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KEITH'S MAGAZINE

ON HOME BUILDING

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THE JOURNAL OF MODERN CONSTRUCTION
IDEAL HOMES MAGAZINE

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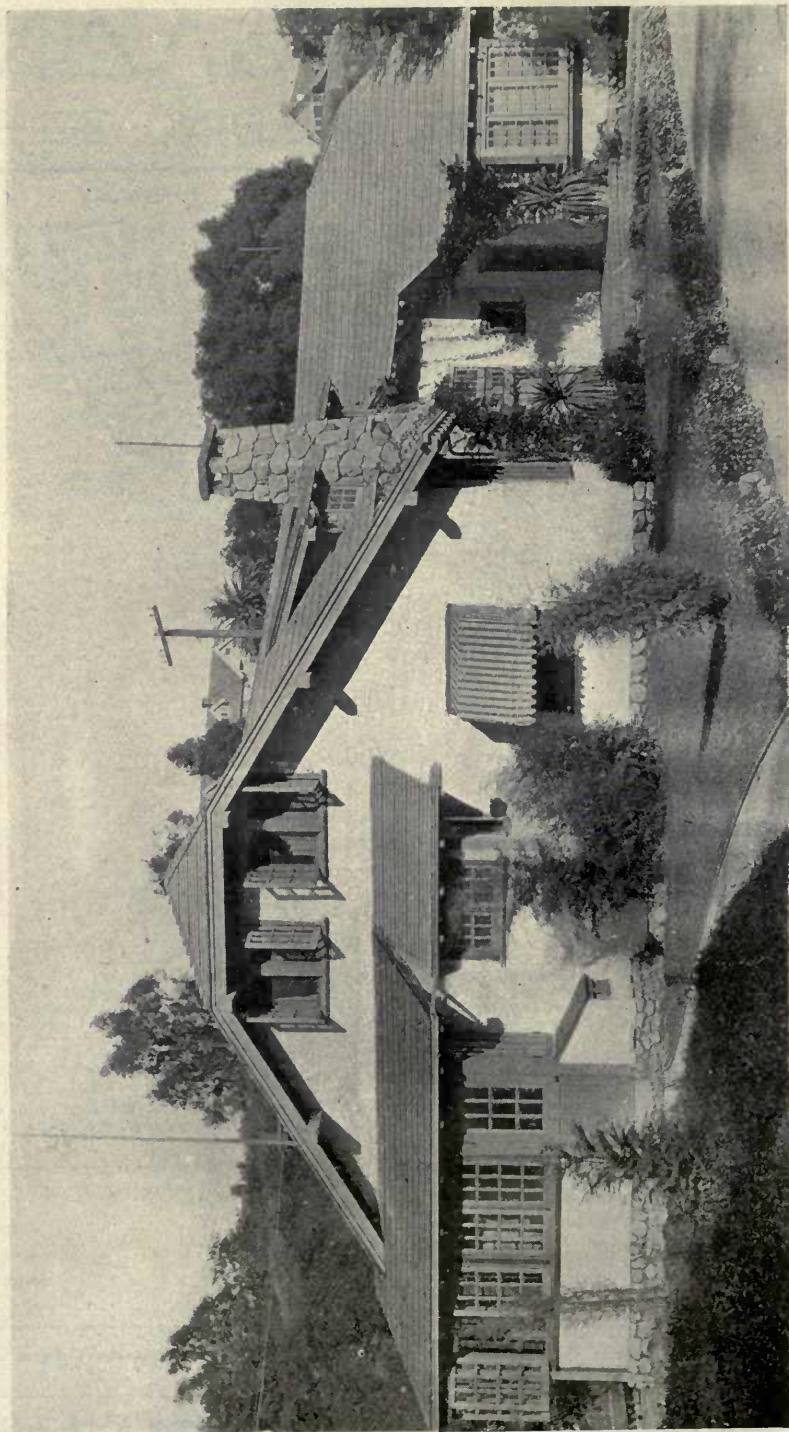
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Quaint Cement Plaster House in Pasadena, Cal., in English Farmhouse Style.

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VOL. XXXI

JANUARY, 1914

No. 1

New and Quaint Ideas in Concrete Design in the Southwest

By Kate Randall

THE new concrete houses seem almost perfect. They may cost a little more to build but they are a great economy in the end and this fact seems to be appreciated, for fully nine-tenths of the houses being built are of concrete.

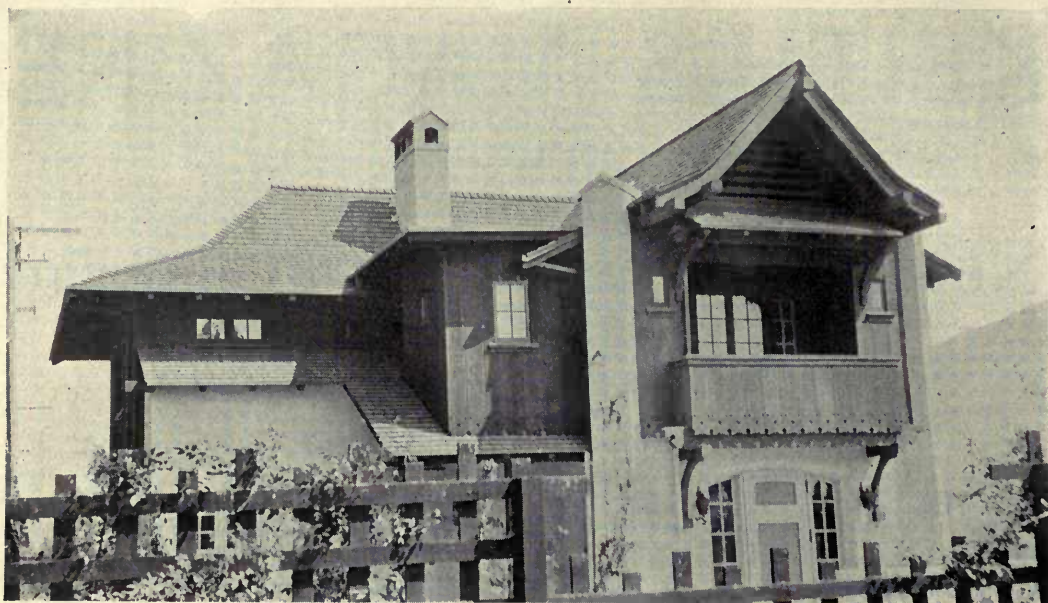
Our illustrations, taken at random, show a few of the many new and charming designs. The house on the "Mountain Side," located for its beautiful and extensive view, is the most unique of all. This and the frontis are the work of the

same young artist. The first story and the tall corner posts are of concrete, the second story of timber. It was difficult to get a good photograph of the side, but the illustrations give a very good idea of the charm of the whole. The other houses speak for themselves. In the interiors we find many new features. The Mexican Mahogany is much used for inside finish. It has a beautiful grain and in color is much like French Walnut.

