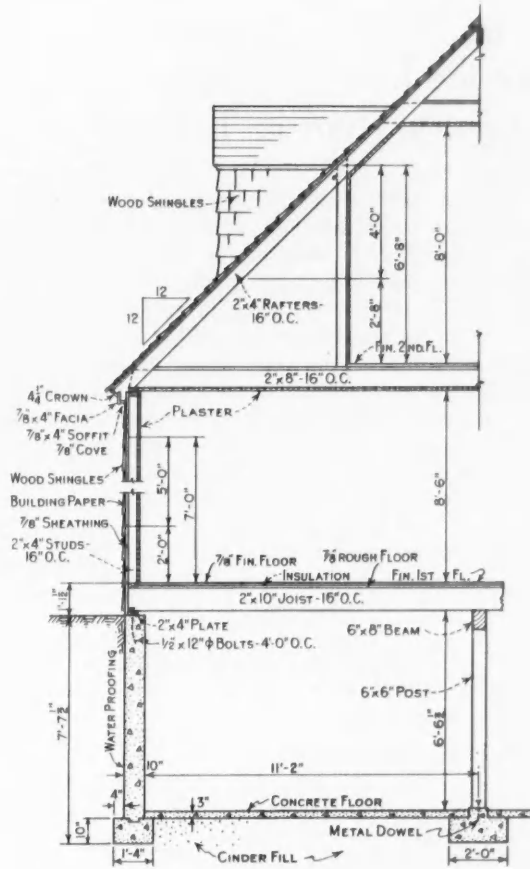
As its name implies, the inspiration for a house of this type comes from Cape Cod and the south shore of Massachusetts Bay. Its beauty is its simplicity and low eave line which hugs the site, giving it a very intimate aspect. The exterior walls of the earlier dwellings were covered with clapboards and later with hand-made shingles, using a coating of whitewash for paint.

Additional charm is lent by the chimney, which, being near the center of the plan, is unusually inconspicuous, of common brick with a very slight projection for a cap. The dormers are both simple and small, fitting nicely into the roof without detracting from its broad sweep.

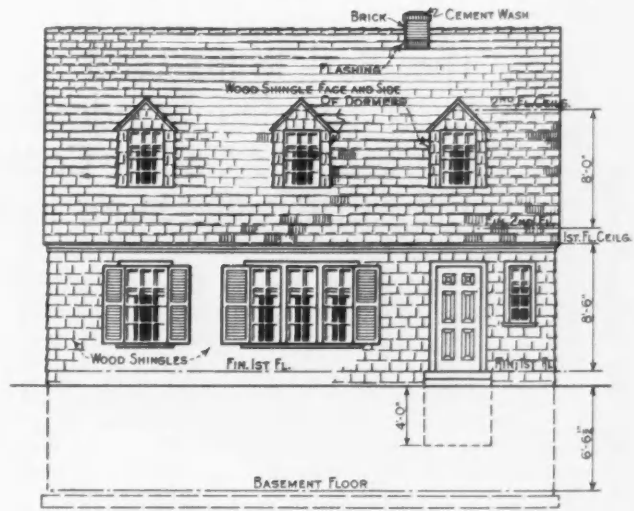
Picture this home with its white-painted walls, green shutters and roof, amid a garden of old-fashioned flowers, a group of hollyhocks near the front door and strips of flower beds paralleling the walk leading from the white picket fence. Set back from the street line on a slightly raised site to afford the best perspective it would be the cynosure of every passerby.

The ground floor plan is typical of that found in a modern bungalow, with the living room at the front of the house. To the rear are the dining room and kitchen. The bedrooms, entered from the dining room, are located on either side of the bath.

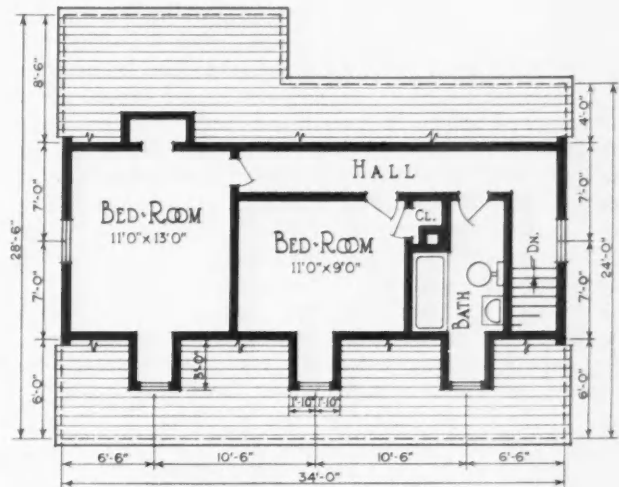
Detailed specifications provide a warm air heating plant and full plumbing, including an apron sink, recessed bathtub, pedestal lavatory and hot-water heater. Floors throughout are of oak, while the walls are papered.



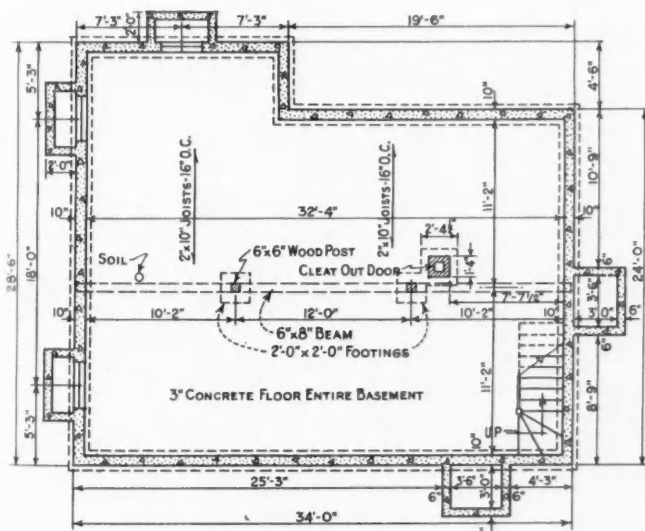
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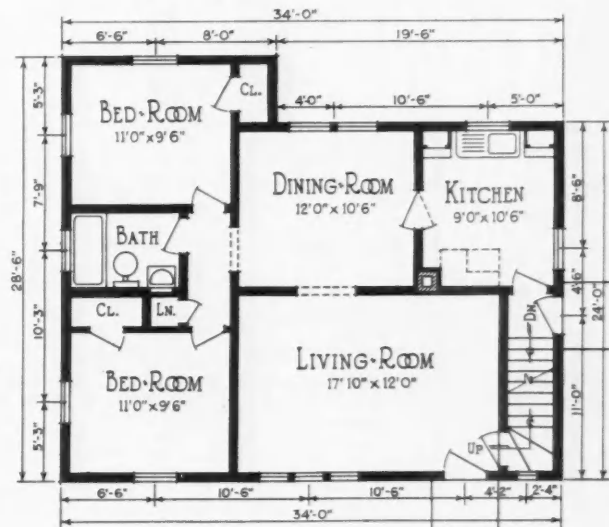
FRONT ELEVATION.



SECOND FLOOR PLAN.



BASEMENT FLOOR PLAN.



FIRST FLOOR PLAN.

Cape Cod Type House Designed by Bemis Lester, Architect, for the Chicago Realty Finance Corp., Cost Key is 1.444-125-886-38-19-14

HOW TO SUPPLY THE COUNTRY HOME

The "Back to the Land" Movement is helping to Raise Rural Housing Standards—Running Water, Sewage Disposal and Gas for Cooking are the first Essentials—They Cost Little More in the Country Than in Town

IT HAS been truly stated that no single factor so decisively marks the contrast between our modern American cities and our rural communities, as running water under pressure. The rural homes of today, however, both those being built new and those being remodeled, are rapidly changing this condition by installing home water supply systems.

Two factors are at work carrying electrical energy to the rural communities with which to operate all the essential conveniences of modern life; namely: individual electric plants, and transmission lines from central power stations. Few will fail to agree with Dr. Wm. Paul Gerhard, C. E., member American Public Health Association and American Society Mechanical Engineers as to the importance of running water in the home.

"If I were asked to name what in my opinion is the most desired utility of life in the country or on a modern farm, I would not name the telephone nor the electric light, nor the automobile, the improved highway, the nearby railroad—essential as they all are—but I would name running water in the house. This conduces more to cleanliness, health and comfort than any other improvement that modern civilization has given us."

The accompanying drawing shows a typical piping layout for an average size home with hot water tank which may be equipped either for gas or electric heat. A pressure water system is the first step toward the convenience of hot and cold water under pressure.

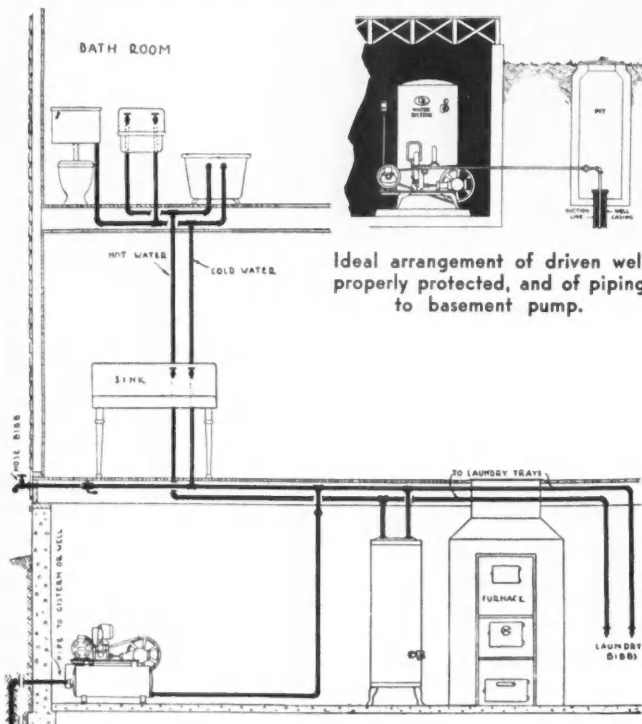
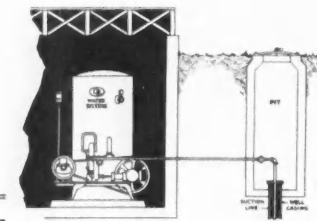


Diagram of water piping from well and pump to bath room fixtures, kitchen and laundry, including automatic water heater.



Ideal arrangement of driven well properly protected, and of piping to basement pump.

The installation of electric pump and pressure tank and connection with the well as shown is an ideal one. The pumping unit is installed in the basement and a straight suction line is run underground to the well. In mild climates it is not necessary to run the suction pipe as deep under ground as shown. This is determined by climatic conditions. This type installation is frequently used where the water level would not otherwise permit the use of a suction pump, allowing the pump to be set much closer to the water. Well casing should be cut off about 6 inches above the pit as shown to prevent surface water or dirt entering the well.

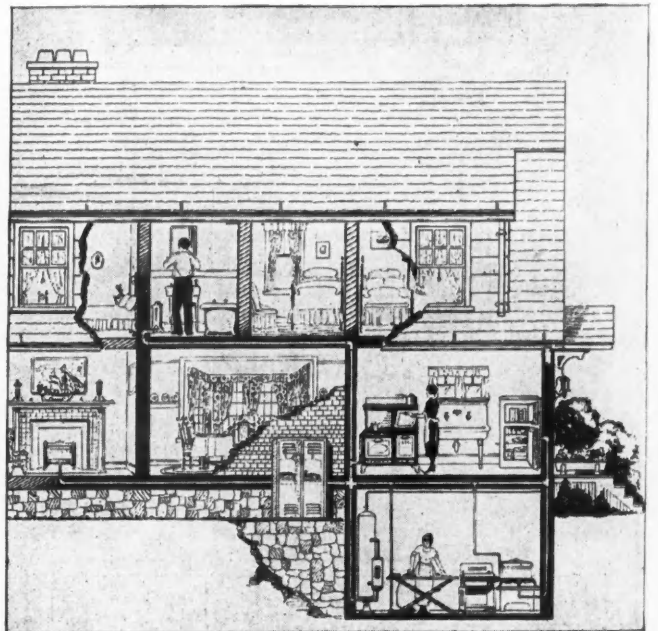


Diagram of installation of gas for cooking, water heating, grate and laundry from steel containers in cabinet outside of house.

In figuring the size water system needed for any home or farm group, the following data is generally used:

For each member of the family, for all purposes, including the kitchen, laundry, bath and toilet purposes	Approx. Gallons Per Day	The actual consumption for each member of the family and for each animal will vary with the season of the year and the conditions.
Each horse	10	Home Fixtures
Each cow	12	Filling the ordinary lavatory
Each hog	2	Filling average bath tub
Each sheep	1 1/2	Flushing a water closet
Each 100 chickens	4	Each shower bath
Drinking fountains	50 to 100	

Gas for Cooking and Water Heating

Every housewife knows the convenience of gas for cooking, and automatic water heating. Gas eliminates the labor of handling coal and ashes. It provides instantly an easily regulated hot flame, which

ME WITH MODERN CITY CONVENIENCES

is as readily turned off. In summer, it assures a cooler and more comfortable kitchen. These many advantages are enjoyed in those homes where city gas service is available. Gas in cylinders brings the same advantages to the suburban or country home. This important city convenience for the country home is supplied in steel containers in such highly condensed form that the equivalent of about 5,000 cubic feet of city gas is discharged from a single cylinder. By means of this equipment, the contents of the cylinder pass in the form of gas through the automatic controlling device, into the usual iron service pipe connected with the gas range or other gas-using equipment.

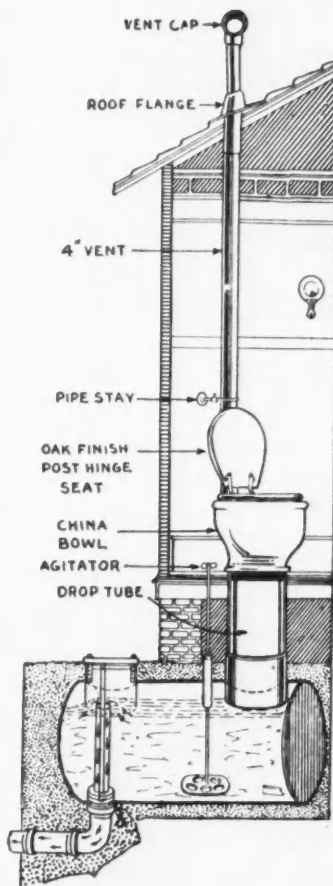
This gas has been developed to meet the needs of suburban and country homes for economical, efficient and dependable gas service. It is a "two cylinder" or "reserve cylinder" system consisting of a sturdy steel cabinet enclosing the pressure reducing valve and connections for two cylinders of gas. This cabinet is placed outside against the rear wall of the house, adjacent to the kitchen.

Two cylinders are placed in this cabinet. One is for use, the other for reserve. The gas passes from the cylinder in use to the regulating device which reduces the pressure to six ounces, the same pressure used with city gas. The gas is then led into the house to the kitchen range through standard city gas pipe. If there are other appliances, gas is brought to them in the same way. The house is piped exactly as it would be for city gas—in fact, if you should ever get city gas, the same gas range, the same appliances and the same piping can be used.

Sanitary Toilet Conveniences for Summer Homes and Camps

The lack of an adequate water supply does not prevent camp owners from enjoying modern toilet facilities. In mountain cabins, seashore cottages, tourists' camps, parks and resorts, chemical systems provide a convenient toilet service and a safe method of sewage disposal.

Installation is a simple matter for local labor. Little floor space is required—a small toilet room addition to the camp often provides the most satisfactory arrangement. Maintenance care is practically negligible. Chemical supplies are easily and economically obtained. Freedom from disagreeable odors is assured by the liquid-sealed storage tank. Yet the cost of this equipment is



A Typical Summer Camp Installation

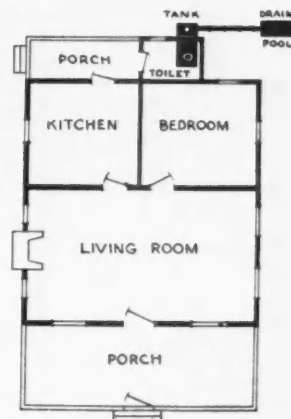
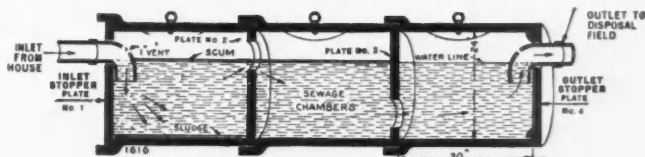
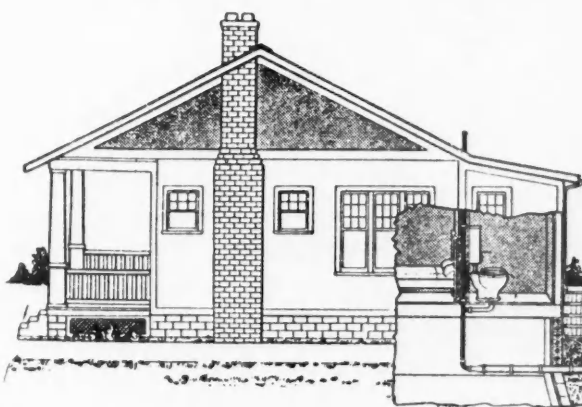


Diagram of improved chemical Toilet arrangement for summer cottages and camps where septic sewage disposal is not obtainable. Above is suggested floor plan of cottage.

low enough to bring modern sanitation within the reach of every camp, whether large or small.

