
Modern Kitchens, Their Planning and Construction...

Six Pages of Ideas on the Most Important Room in the House.

Consider the Housewife First!...

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This announcement is going to Start Something!

There are a good many contractors and carpenters in this country who are sick and tired of waiting for "things to open up."

And perhaps there are just as many who are tired of chasing up blind alleys for jobs that people don't want done and couldn't pay for if they did.

Wood Conversion Company has a message for both these groups of men. It is about two lines of products... Balsam-Wool and Nu-Wood... materials good enough in 1932 to help make work for many contractors and carpenters.

And now for 1933 both lines have been vastly improved and enlarged to make them more desirable to building owners.

There are drastic price reductions. In the case of Balsam-Wool home insulation, as much as 30% to 40%.
To Make Home Owning Desirable

The high cost of home building and of home owning are, aside from the depression, the two big causes of the recent stagnation of the building industry.

The first has been made up of four elements—(1) high cost of land, (2) high cost of finance, (3) high cost of labor, and (4) high cost of materials. The second is made up of two elements—(1) high cost of maintenance and (2) high cost of taxes.

Considerable progress has been made during the past three years to remedy the first cause, that is to get building costs down. Improved vacant land can now be had at a mere fraction of its former price; building materials are down 30 per cent; and labor rates have been reduced 20 per cent. Financing costs alone remain unchanged, but with some prospect of eventually getting down onto the same basis which the Home Loan Bank officials predict.

Taken all together, these elements of building cost have been reduced enough to make a real appeal to the prospective home builder or buyer.

As to the second element of cost—that of home owning—it is admitted that the building industry customarily gives little thought to it. In the very nature of their business, they give more study to the building of houses than they do to their economic and satisfactory use after they are built and occupied—yet unquestionably house satisfaction is fundamental to this industry; a sentiment for home owners' be strong and active in a community before a construction program will be started.

Houses so poorly built that repair and upkeep costs are excessive, and taxes on homes so high that it is cheaper to rent than to own, create a situation in many communities that is extremely unfavorable to home-building or even to home repairs and maintenance.

The crop of shoddily built houses which the speculative boom years produced is still with us, a "black eye" to the building industry, which must be wiped out now with work so carefully planned and so skillfully executed that the general buying public will note the difference and regain its confidence in builders and home building.

As to taxes, this publication has repeatedly called attention to the menace to home building interests of the huge governmental expenses, public expenditures, taxes and assessments which the politicians have incurred and levied against real estate.

Small wonder that home owning has lost favor or that home owners are disgusted and distraught over these ever
We are happy to report that during 1932 a start was made in curbing the costs of government and in bringing down real estate taxes. Powerful organizations are now enlisted in this fight. At the midwinter meeting of the National Association of Real Estate Boards, held in Washington the last week in January, a platform of specific proposals for tax action for the relief of real estate was adopted by the delegate body of the Association. The planks, six in number, give the following program of concrete proposals for immediate legislative action:

1. State control of local tax levies and bond issues, under proper safeguards.
2. Limitation of the property tax by state constitutional provision.
3. Spread of school costs to a wider tax base.
4. Expenditure of funds from state gas and vehicle taxes upon city streets as well as upon rural highways.
5. Restriction of use of special assessments for financing public improvements.
6. Consideration of the income or use value of property as one of the major factors in arriving at a fair assessment for tax purposes.

In most of the 44 states in which regular sessions of state legislatures are scheduled this year, it is already known that there will come up either from the governors, from state tax commissions or other special state bodies, or from industry groups, important tax adjustment measures. Many states are committed to find some means of relief to real estate, particularly homes and farms, from what is recognized as a present inequitable share of the tax burden. The proposals adopted by the National Association are designed to block out suggested fundamental lines of action which would, in fact, give substantial relief.

**Constitutional Limitation for Property Tax**

Proposal Two of this program offers perhaps the most immediate relief to property owners. In outlining this, the resolution states, "We propose that each state adopt a constitutional amendment specifically limiting the tax on property for all purposes, including debt service, to a fixed percentage of its true value. Ohio has had for two years a limitation of 1½ per cent. Michigan and West Virginia have recently adopted similar constitutional limitations. We believe that such enactments can be made effective by an aroused public opinion, and that they will serve to bring pressure for broadening the tax base."

Of great interest to urban and village property owners is the Fourth proposal of this program since it has to do with street improvement, that chronic source of special assessments. On this point the realtors' recommendation reads:

"We propose that funds obtained by state governments from gasoline taxes and motor vehicle taxes be used for the maintenance and construction of streets in municipalities as well as for the maintenance and construction of rural highways. There is no sound reason why the municipalities should not participate equitably with non-urban sections of the states in the highway funds derived from gasoline and motor vehicle taxes."

**Assessments Based on Use Value**

Proposal Six is also of special importance, since it attacks the basis of assessed valuations. The resolution on this reads, "We propose that in valuing property for tax purposes, the income or annual use value of a property should be one of the major factors in the valuation, and that the tax laws of the various states be amended accordingly. The summation method, that is the adding together of the land value and the depreciated reproduction cost of the improvements, now in common use by assessors, is often incorrect and usually produces distorted valuations. The truest measure of the ability of real estate to pay taxes is its use value, and the laws should recognize this fact."

These three planks and the other three that constitute the program for tax legislation proposed by the realtors seem fair, reasonable and workable; and this publication is glad to endorse them. Their adoption by the States would do much to put home owning back into the ranks of the desirable. It is certainly good public policy to encourage home ownership rather than to penalize it.

The building industry can help itself by getting into this fight in every state and town, and by striving not only for lower costs of home building but also for lower costs of home owning.

**BETTER TO ENCOURAGE PRIVATE ENTERPRISE**

A CURRENT news release from the Brookings Institute quotes Otto T. Mallery of the Unemployment Committee of the Philadelphia Chamber of Commerce as stating that most of the 2½ million workers normally employed in the construction industry would have been at work during the past year if the cities, counties and states had increased their public works by the same proportion as did the federal government.

Perhaps so.

But on the other hand, what if the additional taxation needed to put through such a public works program should still further dry up private capital and private work, "releasing" those workmen still employed on private construction—of which there is a record of over $1,000,000,000 in contracts for 1932—would employment among building craftsmen really have been increased?

There is little to be gained by putting men to work on tax-supported construction and laying off those on private construction. It is by stimulating private construction and private business generally that normal employment and business will be regained.
"Glorify the American Kitchen" might well be the slogan of builders this spring. Kitchen modernizing offers one of the most promising fields for immediate business. Today's housewife is seeking efficiency and beauty in her kitchen. She is spending more time there—doing more of her own work. She attaches so much importance to beauty and a work-saving plan that the modernized kitchen has become the most important room in the house, both to her and to the owner and builder with an eye for selling value.

At the top above is shown a gleaming modern installation having monel metal sinks and work areas which add to its efficiency and good looks. At the left below rubber tile provides a resilient, long wearing floor. Built in cabinets feature the cheerful kitchen at the right.
Consider the Housewife First!

The "woman's point of view" in kitchen improvement is given by Miss Abby L. Marlatt, home economics authority.

"The WORKER is worthy of (her) hire," but the housewife is neither listed in the census as a worker or as worthy of her hire. Little newspaper space is given to the overworked, underpaid millions of housewives who have signed on to work as general utility head, purchasing agent, bookkeeper, banker, production manager, day laborer, teacher, and often buffer in life's social adjustments.

All that we are we owe to some woman's months of joy and often fear and then years of careful guidance. I cherish a letter written 19 years ago by Mayor Gaynor of New York City. He had received a letter asking "shall women be paid for their labor in the home and what shall be the rate of compensation—shall it be a weekly or an hourly wage and how much?"

His reply was "I think they ought to be paid by the minute at the rate of $1,000,000 a minute." Woman's work in the home is above price.

In the daily kitchen round of planning, buying, preparing, serving and clearing away there are great possibilities of lessening the fatigue, the energy and time consumption through the better arrangement of work spaces and tool selection. The kitchen in which the worker spends often one half of her time and in some houses even three quarters of her time should be made as efficient as the best engineering layout can devise. The walking distances should be reduced to the least number of steps through the placing of equipment where it is needed. This should be planned after careful study of the house work schedule.

No one plan, no one work schedule, no one allotment of hours to tasks will meet every situation. Perhaps that is why it seems so difficult to standardize the dwelling, but standardize a part of it at least we must if the homemaker who does all her own work is to be helped in reducing her working hours to a reasonable schedule.

One comparative study on meal service indicates that more time is spent in putting away food after the meal than is spent in dishwashing. This is especially true when a wheel tray is not used and when the refrigerator is far from dining room, work table and sink.

A critical study of the kitchen should answer the following questions:

"Can the front door be reached from the kitchen without going through the other rooms of the house?"

"Is the kitchen conveniently located in relation to dining area, rest center, play space for children, laundry, and wash room?"

"Is the kitchen convenient? Is the large equipment arranged to save steps in preparing, cooking, serving and clearing up after meals? Are there storage facilities for supplies and small equipment, located at the working centers where they are used? Are the working surfaces and storage facilities at proper heights to minimize stooping and stretching? Is there sufficient working surface at each work center? Is there a convenient place for the deliveries of groceries and supplies? Is there provision for outside icing if ice is used? Is there a permanent drainage connection to carry away waste from an ice refrigerator? Is there a convenient and sanitary arrangement for disposal of garbage?"

"Can all doors be opened irrespective of the position of other doors? Do the doors swing in the right direction to give the most usable space? Are the doors located so that when opened they do not obstruct the light from windows? Are they placed so as to provide sufficient wall space for furnishings? Are the door knobs set in far enough to prevent bruising knuckles on door frame when closing door?"

"Do the windows provide adequate air, light and sunshine? Are the windows properly placed so that there is sufficient wall space for the placing of furnishings? Are the frames properly constructed so that water can not leak in and spoil interior finishes? Are the windows easily manipulated? Are they properly screened?"

"Are walls, woodwork and floors of a finish easily cleaned? Is the woodwork plain in design—free from (Continued on page 50)
American Builder, March 1933.

Kitchen Modernizing Furthered
By New Materials and Equipment

Kitchen cabinets such as those make the "home workshop" efficient. This U-shaped arrangement is excellent. The straight line working plan combining sink drainboard and work table, all close to the cabinets, is recommended. Cabinet units may be had to fit practically any kitchen.

Above is shown the new fuseless circuit breaker located conveniently in the kitchen. A flip of the finger reestablishes the circuit.