Very high wainscoting is popular, also white wood work. In this house all the



Unusual Design for a Hill or Mountainside.—Grand Avenue, Pasadena.



Another View of the Grand Avenue House.

inside doors of the first floor were of glass, and when the portieres were drawn back one had a very charming vista from room to room and out into a beautiful garden at the back. We noticed half round panels above some of the doors, covered with the same brocade as the portiers and

many arched windows. In one of the smaller houses ingenious movable partitions were arranged. They were really rather high glass book cases on the wonderful modern felt casters and could be turned back against the side wall when a larger room was desired.



Bungalow with Classic Entrance.

The dining rooms are beautiful. One in white enamel had a baseboard two and a half feet high and quite an old-fashioned plaster cornice, and between the two the wall was covered with a wonderful foliage paper, great palm trees almost as tall as the space. The fire-place had a wide hearth and a peculiar fender. On the edge of the hearth was a rail of wrought brass, some three feet high, seemingly quite permanent. At the front were dou-

tive, both for exterior or interior use. Filled with large leaved foliage nothing could be finer. Some of the bed rooms have arched rounded ceilings and panes of glass set high in the doors. The wall papers match the draperies and the hand printed English cretonnes are beautiful and not so expensive in the end, as the colors are fast. Some bed room doors are adorned with small brass knockers as a hint for privacy.

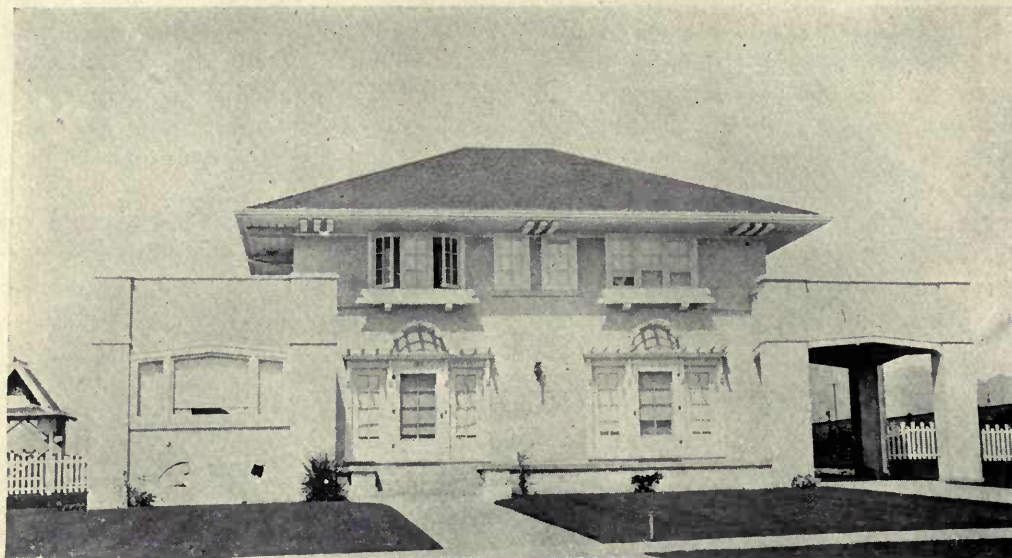


A New Treatment of the Moorish Motif.

ble gates and the top of the rail was cushioned. Another fire-place was tiled, with white tiles, quite flat, from floor to ceiling, the shelf rather high; and set into the tiling above the shelf, was an art glass panel—a vista of beautiful trees. The whole end of one dining room was glass, showing a gay garden, with a background of tall trees. Living room fire-places are still done in tapestry brick, or a new variety called "ruffled." They are quite rough and I have seen them only in red, with both light and dark cement. Brick manufacturers are also making window boxes and great Italian jars in colors to match the brick. They are very decora-

One library, with a wall of some fabric in soft olive green, had draperies of the English Print that were beautiful. Great peacocks in a tropical landscape. The English Wool casement cloth is new here. It is opaque enough to answer as shades at night, soft enough to drape gracefully during the day. It harmonizes best with dark wood work.

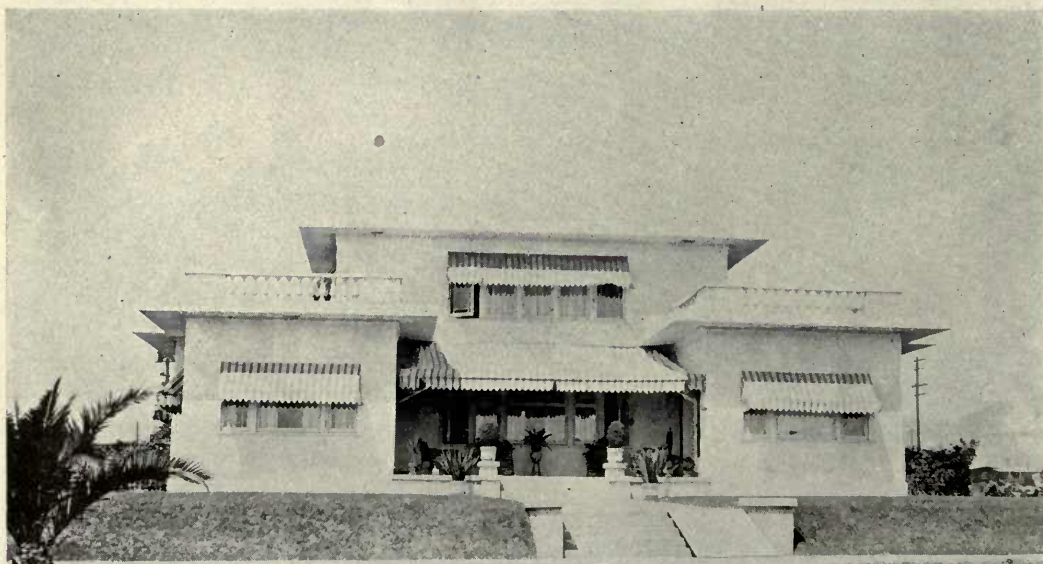
Prospective builders should not fail to study the new bath room fixtures. They are particularly simple and hygienic. Nearly all the floors are built of wood, stone or similar material, floor and baseboard in one, but the silent tub is the greatest boon of all. It fills from the side



Where Lattice Is Used for a Decorative Effect.

about two inches from the bottom and there is not a sound of running water after the first two inches are filled. Toilet basins are cast with a portion of the front rim raised in such a way that about

six inches of the wooden seat is entirely cut out and this raised rim fills the opening. Any housekeeper will appreciate the hygienic improvement. We are certainly getting on.



Showing the Effect of Slanting Wall Lines.