The self-drain storage tank is one of the outstanding improvements in waterless toilet construction developed by one company. Sewage is retained in the tank until liquefied—then discharged automatically into a filter pool for final disposal. No pumping or disagreeable handling of treated sewage. Only attention required is a small monthly charge of chemical and enough water to keep the contents of the tank in a liquid condition.

At the end of a camping or school season, it is often advisable to empty completely the storage tank. This is easily done by means of the simple, hand operated drain valve under the manhole cover.



Sectional drawing Septic Tank assembled from Sewer Pipe. Other models are made of concrete, steel or wood.

A convenient sanitary, indoor closet connected with the Septic Sewage Disposal System. This arrangement does not require a running water system, although the Septic Tank Systems are usually installed where the water for flushing is automatically supplied to the fixtures.



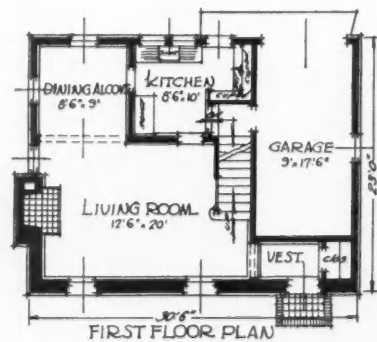
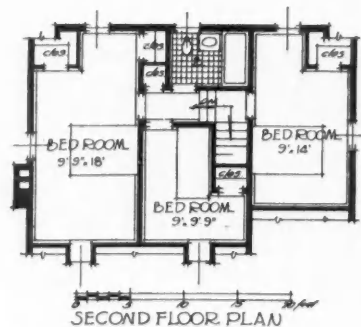
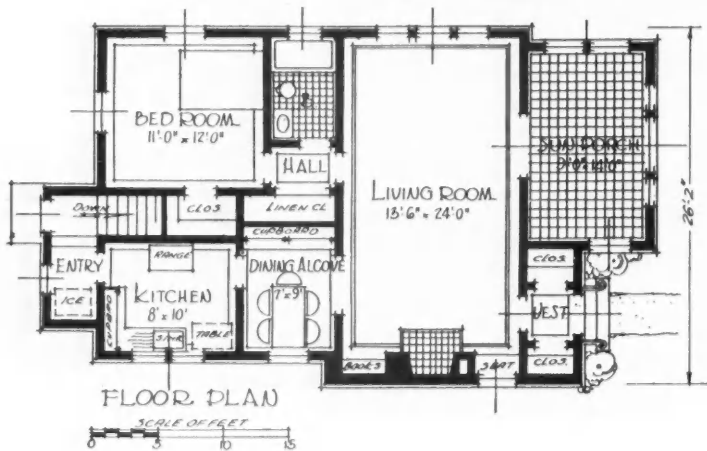
English cottage (above) in stone and siding. Design No. B-54; 16,200 cu. ft. Cost Key is 1.333-109-748-32-17-12.



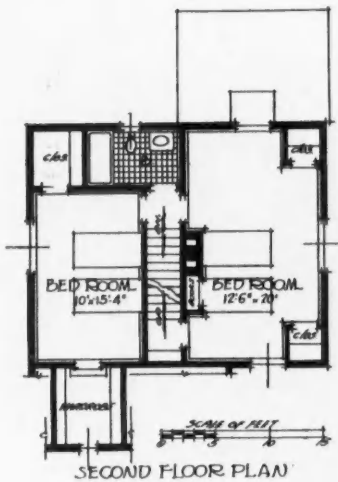
An interesting floor plan is feature of house at left. Design No. A-120; 15,500 cu. ft. Cost Key is 1.178-144-1034-44-15-13.

Six Small Homes Planned To Cost Less Than \$4,000

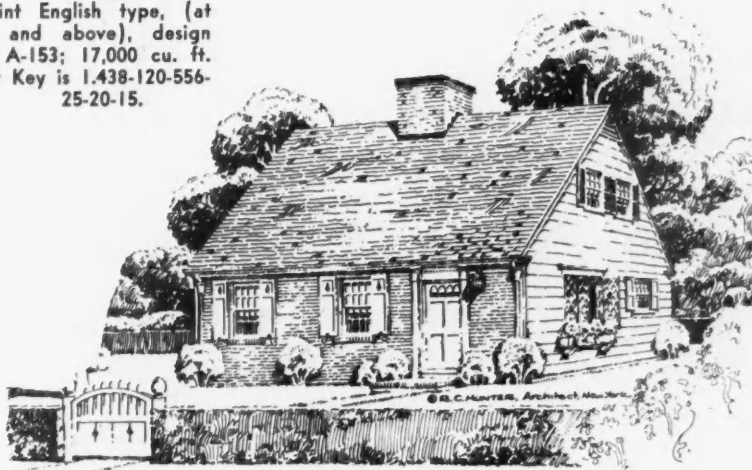
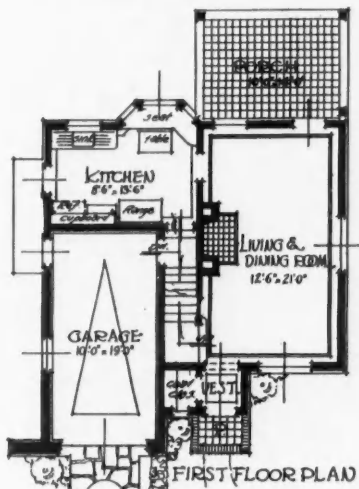
R. C. HUNTER, Architect
New York City



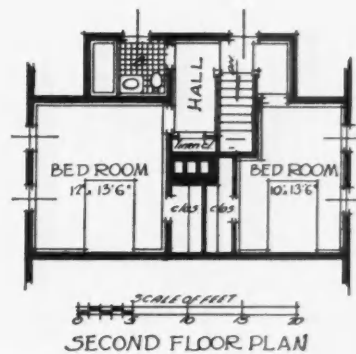
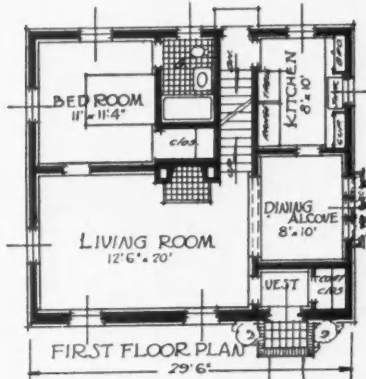
A colonial cottage of stone and siding. Design No. B-53; 14,300 cu. ft. Cost Key is 1.257-107-522-23-17-11.



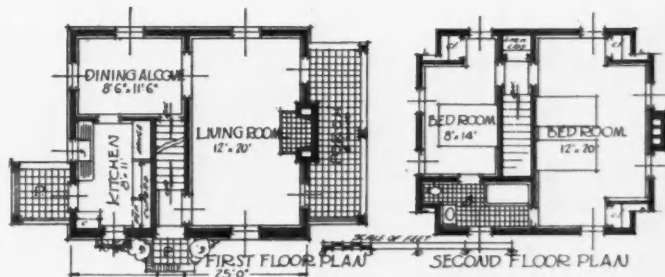
Quaint English type, (at left and above), design No. A-153; 17,000 cu. ft. Cost Key is 1.438-120-556-25-20-15.



The Cape Cottage shown at right is compact and well arranged, and unusually attractive for a very small house. Design No. B-51; 15,400 cu. ft. Cost Key is 1.301-111-767-33-15-11.



Below is a small Dutch Colonial using brick and wide siding to produce a most attractive exterior. The floor plan is especially compact and efficient. Design No. B-52, 13,600 cu. ft. Cost Key is 1.272-92-525-23-17-11.





A PICTURE WINDOW frames a beautiful bit of Wisconsin game country in Thunder Eyrie cabin. The massive fireplace is of natural stone; and logs are from the surrounding region. A pair of the big windows, one on either side of the fireplace, bring in the outdoors.



Local Materials Featured In Two Wisconsin Cabins

MURRAY HETHERINGTON
Architect and Builder
Chicago

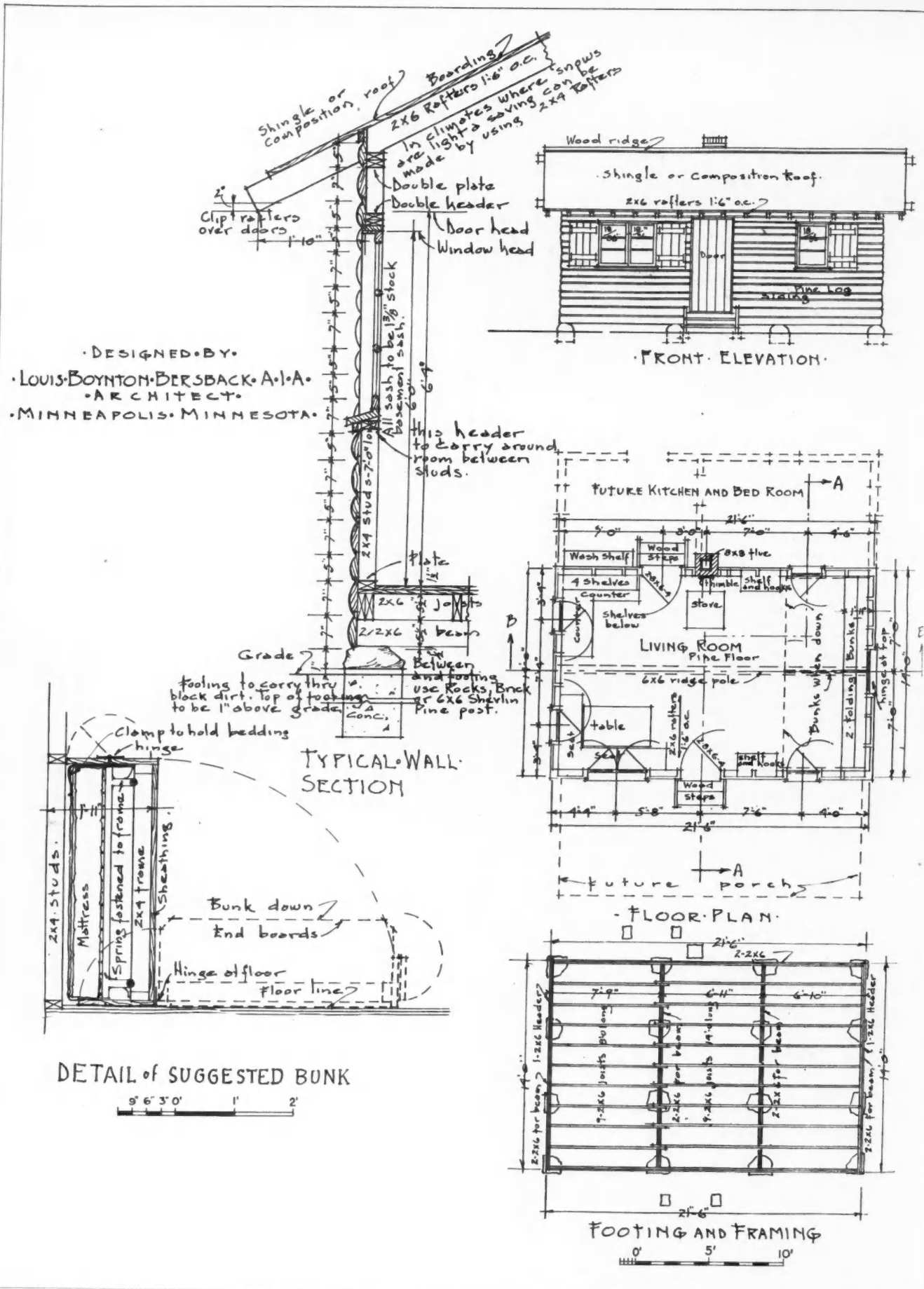
THUNDER EYRIE cabin is located on Thunder Mountain Ranch near Crivitz, Wisconsin, and is owned by E. B. Buck of Chicago. In keeping with the setting of wooded hills and pine bordered lake, the lodges on the ranch have been built from the natural stone and timber at hand, becoming an integral part of the landscape.

End view of the cabin at left is reminiscent of the Swiss Chalet type of architecture. The cabin is located on the side of a hill overlooking a lake well stocked with trout and bordered with heavy timber.

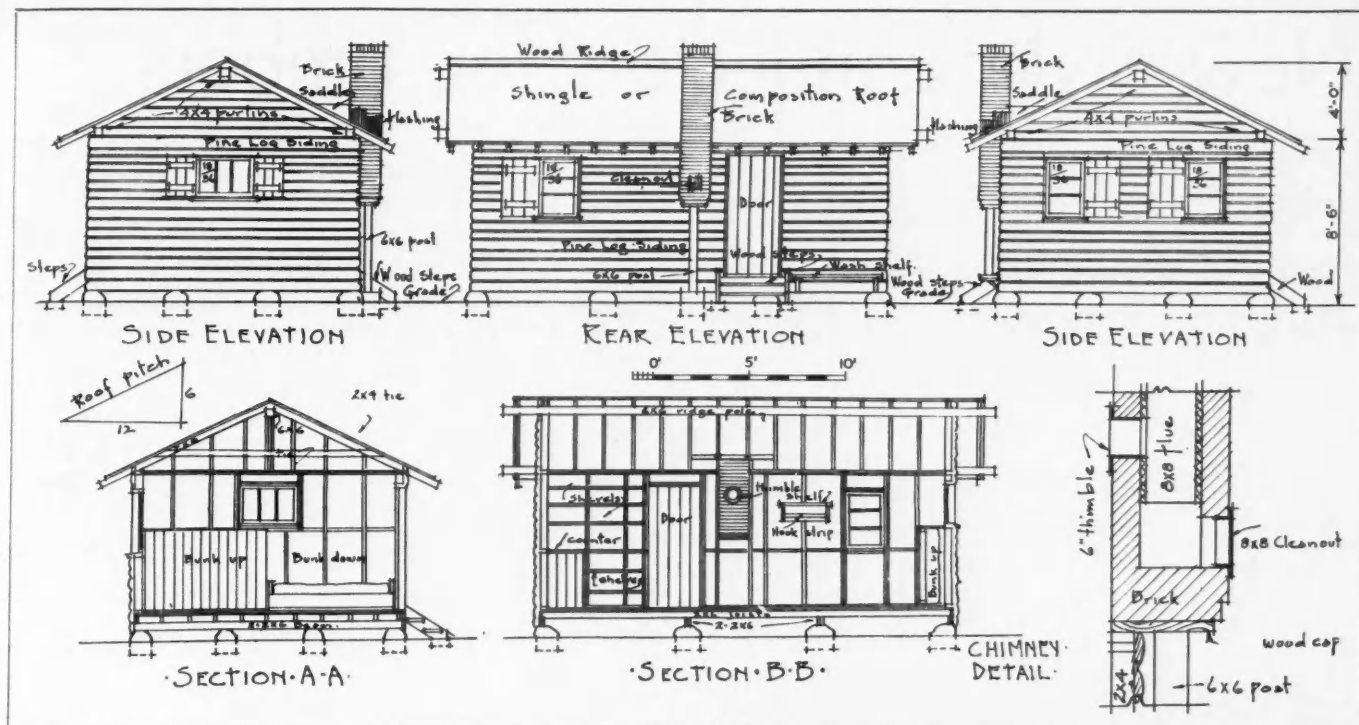


BUCK LODGE also located on Thunder Mountain Ranch is shown in the accompanying views. The entrance above reveals the Swiss Chalet type of architecture. The large fireplace at the right is built of stone from the nearby land; the concrete "footwarmer" in front has exposed aggregate of colorful local stones. Vertical logs form the interior of the large living room below, which is well lighted by windows and dominated by the fireplace.





LOG CABIN SIDING is used in the construction of this attractive cabin to produce a substantial structure at an estimated cost under \$400. Louis Boynton Bersback, A. I. A., Minneapolis, Minn., is the architect. To keep the cost down, a fireplace was omitted and also a front porch, but the design is such that these may be easily added. Future additions are provided for.



Construction Details for a Low Cost Cabin

THIS compact cabin was designed by Architect Louis Boynton Bersback for the Shevlin Pine Sales Company, to illustrate how a substantial, attractive cabin can be built of pine log cabin siding at low cost. It has been estimated that it can be built in the Northern Mississippi Valley Region for approximately \$400.

The size, 21½ by 14 feet, gives a large living room with six windows and good ventilation. Both front and rear doors are included. The rear door is a great convenience, as supplies, fish, etc., can be brought in the rear door and a convenient outdoor wash stand placed beside it.

Convenient built-in shelves for storing supplies are provided. These have counters for cooking purposes. The kitchen nook is conveniently placed near the chimney for a stove connection, and near the back door.

This cabin is suitable for erection in almost any locality. Where snowfall is unusually heavy, the weight should be provided for by larger roof beams, according to instructions in the roof detail of the plan. Shutters are an important item, as these can be closed tightly, making the cabin safe from intruders when the owner is away.

Construction of such a cabin from log siding is rapid and inexpensive. The siding looks like peeled pine logs but is tighter in construction, easier to erect and in many



The cabin is compact and attractive, and can be built now at a low cost while at the same time providing for future additions as needed.

cases more reasonable in cost. It is made with ship-lap edge so that any carpenter can nail it in place like ordinary siding. In this cabin, the siding widths are 6 and 8 inches. Staining of the siding exterior may be done in a number of ways. If left exposed without stain or varnish, it will weather within a season or two to a soft, woodland gray. The same effect may be obtained with two coats of silver gray shingle stain. Those who prefer the natural pine color may finish the cabin with two coats of clear, colorless creosote. If a rustic brown is desired, a dark creosote stain may be applied. All nails should be set and puttied to prevent rust from staining the siding.