At left—a corner detail with gas stove placed conveniently to sink drain board. The ventilating fan, shown above, provides needed circulation.

At far left—a spic-and-span kitchenette with almost as many facilities as a full sized kitchen. The plan is excellent; sink is of monel metal.
Planning the Modern Kitchen

**Rapid progress is being made in kitchen planning and equipment. These new data are given to help sell better kitchens—both new and old, and to stimulate interest in modernizing.**

**Lack of planning**, lack of practical knowledge of kitchen procedure, and lack of efficient equipment and modern materials are the causes of grave defects in the majority of American kitchens. Startling facts have been revealed by recent surveys. For example, a survey of rural kitchens in 18 states showed that only 50 per cent had sinks. The President's Conference on Home Building and Home Ownership found that the majority of kitchens are inadequately equipped or poorly arranged.

Even in fairly modern type homes, built within the last five years, obvious defects of placing of equipment, doors, cabinets and lighting are widespread. A cross-section of kitchens in any town shows dark, unsanitary kitchens that are causing the housewives mental and physical hardship.

All of this exists at a time when there is an abundance of new materials and equipment. Building men are discovering that kitchen modernizing constitutes one of the biggest single fields for business this year. Selling kitchen modernizing calls for a knowledge of the most recent trends in design and equipment. The following data are presented, therefore, to be used not only in actual building operation but in selling kitchen improvements, to show the home owner what remarkable improvements can now be made at very reasonable cost.

The most important recent improvement in kitchen designing has been the "continuous counter" arrangement which provides an almost continuous work area between all the important pieces of equipment. The kitchen is laid out so that there is a natural movement of food from the point where it is taken from the refrigerator to where it is delivered to the dining room table, and the reverse process where the dishes are removed from the table and returned to their cabinets and the remaining food to the refrigerator.

In the plans below, a number of the best and most scientifically designed new kitchen arrangements are given. An ideal size and arrangement is that of Plan 3 which illustrates the basic principles of kitchen design. Briefly, it may be described as follows:

The working area of the kitchen should be in the shape of a U or hollow square. The logical location for the sink is at the center of the U with the cabinet at the left of the cabinet and the stove at the right of the sink. The refrigerator should always be placed conveniently close to the food cabinet and preferably at the left of the cabinet.

Let's see how this works out in plan 3. Food is re-
The stove, the large kitchens of the past was that they were not scientifically arranged. The stove, or counter space next to the stove is strategically placed for kitchen use. A work table or counter space next to the stove is considered very necessary by the housewife.

In planning a new kitchen or modernizing an old, check your prospect's kitchen against these items to find out how up to date it is. Does it have . . . .

- Straight line arrangement
- Continuous work area
- Refrigerator next to cabinet
- Compact, U-shaped work area
- Dull at left of sink
- Modern stove
- Sink at right of sink
- Sink in center of plan
- Four double outlets, electric
- Cross ventilation
- Sunlight
- Not more than 3 doors
- Pass-door to dining room for dishes
- Package receiver
- Ventilating fan
- Washable walls
- Resistant floor
- Modern kitchen cabinet
- Plenty of shelves
- Storage under work tables
- Doors swung right
- Kitchen size fits needs and habits of family
- Sink right height for housewife—32 to 37 in
- Plenty of shelves
- Storage under work tables
- Doors swung right
- Kitchen size fits needs and habits of family
- Sink right height for housewife—32 to 37 in
- Space for table and chairs
- Without interfering with work area
- Cheerful color scheme
- Improved sink
- Toe space
- Cabinet doors open toward direction of greatest use
- Circuit breaker
- Electric dishwasher (portable or built in)
- Acoustic walls
- Cheerful breakfast nook
- Built-in table
- Incinerator
- Telephone and stand
- Milk receiver
- Water filter
- New type windows
- Rubber tile floors
- Garbage receiver
- Safety door lock
- Mixing faucets
- Work table right height
- Automatic time and temperature control on range

In this "ideal arrangement", a straight line movement is possible with an almost continuous arrangement of work table, shelves and cabinets extending in a U shape around the room, with the three important pieces of equipment—refrigerator, sink and range strategically placed for kitchen use. A work table or counter space next to the stove is considered very necessary by the housewife.

Sized of the kitchen will depend on the size of the home, the family and its requirements. One reason why there was a reaction against the large kitchens of the past was that they were not scientifically arranged. The stove,
sink and refrigerator were widely scattered, probably on three opposite sides of a big room, and it required a great deal of extra walking to get back and forth between them.

Now it has been discovered that a large kitchen may be just as efficient as a small one. This is done by grouping the working area and important pieces of equipment at one end, or one part of the kitchen, leaving the rest for the placing of a dining room or breakfast table, or as a place for the children to play while their mother is working in the kitchen. In many families such space is desired for chairs to accommodate other members of the family who naturally gather in the kitchen, where the housewife necessarily must spend so much of her time.

In other words, the actual building of a kitchen is a matter of the individual tastes and requirements of the family. The basic principles of design are universal, and that is why we are able to show scientifically worked out plans such as are given on these pages. But when it comes to applying these plans to individual families, their habits and tastes should be consulted. Study of these plans will suggest improvements. Technical planning help for individual kitchens may be obtained from the "kitchen engineers" of a number of manufacturers. The American Builder will be glad to put readers in touch with these men.
What Should the Worker Demand in His House?

By W. F. SHAW
Manager, American Forest Products Industries, Inc.

What Public Is Entitled To

The wage earner should not be content with a house that is not modern, nor should he be deluded into investing in any type of flimsy construction. Families have been forced to double up in living quarters. In this sense, every dwelling has become a potential tenement. When the depression lifts, there will have been created a great "saved up" reservoir of residential building for over 250,000 families. The movement for slum clearance is slowly getting under way. Residential building is likely to hold the center of the stage for many years.

What is the wage earner entitled to receive if he buys a home? The man who is steadily employed even though he earns but $2000 a year, can afford to pay, in monthly installments, $35 per month, and $80 per year for repairs and upkeep. Reputable home building and finance companies with a 15-year plan will help him buy about $4000 worth of house to be built in accordance with his wishes.

What facilities, what measure of attractiveness and comfort, what sort of construction, should be included in this $4000 house built for the wage earner who is able to make such an investment?

What Public Is Entitled To

He deserves a structure that is substantial, an architectural style that is not a novelty, an investment that will preserve a large part of its value 20 or 30 years after he buys it. While it is to the interest of business in this country that electric refrigeration, automatic heating, air conditioning, and many other similar conveniences should come within the reach of the large mass of consumers, at present these cannot be included in the purchase price of the well-constructed $4000 house. Later, if the family budget permits, these may be installed at no greater cost. Such essentials of modern housing as plumbing, heating, and electric wiring should be built in when the house rises from its foundation. Other necessary items include an attractive design that will not go out of style, with convenient arrangement of interior space; sub-flooring, sub-siding; at least a good quality of building paper or insulation between sheathing and finish; rafters, studs, and joists on 16" centers; substantial outside wood trim; high quality wood shingle roof; three coats of the best grade lead and oil paint; a dry basement; heating plant, whether it be steam, warm air, or hot water, of sufficient size to insure maintaining an inside temperature of 70°F in any weather; a modern bath-room, porcelain kitchen sink with drain board and laundry facilities; a domestic hot water heater to operate at a cost of not over $3.50 per month; sufficient windows to supply light and ventilation, equipped with full length screens; finished wood floors; properly constructed chimney; plenty of electric outlets, correctly installed; built-in wood cabinets in the kitchen, and ample closet spaces throughout the house.

These minimum standards are to be had in a $4000 house today.

There has been an avalanche of publicity unloosed to support unlimited research effort to popularize a distinctly new trend in small house architecture. I could easily suggest half a dozen articles for a long winter night's reading which would leave you amazed at the ready facility with which plans are made to sweep aside the traditional and install a "moderne" style, which proposes to "create in the spirit of today." Competing groups—glass, steel, porcelain, concrete, rubber, cork, aluminum, and interesting combinations thereof—vie in deadly earnest to capitalize interesting uses of these materials. For the American Forest Products Industries to ignore this trend would be foolish. To follow it fatuously, forsaking our traditional heritages, would be even more foolish. If you have taken the prescribed reading course mentioned before, certain phrases and sentences readily come to mind:

"Houses should be built at low cost to be bought and sold like automobiles . . . ."
"... a lot of glass filing cases placed end to end"
"It is low and flat, and, with its colored exterior, looks like nothing so much as an overgrown sardine can set down in the landscape."
"To keep on building small houses just as they have been built for the last quarter of a century is to ignore the truth that Utility is Beauty," "... every inch of space, from foundation to, and including the roof itself, is planned for family comfort." "Mass production of small houses is the logical answer to economic necessities of today." "This house, ordered today, will be erected tomorrow wherever you say, and delivered to you complete in all essential details, the following day."

Construction Methods Due for Change

Undoubtedly we face changing conditions, beyond control of any one group, which will greatly influence trends in the field of small housing. It seems to us that

(Continued on page 54)
Sixty-five unemployed architectural draftsmen submitted designs for re-styling the old house selected by the Cleveland Building Construction Institute for demonstrating the latest ideas in renovizing.

Here are two of the prize winners selected by the judges.

This design by Austin Damon trims off the "gingerbread" without radical structural changes. The grade is raised by means of an earth terrace, while the porch is made more demure.

A. E. Shrimpton's re-styling scheme was liked because it did away with the porch entirely, also with the roof dormer.
Launches Renovize Drive

Bankers, architects, dealers and builders unite to arouse the Cleveland market to present bargains in home improvements.

SPURRED on by recollections of the city-wide "renovizing" campaign of 1932, architects, building material and contracting interests of Cleveland have embarked on another endeavor to rouse the attention of owners of homes and commercial buildings to the need for immediate repairs and improvements to their properties. The movement, being conducted under the auspices of the Building Construction Institute, is proceeding swiftly along a well-mapped route laid down by the executive committee of the organization, whose first objective is the complete remodeling of an older house for demonstration purposes.

Architecture is a concrete example of the ideas advocated by the Institute to be the first practical step in interesting the home-owning public, co-operation of banking institutions was sought with the result that the modernizing of a somewhat deteriorated house will be done by the Cleveland Trust Company under a rather unique plan. The property, owned by the bank through a recently foreclosed mortgage, is located in a desirable neighborhood where the average valuation of homes is around ten thousand dollars. The house is perhaps twenty years old, and was chosen because of its special suitability for this purpose.