A Picturesque Mission Chateau in Cement

By John M. Bulkley



Colorado Home of Col. George Newman.

antly appointed home, surrounded by the things he loves best.

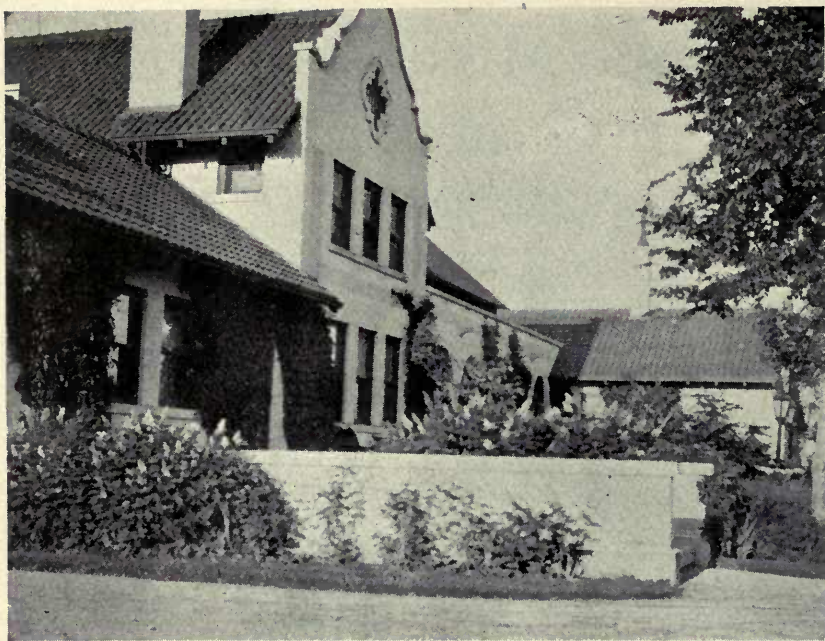
This extensive estate came into his hands by purchase a few years ago, and has been improved and elaborated on house and grounds, until it has developed into a most en-

LITTLETON, Colorado, is about eighteen miles from the charming city of Denver; just at the edge of Littleton is the Mac Rose Stock Farm, celebrated far and near as the home of some of the most famous horses that have graced the turf in late years. It is also the home of the princely owner and hospitable occupant, Colonel George Soule Newman, a gallant officer of the Civil War, who has earned his right to pass his declining years in such a luxuri-

trancing beauty spot. True to his love for fine horseflesh and the fascination of driving the fleetest, he has devoted a large fortune to the pleasures of breeding and speeding—and none has ever done it more successfully



Suggesting Its Spanish Prototype.



The Garden Side of the House.

or in a more generous manner. The house, whose style and extent are characteristic of the noble setting, is mission and well suggests its old Spanish prototypes.

There is one of the finest half-mile tracks in America on the grounds, and here the Colonel derived serene satisfaction in clipping off seconds with colts of his own breeding from the records of great trotters and pacers. The stables are most elaborate and well worthy of the noble occupants. The house is sumptuously furnished in excellent taste, with a library that might be envied by Kings of literature, and halls lined by pictures that must have drawn upon the richest collections of Europe and America.

Dignity in the Dining Room

By E. I. Farrington

DIGNITY does not imply sombreness or severity. The dining room may be cheerful and inviting and yet possess a quiet dignity which will make it doubly attractive. The average dining room is either overfurnished or shoddy. It is not a simple matter to choose the furniture for this room if one is obliged to exercise a considerable degree of economy. One finds whole floors in the furniture stores given over to ornate but cheap-looking pieces, almost oozing varnish and embellished with glued-on, machine-made carvings. This is the sort of stuff many newly mar-

ried couples start housekeeping with, buying it in their haste or having it forced upon them by loving relatives.

Yet it is not necessary to be satisfied with furniture of this sort in the dining room, or any other room, even though the financial appropriation be limited. If one is insistent and patient, it will be discovered that dining room furniture on simple lines, yet strong, graceful and dignified may be obtained for but little more than the garish pieces so conspicuously displayed and prominently advertised.

In the dignified dining room there will be no place for tables with bulging legs,

sideboards of fantastic design, or chair rounds with wart-like bunches. The lines of every piece will be straight or gracefully curved—beautifully simple.

It is not necessary that the dining room furniture be mahogany. Oak is just as handsome, if less elegant, when it is finished rather dark and with a soft, dull polish. It does not show the dust as readily as mahogany and is really to be recommend-

dining rooms are so decorated that mission furniture would look as much out of place in them as cabbage on a rose bush.

Round tables have come into high favor of late years and are now most commonly used. They allow more room for service and so are to be advised when the dining room is small. If the table is of the pedestal type, however,



Furnished in Sheraton Mahogany and Colonial Wainscot.

ed for a modest home. Colonial furniture as shown in modern reproductions is in high favor, but usually has a mahogany finish. Its dignity cannot be questioned, but it is an easy matter to make a colonial room too elaborate.

Mission and craftsman pieces have not lost their popularity and are less cumbersome and massive than formerly. Often very satisfactory dining room furniture of this type may be secured at a comparatively low price. One must be very careful that the chairs are not too heavy to be moved about easily and the nature of the room must always be considered. Many

and must be kept extended to meet the needs of a large family, it will not look as well as a square table with legs. In fact, it is a question whether a round table with legs is not more artistic and more dignified than one supported by a pedestal. After all, the Sheraton model can hardly be improved upon.

A simple round table with tapering legs and not at all heavy in appearance is a most satisfactory investment, although it may not pretend to follow any special style. An interesting room may be made by using such a table in connection with the well-known Windsor



Dark Woodwork and Craftsman Oak for Interior.

chairs in natural oak or painted. A quaint effect is secured by using old-fashioned rush-seat chairs with tall straight backs, especially if these chairs are painted black. When the furnishings and decorations are consistent, odd furniture of this kind gives the dining room both dignity and individuality. A colonial side board or an inexpensive modern adaptation will be needed to make the scheme complete.

There really is no place in the dignified dining room for a glass-enclosed cabinet. Of course this statement will arouse the opposition of all the brides who desire to display their cut glass and Haviland china wedding gifts. Let them pause, however, to consider the ostentation of arranging them in a glass case like so many curios in a museum. The thing is done constantly, to be sure, but a china closet of the garish, conventional pattern never helped to add dignity or charm to any dining room.

This is not an indictment of the china closet in itself. A suitable and convenient place in which to store the table service is most desirable. The old-time built-in closets for china are delightful when adapted to modern homes. Often a china closet may be built into a corner at small expense, the upper part of the door being filled with square or diamond-shaped panes of glass. As a matter of fact, it is possible to buy a china closet which has a modest amount

of glass and which is not lacking in dignity, but it is well to think twice before investing in one of the store front cabinets so often seen in dining rooms. The high cost made necessary by the large amount of glass used is one consideration, but the matter of refined taste is of even greater importance.