The cabin, as shown here, is not finished on the inside. For year-around use, the interior may be finished with log siding or knotty pine finish. A half-inch thickness of semi-rigid insulation is nailed to the studs, and over this a layer of the log siding which gives the interior an attractive log effect. The use of knotty pine is also popular for cabin interiors.

New Style Connectors for Timbers

Joints 15 Times Stronger Than Bolted Connections Developed by European Engineers

By N. S. PERKINS, C. E.,
National Committee on Wood Utilization,
U. S. Department of Commerce

A STRIKING IMPROVEMENT in wood construction, originally intended for the larger types of structures but adaptable to many phases of ordinary lumber framing, is presented to the building industry in the report, "Modern Connectors for Timber Construction," just issued by the National Committee on Wood Utilization, U. S. Department of Commerce, and the Forest Products Laboratory, U. S. Department of Agriculture.

The new system involves the use of "modern connectors"—consisting of rings, plates, and disks, some toothed and some plain—which are inserted between two wood members that are to be connected, and embedded partly in each. A bolt through the center binds the joint together; but the connector, and not the bolt, acts as the load-transmitting agency. The result, confirmed by both experience abroad and extensive laboratory tests in this country, is a pronounced increase in the strength of the joints, and rigidity of the structure, a consequent saving in materials and general construction costs, and an opportunity for pre-fabrication of many units, such as trusses, and panels.

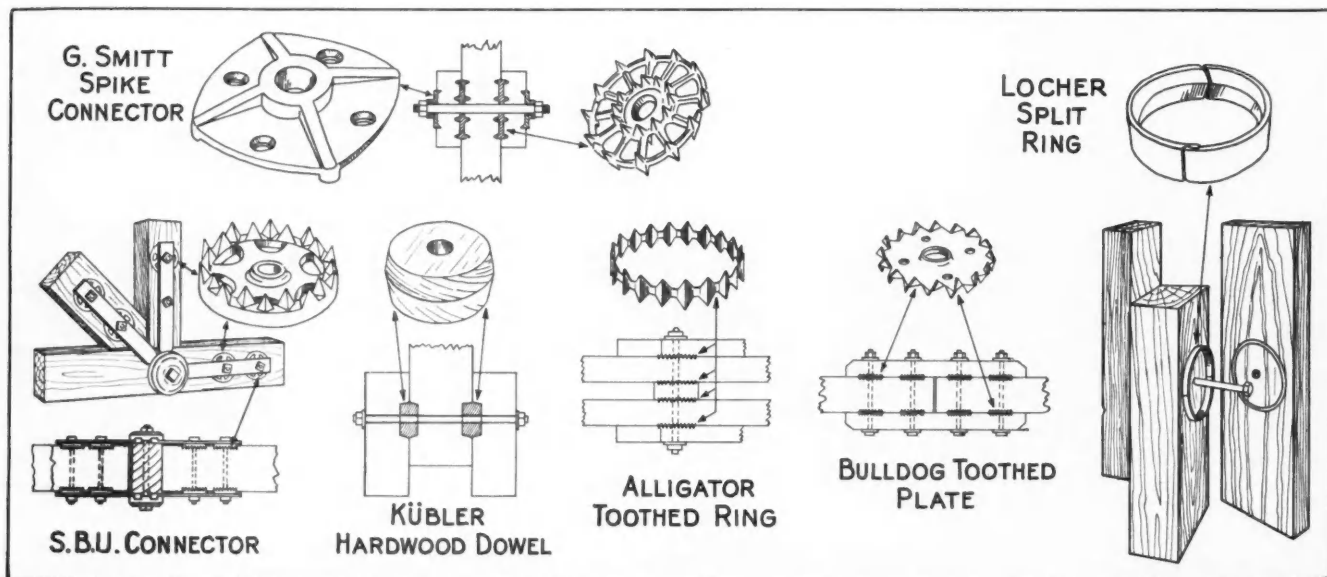
Although timber structures built in Europe with these efficient devices include self-supporting radio towers 460 feet high, three-hinged braced arches spanning 250 feet in the clear and many others equally impressive, the application of these "modern connectors" has by no means been confined to such large buildings. The connectors are manufactured in sizes as small as 2 inches in diameter and may be used almost anywhere in lumber or timber framing. Garages, pier sheds, in fact roof

systems of all types, barns, houses, grandstands, form-work and all sorts of temporary structures have been built in Europe, using connectors at the joints. The government report describes more than 60 types of these ingenious devices but points out that only a comparatively few have achieved commercial importance. Eight different styles of these were selected for the tests conducted at the laboratory.

The connectors selected as having excellent possibilities in this country include the alligator toothed ring, bulldog toothed plate, Locher split ring, S. B. U. (Siemens-Bauunion) hinged connector, Smitt spiked plate, and the Kübler hardwood dowel.

The toothed ring consists of a circular band of low-carbon steel, about $\frac{1}{8}$ " thick, cold rolled, and stamped to shape. It is made in several sizes, varying in diameter from $2\frac{1}{8}$ " to $6\frac{1}{4}$ ". The metal is cut so as to form triangular teeth having a convex outer surface to increase their holding power.

Application of this particular type of ring is shown in the sketch. In assembling a joint, the hole for the center connecting bolt is bored first. This bolt varies in size from $\frac{1}{2}$ " to 1", depending upon the size of the ring. The rings are then placed in their proper position, being fastened with light nails, if desired. A hand press with a lever arm may be used to draw the joint up tight, or a ratchet wrench may be used with special assembly bolts which are later removed and replaced with ordinary bolts. Another effective device for drawing up joints is a modification of the hydraulic tie-squeezer now in use in this country. Heavy jaw clamps



are placed over the entire joint and closed by a hand lever or a small motor-driven unit. Pressures up to fifteen tons may be developed with this device, which is sufficient to force even the largest rings into the densest structural woods. Reports indicate that no difficulty has been experienced in the use of a ratchet wrench and special assembly bolts in European practice.

Toothed rings have been used in the erection of structures of all types. One of the most interesting is a dirigible hangar, 100 feet high and covering nearly an acre of ground, which was built at Spitzbergen, Arctic Ocean, by the Arctic explorer, Captain Roald Amundsen, in preparing for his historic flight over the North Pole.

On the basis of laboratory tests, the report "Modern Connectors for Timber Construction" recommends a safe working load of from 2800 lbs. for a pair of $2\frac{1}{8}$ " rings up to 10,000 lbs. for a pair of $6\frac{1}{4}$ " rings. Comparing this latter size with a bolted joint, in which $3" \times 8"$ planks are used, a single $\frac{3}{4}"$ bolt would have a capacity of only 1970 lbs. Hence, to develop a capacity equal to that of the $6\frac{1}{4}"$ rings, five or six bolts would be required, which, with nuts and washers, would weigh approximately three times as much as the pair of rings with their single bolt. These figures are based upon forces acting parallel with the grain.

The contrast is even more striking where forces act perpendicular to the grain, as in a joint with a vertical framing into a horizontal. In this instance the rings have a capacity of about 7,000 lbs. whereas one $\frac{3}{4}"$ bolt with $3" \times 8"$ planks, as before, is capable of sustaining only a 540 lb. load and a prohibitive number of bolts would be required to develop a load capacity equal to that of the ring connection.

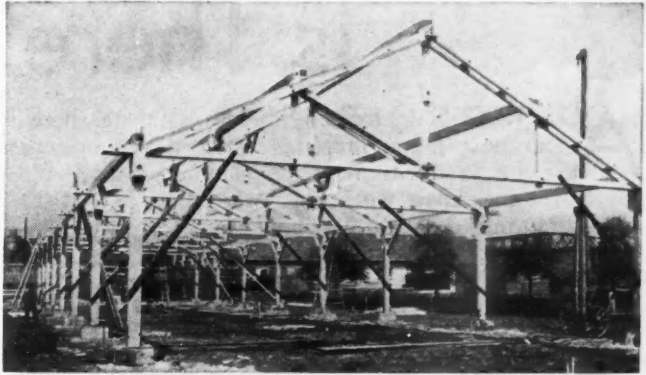
The toothed ring is only one of several efficient connectors, each of which has special, individual characteristics and advantages. The S. B. U. connector, illustrated, is especially adapted for the joining of solid timbers. It consists of a central ring into which from two to five steel straps are hooked for the purpose of transmitting either tension or compression. The hubs of the circular toothed claw plates which engage the wood, fit into these straps. The load is transmitted from the plates to the straps and finally to the center ring, where true hinge action is perfected. The S. B. U. connectors are always used in pairs, on the opposite sides of the timber, with a bolt at each claw plate.

In the preparation of a joint of this kind, the timbers are first cut to length and marked. Bolt holes are then bored at the exact points where the claw plates are to be inserted. Using the bolt holes as center guides, shallow holes are bored about $\frac{1}{8}"$ in depth and the exact diameter of the claw plates. The claw plates, teeth down, are set in these shallow holes and tapped flush with the surface of the wood. The timbers are then shipped to the job and assembled by slipping the connector straps into the central hinge and over the protruding hubs of the claw plates, inserting bolts at each plate.

The recommended working load in either tension or compression for the S. B. U. connector varies from 6,400 lbs. for one pair of claw plates up to 44,800 lbs. for seven pairs, the maximum number used in Europe.

Some connectors, such as the split rings or Kübler disks, require the pre-cutting of circular grooves or seats in the wood members before they can be inserted. This work can be done best in the shop with power drills and indicates that these types of connectors are best adapted to pre-fabrication.

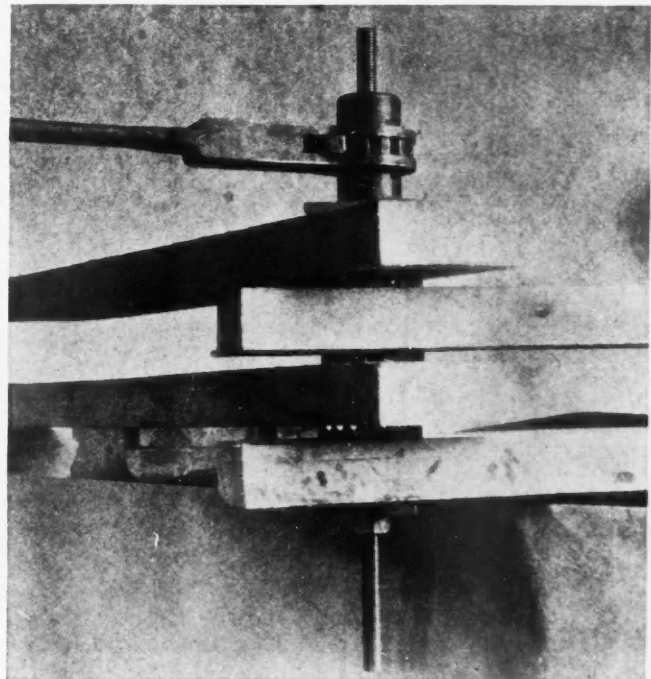
This improvement in methods of joining structural timbers will undoubtedly open new fields for the efficient use of wood in many types of construction, and offers exceptional opportunities for economy in building.



Modern connectors may be used in all types of construction.



Pre-fabrication and shop assembly of trusses, paralleling steel shop practice.



Pressing alligator toothed ring connectors into wood members by means of ratchet wrench.

Is There Any Home Build- ing?

ACCORDING to building field pessimists there is no new home building being done; optimists point to the tremendous volume of modernization and home repair work not reported in the statistics, saying the only reason a housing shortage is not evident is that 1,500,000 families have "doubled up." Some builders and operators express little hope of an upturn in the near future, while others are very hopeful and optimistic. With all these conflicting viewpoints it is decidedly difficult to analyze actual conditions.

Today, study of "trends" is vitally important for those who hope to anticipate developments. In home building, fortunately, previous trends have been studied and a few guiding principles discovered. For instance, in practically every case in the past, general improvement has been preceded by activity in the New York Metropolitan area. When a noticeable improvement in the building and selling of houses takes place in the Metropolitan New York area, the significance of such development may be of utmost importance to builders, operators, dealers, architects and others. Here are a few facts.

According to census figures, there was a total of 3,500 families in Rockville Centre, L. I., in 1930, housed in 3,092 1-family, 92 2-family and 34 multi-family buildings. Apparently, the depression has not been felt so keenly by Rockville Centre building interests as in many other towns. Total building permits for the past four years have been as follows:

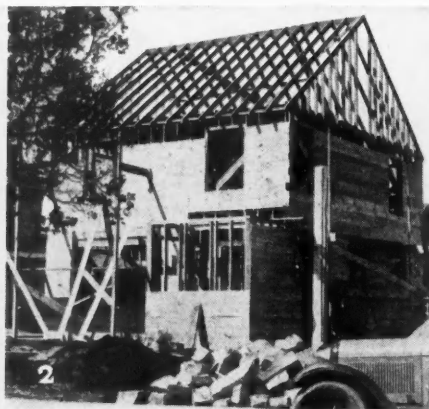
1929	\$2,052,815
1930	1,582,206
1931	1,284,005
1932	809,135

Although 1932 showed a drop of about 60 per cent below the volume reported in 1929 (as compared with 80 per cent or more in other localities), in the period from January 1, 1933 to April 13, 1933, building permits were issued to the amount of \$254,785. If the 1933 rate of home building continues throughout the year, Rockville Centre will do more building in 1933 than last year.

Due to the hopeful statistics, an investigation was made to determine whether the activity in this town should be classified as "freakish" or if it might have some real value as a trend indicator.

Mr. Morris Weniger, Secretary, The Progressive Homes, Inc., reported that his organization had practically no sales in 1931; sold 12 houses in 1932; has sold 2 homes since January 1, 1933, and has 2 more under construction at the present time. These

ONE of the men mentioned in this article is interested in a development property near a well known Long Island town. The development of his property would add from three-and-a-half to four million dollars to the assessment roll, so the unemployment relief committee was approached to induce them to allow the unemployed (who were each receiving several dollars daily from the relief funds) to grade the streets in the development. This is now being done.



The Rockville Centre, L. I., projects shown above are: 1 A. H. Weeks job on Forestdale Ave.; 2 Capital Homes, Inc., job on Ocean-side Rd.; 3 Job on Millway Rd.; 4 Gust. Svenson job on Stratford Rd.; 5 Strathmore job; 6 Lenten job on Nottingham Rd.

Building Being Done in 1933?

A SURVEY BY E. L. GILBERT

homes are in the \$14,000-\$15,000 range. On Sunday, April 9, 1933, about 300 people visited these jobs on DeMott Avenue and Mr. Weniger feels that the houses will be sold soon, after which more jobs will be started. Mr. Weniger said: "Home building in Rockville Centre is holding up fairly well and we hope conditions will improve—but we have all the labor we need with plenty of good mechanics in this section available. So whatever report is made of Rockville Centre building, it should be made very clear that mechanics who travel to this section looking for jobs will simply be wasting their efforts."

In the Canterbury section, Green & Muth have sold 4 new homes since January 1, 1933; gross sales volume being about \$60,000. These builders have 2 large houses under construction and are negotiating first mortgage money for five more. Mr. John E. Muth estimates their company can sell 40 to 50 homes during 1933 if they can obtain mortgage money. "Institutional money is all tied up," said Mr. Muth, "it is unfortunate construction loans are being held back to maintain values on foreclosed properties."

Capital Homes, Inc., offer for sale a house on Ocean-side Road, listed at \$15,750, and are building another home in a lower price range nearby. This company has built and sold 34 homes since February, 1930 and they plan to start several new jobs soon. Mr. Frederick C. Simons, Sales Manager, reports very few new houses available in Rockville Centre and he believes a good steady sale of new properties in this section will continue.

Strathmore, the restricted community development operated by Abraham Levitt & Sons, Inc., is showing the greatest activity. 2,000 to 3,000 visitors visit Strathmore each Sunday and at present there are 14 homes under construction and sold, with 9 additional contracts signed and ready to start. Mr. William Levitt estimates \$150,000 worth of building under way at present, with an additional \$70,000 ready to start. Including subcontractors, there are about 150 men working on Strathmore jobs.

The Levitt development is unusual because they feature good construction and unusual value at \$8,000 under the following terms: \$4,000 cash; \$4,000 first mortgage. The 14 homes under construction and the nine additional homes to be built have all been sold on a half-cash basis. The explanation seems to be excellent values presented to the public through consistent advertising. "We could sell many more homes," said Mr. Abraham Levitt, "if it were not necessary for us to obtain so large a down payment because of the stringency of first mortgage money. However, we are doing a good business and there is one consolation—we do not believe many of our houses will come back to us."

Many other builders are active in Rockville Centre, among them being A. H. Weeks with a house under construction on Forestdale Avenue; Gustave Svenson,



7 and 8 Munsey Park, Manhasset, L. I. jobs; and 10 Strathmore jobs; 11 Progressive Homes job on DeMott Ave., Rockville Centre; 12 Strathmore job. All photographs reproduced in this article were taken by a staff photographer between April 12 and 18, 1933.

building a large residence (\$50,000-\$60,000) on Stratford Road; L. R. Lenten and J. Metz with jobs under way in the Nottingham Road Section.