A committee of architects, appointed to inspect the house, reported that the following changes should be made:

- **Exterior remodeled, probably including removal of present porch; alteration of dormers, overhang of roof, etc.;**
- **Add new chimney for kitchen range, and repair present chimney;**
- **Modernize kitchen and bath:** Add first floor lavatory and toilet; Refinish and decorate walls, ceilings and floors; Paint the exterior; Possibly re-arrange rooms on both first and second floors.

With these recommendations as the basic specifications for the renovizing of the house, a competition was conducted under the sponsorship of the local chapter of the American Institute of Architects, for a suitable design for the work, the cost of which was limited to fifteen hundred dollars.

Reproduced herewith are a photograph of the house as it was before the changes were made, and the two designs which won first and second prizes for suggested architectural treatment of the exterior of the old structure. These designs, which are the work of Austin Da-man and A. E. Shrimpton, are to be combined by the two men into one which will contain the best features of each.

The Building Construction Institute, under whose auspices this campaign is being conducted, is composed of manufacturers of building products doing a nation-wide business; local organizations in the building industry such as the Builders Exchange; the Building Arts Exhibit, Inc.; retail material dealers, contractors, architects, banks and insurance companies. The president of the Institute is G. R. Lewis, Cleveland, vice-president of the Johns-Manville Corporation. The purpose for which the Institute was organized is to promote a program of sales. Through a series of forums, held during the fall and winter by representatives of these units within the industry, it was determined that renovizing work offered the best possibilities for sales during the coming months, therefore the renovizing campaign was decided upon.

The interest of banking and insurance companies in this movement is natural. They realize that older properties must be made to offer the same attractiveness, comfort and value that can be obtained in new homes. In the present Cleveland campaign announcement has already been made of a more favorable attitude on the part of financial institutions toward the home owner who is occupying his own home. Certain banks have made the definite statement that there will be no foreclosures in such cases. Others have expressed their willingness to go a long way toward meeting the problems of these owners; and all have declared their intention of giving every possible cooperation to the home owners whose properties are in need of repairs. Whether direct loans will be made for this purpose has not been determined, but it is the hope of all concerned that this will be made possible in further aid of the campaign.

The Institute now has under way plans for the organization of a central bureau which will act as a clearing house for the various types of service: inquiries for materials, architectural service and workmen; requests for estimates, applications for loans, etc. A considerable amount of publicity, intended to create interest and inform people generally what can be done, is being given the project, and frequent meetings of the members of the Institute are being held to consider suggestions, formulate plans and work out ideas. It is the present intention to continue the further renovizing of houses in various parts of the city, which will be used as demonstration houses and kept open for public inspection.
ANNOUNCEMENT of winners of the 1932 Small House Architectural Competition conducted annually by Better Homes in America is an event of importance to all men interested in home building and design.

Because this is the most outstanding architectural competition in the small home field, and gives an important indication of the trend in architectural design, AMERICAN BUILDER is pleased to publish on this and the following pages six of the prize winning designs. The jury which made the selection was composed of Dwight James Baum, chairman, Edward L. Palmer, H. W. Peasles, Philip N. Stern and Waddy B. Wood.

The purpose of the contest, as announced by Better Homes in America, is to discover and call attention to the best small houses constructed during the past three years, and thus to stimulate interest in overcoming the faulty design and construction of the really small house. Cubage of the houses above the level of the first floor is limited to 26,000 cubic feet for two-story houses, and 24,000 cubic feet for one-story houses.

Awards were made for three types: a, the two-story house; b, the story-and-a-half house; c, one-story house. The jury awarded a gold medal in the one-and-a-half story class to Royal Barry Wills, architect, of 3 Joy Street, Boston, for the house of Maurice A. Dunlavy at Brookline, Mass. This was the only gold medal award made this year.

On the following pages are given the names of five architects who were awarded honorable mention in the various classes, together with illustrations and floor plans of their designs. The designs are of an unusually excellent quality and show what splendid work the building industry is doing in the small home field.

GOOD PLAN—the jury which awarded the gold medal for this house remarked: "The plan is compact and well arranged. There is a fine relation of rooms, economical and efficient circulation. The library has real privacy; service portions are well arranged. The second floor hall occupies minimum space, and yet this small house has ample sized rooms." In regard to the entrance detail at left the jury said: "—there is a fine handling of the entrance terrace."
Gold Medal Award
Story-and-a-Half Class

ROYAL BARRY WILLS, Architect
Boston, Mass.

Located at Brookline, Mass., this house was awarded the gold medal in the one-and-a-half story class in the Better Homes in America 1932 Small House Competition. The jury said that it felt "the house shows great charm, expresses the spirit of the locality, has fine scale and composition, and shows good use of materials."

This house, the jury said, "has an air of domesticity and shows great care in the manner in which all detail has been brought together. There is a good, frank use of the chimney." Cost Key of house is 2.089-154-1161-49-23-20.

ON THE FOLLOWING PAGES are shown other prize winning designs in the Better Homes in America contest. The committee calls attention to the fact that all designs are copyrighted and each is the private property of the architect who designed the structure.
Honorable Mention
Two-Story Class
Better Homes in America Small House Architectural Competition for 1932.

ROLLIN C. CHAPIN,
Architect
Minneapolis, Minn.

The jury said, "This is a well arranged, compact plan, especially on second floor. It is very livable in character, design and materials used. However there is an unfortunate relation between the bedroom dormers and the stair gable. Placing of study wing is good."

Cost Key of House is 1,768-148-980-42-22-17.
GOOD PROPORTIONS were admired by the jury in this small Colonial located at Darien, Conn. They commented on its good mass, simple materials, straightforward plan which makes the house easy to keep clean. The entrance above is pleasant and inexpensive. A large living room and ample bedrooms are desirable features. Cost Key is 1.322-112-768-33-16-12.
Honorable Mention
Two-Story Class

WILLIAM W. SUnderland, Architect
Danbury, Conn.

Cost Key is 2.153-141-1118-47-29-20.

The charming Colonial entrance is an important feature. It is simple and well proportioned. The shuttered windows have great appeal.
Honorable Mention in the Better Homes in America Competition was given this house by William A. Sunderland at Newton, Conn. The jury said, "This shows a fine handling of traditional New England domestic architecture as to mass, fenestration and detail except for location of chimneys. We regret the placing of the interior bathroom."

A simple Colonial fireplace is an important feature of the living room. Details and proportions are well handled and very effective.
Honorable Mention
One-Story Class
RALPH C. FLEWELLING, Architect
Beverly Hills, Calif.

"A successful handling of a special problem," the Better Homes In America jury remarked about this house by the sea near Santa Barbara, Calif. It has a good handling of a long narrow site without the feeling of being crowded. House is appropriate for seashore and shows use of simplest materials. Plan on page opposite shows a fine use of open porches.
First Honorable Mention, One-Story Class

LELAND F. FULLER, Architect, Santa Monica, Calif.

Simplicity in mass and composition is achieved in this house, says the architectural jury. The architect has expressed in his own home individuality and character, with resulting great charm. Cost Key for the main house alone is 1,360-158, 1215-51-14-19.

This plan for the house designed by architect Flewelling on the opposite page, has a rambling plan suited for the location by the sea. Open porches and enclosed areas that lend themselves to seashore life are featured. Cost Key is 1,900-252-1622-69-23-24.
THE HOUSE OF THE MONTH

Cottage of Stucco and Stone in English Design
Built in Westchester County, New York

WILLIAM CAIN, Architect

The Homeland Company, Builders

WHEREVER the building site is slightly rolling, it works out in a very practical way to have the living room and main entrance to the house on a level a half flight above the garage entrance level. Then above the garage, on a mezzanine floor with respect to the living room, dining room, kitchen floor level, the principal bedrooms and bath are placed. A third bedroom and bath can then be put another half flight up, positioned above the dining room and kitchen. This makes for easy housekeeping and is a clever compromise between the bungalow arrangement and the ordinary two-story house, for in this "half-step" plan, each stairway is extremely short, the bedroom level, for instance, above the garage being only six steps up from the living room. An arrangement of this type lends itself well to the English style of architecture. Many quaint and homelike little places have been built and have found a very ready market arranged on this plan. The accompanying design illustrates a good typical example of this idea and has been classified as one of the most interesting recent designs.
Working drawings of English cottage design with mezzanine floor arrangement, designed by William Cain, architect, and constructed by the Homeland Company.
Trellises for

ABOVE—A charming arbor seat with trellis back of simple design. Details are well handled. Size, 5 ft. wide by 6 ft. high.

BELOW—The arched gateway and nicely proportioned latticing make an attractive garden feature.

AT RIGHT—Slender latticework with circle designs. The gate is made unusually attractive by the simple vertical strips and the graceful curved top. The concrete pool in foreground is well handled.
Spring Building

Close latticework and sturdy construction feature this pleasant arbor seat in the garden of Conrad Nagle, movie star.

AT LEFT BELOW—A popular type of rose arbor with seats. Rigid bracing is required for strength, and proper priming of materials to prevent decay.

BELOW—Lattice pergola in a Los Angeles home, protecting driveway to garage. This is a type of home improvement offering good spring market.
HE building industry cannot afford to wait for new work to come to it. Modernizing city rental properties is work that can be done now, as the accompanying pictures show, because it more than pays its own way.

The increased rental value of remodeled buildings is becoming more and more apparent as the period of industrial and social readjustment advances.

And rental value is a yardstick which is definite and valuable. The sale value of a piece of property is affected by so many conditions that it is largely a matter of speculation; but a rent-roll is something which can actually be added up each month in dollars and cents and put in the bank.

Modernizing of city flats such as I am describing is just getting started. It will be one of the biggest sources of business for the next few years.

Especially does the remodeled building assume a position of superiority, both commercially and socially, when it has been originally one of a group of houses all built to the same design. Almost any city has block after block of such homes, monotonous and forbidding, even though some of them are brownstones of a former period of aristocracy.

If a building can be remodeled to look different from the others—to give it individuality, to make it stand out from the mass—it is to be expected that it will attract a better class of tenantry.

Brooklyn, New York, is perhaps an outstanding example of the persisting monotony of mass production of homes. But if it has sinned in the past, it is now endeavoring to atone for its faults and secure a more pleasing appearance for some of its older residence sections.

Scores of old city flats are being transformed. It is a field every builder can cultivate.

Re-styling and brightening the exterior is an important step, for it attracts passers-by. This is usually done by removing old fashioned, unnecessary bric-a-brac, replacing the entrance, refacing, painting, modernizing.