Although given first place in this discussion, the furniture is only one item in the making of a dignified dining room. Much depends upon the room itself and more upon its decorative scheme. A long and narrow room will not appear to so good advantage as one more nearly square, although a square room needs to have its regular lines broken by a fireplace, a bay window or some other architectural feature. A bay is often a distinct help. It offers more room for the maid to move about and provides an excellent place for a few blossoming plants.

Fire-places are useful in dining rooms on chilly fall mornings before the fur-

nace has been started and if well designed may do much to impart a feeling of dignity. The room should be at least fourteen feet square, though, if it is to have a fire-place. In a room where it is evident that a man sitting on that side of the table would have his coat tails burned in case a fire should be lighted a fire-place is altogether out of place. It is true that fire-places were to be found in small dining rooms in old houses, but they were put there as a matter of necessity.

Colonial rooms always look best when the trim is white. Mahogany and white wood work have a well recognized affinity, but oak, when not too dark, also looks well alongside white paint, especially if the pieces are rather light in design. A dark finish is preferable for mission and craftsmen furniture.

In choosing wall colors it is necessary

to be guided by the amount of light admitted. If the windows face the south or east, blues, greens, browns and other subdued colors may be employed. If, on the other hand, the exposure is away from the sun, the warmer colors like shades of tan and yellow are desirable. In the dignified dining room the wall pattern is inconspicuous, except, perhaps, when an old-time picture paper is used or some special and well-chosen plan worked out. Plain walls are much in favor and the home maker may very easily do over the wall herself, if the covering is objectionable, by using one of the cold water paints on the market. These paints are put on with a white wash brush and an entire room may be done over for a dollar or two, the cost of the materials. It is even possible to put the new covering on over wall paper, if the paper is not loose or embossed.



Where a Fireplace and French Doors increase the Dignity and Charm of the Dining Room.

Many people like a wainscoat in the dining room, while others prefer a plate rail. Naturally, the plate rail is much the cheaper. Frequently it is made with a picture molding attached to the lower part and often is designed to align with the mantel or the tops of the window casings, although this arrangement is by no means necessary. The plate rail should be painted or stained like the rest of the

help to give a dining room both dignity and charm. The colonial form is shown in one of the illustrations and the more modern construction in another. In the former, the wainscoat rises just to the top of the mantel and is painted white. Grass cloth covers the wall above it, up to a heavy cornice. This grass cloth is a wall covering now much in vogue. It is delightful in texture, but rather ex-

pensive and some paper hangers have difficulty in applying it. The latter difficulty is more easily overcome than the former. If the paste is brushed onto the wall instead of onto the back of the grass cloth, no trouble will be encountered.

If beamed ceilings are not too low,

they may play a delightful part in making attractive dining rooms. Often they give a feeling of dignity to be secured by no other means. Commonly the beams are only imitations, but in an old house such a thing as pulling down the ceiling and thus bringing the original beams into view has been done.

But after all, dignity in the dining room must be brought about by dealing with the special conditions which are sure to exist. To aim for quiet simplicity, straight lines and graceful curves, rich but unostentatious wall coverings and freedom from too much of anything will do much toward winning success.



Built-in China Closets Are a Delightful Addition.

wood work, but the wall treatment above and below is often different. Sometimes quite decided contrasts work out well, as, for example, a rich brown paper in two tone stripes below and a light blue figured paper above.

The two-third wall treatment is often heard discussed. That means that the plate rail is placed at a point two-thirds the height of the wall in a decorative scheme calling for two kinds of paper. It never looks well when placed lower and unless a room is high posted looks better when less than a third of the wall space is above.

Wainscoats are often a real joy and



“Homes We Have Built” Series

EDITOR'S NOTE.—A fund of \$135.00 is to be divided among the best twelve contributions to this series received by April 1, 1914, as follows: \$20.00 for the best, \$15.00 for second best and \$10.00 each for the next ten articles accepted for publication. Let us hear from many. Address Editor for further particulars.

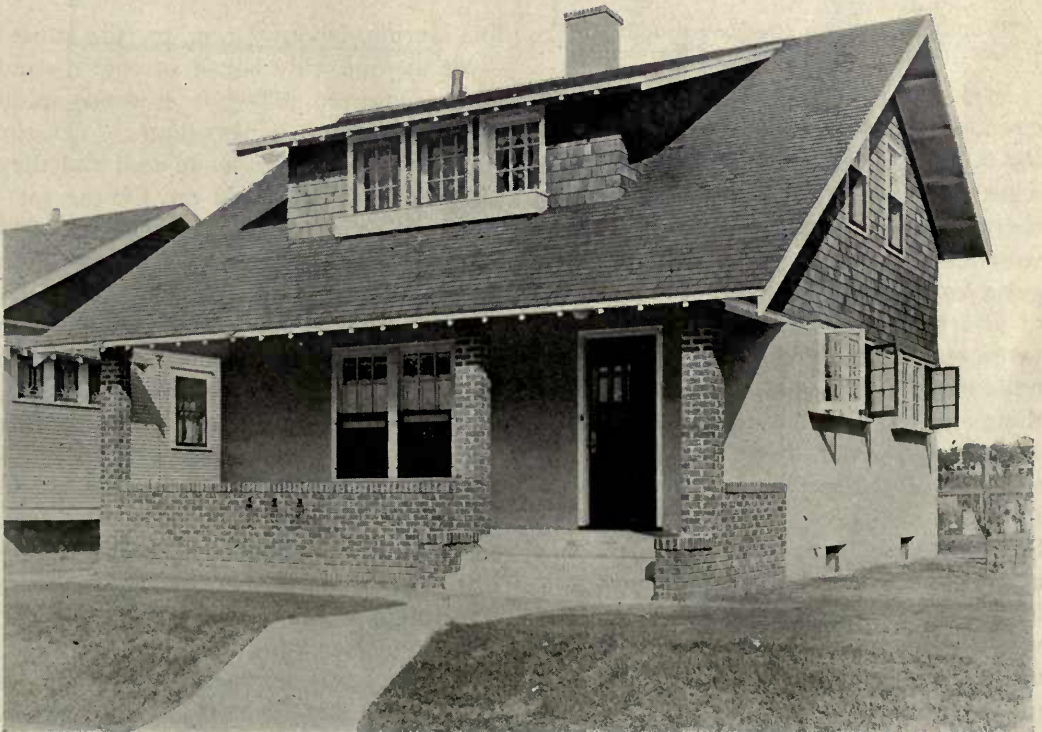
Our House o' Dreams and How It Came True