Mr. James H. Pattin, Rockville Centre Building Inspector, estimates that building permits represent 90 per cent of actual construction cost. When asked about modernization and home repair work in Rockville Centre, Mr. Pattin said: "Permits for alterations and repairs during the first 3 months of 1933 totaled \$3,550; but sooner or later we are going to have considerable work of this kind. People have gone 'economy crazy'; to such extremes, in many cases, they do not realize that what it has taken them years to attain will be lost through neglect. When people realize this simple truth, there will be much more modernization and repair work." Mr. Pattin believes the majority of new homes being built in this area are already sold because few builders care to undertake speculative projects now.

The facts uncovered by this investigation make it apparent the building being done in Rockville Centre represents sound business operations. Perhaps Rockville Centre is a focal point in the Metropolitan New York area and the building being done there indicates the pressure of thousands of families in the New York area who have become dissatisfied with living conditions they have had to endure during the depression. The Strathmore operation proves there are people looking for homes who are able to make substantial down payments and build-

ers in other sections can learn a vitally needed lesson from this example; if 23 families have paid \$4,000 cash down for homes in this section in the last few months, there are undoubtedly other families in other sections able to make similar arrangements.

The Joseph P. Day organization reports 1,000 lots sold at Point Lookout, L. I., since the Spring of 1932. Home building accounts for 600 new homes now on the land previously vacant.

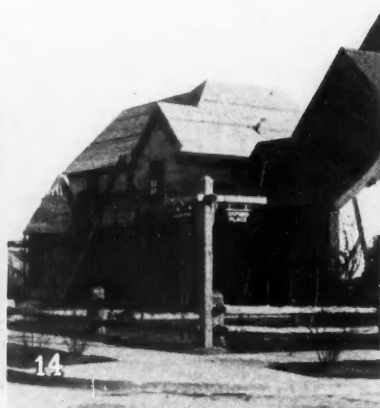
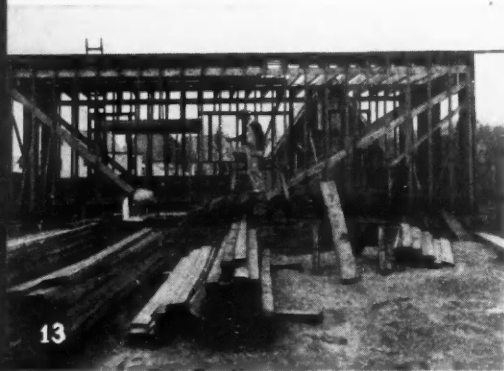
Affiliated Country Clubs, Inc., owners and operators of Mountain Lakes (in the Catskill Mountains) make a specialty of selling summer bungalows to New Yorkers. Mr. A. N. Smallwood, President of this organization, says:

"Our orders for construction of log cabin siding bungalows for vacation purposes are 50 per cent in excess of last year's business on this date and we confidently expect to erect no less than 200 houses at our Mountain Lakes development before Labor Day of this year. Last season we erected about 150 houses and although we make it optional for our customers to pay under a budget plan over a period of thirty months, 90 per cent of our outstandings were liquidated last year within a twelve months period. We have also succeeded this year in increasing the amount of our unit of sale over the figures of last year, although our prices are somewhat lower than last year's schedule. We attribute our unusual, successful operation to the unstinted use of advertising lineage in the daily papers in which we offer a minimum priced cabin and a minimum priced plot in combination at an attractive bargain price. Regardless of this advertising which attracts a large number

(Continued to page 50)



This building was headquarters for the Port Jefferson home repair campaign.



13 Sam Larsen job, Dartmouth St., Baldwin (adjacent to Strathmore); 14 Strathmore job; 15 House under construction at Munsey Park, Manhasset, L. I.; 16 Strathmore job; 17 J. Metz job on Nottingham Rd.; 18 Green & Muth job, Canterbury section, Rockville Centre.

Cost \$12,000 In 1925— Only \$7,950 Today

HOME building costs are down at least one third from the prices of a few years ago. This is indicated by today's construction cost of a six-room-and-sunporch English face brick house for which cost records of past years are available for comparison. Shown below, the house is the most popular of 176 small-house designs offered home builders by the American Face Brick Association during the last ten years.

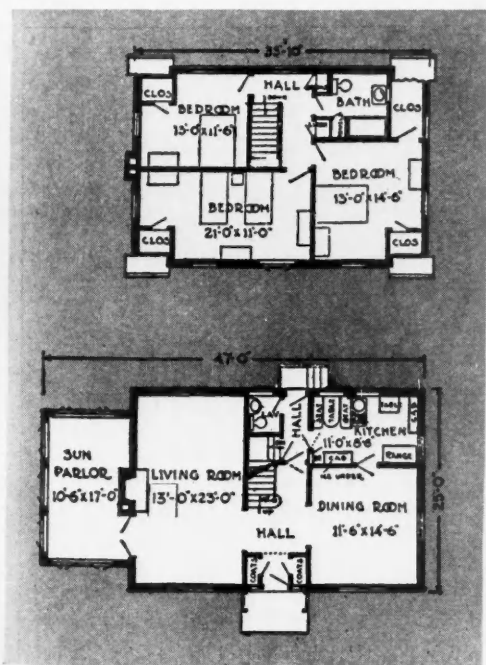
In 1925 the same style house was built in Glencoe, Ill., for \$12,000; in the same year it was built in Park Ridge, Ill., for \$12,350; and in 1927 it was built in Hinsdale, Ill., without sunporch, for \$11,500. Adding the sunporch cost to the Hinsdale job, the average cost in 1925-7 was \$12,100.

Today the same house is being built on the southwest corner of 104th and Oakley Streets, Chicago, at a cost of \$7,950—a saving of \$4,150 from the costs of a few years ago.

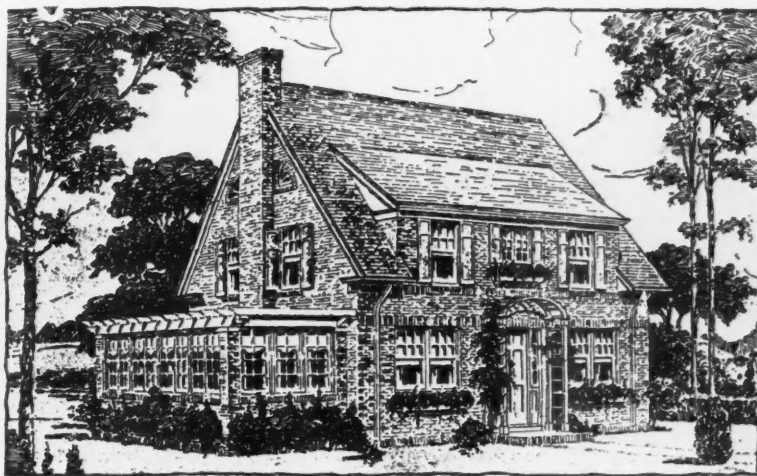
Extras desired by the present owner, such as enlarging the main part of the building one foot in each direction at a cost of \$400, the inclusion of a two-car face brick garage, 20' 4" by 20' 0", at a cost of \$500, and the furnishing of a \$150 electric refrigerator, make the final cost \$9,000; but it is a turn-key job, everything down to the linoleum on the kitchen floor being furnished in the contract before owner moves in June 15.



PICTURE TAKEN early in March showing face brick house in Chicago under construction. It cost 33 1/3 per cent less this spring than it did in 1925. Below is shown architect's drawing. The exterior and plan have been the most popular design of the American Face Brick Association.



Floor plan of the house is a standard arrangement that is efficient and practical.



kitchen as well as in the dining room, and another clothes closet has been included in the second floor. The two-car garage, of face brick to match the house, has been designed with hip roof to harmonize with the architecture of the house.

The increased space gained by enlarging the plan one foot has been distributed between the various rooms, the kitchen being enlarged nine inches in depth and the living room one foot in each direction.

The exterior walls on all sides are of red face brick, backed with common brick, giving a 12-inch thickness to the second floor and 8-inch thickness above that floor. The roof is of composition shingles and is insulated, while felt deadening is inserted between the first and second floors. Construction is first quality throughout.

Fred Klaus, 61 West Monroe Street, is the owner; Oscar Hammer, 8354 S. Green Street, is the contractor; and W. E. Sammons, 3518 W. 60th Street, is the architect who re-drew the plans for enlargement.

At the direction of Mr. Klaus, Architect Sammons has increased the first and second floors one foot in size each way and has decreased the width of the sunporch one foot. An extra window has been added in the

Apartment Modernizing—A Field of Growing Importance

Q *EXAMPLES of modernizing costly tax-eating structures in New York district show profit in this work. Builders active in this field.*

Q *INCREASE in flat and apartment modernizing predicted to eliminate realty losses.*

By **JOSEPH B. MASON**

THE almost unlimited field for modernizing of old apartments, brownstones and two- or three-story flats has been producing an increasing volume of business for builders. But as yet, the surface has hardly been scratched. Real estate men are prone to put off improvement work, even though every day of delay costs them real money.

Because of this holding back, many contractors are taking a more aggressive part in developing this type of work. The older types of residential building were out of date even before the post-war building boom got under way. As new apartments and flats were erected, buildings in even very desirable locations began to decline. Because of this decline in business and rentals, the owners spent less and less on upkeep with the result that even during the good years, buildings of this class got into a very run down condition.

Today, there is hardly a block in any community that does not contain a number of buildings that simply must be modernized to be profitable. In fact, they must be modernized to prevent a constant loss due to taxes. The new materials that have been developed in the past few years now make modernizing of such old flats and apartment buildings less expensive and less difficult than ever before. New bathrooms, for example, which used to run to large figures can now be installed complete with the most modern equipment and decorative effects for almost half the cost of a few years ago.

Builders are discovering that the best way to overcome the inertia of real estate owners is to make a survey of the neighborhood showing the occupancy demands of the people of that region. If the building in question is an old three-story flat with one apartment to a floor with large rooms poorly planned, he may find that the demands of the neighborhood are for compact, two-room apartments. Re-arranging of the interior to meet this demand can be accomplished and a low rental offered for a modernized living quarters.

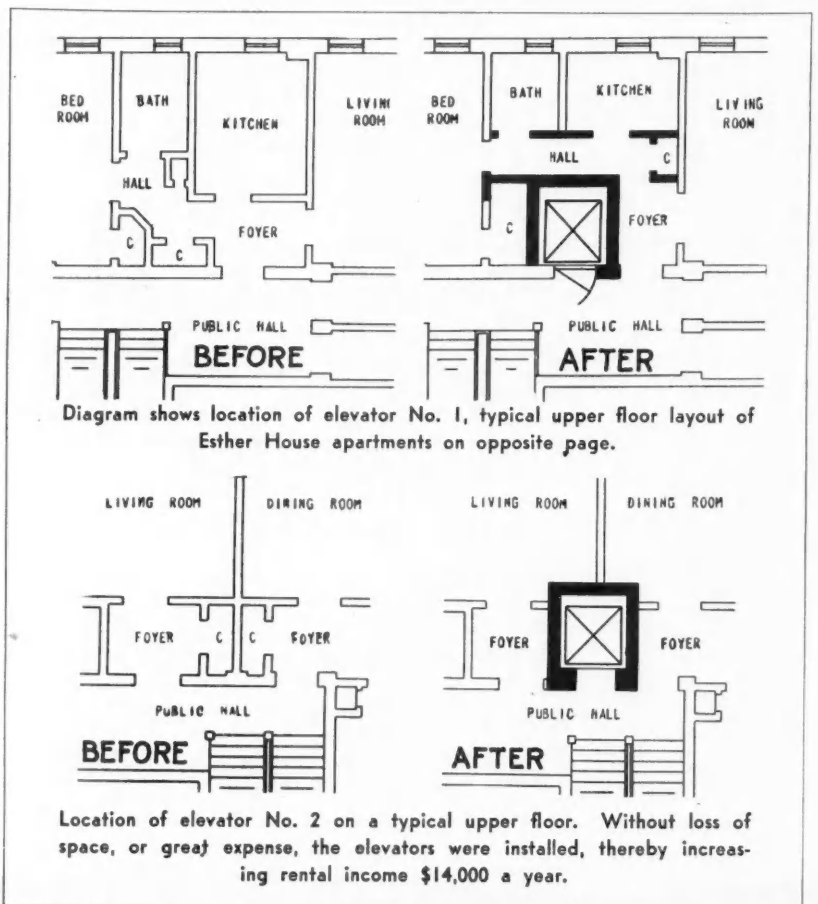
An interesting example of effective and profitable remodeling is a four-story and English basement brownstone building, at 325 West 28th Street, New York City.

This building was losing the owner \$900 a year. To change this loss into a profit the interior was completely modernized, and attractive small apartments installed to replace the big, poorly lighted and awkward rooms. The cost of the work was \$35,900. The work was done in August, 1932. In less than a year, the net income, allowing 5½ per cent interest on the improvement cost had increased to \$8,150.

Another interesting account is that of the Esther house apartment building at 374 Eastern Parkway, Brooklyn, illustrated on page 33. The chief defect of this building was that it was a walk-up type, and five stories was just too far for tenants to walk! Installation of two automatic push-button elevators was completed the first week of October, 1932. Abraham M. Kaplan, contractor and builder of 26 Court St., Brooklyn, who owned the building, reported an immediate increase in rentals. Up until the time of making the improvements, he had had 19 vacancies in the building. On the first of March this year, he reported that he had completely rented the 19 vacancies, making the upper floors all rented solidly and bringing in an added income of \$14,000 a year.

Mr. Kaplan reported that he had put off installation of elevators because he didn't see how the job could be done. He called in engineers of an elevator company who made a study of the building and developed a plan to use closets and foyer space with a minimum of expense.

Rescuing of buildings that appear to be hopelessly lost





Abraham M. Kaplan, Brooklyn contractor and builder, increased the rental income of this 4-story and English basement apartment \$14,000 a year by modernizing and installing two automatic push-button elevators. People would not walk up.

and the restoration by intelligent modernizing of their earning power has been also very well illustrated by the making over of the Franklin Arms, Brooklyn, an old fashioned family hotel. On July 9, 1933, this building had a vacancy of over 80 per cent. Only 16 of the 80 apartments were rented. The Wood-Harmon Warranty Corporation decided to modernize. The old building was transformed into a Colonial inn; all rooms in the building and hallways, the lobby and entrances were refinished and redecorated. Bathrooms and kitchens were completely remodeled and re-equipped. This equipment included a new built-in tub, high quality pedestal lavatories, medicine cabinets, weighing scale, gas range, electric refrigerator, electric dish washer.

While the modernizing was under way, tenants started coming in and on December 7, five months after the modernizing work was started, the building was 100 per cent rented.

In New York City, a building contracting firm has been formed under the title, the Rehabilitation Corporation. This company finances and supervises remodeling and modernizing work. One of the most interesting examples of this firm's operations was the converting of an obsolete apartment house at 1361 Madison Ave., New York, which had a 94 per cent vacancy, into a modern building with quick-renting apartments.

The building had been erected in 1901, and contained 34 apartments ranging from 7 to 11 rooms each.

A survey of the surrounding district showed that much smaller apartments were in demand. A careful estimate of the remodeling work before it was started indicated that this work could be done profitably with the new apartments renting at 25 per cent less than neighboring competition.

The old apartments were cut up into 2, 3, 4, 5 and 6 room apartments totaling 48 in all. Much space was saved by the elimination of long corridors.

A thorough job of bringing every room in the building up to date was performed. In the living rooms and bed rooms, all the old ceiling ornamentation, heavily ornamented picture moulding, unsightly trim, etc., was removed. Lobbies and corridors were decorated in Georgian style, papered yellow and silver, with pilasters and trim white, and a rubber tile flooring. Venetian blinds were placed at the windows.

Kitchens were equipped with combination sink and tray replacing the old soapstone tubs and enamel iron sinks, electric refrigerators, modern gas ranges with oven control, rubber tile flooring. Every bedroom was given a private bath with colored fixtures, rubber tile flooring, tile wainscoting, chromium hardware and brass piping. The old elevator was replaced with a modern electric type and a walnut cab.

Total cost of the alterations was approximately \$80,000, or about 10 cents a cubic foot.

The old brownstone dwellings and outmoded flats, as we have said, offer one of the best fields for builder modernizing. Bernard Knopp, Inc., New York contractors and builders, recently completed the modernizing of two of these old brownstone houses located at 18 and 20 West 58th Street, New York. These buildings were in a very good neighborhood, but were a problem to the owner. Although structurally sound, they were hopelessly obsolete, and brought in practically no income. The properties were assessed at \$265,000, which meant about \$6,000 a year taxes. The owner considered leaving the properties vacant, which would have called for the employment of a caretaker at a cost of \$1,000. Instead of allowing them to go vacant, it was decided to remodel the building, install income-producing stores on the first floor and modern, compact apartments above. Architects on the job were Treanor & Fatio.

The two old buildings were joined together, and a new

(Continued to page 50)

How American Builder Sets the STYLE

By EDWARD O'BRIEN, JR.
Secy. Jackson (Miss.) Lumber Co.

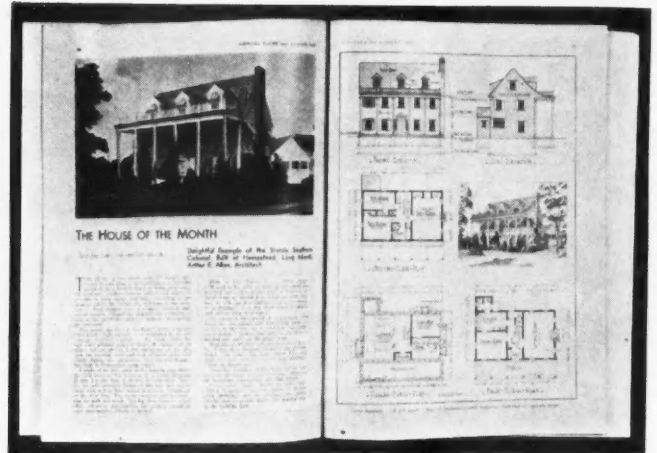
ENCLOSE two photographs of my home, showing before and after remodeling, which was done along lines suggested by your "House of the Month," in the August 1932 AMERICAN BUILDER.