Inside walls and floors should be replaced, new wall and ceiling materials applied. A host of new building products that simplify modernizing are now available.

The house at 489 Monroe Street, Brooklyn, (Example 1) was recently largely remodeled, bringing its income up from $50 per month to $120. It now comprises an 8-room apartment on first floor and basement, 5-room apartment on the second floor, and two 2-room apartments on top.

A good example of achieving a modern appearance by the most simple and direct means is the house of Mrs. C. Garlish, 552 Quincy Street, (Example 2). Up to a year ago this house was just like all its neighbors, its architecture dating back to the period immediately following the Civil War, and its siding and window caps showing serious decay. Replacements and repairs, together with the biennial bill for painting, were a heavy load.

The owner observed that negroes were moving into the vicinity in increasing numbers, and she wanted her house to emphasize by its appearance that it had not fallen into the hands of this class of tenantry. The modernizing work has not only succeeded in this, but by reason of giving the house some distinction has brought in and held a better class of white tenants.

In the case of this house, the addition of a brick veneer front and rear is practically the only change made. The interior which was in good repair and well cared for was left as it was.

In remodeling the front, the window frames, which were in good condition, were left in place, but the sills and caps were removed, also the siding and the old cornice. The brick used is a medium burned red textured brick, run up to the full height of the building and with a pediment added, giving it the appearance of somewhat greater height and dignity than the adjoining house, of which it was originally a counterpart.

The front steps, iron railing and forecourt have been

1. Thousands of flats such as shown on the next page need remodeling. Renters pass them by because they are out of date.

2. Remodeling can be done in hard times because it puts these buildings on a paying basis.

3. The business waits for the right kind of building salesmen.
EXAMPLE 1—An entirely new front in modern style was added to the house at right. Rental income jumped from $50 to $120 per month as a result.

EXAMPLE 2—New brick veneer front on middle house put it in better rental class, boosted value.

EXAMPLE 3—Neighbors vacant, but the new stucco front brings in renters, even in hard times.

EXAMPLE 4—$5,000 was spent on the building at right, making it a valuable property which stands out especially well. Many other buildings need similar attention.

The house at 164 Monroe Street (Example 4) is owned by Robert Tarsy, a painter and decorator, who did much of this remodeling work with his own crew and secured favorable terms on the other parts of the work from his friends in the trades. The improvement adds two rooms and an upper balcony to the usable space, and includes a two-car brick garage. The cost of the entire improvement was about $5,000.

These are just a few of the many examples of modernizing of city flats and apartment buildings that have already been performed and which indicate the possibilities in this field. A host of new products and building materials are on the market that make this type of work less expensive and more simple to perform than ever before. It is work that can be secured in practically only one way, and that is to make personal calls. By offering to save the owner money in repairs and upkeep, and increase his rental, sales can be made.
FOUR important points are stressed by the author in this concluding article. He urges (1) "Seal" finishes (2) Demonstration of quality with samples (3) Licensed contractors (4) Bonded guarantees of good workmanship.

A cheap varnish usually has a large percentage of rosin in it, which is brittle. The remainder of the composition is chiefly volatile thinner, which is required to thin up the rather heavy bulk of rosin. This thinner is largely of the natural or oleum spirit class, which will evaporate, leaving practically nothing of its composition behind of value.

The better spar or waterproof varnishes do not contain rosin, but instead have a different kind of gum in a much smaller percentage. Of the two best known gums, Congo and Kauri, the Kauri is the lightest and is usually considered the best. The high grade varnish contains only from 10 to 12 per cent of gum, with only a small amount of filler; the rest being largely China wood oil, which is made from the Tung nut. This vehicle sinks into the wood, distributing the gum better and leaving a denser protection for the wood surface.

At the end of last month's article I was discussing types of varnishes, and described the value of a good "spar" or waterproof varnish of elastic consistency.

There is need for better workmanship and better or more suitable materials in the floor maintenance industry along with a reduction in expense.

It would be convenient to have a method in which the owner would be assured of good workmanship, where the thoroughness of all steps in the work would be apparent in the job at the time it is finished, and one that the owner could inspect and be satisfied with before the contractor leaves the work. With a poor sanding job and cheap varnish and shellac, bad work may not show up for several months.

Next it would be desirable to have a finish that would compare favorably with a filler job using three coats of high priced waterproof varnish and wax finish, but that could not be so easily damaged by rough or careless usage, that could also be patched in worn spots.
without leaving tell-tale marks, and that could be renewed quickly and economically.

Without trying to pull rabbits out of the bag, it may be stated that such methods and materials may be procured and that in the main they are already perfected and have been given the trial of time. Results have been satisfactory to those that have tried them, but knowledge of them is not widespread, especially in areas where price cutting and shoddy workmanship are as prevalent as in Chicago.

There are on the market several finishes that will give these results. The exact composition of these materials is not as well known as that of varnish, since they are newer and the trade secrets are better protected. In general, the constituents are known to be largely China wood oil combined with various compounds of waxes.

It was seen in the case of varnishes that one of the big differences between the cheap grades and the high quality waterproof types was the use of China wood oil instead of volatile thinner. Partly to this difference may be attributed the waterproof quality, while the smaller quantity of better quality gum gives a thinner, more resilient surface shell which minimizes the danger of chipping and rapid wear.

With the "seal" finishes, this undesirable surface shell which may be so easily damaged is eliminated. The China wood oil penetrates deeply into the wood carrying some of the protective waxes with it, and effectively seals the surface. In general, filler is not required, but with an extremely large pored wood, the spirit filler is applied after the first coat of "seal" is applied before applying the waterproof treatment where it is needed most—in the wood surface.

"Seal" finishes give a hard, durable wearing surface and the application of a "luster finish" will give a polish equal to that of wax with the added advantage that it is not nearly so slippery. The "seal" finishes are relatively inert chemically as alcohol varnish remover and hot water will not harm them. A carelessly dropped match will not blister them as it does varnish. The outstanding advantage is that the finish is in the wood instead of on the surface. For this reason, it is impossible for it to chip or wear off. It is also because of this that the polished floor is not as slippery as a waxed varnish. Further, the finish being waterproof and sealing the surface securely, dirt has no place to lodge. The result is that not much cleaning other than sweeping or wiping up with a dry dust mop is necessary.

From the owner's standpoint, the servicing of this type of finish is simple. Worn spots can be patched by brushing up the area with steel wool and applying another coat of "seal" which will blend with the old finish. If the floor has become dirty with scuffed-in grime, it only requires a scrubbing with steel wool and the application of another coat of the "seal" followed by the polish if desired. For small areas this maintenance work can be done by hand. For the larger areas, a floor maintenance machine will be much more efficient as well as giving a more uniform job.

Guarantee of Good Workmanship

Since this type of finish does not extend above the surface of the wood, it is impossible to cover up sloppy or high floor surfacing marks by filling them up with a thick covering coat as in the case of varnish. Furthermore, for a good polished finish, it is necessary to carry the surfacing operations farther than in the case of a varnish job. Better work is called for all the way.

In changing the finish of a varnished floor to one of these seal finishes, a good resurfacing job is required, as the first step. This sanding job need not be repeated then until the floor becomes uneven from wearing or some unusually rough use such that the dirt becomes deeply imbedded in the wood itself.

For residential work, it is advisable to carry the floor sanding down to No. 0 or No. 00 paper which is itself a check on the intermediate steps of the surfacing job as the fine finish will show up scratches like a table top would.

In applying the seal coats, the surplus material should be wiped off before it has become dry and after drying the floor, should be buffed with steel wool to cut the finish right down to the surface of the wood, for best wearing results. This condition can be determined easily by observation, since there is thus no place to hide poor work except on top of the floor where it remains to be seen.

Another help towards quality work is the fact that one of the distributors of these new finishes, who is also a manufacturer of floor surfacing and maintenance equipment, is licensing only reputable floor surfacing contractors who are known to do only high quality work for this new type of floor finishing and maintenance work. This is an important step towards quality.

Comparison of Costs

Since general cost figures are very difficult to apply to a wide field, the comparisons given here will be from the Chicago field, based on current prices (January 15, 1933).

Few decorators keep unit costs on the different items of their work. In other words, few have figures as to just what proportion of the cost of a floor job applies to removing the old varnish and preparing the floor for the new coats, and the varnishing itself. They seem to shy at reducing these units to terms of so much per square foot. From general observations, however, it seems safe to set up the cost of a removing job at from 2½ to 3½ cents per square foot. Three cents would be a reasonable figure. The decorator adds his profit to that figure. Floor surfacing prices in Chicago at present can meet this competition. To the decorator who owns his own sanding machine and pays equal wages to machine operators and painters, the cost of surfacing will be no greater than "removing." The average price to the customer is now somewhere between 3 and 4 cents per square foot. In the spring when there is a large demand for this work, the price will be somewhat higher, some asking and getting 5 cents. In general, however, it may be concluded that a good floor sanding job will cost very little more than a thorough removing job.

For one coat of shellac and one coat of cheap varnish, the cost will probably be somewhere near 1¼ cents per square foot, and for a coat of filler and two coats of floor and trim varnish, the customer will pay around $1.50 to $2.50 per gallon, while the waterproof or "spar" varnish, the cost of which varies from $3.50 to $6.50 per gallon.

In comparison, the cost of the good "seal" finishes is around $4.00 per gallon with discounts to licensed floor contractors.

There is considerable more work to applying the (Continued on page 52)
PRACTICAL JOB POINTERS

A readers' exchange of tested ideas and methods, taken from their own building experience. Two dollars will be paid for each contribution published.

Just a Saw Horse

I AM enclosing a sketch of a handy saw horse that is easy to make and easy to use. The details for its construction are shown. The principle involved in this saw horse is the freedom one has in sawing straight down or in a vertical position, such as sawing wallboard, plywood, etc., as the legs do not interfere. —AUGUST WESSLIN, Barron, Wis.

Legs of this type of saw horse are conveniently out of way

For More Efficient Work

THE AMERICAN BUILDER has helped me with many valuable suggestions throughout the many years I have been reading it. Enclosed is a little pencil sketch of a what-not that has helped us make good workmen more efficient. It will be found handy for many classes of work. It is easily made from material found on any job. (Usually scraps or broken pieces that are classed as kindling.) It is a double step ladder framed from 1x4 for side pieces and 1x6 treads, 16½ inches long; 9-inch rise and 6-inch run for side pieces.