By Susan Thornton

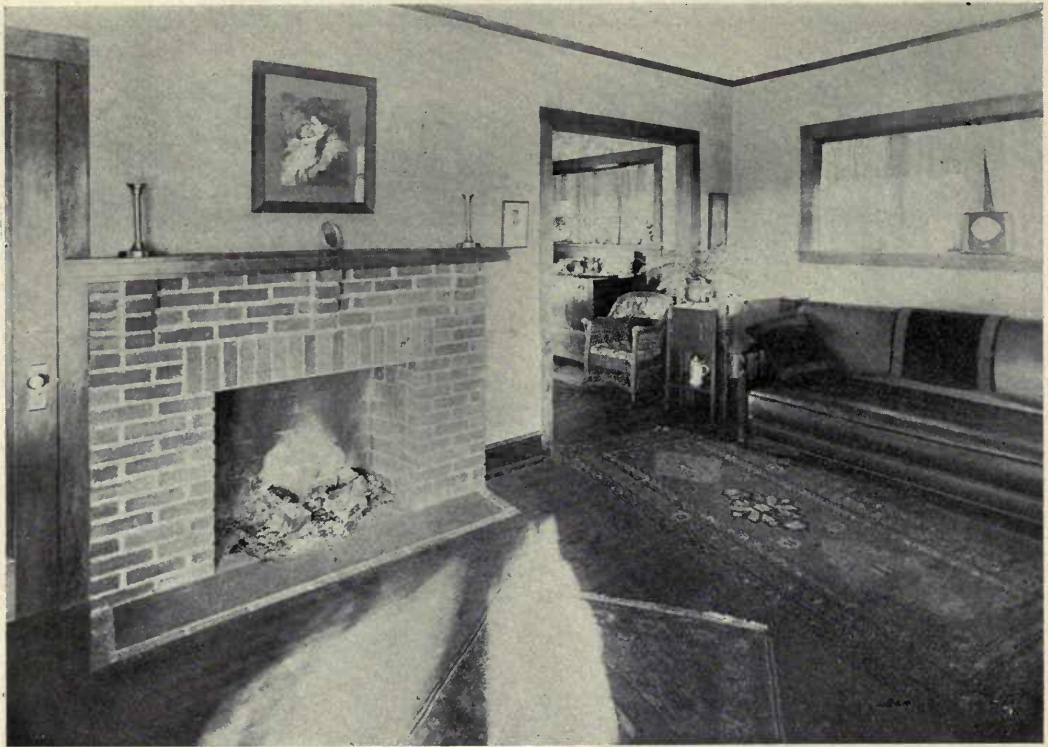


WE decided all of a sudden to build. We meant to have a house, because our past winter's experience in a duplex—where we were never warm, but just didn't freeze, and the

crying baby down stairs—had decided that point. But we expected to buy a house already built—partly because we thought it would be easier, partly we had in mind that wise old saw—



Cream Plaster, Oiled Shingles and the Rich Tones of Navajo Brick.



The Warm, Vivid Yet Soft Coloring of the Fireplace, Is a Delight.

"Who buys a house already wrought,
Gets many a board and nail for naught."

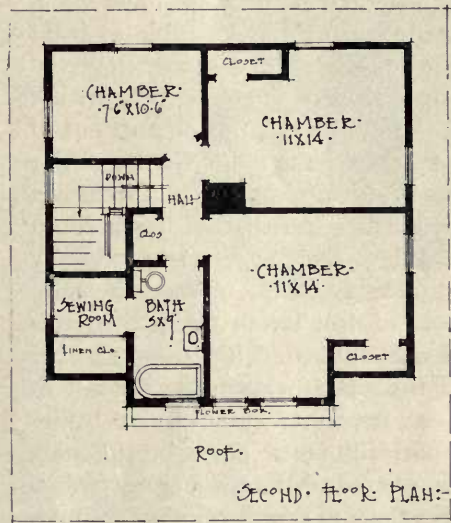
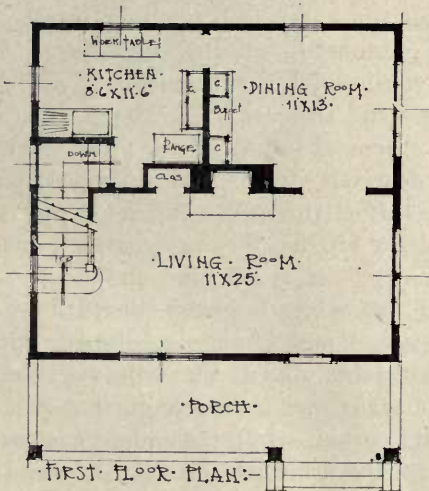
Very likely they do; after our experience, we feel more than ever like believing it. But do they get what they want—what suits just *their* ideas? Never. So it's worth the extra dollars and the extra trouble to build your own. You really get a lot of fun out of it too—and no end of information. One thing you want to make up your mind to, if you set out to build: don't get upset and nervous, if things go wrong—because some things are morally certain to go wrong. To say nothing of the perversity of inanimate things—such as the weather; wagons breaking down, etc.; there are orders that are not delivered as agreed; freight that is delayed; the painters and the plumbers that don't come when they promise; the mistakes the workmen make and the mistakes you make yourself. Oh, it isn't all a lark, by any means. You go out some

fine morning about 9 a. m. to "the house"—it's the one, only house, of course—and find a deserted job—not a workman in sight. You inquire next door. "Yes, the men came, but it began to rain and they all took their coats and ran for the car." You recall there was a little shower of 15 minutes. If you express yourself about this they quit altogether. The old order changeth—and the employer is no longer "the boss," but the workman. Did I not stand by helpless on another fine day, while everything was at a stand for the basement cement floors to be finished—and no arguments or entreaties would prevail upon the Polish lout who *was* there to turn a shovel of earth, because "that wasn't his part of the job," and the other man, whose part it was, hadn't got over Sunday's spree.

A more vexatious delay was when the window frames that had been ordered and were to be delivered when called for—

were not ready for a week after. Nothing more could be done till those frames were in place, so the workmen all departed for other jobs, whence they could not be recalled at a minute's notice. This made trouble all along the line, for the lathers had been engaged for a certain date, the plasterers to follow on their heels. They couldn't wait till we were ready but got busy elsewhere, and we had to wait for them. So the delay in the frames resulted in full three weeks delay in completing the house. We had ar-

of course, you can't get special plans drawn at a minute's notice—simply because there are others, and you are not the only pebble on the beach. Then unless you have considered your plans thoroughly, you are sure to make changes, and these make for delays and increased cost. We thought we could put in the foundation easy enough, without the completed plans. Afterward, we found the changes we made in the floor plans brought the laundry windows and grade door in the wrong place and necessitated



ranged to give up our duplex expecting the completed house three weeks before we got it—like a row of nine pins, you see. Moral for the prospective home-builder who reads this: Don't have any verbal "understandings" with your subcontractors. Have it down in black and white, with a cash discount for delays. Then they will come to time.