The original house was built ten years ago, and as my family increased from two to four, I began to have ideas of remodeling, to give me more room, but for one reason or another none seemed to work out.

The idea had been practically abandoned when I opened the August AMERICAN BUILDER to the "House of the Month" and took just one look at the Southern Colonial by Architect Arthur E. Allen, and the whole thing seemed to fairly jump from the page and—depression notwithstanding—it bit me fatally before I could close the book. It was exactly what I had been looking for, actually built by someone else. I had the elevations reworked by Mr. T. H. Williams of our own organization, and with the exception of box cornice, the pergola, and porch, we stuck faithfully to Mr. Allen's lines.

It was not necessary to change any doors or partitions, therefore, I had no expense downstairs, except the stairway, and the whole thing fitted perfectly.

The upstairs has three bedrooms and two baths, one bedroom being 17'6"x31', with seven windows, which won't be bad about July. The downstairs has two bedrooms with bath between, living room 18'x42'.



The house proper is 42 feet wide with a 10-foot porch, making 52 feet overall; therefore, my columns are 12"x12" instead of 7"x7" as shown by Mr. Allen; this difference in size bears out the proportions. Though quite a distance from town, I have city water and electricity.

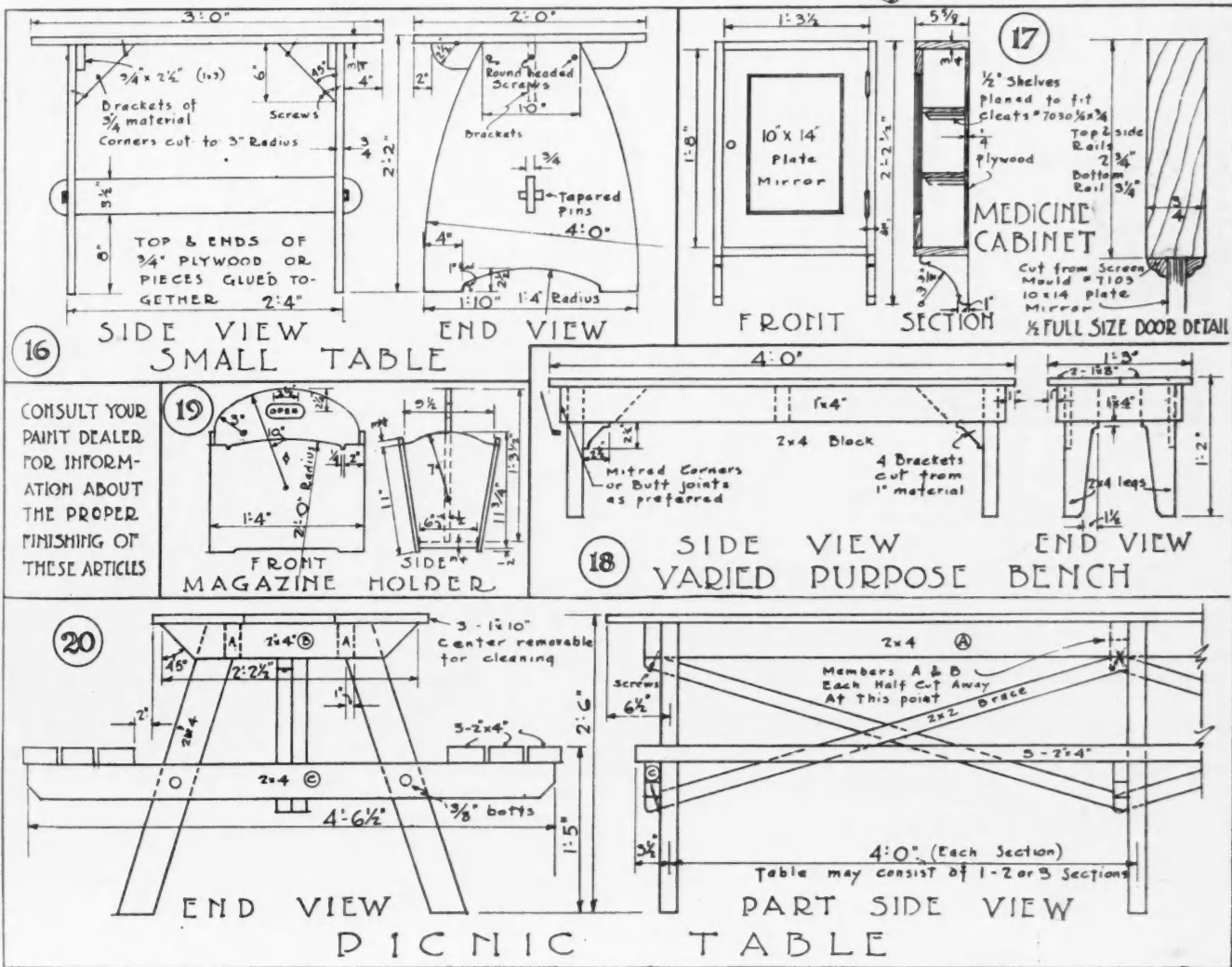
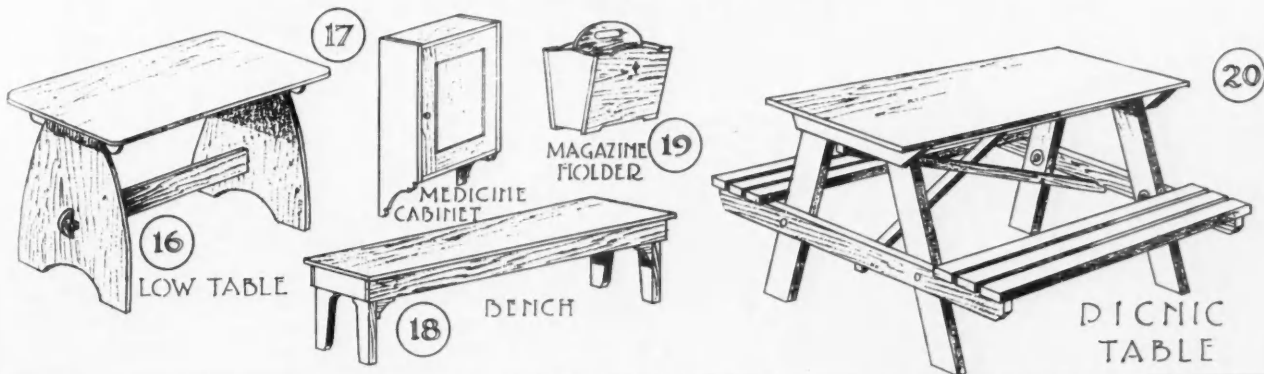
All in all, I am quite proud of the house for a remodeled job and am greatly indebted to your good paper and Mr. Allen for the suggestions that made it possible.



"I have figured very carefully the cost as compared to 1928-9 and find the same improvement cost about 32 per cent less than if it had been done then, which might be an incentive to any who are remodel-minded."

Benches, Tables and Swings— Timely Projects for Tool Users

CONTINUING the series of practical handcraft projects, "What to Make of Wood—and How" inaugurated in the April American Builder through the co-operation of the Northwestern Lumbermen's Association, we illustrate herewith 5 additional pieces which should intrigue the interest of those skilled in the use of woodworking tools—both amateur and professional. The picnic table has a special timeliness at this season of the year, while the low table, the bench, medicine cabinet and magazine holder have a year-round utility. The construction detailed is strong yet simple, which brings these pieces within the capability of manual training school boys and other home workshop enthusiasts; also assuring economical production for carpenters or cabinet makers turning out such items for sale.

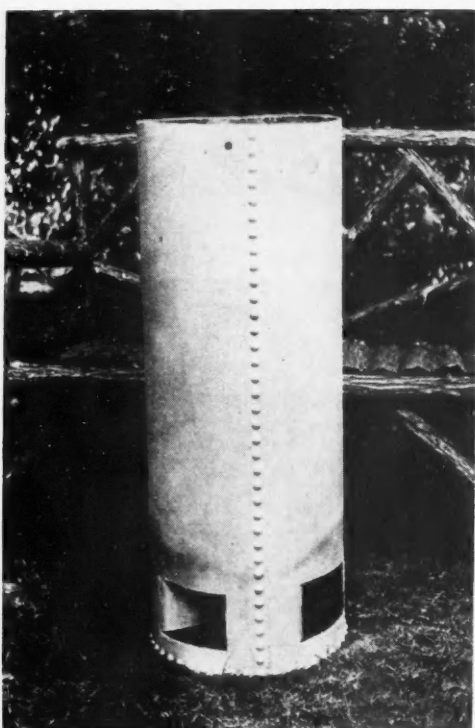


PRACTICAL JOB POINTERS

A READERS' EXCHANGE of tested ideas and methods, taken from their own building experience. Two dollars is paid for each contribution published.

Home Made Incinerator

CASTING ABOUT for material with which to make an incinerator, an oxy-acetylene welder found an old kitchen hot water boiler in a scrap heap. He found that the boiler was about twice as long as he needed for an incinerator. Taking his oxy-acetylene cutting blowpipe, he proceeded to cut it in half. He then cut off the boiler headers from each end which left him with two 30-inch cylinders of galvanized iron. He cut four rec-



This home made incinerator was made from an old hot water tank with the aid of an oxy-acetylene cutting blow pipe.

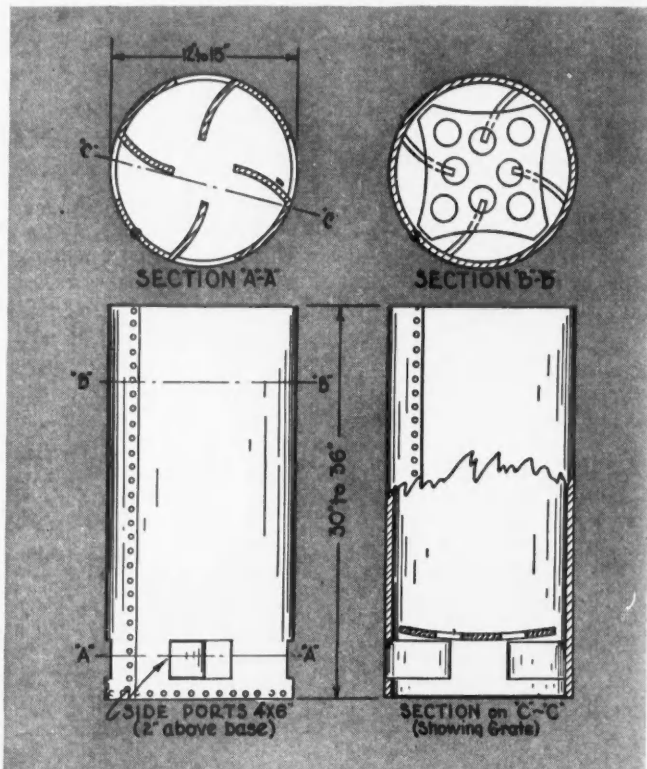
tangular sections near the bottom of the boiler section and bent them in toward the center. This gave space for draft holes and at the same time acted as a support for a grate. This was done, and the four sections that were cut were then bent as shown in the accompanying sketch.

A grate was still necessary in order to complete the incinerator but rather than fabricate a new grate and weld it into place, the old head which had been cut off one end was cut into a square shaped piece with four concave edges. Then several holes two or three inches in diameter each were cut in this piece in order to provide air space sufficient to give a good fire. This constituted the grate and was merely laid in on top of the four side wall cut sections to complete the incinerator.—OWEN C. JONES, New York City.

Reversing Metal Door Swing

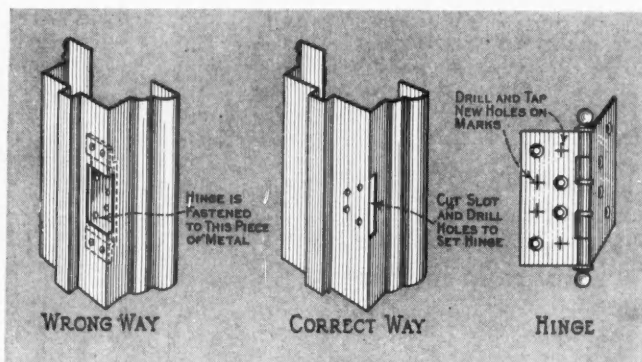
HERE is a method I use in reversing the swing of a door in a metal door frame.

Instead of cutting the metal door frame as many carpenters do, as in illustration at right, and fastening a piece of metal inside in order to screw the hinge, I cut a slot on the face of the



door frame the thickness of the hinge, as in the middle figure. Then I take the half hinge that is to go to the door frame, and drill and tap four new holes in it, as shown at right.

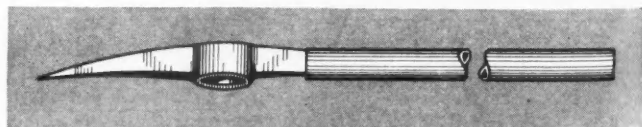
When this is done, I take the hinge and place it on the door frame where it is to go and trace the new holes of the hinge to the door frame. These holes in the door frame are to be drilled a little larger than the machine screw to be used, and they are also to be countersunk. When this is done, the hinge will just have to be put in the slot, and fastened with the machine screws.—PHILIP CAPORRINO, New York City.



To reverse swing of a metal door, slot is cut.

Pick Gets Into Corners

HERE is a handy kink for builders: when there isn't room enough to swing a pick, take the head off, slip it into a pipe as indicated in the accompanying sketch, and you are ready to go ahead. You can get into any corner with a pick of this kind, and although the force of the blow is reduced a little, it is still an effective pick.—W. F. SCHAPHORST, Newark, N. J.



Using pick this way works well in close quarters.



NEAT, ECONOMICAL ... BRICK WORK

EVERY contractor who has ever given Brixment mortar a fair trial *knows* that the average bricklayer can do more work and neater work with Brixment than with any other mortar materials.

The reason is that Brixment works as fat and smooth as lime putty—yet does not smear the face of the brick when the bricklayer cuts the joint. It does not

cause efflorescence or fading of colors, is water-proofed, and makes a joint as hard as the brick itself.

Work in a few batches of Brixment mortar on your next job. Watch the way it cuts out the time-wasting motions. Count the number of brick that go into the wall per hour. *See the results.*

LOUISVILLE CEMENT COMPANY, *Incorporated*, LOUISVILLE, KY.

District Sales Offices: 1657 Builders Bldg., Chicago; 600 Murphy Bldg., Detroit; 101 Park Ave., New York.

Mills: Brixment, N. Y. and Speed, Ind.

BRIXMENT

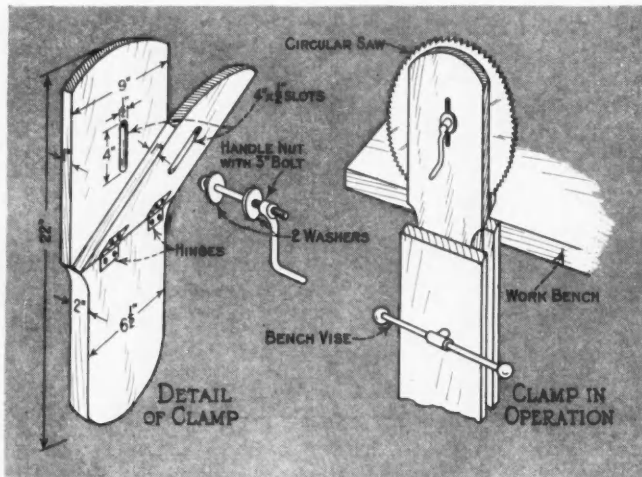
A Cement for Masonry and Stucco



For Filing Circular Saws

USING the ordinary bench clamp to hold circle saws, one usually finds his saw falling when turning, thereby damaging the teeth. This objectionable feature is overcome by using the circle saw filing clamp shown in the illustration. It consists of 2-inch material. The figure at the left shows the clamp in detail. 4 x 4 1/2-inch holes are made up and down the center. This is to receive the bolt and handle nut by which the clamp is tightened.

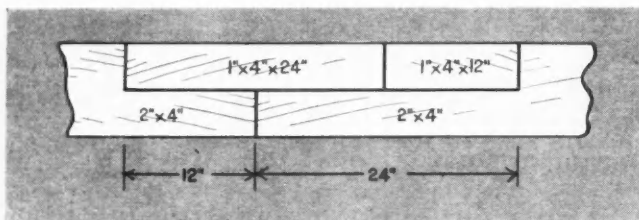
The figure at the right shows the outfit in operation. First the saw is inserted between the jaws of the clamp. The bolt is next put through the saw mandrel hole and tightened by means of the handle nut. In changing the position of the teeth, simply loosen the clamp slightly and turn saw, all this with no danger of slipping.—A. S. WURZ, Jr., Rockyford, Alta., Can.



Device holds circular saws while being filed.

Splicing Timbers

HERE is a practical way of splicing two timbers (self contained) when there is no other lumber available, and having a timber plus the length of both timbers. This timber will be as durable as a one-piece timber. Halve a piece out of one end of a 2x4, 1x4x24 inches. Halve a piece out of the end of the other 2x4, 1x4x12 inches. Take a 1x4x24, and nail it on end of twelve-inch cut out, forming the splice. Use 1x4x12, as filler, as per sketch. I am a new subscriber to the AMERICAN BUILDER and find it very educational.—NORMAN H. WENTWORTH, Hudson, N. Y.