The frame work under the top step when covered on the under side makes a handy place for screws, nails, etc. The top step is made of three pieces of 1x6x19 inches. The center piece is notched at each end, a slot large enough to enter the fingers in the center, and firmly nailed in place. The two outside pieces are hinged to the center piece, forming a cover to the till. The first tread is made of three pieces of 1x6x33 inches, extending between the two ladders and carried on 1x3 risers, thus forming a floor for tools. (Plane, saw, brace, hammer.)

Four loops and two patches of leather nailed to side pieces form carriers for punch and screw driver, 5/8-inch and 3/8-inch bits, and two chisels. The notches in the first and last treads are used to hold sash and doors while fitting and mortising.—ASA E. SMITH, Winterset, Ia.

For Driving Nails in Hardwood

THE end of the hammer handle is bored and filled with paraffin. When nails bend and refuse to enter hardwoods, they are pushed into the paraffin, which lubricates them, making them go into the wood without difficulty. This method has been used by local carpenters and builders for many years.—EMERSON EASTERLING, Ashland, Ore.

Hole filled with paraffin

Uses Square to Lay Out Arch

HERE is my way of drawing or laying out an arch with a steel square and a simple method of finding the center point. BC is the center and A the height of the arch. Just draw a line from A to B. Then find the center (D) on AB and use your steel square to draw lines at right angles until they meet, which is the center point. If this idea is published, renew my subscription to the AMERICAN BUILDER AND BUILDING AGE for another year, and I will pay 50 cents extra.—C. A. OSTIGNY, Granby, Que.
Grounds for Plaster Guide

YOU will notice in my sketch there are two grounds 34 inches by 1½ inches (A, B) nailed to the studding before plastering. This gives the plasterer a guide. Where a white or skim coat is used, the plasterer as a rule does not get very close to the floor because he is afraid of getting his trowel dirty. The result is that there will be no plaster within an inch or two, and this causes the base board to turn in at the bottom, out of plumb. It will also leave a crack between the base board and plaster on top of the board.—EDWIN W. HARRIS, Contractor and Builder, Sunbury, Pa.

To Start Small Screws

HERE is one for your "Practical Job Pointers" Department. This is how I hold small screws: just stick them through a heavy piece of paper and you always have them when you want them. When you are ready to use the screw, hold the paper in position so that the screw is where you want it, and give it a tap with hammer. When it is well started, just tear the paper off. Carpenters around here all like your magazine, but work has been slack.—HOWARD J. BRADLEY, Bridgeport, Conn.

Mitre Cuts Without Box

I AM SHOWING a sketch below that tells how I make mitre cuts without a mitre box. These cuts will be pretty close to correct even without the box. Set your hand saw on the material to be cut, as nearly plumb as possible. Now watch reflection of piece of wood in the saw blade. Pivot the saw blade right or left until the reflection of the edge of the board makes a right angle with the real edge. Then mark along back of saw and you have your mitre cut. A little practice will show you how and skill in judging cut will grow with experience.—C. E. LINDSTROM, Homé Service Co., Minneapolis, Minn.
NEW PRODUCTS

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

New Tempered Sink Top Material

FOR years maple sink tops and drain boards have been used in kitchens in which the more elaborate equipment, such as metal or cast porcelain units, was too costly. Now a new type of tempered composition material has been perfected by a well known manufacturer of kitchen cabinets and equipment, which will not stain, and is impervious to water.

The development of the modern kitchen has made necessary a kitchen sink and drain board unit that is easily installed, can be easily fitted at one or both ends to side walls or other units and that is flexible as to dimensions and makeup.

The new tempered top material is as flexible as maple but will not warp, crack, craze or deteriorate. It is tough enough to avoid damage under hard usage and yet resilient enough to overcome the difficulties of hard materials. Some of the features include: 1) Tempered composition material; 2) will not deteriorate in use; 3) cannot be dented with any ordinary hard blow; 4) not easily marred with a knife or sharp instrument; 5) is impervious to water or other liquid, and impervious to grease. 6) will not warp or split; 7) will not stain or spot when attacked by milk, vinegar, fruit juices or alcoholic liquors and very little damage will be done by strong soaps; 8) reasonably impervious to heat and cold and not easily damaged by hot vessels; 9) all outlets may be cut by plumbers on the job; 10) strong and rigid and can be made any length up to 120 inches, either with or without splash backs or ends; 11) no unsanitary joint between top and sink. This joint is thoroughly waterproofed, tight and close fitting.

Double-hung Window of New Type

OF INTEREST to builders and architects is a double-hung window that reduces the hazard of falling from windows, and exposure during the process of washing them. This new patented window has four brass spring locks, two on each sash, one on either side, and will lock either top or bottom sash in positions for ventilation with safety as they cannot be reached from the outside. The lower sash is worked on a pivot bar at the bottom and will pull out from the meeting rail at top to lock in position, giving ventilation without a draft.

Steel Shower Bath Compartments

A SHOWER bath compartment having walls and top of stainless steel has been developed by a Chicago manufacturer.

The use of stainless clad steel enables the manufacturer to produce shower compartments with high corrosion resistance at a substantial saving to the user.

The shower compartments as shown in the illustration are of the knock-down construction, having interlocking leak-proof corner joints. The walls rest inside a steel flange imbedded in a one-piece, pre-cast terrazzo receptor or base. The entire unit forms a water-tight shower stall.

The walls are assembled at the place of installation. No. 16 gage stainless clad steel is used having a 20 per cent ply of 18-8 stainless steel bonded to a mild steel under surface. In the method of wall construction only the stainless surface can come into contact with water.

On account of their knock-down construction, the compartments are very adaptable for remodeling and modernization.

Shower compartment comes ready for quick assembly. Stainless steel is used with pre-cast terrazzo base.
Brick Siding Popular for Modernizing

OWNERS of frame or stucco residences, faced with the necessity of painting, re-siding or re-stuccoing their dwellings, are discovering the economy of the new imitation brick sidings. A new and interesting siding made of asbestos and cement which resembles brick to a remarkable degree is on the market. It is easy to apply and fairly inexpensive. Contractors and dealers report that this is one of the products being sold today in the modernization and repair market which for many years have made electric dumbwaiters expensive have been simplified to a practical modern degree resulting in a low cost outfit.

The “before and after” photographs shown below illustrate the manner in which a stucco dwelling badly in need of repair can be repaired and modernized with the new asbestos cement brick-like siding material.
New flexible building paper, being installed on a cold day, showing ease of application and freedom from puncturing. Insert: the creping which is applied by a patented process to one of the two component kraft layers of this building paper. (Crepaging is shown actual size.)

New Insulation Materials

To meet the rigid requirements of air conditioned homes, a prominent manufacturer has introduced a super insulation made from two thick layers of fluffy wood fibre with edges sealed against moisture and flanged to facilitate its application. These improvements are also features of the standard half-inch and full one-inch thicknesses of this blanket insulation. The new wall-thick material is offered especially to meet any demands of air conditioning and heating engineers. It is windproof, sealed against air infiltration and moisture, will not settle or sift and is easily and cheaply applied.

Of special interest to the temporarily unemployed is a new use for insulation—an insulating jacket for residential water tanks. Many contractors are using this item as a "foot-in-the-door" interest getter in door to door solicitation of home owners. Not only does it create a profitable, easy-selling item but as a practical demonstration of the value of insulation, it builds up a list of potential buyers of attic insulation that can be followed up at some future time. Cases are on record of contractors selling a dozen installations in a day. As a "make-work" idea it is appealing to many who need an income.

Another new item from the same firm is a tough, high grade building paper, which is a combination heavy creped paper cemented to a plain sheet by means of asphalt. The result is a building paper which is flexible yet sufficiently stiff for easy handling and application. The contraction and expansion of building members will not cause tearing or splitting. The rough and smooth waterproof surfaces make it especially adaptable for conditioning concrete. Tests show that it does not become brittle in cold weather, nor limp on hot days. A 36-inch roll weighs 45 pounds. It can be obtained in any width up to 9 feet.

New Non-Splitting Nails

Save Time, Money, Labor

One of the products that is contributing to lower building costs is an oval shank, non-splitting steel nail. The fact that such a common, ordinary article as the nail has undergone radical changes is an indication of the progress and change that is taking place in building products.

The following points are claimed by the manufacturer: 1. Ten per cent more nails per pound. 2. From 50 to 70 per cent increased holding power. 3. Nail has oval shank with 7 cutting edges. 4. Nail has a sharp chisel point. 5. Made of high carbon steel content which tends to prevent soft nails and easy bending.

Of further interest to both builders and dealers is the fact that the nails are delivered in five-pound cartons which makes handling easy and saves time and waste. Special display stands have been developed which displays 140 five-pound cartons and requires very little floor space.

In describing the effectiveness of this nail, the manufacturer states:

"The sharp chisel point of the non-splitting nail cuts cleanly across the grain and allows the flat smooth shank to enter the wood with the grain, free from inter-fiber distortion. This accounts for the easy driving. Instead of prying the wood apart as the common round nail does, the shank of the non-splitting nail lies steadfast with the grain, and invariably has more actual nail surface exposed to the inter-fiber of the wood. Thus, the holding power is from 50 to 70 per cent greater than that of the ordinary common round nail."

The line includes nails for every purpose, such as flooring nails, siding nails, shingle nails, roofing nails, etc.
Need More Owners of Low Cost Homes

FIVE MILLION American families are in a position to own homes valued between $2,000 and $5,000. This is the first conclusion reported by the Home Building and Home Ownership committee of the United States Building and Loan League in its correlation of basic facts from which to start an aggressive home ownership drive.

The Committee points out that $2,000 to $5,000 homes constitute the great bulk of existing one-family homes within city limits today, and that the percentage of owner-occupancy is smaller in this group than in any other price range. An average of little more than one out of every three families economically able to own such homes actually have title to the property.

In the price range of $5,000 to $7,500 homes, three out of five city families are owner occupants, while in the class above, $7,500, four out of five are owners.

"Home ownership is just as desirable for those who pay $20 to $50 a month rent as it is for families in the next price range above," points out Philip Lieber, Shreveport, La., chairman of the committee.

There are three and a half million city families which do own homes in the $2,000 to $5,000 class. These families have title to $12,286,000,000 of the real wealth of the United States. In other words, by diligence, thrift, systematic payments on their mortgages, these families with incomes around $2,000 and $3,000 a year have managed to become important sharers of the country's wealth.