As before said, we decided all of a sudden to build. One lovely day in the last of May we saw a "lot" that took our fancy, and in three days we had our plumber digging, to get in the water, so the masons could put in the foundation. Here was our first mistake—beginning the house without completed plans. For

placing the hot water boiler at a disadvantage. Moral No. 2: Be sure your plans are what you want before you start the foundation walls.

However, this is not all a record of "mistakes." *Au contraire*—we count our house-building a glorious success. We are sure of it, these chilly days in December, when we come in from a tiresome trip down town, to grateful, enveloping warmth that is a pleasant contrast to the shivers of last winter. And then Sunday afternoons and evenings, when a cheerful blaze crackles in the fire-place which is our pride—we glow with satisfaction as well as warmth.

The fire-place is a luxury, of course—

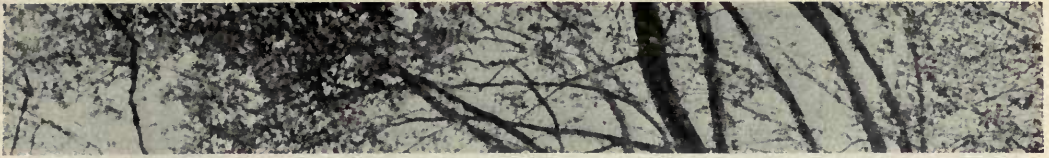
but we are kin to the man who told his architect to "build him four fire-places with a house around them." We cared nothing for a house without a fire-place.

We could have used a cheaper brick for facing—this Navajo Matt, rough surfaced brick is \$3.00 a hundred; but the warm, vivid yet soft coloring, the rose-reds, indigo blues, olive greens, all blended and fused together with creams and browns—are a perpetual delight and worth ten times what they cost. We have an oriental rug on the floor, with just the same coppery reds and creams, and a silk lamp shade on the library table in front of the fire-place in that same shade of red. The shades of the electric lights are amber color, and the little silk curtains of the casements are the red of the rug. The wood work is birch, with a Circassian Walnut finish, a brown that has a slight greyish tinge, and which is extremely soft and pleasing on the birch. The stain has a coat of dull lac to fix it, then two coats of wax, rubbed. This brings out the grain of the wood beautifully, yet is soft and does not mar easily. It tones in well with the fabric paper on the wall, which is a cross between a grey and a tan with a fleck of cream running through it. This paper was \$1.50 a roll, but we considered it economy, because it will look well for years and not grow tiresome. We get just a glimpse of the stairway at the left, a very pretty feature architecturally. It is partly enclosed, a beam and supporting bracket dividing the open from the enclosed portion. The picture also gives a glimpse of the dining room, through the connecting arch, with its very artistic decoration of chestnut leaves and burrs in golden brown, deep almost yellow creams and russets, on a creamy grey ground. The russet tones of the foliage are supported below the chair rail by a burlap effect in exactly the same shade. The light shades are amber and the leading of the china closet

is copper. The casement draperies are old gold sun-fast.

The casement windows in both rooms are charming, inside and out. "Magic casements opening" not on the sea—but green grass and trees. The picture shows them opened out, held in place at any angle by the new casement adjuster fixtures. As you see, the frames are "boxed out," with the shingle just swelling out over them in a graceful curve, and this permits a recessed effect inside where flowers or bric-a-brac may stand. The screens and storm sash are placed inside. On the second floor nearly all the windows are casements opening inside, and the summer breeze through these wide open windows is a perfect joy, while the stops and sills are so arranged as to render them absolutely rain proof. In the hardest fall storms, not a drop of water has leaked through. When people come into the kitchen they say, "what a darling kitchen." It is all blue and white with blue and white linoleum on the floor. It is pantry and kitchen combined, with a work table under the window, built-in cupboards and a gas range that just fits in its corner, while the radiator is tucked under the drain board to get it out of the way.

Our brick porch, of the same variegated Matt brick at \$22.00 per M., with cement floor—was an extravagance, but it lifts the exterior right above the level of the commonplace bungalows adjoining. This porch, including cement floor and steps, cost \$200. It gives a touch of rich color to the exterior of creamy-grey cement, with the soft browns of oiled cedar shingles and cream-white trim. Next year we plan to add the charm of vines and shrubbery to an exterior which even in its present bareness has attracted much admiration. The cost of the house complete with hot water heat, plumbing, decorating, porch, walks and steps, storm sash and screens, was about \$3,300.



When Wintry Boughs Are Bare.

Home Grounds and Gardens



Planning for the Trees

By
Harry T. Woods



IT is difficult to get anyone to pay much attention when you "talk garden" in January. The excitement is all over; the mistakes can no longer be rectified; the successes have all been achieved. So we let the garden, and frequently the grounds, go their own way to desolation and death.

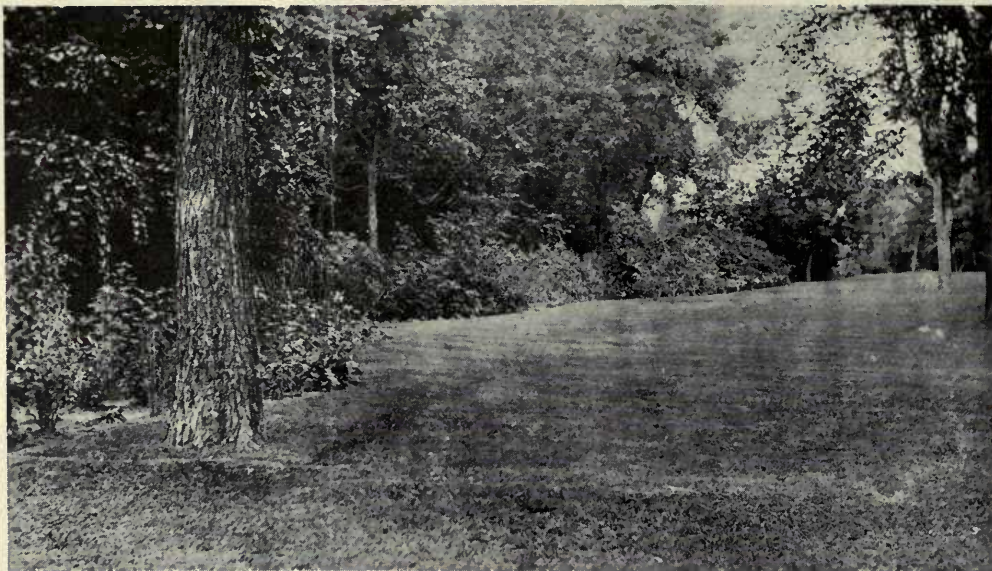
There are some things however that can be done to advantage in this "off" season and one of these is

Arranging for Trees.