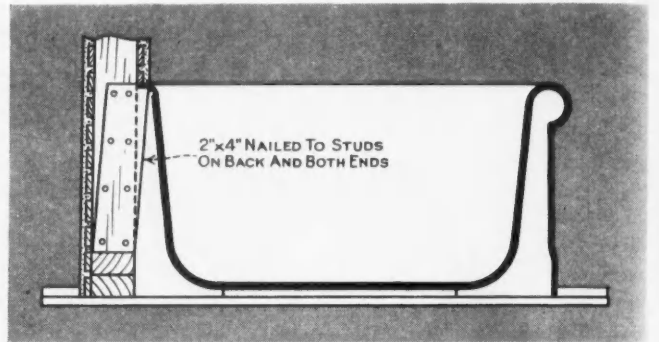


Method suggested for splicing heavy boards or timbers.

2 x 4 Supports Tub

ENCLOSED you will find a sketch of a practical job pointer, which I have found very helpful. I have tried various ways of supporting built-in bathtubs, including metal cleats, angle irons, and bolts, but have found this method fully as effective, and much more simple.

A piece of 2 x 4 is placed with its end solidly against the underneath edge of the rim of the bathtub, and is spiked to the stud. One is placed on each stud on the back and both ends of the tub. I have also used pieces of 1 x 4, and found them just as effective. When this system is used, no crack develops between the bathtub and the plastered wall. Cracking of plaster and sagging of tubs is a defect that has caused many builders trouble. Several patented devices have been put on the market

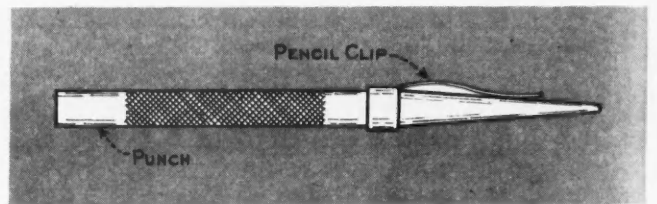


Two-by-fours are set at an angle to support bath tub and prevent sagging or cracking.

the past few years, but most of them are too expensive and not easy to get. This home made bracket does the job well and without much expense.—THOMAS L. LLOYD, Denver, Colo.

Pencil Clip Nail Holder

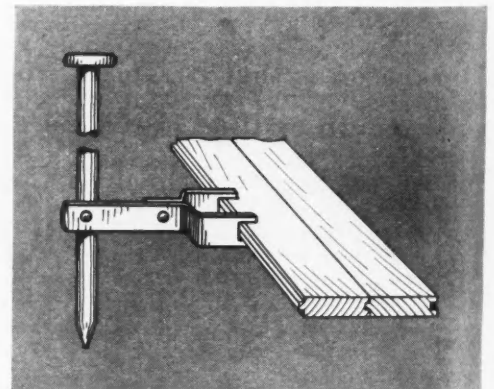
THIS nail holder is an ordinary pencil clip fastened on a center-punch. One who knows realizes how hard it is to hold a tiny nail in a position in which it can be struck by the hammer without injury to the fingers. With the nail holder, the nail is simply clipped in between the tongue of the clip and center punch, placed in the proper position for driving, and nailed.—WILLIAM FORT, Berwyn, Ill.



Ordinary pencil clip holds small nails until driven by hammer.

Flooring Jack

IN your issue of last April, there is a flooring jack described by Mr. Willey. I am sending sketch of one I made, and have used for years. It has the advantage over all others I have seen inasmuch as it can be used when laying flooring over sub-flooring; also, when laying any kind of tongue and groove stock which needs forcing into place. The end of the handle is pointed and driven into the sub-floor like a chisel. The handle is of convenient length, about 18 inches, and is driven into the floor by striking sharply with a hammer.—CLEM J. GARDNER, Stony Creek, N. Y.



Spike is driven into sub-floor and gives good leverage on finish flooring.

MODERNIZING DETAILS—Considerable interest has been expressed by readers in built-in bookcases and panel work for modernizing. Contributors to Job Pointers Department are urged to submit some simple, workable ideas for such work.—The editors.

Are You

NU-WOOD PRODUCTS

Bevel-Lap Tile
Bevel-Lap Plank
Insulating Board
Insulating Lath
Roof Insulation
Panel Blocks
Border Strips
Mouldings
Bevel Panel Strips

BALSAM-WOOL PRODUCTS

Insulating Blanket
 ½ inch, 1 inch, and Wall-Thick
Hot Water Tank Jackets
Acoustical Blanket
Krex-Tone
Acoustical Tile
Floor Deadening
Treatment
Packing Pads

OTHER PRODUCTS

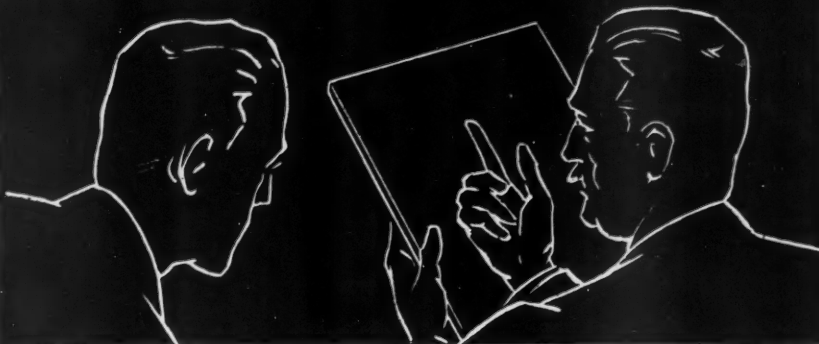
Tuff-Wood Hard-Board
Spruce-Up Wall-Board
Tufflex Building Paper
Fireproof Krex-Tone
Acoustical Tile
Adhestik
Bevil-Devil
Grooving Tool
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Products

Keeping up with these Developments in the INTERIOR BUILDING MATERIAL FIELD ?



WALL and ceiling coverings are going acoustical. Acoustical treatments must be insulating. Decoration without additional finishing is important. Material and installation costs must be lower than ever.

Those are the developments that 1932 showed will continue in the interior building material markets during 1933. And there is one material which fulfills every requirement.

*That Material Is NU-WOOD, Now Offered
in the Widest Variety of Forms*

People who want to renovate their homes, now do not have to buy different materials and pay several installing costs. They are turning to NU-WOOD because it covers, it insulates, it hushes noises, and it is adaptable to thousands of individual decorative schemes.

At the left is a list of the 1933 Nu-Wood and Balsam-Wool products. Look it over. Balsam-Wool has been improved so that it is even easier to install and there is a new form of it—WALL THICK. Nu-Wood Bevel-Lap Plank is another 1933 product. It already promises to be as popular as Nu-Wood Bevel-Lap Tile. If your lumber dealer cannot give you information about these and the other listed products, write us today.

WOOD CONVERSION COMPANY
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THE MOST USEFUL
INTERIOR BUILDING MATERIAL

How to Control Termites

Houses Built Low to the Ground in Today's Style Invite Termite Attack

By EVAN L. FELLMAN

Termite Control Manager, E. L. Bruce Co.

IN SPITE of the fact that termites are today causing damage to woodwork of homes and buildings in all except a few of our most northern and eastern states, they apparently remain much of a mystery to the majority of builders, architects and lumber dealers. There is evidence to support the contention that termite activity in some degree at least may today be found in approximately fifty per cent of standing structures.

Termite damage has been and still is frequently mistaken for "dry rot," although the appearance of the damage to one acquainted with it is entirely different from the appearance of damage caused by rot producing fungi. Not so long ago an architect in one of our largest cities of Ohio doubted the existence of termite activity in that city. He wanted to be shown. A trained termite control investigator took this architect to a home in the city where the investigator had previously found termites active in several joists under the structure. The condition was so severe that the inspector was able merely to take hold of a section of joist and break it off. He

showed it to the architect, pointing to the hundreds of termites in the riddled piece in his hand. The architect exclaimed: "You can't fool me, those little bugs don't eat the wood. That damage to the wood was caused by rot and these little insects are merely using these hollowed out places in the wood caused by the rot for their home."

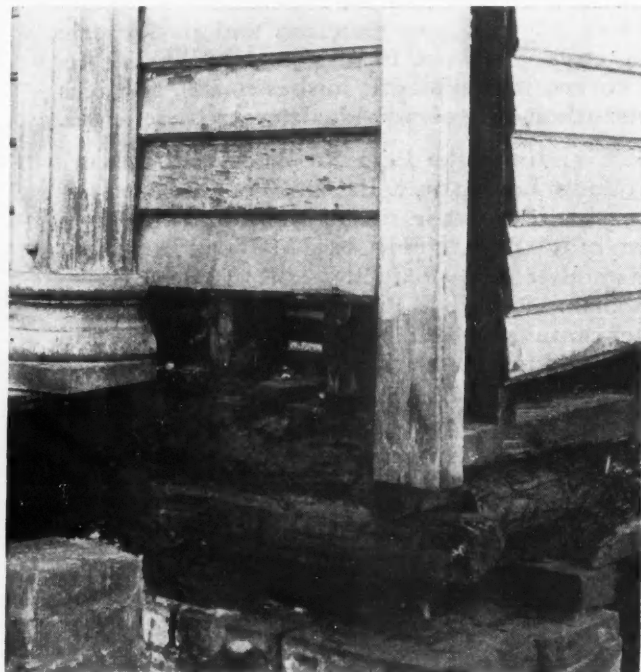
As this came from a member of the building fraternity, one who had specified the use of lumber time and time again, such lack of knowledge of and appreciation for an existing problem supports the contention that termites are a mystery—at least to some architects. How far does this lack of understanding reach through others in the building fraternity, builders and lumber dealers, real estate and loan companies?

Generally speaking, there are two methods of controlling termites in infested buildings. The first is by making changes in construction and through use of concrete and metal termite shields over foundation walls. Obviously this is most expensive and far beyond the reach of nearly all home and building owners.

The second method of controlling termites is by chemical means. In considering the purchase of protection against termites the owner should ascertain answers to the following questions: (1) What is the name of the chemical to be used? (2) What is the name of the manufacturer of that chemical and does that manufacturer guarantee effectiveness of his product? (3) Is the contractor or termite control company who proposes to apply this chemical responsible and is he properly equipped to provide effective work? (4) Will it be possible for me to obtain a bond issued by some nationally known surety company to protect me and guarantee fulfillment of the contract?

Successful control of termites is not the work of the contractor or anyone else who has not made a serious and concentrated study of the problem and who is not equipped with the experience and treating apparatus with which to do the work. Experience shows that with the treatment of thousands of structures a high degree of efficiency has been obtained and that the majority of those structures will remain protected against further termite inroads for a long period after the five year guarantees have expired. But occasionally retreatments are necessary. Hence the importance of a reliable and valid contract, made with a company furnishing expert professional service. Only when termite control work is kept on a high professional plane may it be considered as worthy of trust and consideration. It should be compared, for example, with the type of service of a leading national organization of tree surgeons.

The legitimate termite control operator should be looked upon as a competent professional man—a doctor, for instance—whose services are always of value but perhaps may not reach perfection. It may be said of proven chemical termite treatments that they may be counted upon to be worth several times their cost in that they will save the much higher expense of repairs and replacements which invariably result when termites are allowed to proceed unmolested.



Wood-rotting fungi (common dry rot) and termites have united to cause this damage to important structural members in a Central Illinois home.

Above: Views of subterranean (*reticulitermes*) termites.

Can You Pick a Hole > > >

in This or This?



$$\begin{array}{r} 2 \\ 2 \\ \hline 4 \end{array}$$

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NEWS—building activities of the month

Residential Pick-up in March

CONSIDERING the widespread slowing down in business occasioned by the banking holiday, the March results in the construction field must be considered encouraging. Normally March shows seasonal expansion in new construction awards; in spite of the banking holiday some seasonal expansion over February occurred. The March contract total of \$59,958,500 covering all classes of construction compared with \$52,712,300 for February and \$112,234,500 for March, 1932, according to F. W. Dodge Corporation.

Of larger present significance, however, is the fact that residential awards during March expanded about 36 per cent as contrasted with February; the March total for this class of work was \$16,021,000 as against \$11,805,300 for February and \$33,208,600 for March of last year. Of the March, 1933 residential total practically 80 per cent represented awards for 1 and 2 family houses; this is of significance in that it is in the small house field where conditions of improvement usually occur first.

For the first quarter of 1933 residential building contracts totaled \$39,777,200 as against \$85,130,200 for the corresponding quarter of 1932. Of the 1933 quarterly total 75 per cent was for 1 and 2 family houses while the remainder was for apartments and hotels. Of the 1932 quarterly total 78 per cent went into small houses and 22 per cent into apartments and hotels.

See Growing Home Need

RECENT surveys by real estate boards show high occupancy of residential properties and a growing home need. St. Louis in its survey candidly admits: "We have eliminated 'units under construction' this year as there were too few to be of any importance." The Kansas City survey, which did not tabulate new construction, found 620 of the city's existing housing units untenable. More than half these were single family houses. Des Moines found 166 homes untenable.

Bronxville reports, "The most startling fact revealed is that we have only thirty-five new houses which are unoccupied and which are offered for sale for the spring market. Never in the history of this territory has there been such a limited number available in this classification."

Single family residences in Greater St. Louis are 95.4 per cent occupied. A total of 8,762 families were reported doubled up with other families, and in addition 18,899 families were reported as living in 4,548 boarding or lodging houses. This last is to a considerable extent really a "doubling" due to the depression, as is indicated by the fact that the 1930 census found only 459 rooming or lodging houses in St. Louis, these housing 8,409 individuals (not families).

Kansas City, Mo., reports single family residences are 92.63 per cent occupied. A total of 5,385 families were found "doubled" with other families. This is an increase of 6 per cent over the number found in a like count a year ago. Even more striking is the fact that 7.2 per cent of all the occupied single-family houses in the city are now housing an extra family.

San Diego found 95.85 per cent of its single-family residences occupied. Families living as "excess" families numbered 1,157.

Within Westchester County, New York, surveys made by local chapters of the Westchester County Real Estate Board show occupancy of single-family dwellings as follows: Bronxville, 95½ per cent (in the village proper, 97½ per cent); Mamaroneck, 94½ per cent; Scarsdale, 95.6 per cent.

Camden County, N. J., had an occupancy of 93.27 per cent in houses, including both those habitable and those uninhabitable, an increase of 1.55 per cent from that found six months earlier. Of the vacant houses more than 28 per cent were found uninhabitable. Counting out the houses unfit for living purposes, the occupancy was found to be 95½ per cent.

Muncie, Ind., reports for residential units a total occupancy of 91 per cent.

Ann Arbor, Mich., found 98.1 per cent of its existing single-

family dwellings occupied. For all types of housing units in the city the occupancy was 96 per cent.

Des Moines, Ia., has a 96.45 per cent occupancy for single-family residences, this divided as follows: Two-story houses, occupancy 96.3 per cent; bungalows, occupancy, 96.62 per cent. Occupancy for housing units of all kinds, including apartments, single-family houses and temporary houses, was found to be 94.63 per cent.

Renewal of Home Building

A NEW and optimistic outlook has caused thirty leaders in the construction and allied trades to call a National Conference on the Renewal of Home Building to meet at the Congress Hotel, Chicago, on May 9 and 10, under the chairmanship of J. Soule Warterfield, vice president of the Starrett Building Company.

The United States Department of Commerce, through the Division of Building and Housing, is now engaged in making especially for this conference a detailed national survey on the housing situation from coast to coast, and it is indicated that the survey will show a diminishing vacancy.

"During this depression, literally dozens of large organizations and many talented individuals have been working twenty-four hours a day designing and inventing all kinds of material, equipment, processes and plans for improving homes," says Mr. Warterfield.

"There is much that is reassuring and much that is interesting and much that is new and these are the things that we wish to bring out at the coming conference—both for those in the various businesses and for the public who are the prospects for all of us."

The following are serving on the Committee on Arrangements: George W. Dulany, Jr., American Forest Products Industries; R. W. Starrett, Pres., Starrett Building Co.; J. H. Thorkelson, Kohler Co.; Alfred K. Stern, Julius Rosenwald Fund (Chairman, Ill. Housing Commission); William Zelosky, Wm. Zelosky Co.; John R. Fugard, Pres. Ill. Society of Architects; Daniel H. Burnham, Chairman, Chicago Regional Zoning Commission; Ralph P. Stoddard, Mgr. Brick Mfrs. Assn. of America; Paul B. Belden, Pres., American Face Brick Assn.; Dr. A. P. Haake, Mgr. Dir., National Assn. of Furniture Mfrs., Inc.; Russell Creviston, Sales Promotion Mgr., Crane Co.; George Meyercord, Pres., The Vitriolite Co.; E. J. Mehren, Pres., Portland Cement Assn.; Herbert U. Nelson, Exec. Secy., National Assn. of Real Estate Boards; Charles K. Foster, Exec. Vice Pres., American Radiator Co.; Edward A. MacDougall, Pres., Queensboro Corp.; N. Max Dunning, Advisor on Architecture to the R. F. C., Chicago; Holman D. Pettibone, Pres., Chicago Title & Trust Co.; N. G. Symonds, Vice Pres., Westinghouse Electric & Mfg. Co.; J. Soule Warterfield, Vice Pres., Starrett Building Co.; Percy Wilson, Chairman, Home Builders & Subdividers Div., The Chicago Real Estate Board; John H. Millar, Millar's Housing Letter; C. J. Bassler, Pres., Air Conditioning Corp. The Committee on Coordination includes: Bernard L. Johnson, Chairman, Editor, AMERICAN BUILDER; H. H. Bede, Business Mgr., National Real Estate Journal; Jacob L. Crane, Jr., City Planner; Joseph Eves, Western Mgr., Better Homes & Gardens; David B. Gibson, Vice Pres., Industrial Publications, Inc.; Arthur A. Hood, Vice Pres. National Homes Finance Corp.; W. G. Kaiser, Mgr., Cement Products Bureau, Portland Cement Assn.; George S. Eaton, Secy-Treas., American Face Brick Assn.