Contrast the absence of this wealth on the part of the renter whose monthly payments have gone to increase somebody else's income rather than to add to his equity for himself.

"We should be able in the next three years to raise the percentage of home ownership in the $2,000 to $5,000 home group from 45 per cent to 75 per cent, a change characteristic of families which can afford the $5,000 to $7,500 home."

Home Loan Enabling Law Passed By Montana

HOME FINANCING institutions in the states of Montana, eligible for membership in the Federal Home Loan Bank system under the act creating it, but ineligible hereinafter because of State laws, may now join the system. A bill passed by the Montana Legislature, lifting the State ban on membership in the system, has been signed by Governor E. Erickson.

Montana is in the Eleventh Federal Home Loan Bank District, which comprises, in addition, Washington, Oregon, Idaho, Utah, Wyoming and Alaska, and is served by the Federal Home Loan Bank of Portland, at Portland, Oregon.

The Portland regional bank is capitalized at $6,000,000.

Montana is the first of the states in the Eleventh District to enact enabling legislation.
Real Estate Survey Shows Lack of Financing, Growing Home Shortage

The abnormal present condition as to money supply for real estate mortgage loans has reached this point:

In 91 per cent of the principal cities of the country, loans are seeking capital. In only 2 per cent is mortgage money supply greater than demand. That is the outstanding fact revealed in the 20th semi-annual survey of the real estate market, covering 307 cities, released by the National Association of Real Estate Boards Feb. 20.

Actual stringency is even greater than the figures indicate, since the only cities reporting any excess capital are cities of under 100,000 population, a detail that in itself is a striking indication of the situation.

Further, the 2 per cent of cities reporting any money available are confined to three geographical sections of the country, that of the Atlantic, the East North Central section and the South Atlantic section. In 7 per cent of the cities reporting there is a normal condition or equilibrium between financing supply and financing demand.

In cities of over 500,000 population, the normal money centers, in no case is capital seeking mortgage investment. In 82 per cent of them loans are seeking capital.

Cities of from 200,000 to 500,000 population report 100 per cent that loans are seeking capital.

Shortage Coming in Dwellings

As has been consistently indicated by recent surveys, residential structures are the group in which demand may first be expected in new construction. In 7 per cent of the cities reporting there is already a shortage of single family dwellings; 76 per cent report a supply about balanced with demand.

From the survey, therefore, a condition of shortage would immediately prevail in 83 per cent of these 307 cities as soon as general business conditions recover to such degree that families now "doubled up" may begin to undoubled. In some cities reporting, it is pointed out that from 3 to 5 families are occupying space intended as a single-family unit.

As to apartment buildings, supply is balanced with demand in 60 per cent of the cities reporting. Actual shortage already exists in 3 per cent of the cities.

Business property supply is normal in 51 per cent of the cities; is in excess of present demand in 48 per cent of the cities; is even now showing shortage in 1 per cent of the cities.

Cities of under 100,000 population show much the healthiest use or present absorption for all types of properties, business properties, apartments and single-family dwellings. Of cities under 25,000 population, 13 per cent report a present actual shortage of single-family dwellings.

While rents are predominantly down in all groups of properties, apartment and business space show this tendency most uniformly. In only 76 per cent of the cities are rents lower in single-family dwellings, 22 per cent of the cities show a stationary condition here in spite of the downward pull of the past year's general business situation.

The down tendency in rents is reported for apartment property in 90 per cent of the cities; for two-family dwellings in 89 per cent of the cities; for downtown business property in 82 per cent of the cities; for outlying business property in 93 per cent of the cities; for downtown office space in 91 per cent of the cities; for office space in outlying business sections in 82 per cent of the cities.

Cities of over 500,000 show greatest rent deflation, reporting a down trend in two family houses, apartments and business buildings. In 72 per cent of these cities, however, single family dwelling rents are stationary. Cities under 100,000 show the greatest rent stabilization. The report also shows that cities between 25,000 and 100,000 show strongest stabilization of subdivision activity. In 20 per cent activity is at same level as last year.

Interest Rates

Recent indication that interest rates are falling is little reflected in the survey reports, which, however, were sent in by the member boards before the present movement got under way. The reports show interest rates steady in 69 per cent of the cities; falling in 4 per cent; actually rising still in 27 per cent of the cities.

A fall in rates had reached only five of the eight geographical sections at the time the reports were sent in. These were the Middle Atlantic section (7 per cent of the cities); the East North Central section (3 per cent of the cities); the South Atlantic section (9 per cent of the cities); the Mountain section (6 per cent of the cities); the Pacific section (2 per cent of the cities).

The smaller percentage those under 100,000 population, show the greatest disposition to falling interest rates.

Percentage of Cities Reporting Overbuilding, Normal Supply or Shortage in Single-Family Dwellings, Apartments and Business Property

<table>
<thead>
<tr>
<th>Section and Size of City</th>
<th>Single-Family Dwellings</th>
<th>Apartments</th>
<th>Business Property</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Over Normal Short</td>
<td>Over Normal Short</td>
<td>Over Normal Short</td>
</tr>
<tr>
<td>Totals for U. S. and Canada</td>
<td>76 7 37 60 3 48 51</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>New England</td>
<td>7 72 21 31 69</td>
<td>36 64</td>
<td>1</td>
</tr>
<tr>
<td>Middle Atlantic</td>
<td>13 85 2 33 61 4 46 54</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>East North Central</td>
<td>12 72 5 33 39 10</td>
<td>69 41</td>
<td>1</td>
</tr>
<tr>
<td>West North Central</td>
<td>11 84 5 35 65 5 50 50</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>South Atlantic</td>
<td>10 88 3 30 67 7 53 44 3</td>
<td>1</td>
<td></td>
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<tr>
<td>East South Central</td>
<td>20 80 10 20 50</td>
<td>10 20</td>
<td>1</td>
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<tr>
<td>West South Central</td>
<td>35 55 10 50 45 5 67 33</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Mountain</td>
<td>20 80 10 50 50</td>
<td>31 69</td>
<td>1</td>
</tr>
<tr>
<td>Pacific</td>
<td>69 21 11 67 33</td>
<td>33 67</td>
<td>1</td>
</tr>
<tr>
<td>Canada</td>
<td>33 67 1</td>
<td>67 33</td>
<td>33 67</td>
</tr>
<tr>
<td>Over 500,000</td>
<td>29 71 86 14 86 14</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>200,000 to 500,000</td>
<td>20 70 10 74 26 83 17</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>100,000 to 200,000</td>
<td>21 73 6 53 47 65</td>
<td>35</td>
<td>1</td>
</tr>
<tr>
<td>25,000 to 100,000</td>
<td>19 76 7 60 63 10 70</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>Under 25,000</td>
<td>12 73 13 14 83 3 39 58 3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>District and County Boards</td>
<td>83 6 31 60 9</td>
<td>44 56</td>
<td>1</td>
</tr>
</tbody>
</table>

Forecasts Air Conditioning—Air conditioning will be the generally accepted standard in the future, according to Elliott Harrington of the General Electric Company, speaking before the Franklin Institute in Philadelphia, Jan. 25. Apparatus for conditioning air, said Harrington, will be installed even in small houses, with the same nonchalance that electric lighting and modern plumbing are now specified. He said:

"The air conditioner for the home will be a single unit installed much as a boiler is now placed in the basement. It will be a perfectly standardized article, manufactured in large quantity, relatively light in weight and purchased at a reasonable. Price. It will not only provide the four essential elements of air conditioning (simultaneous control of temperature, humidity, air movement, and purity), but will take care of additional factors yet to be discovered, to produce in the home a degree of comfort and health as yet unknown. "Heating contractors will cease to exist. In their place will be the air conditioning contractor, skilled in application engineering, as is the merchandising of his product."

Reorganization Loans—The Republic Realty Mortgage Corporation of Chicago announced on Feb. 16 that it will actively enter the business of loaning money on apartment buildings for reorganization purposes. Loans will be made on first mortgage trust deed of reorganization and may be procured by property owners, by bondholders committees, and by attorneys, for the purpose of avoiding or of completing foreclosures, funds to be used for taxes, foreclosure costs, receivers dismission, payments to bondholders, and repairs necessary to restoration of income. Officers and directors are: Gordon Strong, chairman; B. F. Affleck, vice-chairman; H. L. Schmitz, president; B. J. Rosenthal, and Edward A. Renwick, vice-presidents; R. B. Beach, treasurer; Alexander Komkile, secretary; George S. Kelly, assistant secretary; and H. H. Blum, Philip W. Gates, Sangston Hettler, W. J. Kelly, John E. Macleish, J. R. Magill, William Schlake, Walter Dill Scott, and W. S. Underwood, directors.

American Builder, March 1933.
Contractors Enthusiastic About

Eternit

Asbestos-Cement

"BRICK-TYPE"

SIDING

Outstanding Features and Big Sales
Opportunities of this Rigid
Three-In-One Strip* Quickly Sensed.

Rubberoid's recent announcement of its ingenious Asbestos Cement Brick-Type Siding, textured like rough natural brick, has been enthusiastically received by carpenters and contractors.

This unique, inexpensive, age enduring siding, provides tremendous sales possibilities. Every owner of a weather-worn frame or stucco building, and every builder of a modest home, is a Eternit Brick-Type Siding prospect.

Picture after picture of jobs are coming in. Enthusiastic letters from property owners, contractors and dealers, all prove that Eternit Brick-Type Siding with its many distinctive features will be a 1933 sales leader.

Investigate this newest Eternit triumph. Study its sales features. Note its ease of application. Put this non-competitive, profit-making, modernizing product to work. Samples and further information gladly forwarded upon request.

*Patent Nos. 1,688,405 and 1,770,509

Features
2. Tapered Construction—Brick faces slightly elevated so that finished job looks like real brick. Strips 6" x 30" contain 3 Bricks 2½" x 9¼".
3. Rough Brick Texture—Exposed area of siding faithfully reproduces rough brick.
4. Brick Colors—Redtone and Buff with Dark Gray mortar joints. The mineral oxide colors are an integral part of the siding.
5. Ease of Application—Self-spacing, self-aligning. Soldier courses for base and over windows—corner pieces mitered for perfect fit.
6. Double Market—A volume producer for re-siding work, but equally efficient for new construction.

The Rubberoid Co.

Roofing Manufacturers for over Forty Years


Factory: St. Louis, Mo.