An important thing to take into consideration is the size which they will obtain when full grown. Be careful in selecting sites for trees that no desirable view will be shut off, no present arrangement of things interfered with when their tops reach skyward and their branches spread to their destinations. I would also caution against planting too near the house, on account of the exclusion of sunlight. This, however, is a matter of taste. For

my part I like all there is to be had of it for nearly ten months out of the twelve.

The holes in which trees are to be planted, if the soil is at all hard, cannot be dug up too far. If you know of anyone familiar with the use of agricultural dynamite, get him to blast up the holes. The charges cost but a few cents apiece, and no amount of back-breaking, spading and picking can so loosen up a refractory soil and subsoil. Old manure or bone meal, mixed thoroughly with the earth in the bottom of the hole, may be used to assure rapid, healthy growth. Don't feel that you must go without trees if the nurserymen's prices (remember that most trees are several years old before they can sell them) seem beyond your reach. One or two good trees a year will soon give you a fine showing, and if there is no other way to get them, go out to the woods and try your luck. In all probability a neat little clump of birches, a seedling oak or pine or fir, may be found to



Trees Planted Along the Boundary Lines.

be had for the digging, and while its success will not be so certain as with nursery stuff, which has been pre-transplanted and root-pruned, nevertheless there is much pleasure and little expense in trying some of Nature's stock.

In buying a tree pick one by condition rather than price. You want a strong nursery grown tree and it will cost you from \$3.50 to \$10 each by the hundred, according to size. You want a tree that has an abundance of fibrous roots close to the tree. Good roots mean strength

and insurance against failure. Such a tree is produced only by great care while in the nursery. It will have a shapely head, it will be free from pests and in every way what a specimen tree should be. To bring a tree to such a condition requires time and entails considerable expense. It necessitates shifting every year or two in the nursery. Such a tree requires room in which to develop and it has to be sprayed and pruned carefully. The price suggested for such a tree may make some people gasp, but it is really cheap when compared to trees that can be had for a much lower price. Trees can be had for prices ranging from fifty cents to one dollar and a half and they are worth just that much; no more. They are what is called "field grown." They have been grown packed together in rows hundreds of feet long, never transplanted and when wanted for shipment are turned out with a plough. The roots are straggling, the feeders are at the ends of what roots there are and the moving generally destroys them.



Grouping of Young Pines, Spruce and Arborvitæ.

If planting is to be made where the soil is good, as on a lawn, very much less difficulty will be experienced than if the sidewalk is to be the place. Remem-

ber that the tree gets its food from the soil; consequently, use as much as possible in making the setting. Excavate a space ten feet long by four deep and four wide and fill in with the best loam you

can find. Mix liberally with it well rotted manure, bone meal and hard wood ashes. Let this settle well before planting. Don't plant the tree too deep. Go by the mark



Even in Winter There Is a Feeling of Warmth.

ber that the tree gets its food from the soil; consequently, use as much as possible in making the setting. Excavate a space ten feet long by four deep and four wide and fill in with the best loam you

on the trunk made by the nursery planting. If you have the necessary amount of loam you can brick up to within a very short distance of the tree without injuring it in the least.



American Woods and Their Uses

Part II—The Soft Woods

By Wesley T. Christine

HAVING been sentenced to earn his grub by the sweat of his brow, man set about to lighten the sentence as much as possible and when occasion presented or could be invented he has not been above earning his keep by the sweat of the other fellow's brow.

When confronted with the necessity of providing a home for himself and dependents the colonist invaded the forests, selected the trees that were easiest to work and could be secured in largest

quantity and of their products he built a home. He took the soft woods because they grew in greater profusion, could be handled with greater ease and gave the longest and most satisfactory service. He found there were exceptions to this general rule, but was guided by the rule not the exceptions to it.

Soft woods grow in solid bodies while the hard woods, he found, were a mixed growth showing a very small quantity of any one kind of timber to the acre. Much of the soft wood timber was small, the



Excellent Effect Obtained with Wide Siding.

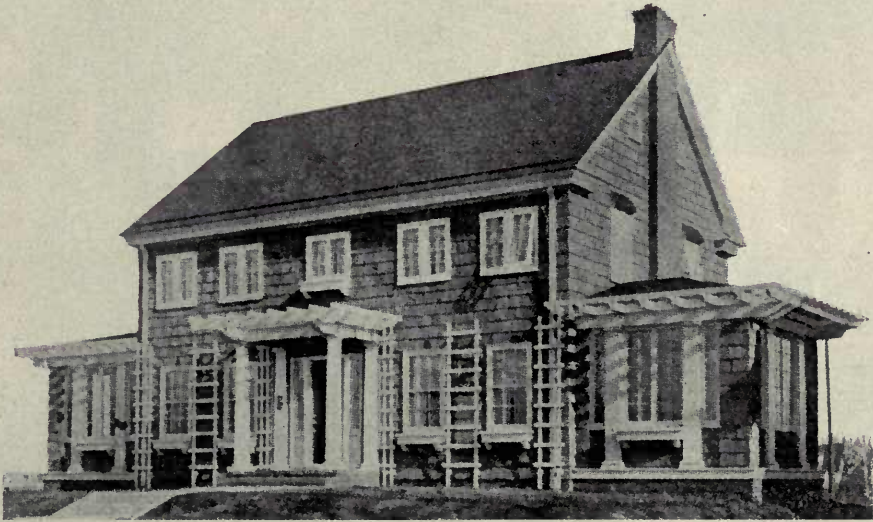
trunks of the trees were straight, the timber was light and it suited the settler to discount his sweat bill as much as possible.

Until machinery relieved him of the task the settler used timber in the form nature creates it, building log structures almost entirely and covering them with rived clap-boards.

The colonists learned very quickly, that some of the soft woods were much to be preferred to others and naturally chose

White pine is the lightest and softest of the pines. The utter absence of pitch, the even character of the wood, its resistance of rot influences, the ease and rapidity with which it could be worked made it the early favorite and it has retained its place in the regard of builders and factory operators. While production has decreased it now holds third place in volume produced and should retain that position for many years.

Norway pine, the companion wood of



A Quaint Revival of Colonial Times.

the best. There was no difference in price, and the price in each and every case was the labor required to get out the logs.

White pine was the universal favorite of the colonists and also of the early settlers in Southern Canada and the northern central portions of the United States. Its popularity has not waned and White pine today is the favorite of the building and factory trade.

The soft woods are divided into six classes or kinds. This classification is a general one, the separation of the soft woods being by families. First come the pines, next the cedars, spruces, firs, hemlocks and larches or tamaracks.

white pine, is a heavier, harder wood. It possesses greater strength and does not give the same resistance to the elements. It is ideal timber and framing lumber and its varied grain makes it of value for interior wood work.