A. I. A. Omits Convention

CALLING for national support from members of the American Institute of Architects, Ernest John Russell of St. Louis, the president, announces four measures adopted by the Board of Directors to meet a crisis in the affairs of the organization. These are wide reduction in expenditures, remission of back dues conditional on full payment for 1933, renewed action to secure employment of private architects on government building projects, and omission of the 1933 convention.

Chamber of Commerce to Discuss Building

THE maintenance and improvement of property—residential, business and industrial—as part of a general program to aid business recovery will be considered by leaders in the construction industry at a special round table conference to be held at the Twenty-First Annual Meeting of the Chamber of Commerce of the United States at Washington, May 2-5.

President Roosevelt heads a list of distinguished speakers who will address general sessions of the annual meeting.

The construction round table conference, under the chairmanship of Walter J. Kohler, manufacturer and former governor of Wisconsin, will consider means for stimulating the renovation and rehabilitation of all classes of property.

Frank Parker, president, Philadelphia Federation of the Construction Industry, and professor of finance, Wharton School of Business, University of Pennsylvania, will lead the discussion of the "residential" topics. This field includes: Preserving property values through maintenance and improvement; practical tests for the home owner to determine the extent of improvements which should be made; methods available for financing improvements. Dr. Parker directed the Philadelphia renovize campaign and will discuss the administration of such campaigns in metropolitan areas.

Realtors to Meet in Chicago

WHAT the reshaping of the nation's real estate structure must be and what it means to the future of American cities will be the central theme of the coming twentieth annual convention of the National Association of Real Estate Boards.

The convention will meet at the Stevens Hotel, Chicago, and will cover the entire week of June 12-17 inclusive. Three major topics will be:

Our national mortgage structure. Stabilization of mortgage money supply is of recognized pressing public importance.

Definite real estate tax relief. On this much is now being accomplished in many states.

Reshaping methods of real estate development. Such reshaping is going on to meet coming needs soundly, accurately, without waste.

W. D. M. Allan Promoted

ANNOUNCEMENT is made by Wm. M. Kinney, general manager, Portland Cement Association, of the appointment of W. D. M. Allan, manager, Cement Products Bureau, since 1926, as director of promotion, with responsibility for the planning and direction of the work of the following six departments: Advertising and Publications, General Educational, Cement Products, Highways and Municipal, Railways, and Structural bureaus.

W. G. Kaiser, assistant manager, Cement Products Bureau, for over 10 years, is named manager to succeed Mr. Allan. These changes became effective March 22.

Milcor Buys Richsto Metal Trim

ARCHITECTS and builders will be interested in the announcement that the Milcor Steel Company has purchased the Richsto Metal Trim Company of Aurora, Ill. "The complete line of interior metal trim as manufactured by the Richsto Metal Trim Company will now be made by Milcor," said Mr. Louis Kuehn of the Milcor Steel Company. This line embodies plasterers' accessories, casings, metal bases, cove mould, window trim, chair rail and offset trim, chalk troughs and blackboard trim.

New Moulding Standards

JUST released by the Bureau of Standards of the U. S. Department of Commerce is a pamphlet containing the 1931 revised 7000 series of Standard Wood Mouldings and recommended specifications for standard grades of Red Cedar Shingles.

These new designs and sizes were the result of painstaking work of a special committee representing the lumber and millwork, producing, distributing, designing and consuming branches of the trade. Much was the result of original work of E. Stanford Hall, Fellow of the American Institute of Architects. This new series is the most up to date and architecturally correct of any stock series ever published. Because of their merit they are gradually becoming the standard in the trade.

(Continued on page 44)



Designed by Paul F. Watkeys, Architect

Another Successful
Builder Says:

"Spring means Heatilator business in Summer Homes and Camps"

"TALK to anybody about their summer home and what do they say? They dread the thought of dampness and cold and as a result they delay opening their home, close it weeks before they want to leave—because they haven't enough heat.

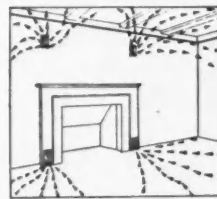
"I ask them how they'd like to add several weeks to their summer season and still be comfortable. They think I'm fooling. It's then I talk about the Heatilator Fireplace—tell them how it's not like the ordinary fireplace—but an honest-to-goodness heating plant. Heatilator, you know, works on a circulating heat principle—just like a warm air furnace. The warmth is spread out over the entire room and those adjacent. Let a prospect get that picture once, and you've just about made a sale.

"There's another thing about the Heatilator that means a lot to many people. It's guaranteed not to smoke. And there's a money back guarantee that says so. That's another selling point. Lastly, you can use the Heatilator in any type of fireplace without altering its design.

"I'm convinced that any builder who first gets this Heatilator story himself and then tells it half-way completely is bound to make some sales. I know because that's my own experience."

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We'll gladly send full particulars without cost or obligation. Mail the convenient coupon below. Heatilator Company.



Warm air rises—spreads over room. Air currents return to fireplace along floor.

Heatilator Fireplace

Heatilator Company,
815 Brighton Avenue,
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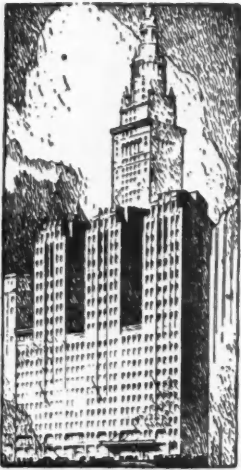
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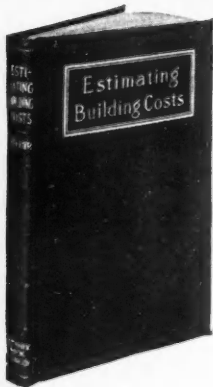
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By WILLIAM ARTHUR

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This concise and handy volume has been specially prepared for the use of building tradesmen, contractors, material men, technical students, instructors and all others interested in the construction of dwellings, barns, stores, and industrial buildings of moderate cost.

It contains a collection of material data covering all classes of building construction and arranged for quick reference. There are ninety-one tables showing the actual number of hours of labor and quantities of material on work done. These examples are all worked out on the basis of \$1.00 per hour for mechanics, and 60 cents per hour for laborers. The quantities are given and any change of rates can easily be adjusted by simple proportion.

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30 Church Street New York, N. Y.

Building News

(Continued from
page 43)

Announce Engineering Week

"ENGINEERING Week" in Chicago June 25-30 promises the greatest gathering of engineering societies ever held in this country. The American Association for the Advancement of Science which includes many affiliated organizations will hold all its sessions on Applied Science during the same week that nineteen other engineering organizations are meeting in Chicago. More than 100,000 engineers comprise the membership of these organizations and all are being invited to attend.

Construction Census Report Available

THE Bureau of the Census announces that the United States Summary of the Construction Industry has been issued. Pertinent figures on the construction industry: how the construction dollar is spent, the percentage for wages and materials, the amount of overhead, the items making up this overhead, the proportionate market for each of the basic construction materials, the type of construction firms, the amount of work executed by the out of state contractors, the distribution of the market, are a few of the items on which the United States Summary—Construction Industry presents adequate data.

Reports were received from 144,396 firms in the contracting business as operative builders, general contractors, or subcontractors. Of this number 30,597 firms which had a business of \$25,000 or more during 1929, reported a total business of \$6,250,266,665, of which \$4,217,366,643 of business was done by 14,766 general contractors of all classes; \$153,523,886 by 750 operative builders; and \$1,879,376,136 by 15,081 subcontractors. As much of the volume of business reported by subcontractors was also reported by general contractors as subcontract work let, the volume of actual construction executed by all these larger reporting firms amounted to \$4,794,772,665 for the year. The business of the contracting establishments which did a business of less than \$25,000 in 1929 is estimated at over \$1,000,000,000. The larger-sized group of contractors furnished 828,772 man-years of work while the smaller contractors augmented this number by about 179,000 man-years of work or, together, a total of approximately 1,008,000 man-years. These figures do not include salaried employees or proprietors of firm members.

Copies of this report entitled, "Construction Industry—Summary for the United States" are obtainable from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the price of 20 cents.

Home Building Index

THE President's Conference on Home Building and Home Ownership has just issued a complete index to the eleven comprehensive volumes on home building and ownership compiled and published by the Conference last year. The index will prove valuable in helping builders locate the specific ideas of interest to them among the great wealth of data and information contained in the volumes.

New Jobs for Architects

A NEW ERA in building, promising to let America's great skyscrapers grow old gracefully instead of having them torn down after a decade was advocated in New York recently by J. C. Knapp, Vice President of the Otis Elevator Company, in a speech made before the Architectural League of New York.

Mr. Knapp pointed out that in every country but the United States the buildings are kept in good condition for long periods of years, even centuries. Suggesting that building owners in this country follow that example, he declared that a highly practical way of doing this would be to utilize the service of architects as maintenance experts to keep the building up to date and suggest repairs and improvements. According to the plan, the architect who designed the building would be paid a retaining fee to continue his interest in the structure.

NEW PRODUCTS

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

New Frameless Fly Screen

A NEW frameless, all metal fly screen has just been announced by a firm that has been in the screen business for over half a century, which represents a distinctly different departure. The new screen comes complete, ready for quick installation, delivered in a 3-inch fiber box which serves as a storage container for the screen. It is made for use in double-hung windows and covers the entire opening.

This new type of screen is especially suitable for use in replacing old fashioned equipment in old homes, for the screens



New frameless all-metal fly screen is installed from the inside quickly with only 4 screws. No side frames are used which obstruct light and air. Can be stored in 3-inch fiber box.

can be quickly applied by a carpenter, and after once applied, can be easily taken down and put up by the owner. It is installed from the inside, requiring only four screws. The top rail of the screen is placed over the two screws and locked into position. Then the bottom rail is placed over two screws at the bottom of the frame and locked. A special selvedged edge fits against the outside window stop. The screen is easily tightened by a convenient device so that it is always tight, good looking and insect-proof.

Details of the product include the following:

Since there is no frame, there are no side pieces to obstruct light and air. Screen guides are eliminated. No fitting is required, and if the window is out of square, the new screen is easily adjustable at the bottom for minor variations.

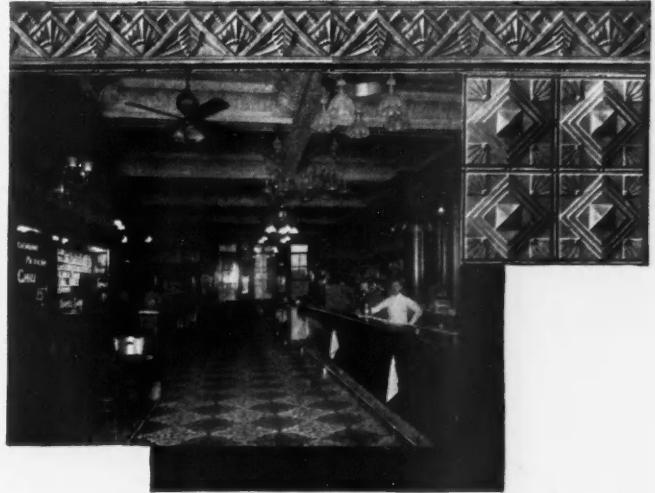
The full length permits either top or bottom window sash, or both, to be open, giving maximum ventilation. There are no rolling parts to get out of order, and no painting or maintenance expense required.

Window washing is facilitated, as release of the bottom catch permits the screen to swing free at the bottom. A neat, trim appearance is given both inside and out.

When removed from the window, the screen requires only a small storage space and is packed away in a 3-inch square fiber container. The complete screen can be cleaned by immersing in soapy water or other cleaning solution.

Stock sizes to fit all standard windows are available, and all that is needed is height and width of each window opening. Screens are priced at a low figure to supply an all-metal construction at the price of a wood frame screen.

The ease of installation and removal, practical operation and good looks make the new product one that builders and dealers will find of great value.



The New Deal Calls for Edwards "MODERNISTIC" STEEL CEILING

Cafes, Cafeterias, Hotels, Restaurants, Groceries, Drug Stores and places of public entertainment present to-day's liveliest market for building contractors. Wherever cleanliness, sanitation, safety and decoration are required, the first choice is Edwards "Modernistic" Steel Ceiling. Cannot crack, chip or crumble. Washable with soap and water. Easily applied to new construction or over old plaster. An attractive profit in every job.

Send us measurements of your next ceiling. Get our low net prices, freight paid. We will help you close the order. Write today for catalog 178 and "Modernistic" Folder.

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World's leading manufacturers of Sheet Metal Building Material
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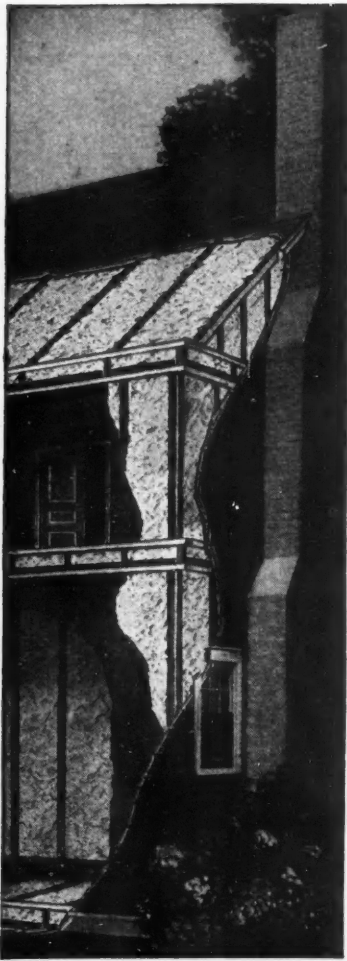
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The results of these experiments are confirmation of the fact that Lustraglass transmits a substantial volume of ultra-violet rays of sunlight. Because it transmits these valuable rays and because it is a clearer, whiter, flatter, more lustrous glass, and because it costs no more than any good window glass, architects and builders everywhere are specifying Lustraglass for every type of building. Send for booklet P-332. It contains an interesting report of the experiments.

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It repels outside Summer heat as effectively as it retains inside Winter heat and saves approximately 35% of fuel expense.

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NEW PRODUCTS

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Non-Tearing Roofing

THE new type of asphalt shingles and prepared roofings made from a recently perfected tough cellulose fiber are attracting wide attention in the building field.

A number of large manufacturers of roofings have adopted this new method, using a tough, flexible interlocked cellulose fiber which gives asphalt roofings strength and durability heretofore unknown.

The base material which gives these roofings added strength contains a higher percentage of asphalt because the cellulose fibers are very absorbent. The cellulose fiber has an unusual



Tough felted cellulose fibers are used as a base to make this non-tearable roofing. Pulling away from nails is prevented.

strength and capacity for wear, laboratory tests show, and the result is roofing made with them is very difficult to start tearing. This is due to the fact that the stress is distributed over an area rather than being concentrated in one spot, which causes ripping. The new type roofing is extremely difficult to tear or pull away from nails.

Roofings using the new fiber base cling to the roofing nails tightly and offer greater protection against wind and storm. In recent tests by the manufacturer, a miniature house was built, roofed with the new type roofing and subjected to alternating blasts of air. One side of the roof was covered with the new type roofing and the other with another roofing which did not contain the tough cellulose fiber base. Under the heavy air pressure, 3 nail holes gave way in 20 hours on the old type roofing, and after a period of four days, 18 nail holes opened up. During the same period, the fiber base roofing remained intact, and the material had not pulled away from the nails.

Another feature of the new roofing is its flexibility. It can be molded easily around angles and corners without breaking due to the flexibility of the interlocked cellulose fibers. This is a point of great importance, for in the past, corners and angle applications have been the most dangerous spots of asphalt roofings. Test data, further information and samples of roofing made from the new felted cellulose fibers will be sent to interested builders and dealers on request.

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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, Terme 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

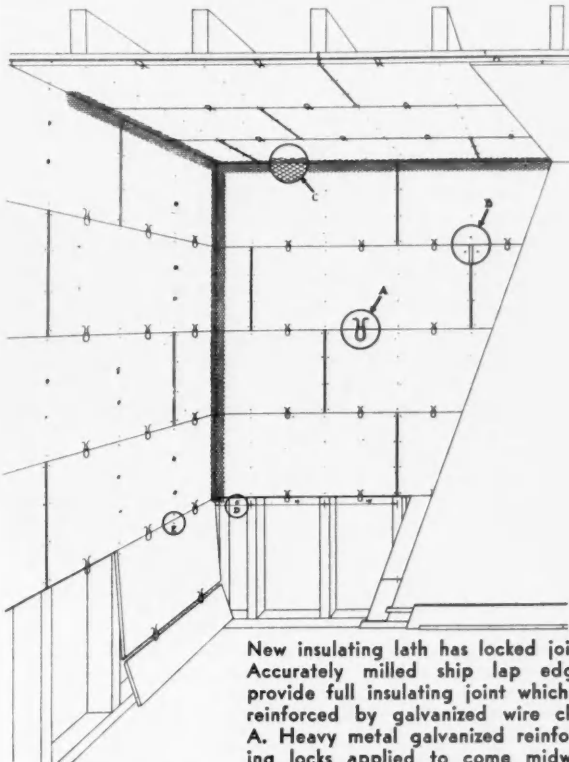
Insulating Lath with Locked Joint

A NEW and improved plaster base of insulating lath has recently been put on the market which has many technical improvements. This lath is a wood fiber insulating board manufactured in units 18x48 inches, from 1/2 to 1 inch thick. It is a rigid board providing a high degree of thermal insulation. Both long edges are given an accurately milled, ship-lap edge providing a close, tight joint between the units and a full thickness of insulation at the joints.