Please send full particulars about Eternit Asbestos Cement Brick-Type Siding. Check below if you also wish information about:

- Asbestos Stone-wall Siding
- Shingles
- Asphalt Roofings
- and Shingles
- Asphalt Brick
- Style Siding
- Timbertex Asbestos Shingles
- Safe-n-Dry Sheathing Paper

Name of Contractor...........................................

Street Address..............................................

City......................................................... State..............................................
You are invited to write your views on any subject of interest to the building industry. 300 words should be enough!

American Builder, March 1933.

First, there are plenty of empty houses also all kinds of store and industrial buildings available and have been for some time. Men coming here expecting to find work when 80 per cent of the population is here are walking the streets.

Second, I have at hand several letters from out of town contractors requesting information regarding this subject, also men coming here expecting to find work when 80 per cent of the building trades men here are walking the streets.

Third, you yourself know from your readers what effect untrue statements have, and I sincerely hope you will correct this statement and prevent any re-occurrence of the same.

G. A. McCUlloCH, Secretary Local No. 81, United Brotherhood of Carpenters and Joiners of America.

Approves the Cost Keys

Klamath Falls, Ore.

To the Editor: I notice that in the last few issues of the AMERICAN BUILDER you have presented houses designed by the Architectural Guild of Small Home Design, Inc. With these houses you have included the Cost Key.

This cost key idea has impressed me very much while method of quickly arriving at home costs, and I have induced our leading retail lumber yard to adopt it. I am also familiar with the method and am using it.

The work of the Architectural Guild of Small Home Design interests me greatly and I consider their work to date a decided advance, and should be an inspiration to small home ownership. I am registered with the Guild and have received their first published volume, and am anxious to obtain Cost Keys for all of the designs therein. Can you furnish these Cost Keys or tell me where and how I may obtain them?

For the past ten years I have received the AMERICAN BUILDER and wish to take this opportunity of expressing my appreciation of the advance you have made in the last year or so in the quality of the houses shown and in the worth of your articles.

HOWARD R. PERRIN, Architect

Old-Time Papers Discovered

Mamaroneck, N. Y.

To the Editor: We have been subscribers to your magazine for many years and found same very interesting. We ask that you publish the following letter in your "Letters from Our Readers" column:

I have in my possession a contract-specification written in long hand dated October 20, 1860, for labor and materials for the carpenter work for a store and six-story building on lot 354 Broadway, New York City, prepared by John Kellum & Son, Architects; John R. Lawrence, Esq. was the owner and A. G. Bogert & Brother were the Contractors.

I would appreciate any information regarding the above by any relatives who may be interested.

ROBERT V. ACAMPORA, P.E., Acampora Brothers Contractors, Inc., Builders

An Estimating Short Cut

Norwich, Connecticut

To the Editor: As we are all interested in time saving methods in making estimates, we are glad to pass along an idea which we have used in figuring plans where the scale is either 1/4 or 1/2 inch to the foot and where the studding or joists are placed 16 inches on centers.

In order to get the number of joists or studs required and using an ordinary carpenter's rule instead of a scale, you measure the length of the wall or floor as shown on the plan with the rule and multiply the number of inches shown on the rule by 3 if the plan is 1/4 inch scale or by 6 if the plan is 1/2 inch scale and add whatever pieces are required for starters or doubling up. For example: using a 1/2 inch scale—if the floor was 16 feet long, it would scale 4 inches and multiplying 4 by 6 gives us 24 joists which would be the number required for a 16 foot span, then adding one or more for starters as required.

W. S. SWINDELL, Builder

LETTERS

from Our Readers

Loyal to Building Industry

Kent, Ohio

To the Editor:

Here is an idea which I wish to submit: that you take your readers (in a figurative sense) on personally conducted tours to some of our great building material producing plants, to show that our industry is not the backward and degenerate "brother" that it has been described as being.

The vogue, in current discussions relating to this industry, is to berate and deplore this supposed backwardness. To the extent that this is true, the criticism is justified, of course. But beyond that point it is not justified. Representations that lead to distorted, unfair conclusions, conclusions that are highly detrimental to the trade as a whole, should not be allowed to pass unchallenged.

In no other field is competition more active than in this one. Nor is there another field in which the incentive for the application of ingenuity, for enterprise, for progress is greater. It should be our purpose to give evidence of this, not through boasting but through simple and convincing presentation of facts. New materials will continually be tested out, and they will be accepted as they prove their worth; and so with new methods. But the change will be by way of gradual development, rather than any sudden and blind revolution. If prospective home owners could have a look at some of our lumber mills, brick plants, etc., they would take less seriously the "ox-cart" line of talk.

HOWARD H. CLARK, Mason Contractor

Condemns Shop-Built Houses

Marion, Iowa

To the Editor:

Shop-built houses are damaging to any dealer. In the first place, they cut his outlet for material; and the fact that every section has a surplus of carpenters who need the work, should make the local dealer greatly interested in seeing that as much labor is given them as possible. Shop-built houses positively eliminate lots of labor where the local dealer is; and it is much work for home labor as possible. We shall do all we can to defeat the plan you describe in your February issue, and believe we will be able to compete and keep the business where it belongs.

C. R. BIDDICK,
The Biddick-Eastman Lumber Co.

Says Erie Is Not a "Bright Spot"

Erie, Pa.

To the Editor:

I am writing you regarding an article appearing in the January issue of your magazine under the caption of "Bright Spots."

In this article your magazine quotes: Erie contemplates erection of 4500 to 6000 houses in 1933. I do not know where your information came from, but I do know that this is untrue, also unfair to local contractors and men employed in the building industry in this city.

First, there are plenty of empty houses also all kinds of store and industrial buildings available and have been for some time.

Second, I have at hand several letters from out of town contractors requesting information regarding this subject, also men coming here expecting to find work when 80 per cent of building trades men here are walking the streets.

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W. S. SWINDELL, Builder
Re-styling Old Houses is Profitable

New houses for old! That's what Careystone Modernizing Units mean to home owners. When the old structure is restyled and protected with Careystone Colonial Clapboards, Normandy Brick Siding or Cape Cod Shingles, the exterior is literally new. More than that, the cost of the improvement is paid for by the ending of painting expense. Careystone Units are made of asbestos and cement—they are as weatherproof and fireproof as stone.

There is profitable Careystone Modernizing business waiting for dealers and builders everywhere. Think of the unattractive old frame houses in your own community—every one of them will ultimately be a real prospect. We have perfected a plan which is turning these prospects into satisfied customers wherever it operates. If you are interested in making real profits in 1933 instead of wishing for them, write for full details.

THE PHILIP CAREY COMPANY • Lockland, Cincinnati, Ohio
Branches in Principal Cities
THE SAW EVERY BUILDER WANTS
HI-POWERED • FINER QUALITY
—Now priced sensationally low!

The original “old reliable”... the sturdy saw, with more motor power for the size... priced so low it pays for itself on the FIRST JOB! Now you can have that Portable Electric Hand Saw you have always wanted!

Made in 6 sizes—all with the exclusive features that made Skilsaw the leader. See your Hardware, Mill Supply or Equipment Dealer. New Low Prices!

Skilsaw, Inc., 3342 Elston Ave., Chicago $39.50

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AMERICAN
STEEL
SHEETS
FOR ALL KNOWN USES

KEYSTONE Copper Steel Sheets
Excel in the Building Field
Use sheets of recognized reputation and value. For roofing, siding, gutters, spouting, air conditioning systems, and general sheet metal work—Keystone Copper Steel gives maximum rust resistance. Insist upon AMERICAN Black Sheets, Keystone Rust Resisting Copper Steel Sheets, Apollo Best Bloom Galvanized Sheets, Galvannealed Sheets, Heavy-Coated Galvanized Sheets, Formed Roofing and Siding Products, Terne Plates, etc. Write for information.

This Company also manufactures U.S. 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.

Consider the Housewife
(Continued from page 16)

grooves, beading, and other soil catching features? Are the colors and patterns used restful and pleasing to the eye? Are the floors free from seams and dust collecting crevices? Are they easy to walk on without danger of slipping?

“Are there adequate lighting facilities...? Is the lighting free from glare and gloom and from shadows on working surfaces? Are there a sufficient number of switches? Are they at such a height to avoid cord tangling, reaching and stooping, in connecting electric appliances or lamps? Are they the double type so that appliances can be attached without disturbing the lighting connections? Are the lighting fixtures suitably and simply designed free from ornate soil-collecting features? Is the telephone centrally located? Is there provision for privacy in conversation? Is an extension needed for saving steps? Are the telephone and door bell audible in all parts of the house?”

Today the efficient kitchen provides a separate working surface for each general type of work as work table for mixing or preparing raw foods; range and a serving table where the food is cooked and prepared for service; a sink with its drain board or drain boards and side table for holding soiled dishes used in the cooking processes or during the preparation of food and its removal after the meal is served. Storage area must be provided for dishes and foods put away for future use as well as for general storage cupboards for supplies which are bought in large quantities. The relation of these centers to each other is very important if the worker is to save time and energy.

For right handed people the route of preparation should be from left to right:—refrigerator, work table, sink, range, service table, dining room or dinette area. For clearing away the reverse routing is used—from the table to the sink, to the dish cabinet. If there is a connecting pass window to the dining room, the dish cabinet and the sink should be in close connection on the same side of the wall. Otherwise a wheel tray should be used to convey the dishes and food from the dining table to the storage and sink area.

In planning a kitchen to fit the worker the right relationship of working heights as well as the relation of working areas is important. Today the suggestion is that in the same kitchen there be a work preparation area where the worker may be seated in an ordinary chair with knee room as found in desks; that there be a second working height where food preparation requiring movements as kneading and rolling may be carried on; that there be a third area where the worker stands easily without bending over or raising her shoulders in the use of equipment. This last working area should be on the level with the rim of the sink.

Where there is a single worker and the dinette is not part of the kitchen, a work room 7 feet by 7 feet is adequate for the average family. In this the window should be over the work table area and close to the sink so that daylight is available. There should be an exhaust fan to remove excess heat and moisture either by driving force or by suction, but so arranged that the cooking unit is not cooled unduly.

Where cost is restricted, the sink should always have at least the left drain board or on the left a table area which is covered with a rubber draining mat leading into the sink. Over the sink should be narrow shelves holding cereal jars, the double boiler, the coffee and coffee pot, the tea and tea pot, the cocoa and cocoa pot, and suspended on hooks under these shelves should be all the small utensils used in connection with the work at the sink and adjacent work table. An electric light should be at the left of the sink above the eye level but not so high that a shadow will be thrown upon the sink. The utensils used at the stove should be stored on hooks back of the range and at the side of the range where they can be reached from both range and sink. Dishes should be stored either in a cupboard in the wall near the sink between the dining room and the kitchen or else across from the sink area. The distance between the sink and the china cupboard should be not more than 30 to 36 inches. The refrigerator should be as near the work table, the sink and the dining room door as the wall space will admit.

Fresh vegetable storage may be on shelves with slated front under the drain board of the sink, an adjustable opening on the outside will keep the area cool, without freezing. Food storage cupboards should be near the work table—above and under it.

(Continued to page 52)
EARN BIG MONEY
MAKING COLORCRETE PRODUCTS


Why Be Idle?

Turn your spare time into profit by making permanent products. Masonry, Stamps, Brick, Block, Tile, Pavers, Fencing, etc. With Colorcrete you can supply these in 50 Colors and Shades! Beautiful and artistic designs that will last. 

Write for full particulars on machines and prices.

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224 Fountain Ave., Lancaster, Pa.

PRICES-CUT
25-40%

Write for full particulars on machines and prices.

COLORCRETE INDUSTRIES, Inc.
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Holland, Mich.

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COLORCRETE INDUSTRIES, Inc.
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Holland, Mich.
Edwards "MODERNISTIC"
Captures the Steel Ceiling Contracts

The most up-to-date steel ceiling pattern in the world. Enthusiastically adopted by many leading organizations and retailers for their most modern stores. Puts the final touch of elegance to store interior and makes profits for the contractor.

Send Ceiling Dimensions. Get our delivered price. We will help you close the order. Ask for Catalog 178 and Modernistic Circular.

The Edwards Manufacturing Co.
542-562 Eglinton Ave. Cincinnati, Ohio
World's leading Manufacturers of Sheet Metal Building Material

American Builder, March 1933.
Something New!
DAHLQUIST TURBO
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 tank to create a suction and a whirl which continually sweeps and sprays 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.

With a Dahlquist Turbo-Aquatherm installed in your hot water tank sediment cannot accumulate.

Every day the heatilator fresh cleans hot water it is for cooking and drinking purposes at all times—there is no chance for the Dahlquist Turbo-Aquatherm will not install a hot water storage system without it.

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

SAVING MONEY!
...cut out costly hand-sanding!

This powerful portable electric tool
Sands, grinds, finishes wood, metal or stone!

- Produces finer finishes faster.
- Has so many uses it pays for itself quickly. Powerful motor, 23 inch sanding area, yet weighs only 18 lbs. For details and new low prices write to:

SKILSAW, Inc.
3342 Elston Ave., Chicago

Another Successful Builder Says:
"We Haven't Sold the Living Room . . . with Heatilator we can"

"I MAY be wrong, but it seems to me that many builders haven't altered their sales story for years. It's the same old song and dance about the closets, the plumbing, the bathroom and the kitchen. Heatilator changed my methods, I can tell you—made me realize that a living room, Heatilator equipped, is one of the best selling bets I can have.

"The ordinary fireplace is 5% warmth, 95% decoration. Heatilator keeps the decoration but steps up the warmth till it means something. That's because of its circulating principle. The heat, instead of radiating in a straight line for a few feet is circulated over the entire room and those adjacent.

"Why they tell me in mild climates it's the only heat you need—and I believe it. It certainly makes a difference in fuel costs in our climate, both Spring and Fall.

"Suppose a prospect has had trouble with a 'smoker'. What a story you've got then. You've got a money back guarantee to talk about—that Heatilator won't smoke. And Heatilator can be used with any style of fireplace.

"I think it's a mistake not to bear down more on what you can give a person in their living room. That's why I'm for Heatilator. It's played a big part in my selling."

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

With the Spring cleaning season just about the remodeling of old floors offers you a big income and there is plenty of work to go into something for yourself. We start you out and supply the edging machine business getting circulars and cards that bring in the jobs. No experience necessary.

The New American Spinner disc edging machine eliminates hand work on edges. It is easily handled, compact and powerful. Write for full details, sent without obligation.

**THE AMERICAN FLOOR SURFACING MACHINE COMPANY**

615 South St. Clare St., Toledo, Ohio

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**What Should the Worker Demand in his House?**

(Continued from page 21)

By and large, those who want low-cost houses, and their name is legion, will accept limited space accommodations. Furniture is becoming smaller and less ostentatious; radios replace large pianos; small seats replace davenports. Families are smaller. Less time is spent at home. Servants are harder to get; the family washing is done elsewhere. The automobile is now standard home equipment. A house is less a matter of pride and sentiment, and much more a utility service. All this is being pushed slowly, no attempt being made in general to succumb to new ideas. As a consequence, the new idea savor of packing house methods but it by no means live in it and call it home.

The problem cannot be met by drastic construction economy alone. Recourse must be had to construction types, to construction methods of distribution, and methods of ownership to meet the fact that an inventor states a five-room house of electrically welded steel and glass can be erected in nine days (Chicago Tribune, April 23, 1932) and that later when machine mass production gets into full swing, it will require only two days. This saviors of packing house methods but it by no means assures consumer acceptance of the house and willingness to live in it and call it home.

**Requirements to Be Met by Low Cost Housing**

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**Lumber-Construction Has Tremendous Advantage**

All the new types of low-cost houses that may be invented and fabricated will not change the fact that the house must be capable of being bought and sold or rented and vacated at little or no sacrifice. It must have a free market and a liquid value. The population that wants low-cost houses is perforce migrant. It is here today and there tomorrow in a liquid value. The population that wants low-cost houses is perforce migrant. It is here today and there tomorrow in a period of years.
250 Short Cuts for Builders

Every one of the kinks given in this practical volume is different from those given in our other book entitled Kinks for the Builder. Every one is unusual, every one helpful on the daily job, and any one worth ten times the price of the book when applied to your work.

Like Colwell's Kinks for the Builder these were gathered from the practical methods suggested by builders throughout the country because they save time and material over the usual methods of doing work.

Even in these days when jobs are scarce the man who saves time and material is ahead of the other fellow both through the greater profit on that job and in being able to use the extra time in chasing up another job.

Lack of space prohibits our listing the 250 different short cuts but here are a few of them, so that you may see what a wide field is covered:


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Other Useful Books for the Builder:

AMERICAN BUILDER and BUILDING AGE
30 CHURCH STREET, NEW YORK

INDEX TO ADVERTISERS
MARCH, 1933

NOTICE TO ADVERTISERS

Forms for the April Number of the American Builder and Building Age will close promptly on March 15. New copy, changes, orders for omissions of advertising matter must reach our business office, 126 W. Adams St., Chicago, not later than the above date. If new copy is not received by the 15th of the month preceding date of publication the publishers reserve the right to repeat last advertisement on all unsold copies.

AMERICAN BUILDER AND BUILDING AGE.
“I wonder why I never thought of it before”

PESSIMISTIC saying No. 17699: “Yes, we just been sorta settin’ around waitin’ for things to break in the building line.”

But why be a slave to habit? ... Must a builder be nothing but a builder? Is a construction contract the only language he knows? Is he “too big” to go after the innumerable modernization jobs and equipment needs which have been accumulating in every community during the past three years?

There’s money in them. They’re not so formidable as to put a fatal crimp into present-day pocketbooks; and with “renovizing” campaigns going on all over the country, pickings ought to be good this year.

Why not take on the selling of Rolscreens? You know all about the advantages—yes, and the economy—of rolling screens. You know how to install them. ... And if you don’t, we’ve instructions that make a hammer and screwdriver about all a man needs.

Look into the attractive possibilities of a Rolscreen franchise. Rolscreens of Pella are by all odds the easiest selling on the market. They’ll far outlive their Ten-year Guarantee. They make yearly outlive their Ten-year Guarantee. They make yearly

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Rolscreens
* of pella *

Rolscreen Company, 333 Main Street, Pella, Iowa

If my locality is still unassigned territory, please send me full details of your proposition.

Name ____________________________ P. O. Address ____________________________

American Builder, March 1933.

(Continued from page 54)

changing requirements. Lumber is now, and will continue to be, much better adapted than any other generally available material to meet these requirements. Its distribution methods must be revamped to capitalize this advantage.

If people must have cheaper houses, then they must be smaller, and many must be portable. Concrete cannot meet this situation. Nor can brick or stone or stucco meet it. Steel can be made portable, but it is heavy and expensive. Lumber alone is ideally adapted to answer this problem, and strangely enough, competing materials guided by advice from their research laboratories, have more confidence in lumber’s natural advantages to capture this market than have the lumbermen themselves.

Low Cost Housing from a Structural Standpoint

A modern architect planning a lumber-built house to meet the newest competition would, for example:

1. Eliminate the basement, relying on floor insulation to maintain comfort underfoot.
2. Plan for construction in units capable of ready transformation into such assemblies of utility quarters, and living quarters, as may be desired.
3. Plan for complete manufacture and sale by local dealers, independently of land values, transported to place, moved for customers as desired, traded in for newer or different models on a reasonable adjustment basis, and provided with a free market, exactly like automobiles.
4. Provide complete and effective insulation.
5. Eliminate plaster in favor of sawn-board interior finish or plywood.
6. Provide livable roof decks.
7. Provide ready-finished flooring with a base that will not permit of shrinkage cracks and squeaks.
8. Eliminate the pulley box window frame in favor of simpler methods of counterbalancing.
9. Employ base outlets only for lighting.
10. Provide unit type, solid panel partitions readily movable by the occupants.
11. Provide an exterior finish of sawn lumber that combined in piles to permit of prepainting and application in large sheets in a single operation.

Impractical! Impossible! do you say? Well, suppose instead of debating the point now, we lay this statement aside and read it again, say in five years, and see if anyone will have visited the means of checking each of the above eleven points and others not yet developed.

One other point must not be overlooked, viz., easily twice the current ten year averages for small houses could be built and sold if present unnecessary financial obstacles are removed. Behind every story of modern design there is also a story of modern merchandising—if the design has proved successful.

Resume of Advantages and Disadvantages

The present stationary position of lumber and wood products, while no different from other competing materials in many respects, has certain important elements which may well be emphasized. Lumber enjoys an advantage gained from producing a vastly improved product; it has lost none of its natural characteristics which appeal so strongly to hordes of imitators seeking to increase sales; it has today more alert selling organizations, and better distributors than ever before. It is also in an improved position for the very reason that it realizes its weaknesses and seeks to remove their causes.

It possibly suffers heaviest loss of markets today because of making a hammer and screwdriver about all a man needs.

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