The outstanding feature of the new insulating lath is the locked joint. Three heavy gauge galvanized wire locks are attached at the edge of each unit. These act as reinforcements spaced between the studdings to provide a stronger, more rigid joint. They strengthen the wall or ceiling at its most vulnerable point—the joints. This reinforced joint prevents separation of the units at the joint under trowel pressure, and eliminates the possibility of plaster being forced into the joint and holding it open.

The burlap textured surface of the insulating lath has high bonding power. According to the manufacturer, plaster bonds to the surface with twice the strength of plaster to wood lath. According to tests conducted by the manufacturer, a force in excess of 1,150 pounds per square foot is necessary to break the plaster bond.

Full insulation at joints is an important feature of the new insulating lath with locked joints. The closely fitted ship-lap on both edges maintains full insulation value and provides a wall



New insulating lath has locked joint. Accurately milled ship lap edges provide full insulating joint which is reinforced by galvanized wire clip. A. Heavy metal galvanized reinforcing locks applied to come midway between supports which are spaced

16" apart. B. Joints staggered—Units spaced 1/4" apart at ends—Joints centered on frame members. C. All interior angles covered with metal lath reinforcing strips. D. For odd spacing of frame members cut sheets in such manner that remaining locks will fall midway between supports. E. Fasten the next to the last sheet along top edge only. Nail securely after last sheet is in place.

of uniform thickness and insulation. Due to the principle of the interlocking joint, the entire wall or ceiling when erected is similar to a unit constructed in one piece.

The lath units of large size lay up easily, simply and quickly. Each unit fits into place solidly due to the location of the galvanized wire reinforcement and the accurately milled ship-lap edge.

In addition to being a very efficient base for plaster, the product provides high insulation efficiency. The four points of (1) insulation efficiency, (2) rigidity of joint, (3) bonding power, and (4) ease of application make this new product one of especial interest to the building industry at this time.

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Stiffer, more durable and stronger than Copper Fly Wire—at less cost. Made of extra Heavy hard drawn Bronze, Double Selvage. Lowest prices in history.
16 mesh... 3¢ sq. ft.
18 mesh... 3 1/2¢ sq. ft.
In 100 Lineal Ft. Rolls.
Widths 18 to 48", every even 2". Cut pieces 1/20 Sq. Ft.
Extra F. O. B. Phila. Shipping wt. approx. 15 lbs. per 100 sq. ft.

Combination Screen & Storm Door

White Pine. 1 1/4" thick, complete with 10 mesh Bronze Wire and 12 lights of Glass in Storm Panel.
2'0" x 6'0" \$4.45
2'8" x 6'8" 4.55
2'10" x 6'10" 4.75
3' x 7' 4.95
Plus 35c each door for Packing.
F. O. B. Philadelphia. Shipping wt. approx. 85 lbs.



BALL BEARING LAWN MOWERS

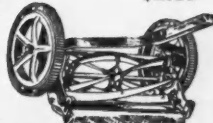
Devon Junior, 4 Blade, Self-Adjusting, 8" drive wheels geared on both sides of wheel.

12" size \$2.69

DEVCO SENIOR
Ball Bearing, 5 Blades, Self-Adjusting.

14" size \$2.89

14" size \$3.98
16" size \$4.35
18" size \$4.85
F.O.B. Phila.



Enameled Round Front ROLL RIM LAVATORY

Guaranteed A-1 Quality. White Porcelain Enameled Iron. Size 17" x 19".

\$3.95 bare

Complete with Nickel Faucets, floor or wall tray, plug, chain, stopper and Supply Pipe.
F. O. B. Philadelphia



Chrome fitting: \$1.25 extra \$7.45

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B Quality, with Oak or Mahogany Seat. Each... \$8.95
Guaranteed A-1 Quality, with Chrome trim, Oak or Mahogany Seat. Each... \$9.95
With White Seat and Chrome Hinges 50c Additional on Both Outfits. F.O. B. Philadelphia.



42" COMBINATION SINK and DRAINBOARD

1st Grade, Guaranteed A-1 Quality. White Porcelain Enameled Iron on bare

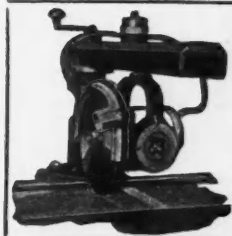
Chrome, Combination Faucet as shown, Nickel Coupling and Trap, Right or Left Hand Drainboard \$16.50
FOB Phila.



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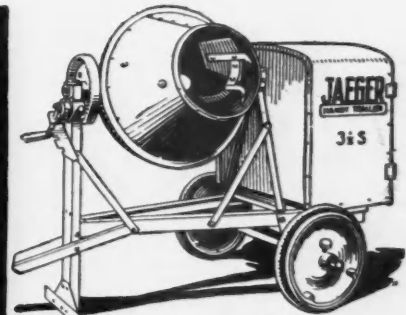
F. O. B. FACTORY on STEEL

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JAEGER'S

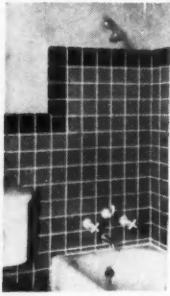
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AMERICAN FLOOR SANDERS

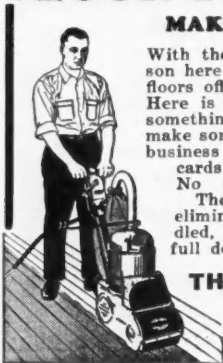
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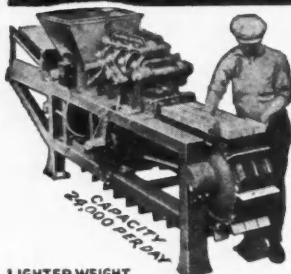
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MACHINE COMPANY**

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American Spinner
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1933 EARNING POWER USE LOCAL MATERIALS AND LABOR



LIGHTER WEIGHT
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BIG SAVINGS IN
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A STAPLE COMMODITY—A 100% mark-up—a selling price far below competition—Orders exceeding a million units in one month—His brick used in all the biggest and finest buildings in his territory. . . .

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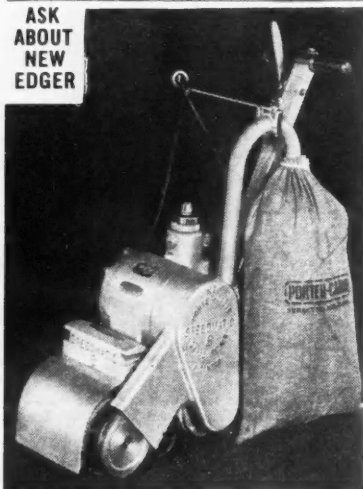
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New Aluminum Floor Sander

The last word in simple efficient design. Handles easier than any other real sander, doesn't tire operator. Never before has an 8" floor sander been introduced that is the equal in all around advantages to the Speed-matic 8. Light, compact, and sturdy, it has 8" drum traveling at terrific speed to turn out more square feet per day for you. Light enough to carry, yet its patented design will quickly transform a new or old floor into one of remarkable smoothness. With this wonderful new floor sander, you can make money even at present low floor prices. Four models to choose from. Write for details.

Porter-Cable-Hutchinson Corp.

1721 No. Salina St., Syracuse, N. Y.

LETTERS

from Our Readers

With Basement, or Without Basement— Which?

Holland, Mich.

To the Editor:

Anyone considering building new homes of the basementless type might well consider the following:

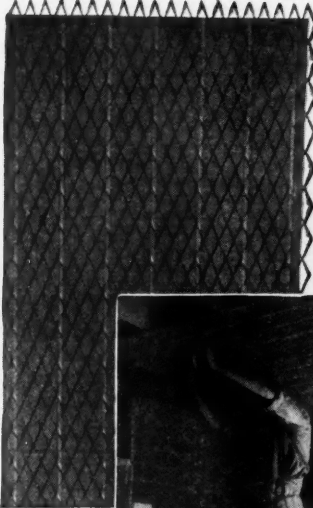
1. You will want to sell your homes to all classes of buyers; by laying out your home without a basement, you will find it difficult to sell the average home owner on the idea of a home without a basement because of habit.
2. A home without a basement when an oil burner is used is very satisfactory from a cleanliness standpoint; however, where coal is used, a basement is necessary to take care of fuel and ashes.
3. A house with a basement will have warm floors. Unless the house without a basement is extremely well insulated underneath the floors, the floors will be cold. This runs up the cost of insulation.
4. Experience has shown that a house must be built with the foundation under the frost line, so why not go the few feet more for the entire basement?
5. You will get some stratification of first floor temperature without a basement.
6. Without a basement or attic, you will have no place for storage of trunks and other miscellaneous things always found around a home.
7. A house will cool better with a basement under it during the summertime.
8. We have noticed the trend in thousands of basements over the country toward recreation rooms which are being built into basements. This makes a rough and tumble room, for dancing, for a billiard table, for a ping-pong table, for a bar, and a play-room.
9. Without a basement there is no place to store fruit, and in this day and age, people are going back to the kitchen economy of putting up fruit.
10. Without a basement, a man cannot have a work-bench.
11. Wash-tubs are always handy in a big basement, whereas they will be unhandy in a house without a basement.
12. The basement is a place to dry clothes in the wintertime. Without a basement there will be no place to dry clothes except on the outside, or send them to the laundry.
13. The basement is a place for the washing machine.
14. The basement is the place for the heating plant.
15. The basement is the place for the hot water heater.
16. Plumbing and toilet facilities are easily handled when there is a basement under the house.
17. Where there is no basement under the house, any wood is subjected to dry rot.
18. The basement is always used for an ash drop for the fireplace.
19. The basement is always used for a clothes chute from upstairs.
20. The heating system will cost the home owner more money when a basement is not used, as all ducts will have to go overhead or underground, which necessitates a false ceiling or adequate insulation for underground ducts. In all homes without basements, a forced air plant must be used.
21. Gas meters, water meters, and electric meters should be installed in the basement, as people do not want meter readers going through their homes.
22. Some people prefer refrigerators with the refrigeration unit separate in the basement.
23. Chimney clean-out of furnace should be in the basement, as it is a dirty job to clean out the soot in the chimney if the house is without a basement.

(Continued to page 50)

INSULMESH

A Plaster Base that Insulates Deadens Sound and Reinforces

Easily handled, easily cut to size, economically plastered and moderate in cost this modern plaster base provides all the metal lath advantages of permanence, firesafety and crack prevention plus insulation against heat, cold and sound.

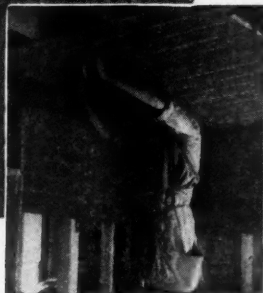


Patent Applied For

Truscon makes a complete line of metal lath and accessories.

Write for sample and prices.

40 sheets to Carton
Easily handled and stored.



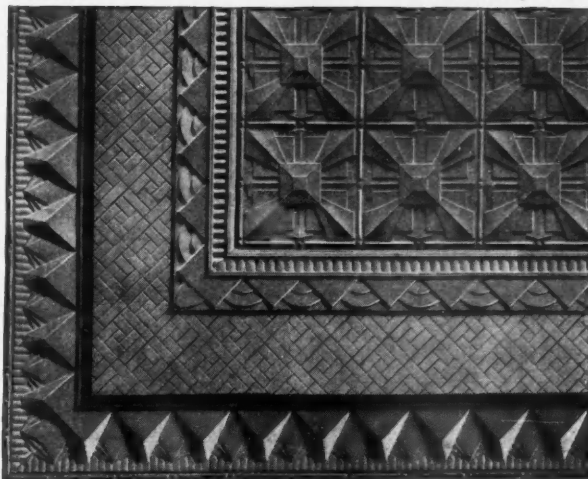
TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO
Sales and Engineering Offices in all Principal Cities

Steel Ceilings and Sidewalls

Berloy Steel Ceilings and Sidewalls, available in various designs and combinations, are beautiful, permanent and economical. The material is of uniform high grade quality and easily installed without removing plaster. Suitable for stores, schools, churches, theatres and auditoriums.

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BERGER BUILDING DIVISION

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NOTICE

Forms for the June Number of the American Builder and Builder of advertisements must reach our business office, 105 W. Adams St., of the month preceding date of publication the publishers reserve



SPECIAL PRICES

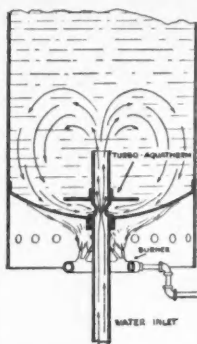
Woodworking Machines Limited time only

Write us at once for Clearance Sale prices on Combination Woodworkers, Cut-Off Saws, Saw Tables, Jointers, Shapers, Band Saws. This is your chance to save money on money-making machines you have always wanted. First come, first served so write at once.

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Makers of Take-About Sander, Speedmatic Saws, Floor Sanders, Edgers.

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DAHLQUIST COPPER BOILERS Are Equipped With THE NEW TURBO-AQUATHERM U. S. Patent No. 1762215 Stops Dirty Hot Water

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

PLAIN FACTS

Hot water storage tanks of all kinds are actually sediment traps and eventually deliver muddy hot water unfit for any use. Once sediment has accumulated, there is constant trouble with muddy water.

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

DAHLQUIST MFG. CO. 10 West 3rd St., So. Boston, Mass.

Four
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One
\$268



Ball Bearing
Includes 22" band saw, 12" jointer, circular rip and cross-cut saw and boring machine.

New Business!

The Parks improved line of woodworking machines has everything to insure profit—economy in operation, sturdy construction, ball-bearing equipment, moderate price. You can always get new business with a Parks!

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MACHINE CO.
Dept. BL-11, 1524 Knowlton St.
Cincinnati, Ohio

Canadian Factory: 338 Notre Dame East, Montreal

PARKS
WOODWORKING MACHINES

(Continued from page 48)

I am giving these thoughts on the basement because I believe that builders are more interested in the marketing of their houses than they are in construction details, and it is my belief that they are going to run up against sales resistance when they attempt to sell a house without a basement. Of course I realize that construction costs will be lowered without a basement, but by the time you sum up the above, I know you will be money ahead and your future profits will be greater to go along with people's expressed desires. From our standpoint, we can furnish a heating or air conditioning system for a home with or without a basement.

C. R. BENNETT,
Assistant Sales Manager, Holland Furnace Co.

Finds Scrap Books Useful

Mokena, Ill.

To the Editor:

I have an idea which I suggest you should put in your next issue. I have made several scrap books, consisting of ideas taken from your "Practical Job Pointers" columns, plans of houses, other forms of plans and drawings which I cut out of your magazines each month and paste in these scrap books for future reference.

This makes a very compact form for reference, and does not take up as much room as each and every magazine. By publishing this idea in your magazine, you should be able to get more renewals and new subscriptions. I hope that this will build up your publication.

OSCAR C. KLOSE

Apartment Modernizing

(Continued from page 33)

front put across, making them look like one building. An elevator was installed, interiors were entirely rearranged and re-finished, and the new apartments given a thoroughly modern, efficient arrangement. Four 2-room apartments were provided on each floor. Bathrooms were made as modern as possible. Complete kitchenettes were installed. Spacious living rooms were provided and the wood burning fireplaces given a modern dress. The result was a building made up of very attractive and desirable apartments at reasonable rentals.

Cost of the alterations was about \$36,000. An addition of fixtures and equipment brought the total figure to \$40,000. As a result of the modernizing, the building was completely rented with a conservative income at present low rates of \$26,000 a year. Figuring taxes at \$6,000, operation at \$10,000, this leaves the owner a profit of \$9,000 a year. By amortizing the cost of the improvements over a ten-year period, he has thus transferred his tax-eating, expensive property into a profit-maker of at least \$5,000 a year. With increasing rents in the offing, this should be considerably increased.

Is There Any Home Building?

(Continued from page 30)

of prospective buyers our average sale is close to \$2000.00."

At Port Jefferson, Long Island, a modernization and home repair campaign started on the day the national bank moratorium was announced! The committee workers, somewhat discouraged by this condition, have nevertheless brought in \$20,000 in pledges so far and expect their Building Exhibit will help produce much additional business. Several expensive homes are being built in Munsey Park at Manhasset, L. I. Brokers in Ridgewood, N. J., report 22 dwellings sold since January 1, 1933; out of 3,000 1-family units in this section only 143 are vacant.

Evidently, considerable new building, modernization and home repair work is being done in the entire Metropolitan area and many sales are being made by concerns which sell suburban or rural properties from New York offices. No one wants to be "dangerously" hopeful these days, of course; but is the Metropolitan New York area again providing the forecast of a national trend?