The lumber trade has divided the pines of the south into two general classes to which they have given the names: "longleaf" and "shortleaf," the latter being the class to which have been assigned the softer, whiter, lighter woods, the former taking in the heavier, stronger woods.

In addition to the genuine white pine of the west there is a wonderful growth of what may be termed a soft variety of

hard pine. This is marketed under many names. "Western Pine," "Western White Pine," "Idaho White Pine," "White Pine," and also given local applications of "Western" and "White."

This pine is beautifully colored and figured and somewhat similar in character to the soft pine of Arkansas. It is used extensively in the manufacture of sash

be secured. Boards that wide are not practicable, however, and usually are split into two or more before leaving the mill.

In a broad way the cedars are swamp timbers, the great exception being the Tennessee or pencil cedar. Pencil cedar is so scarce now that the old rail fences are being rifled of their cedar rails



Living Room Finished in Dark Stained Curly Fir.

and doors, for siding, and locally for all building purposes.

Sugar pine abounds in the higher altitudes of California, the belt overlapping into southern Oregon. It is called sugar pine because the sap is sweet and it is claimed the Indians made sugar or syrup of it. The wood resembles white pine of the lake states very closely, the main point of difference or identification being an abundance of small black flecks in the wood. It is a pattern and factory stock. The trees grow to be very large and lumber of almost any width up to 5 feet can

and made into pencil stock. The wood in the rails is just as good now as it was the day the trees were cut.

Tennessee cedar is used for clothes chests, closet lining, etc., the odor keeping out moths. One of the principal uses in earlier days was for fence posts and foundation posts under buildings. The knotty timber is used for such purposes now.

White cedar swamps of the lake states and of the Atlantic coast states have been levied on by fence builders and telegraph companies for several generations. The

skeleton-like boles of former residents of the swamps grace the highways of commerce and adorn (?) our city streets.

Throughout the western forests is to be found the red cedar, varying in size and character with the conditions under which it grows.

In Idaho, Montana and eastern Washington this cedar is of fence post and telegraph pole size. On the Pacific slope the red cedar reaches a great size, rivaling that of fir and spruce. It is the present shingle material of the North American continent and is employed for siding and outside trim. Belonging to the cedar family it lasts, of course.

Cypress of the gulf coast and red wood of the northern California coast are classed as cedars. Locally they are used for all building purposes. In distant markets their uses center in exposed work where a material that will resist decay is required. From both woods are produced large quantities of shingles, siding, interior and exterior trim and similar stock.

Cypress, thanks to the publicity given that wood, now is regarded as the only wood for greenhouse work.

Spruce is the mainstay of the paper makers.

The tideland spruce of the west is a great tree, attaining a diameter of 10 feet or more and a height of 250 feet. It is a lumber wood, largely, and is growing in popularity as a sash and door material.

Used in the manufacture of doors it frequently is mistaken for white pine, which it resembles in color, though the texture of the wood is slightly different.

In California and foreign markets fir is known as "Oregon Pine." The fir timber of Washington and Oregon will produce anything up to a timber twenty-four

inches square and seventy feet long. Fir is the big timber dependence of the world, and is used in all parts of the world.

Fir siding, fir flooring—excellent for porches or where exposed to dampness—fir frames, fir doors, fir joists are familiar to eastern builders. On the Pacific slope fir is used for all purposes, being the main reliance of the ship builders of the west.

Since our Greek friend drank the hemlock juice there is not a mouse or a rat in the world that will have anything to do with that wood. The farmer profits by the rodents' aversion to hemlock.

Western hemlock is superior to that of the east, being of finer quality and showing no tendency to shiver when exposed to the weather.

Hemlock is fourth in volume of product and will retain that place for some time.

This is another of the soft woods that will not rot, and it might be said here that in that respect the soft woods are vastly superior to the hard woods, with one or two exceptions.

It is an excellent material with which to floor barns, driveways, sheds, factories, etc. Northern lumber manufacturers use it largely in flooring their barns and roadways in their lumber yards.

This completes the list of soft woods and truly it is a wonderful list upon which the builder may levy tribute, for scarcely one of the woods mentioned cannot be secured by any builder who elects to use that particular kind of lumber.

With this information in store the average builder should be able to judge whether or not he is getting one of the most suitable or one of the least suitable woods. That is the point in which he is interested, for on it depends much of the value of the investment he makes.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 470 SPENCER & POWERS, Chicago, Ill.

B 471 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 472 JOHN HENRY NEWSON, Cleveland, Ohio

Design B470.



HIS is an attractive exterior, in a rather unusual combination of wide, rough-sawed siding, stained brown with cement plaster above the second story window sills, and is an instructive example of the excellent results that may be obtained when wood is the material chiefly used in construction.

The architect has achieved an artistic dwelling at a moderate cost which will hold its own with more pretentious neighbors in that suburb of Chicago, Oak Park—noted for its beautiful homes. The unusual placement of the windows in two long groups and the unusual depth of the porch projection, required and have received, careful handling. The arrangement of the floor plan is also unique, with special attention paid to the conveniences of the service portion. The location of the closed stairway deserves notice, as it is easily accessible from both the front and the rear, without the expense of a separate back stair. From the entry in rear, four steps lead down under this main stair to the basement; thus the back porch gives access to both kitchen and basement, the refrigerator being also filled there.

Generous fireplaces on both floors add to the value of the house, and the attic is most convenient of access.

The finish of the first floor is oak, with yellow pine in service portion. The second floor is partly birch mahoganized and partly white enamel. Built-in wardrobes are a feature of the large front chamber,

Design No.

B 473 KEITH'S ARCHITECTURAL SERVICE, Minneapolis

B 474 BUNGALOWCRAFT CO., Los Angeles, Cal.

B 475 A. C. CLAUSEN, Minneapolis, Minn.

which is a veritable sun-room in itself. The house is equipped with the usual heating and plumbing and is estimated to cost about \$5,000.

Design B471.

This design is for a two-story frame house, the first story veneered with brick and the second story cemented on metal lath, the roof covered with red Spanish tile, with wide overhanging cornices.

The first story has three rooms and two porches and second floor two rooms and a sleeping porch. The size of the house is 25 feet in width by 36 feet in depth exclusive of the side piazza. The vestibule entrance on the right opens into a large living room across the front 24 by 13 feet with wide Dutch window projected in front and a seat beneath, book shelves at the end with French window between opening on a glazed piazza. The dining room opens back from the living room on the left 12 by 14 feet with recessed sideboard with wide Dutch window. French windows at the rear, open on a porch that may be used to eat in during the summer months. This plan has had careful study to accomplish every convenience. A special feature is the arrangement of the staircase leading to the second story, with basement stairs underneath and grade entrance and rear section from the kitchen connecting.

The finish of the first floor is Mission stained fir with oak floors and the second story finished in pine and enameled white with birch floor. There is one large



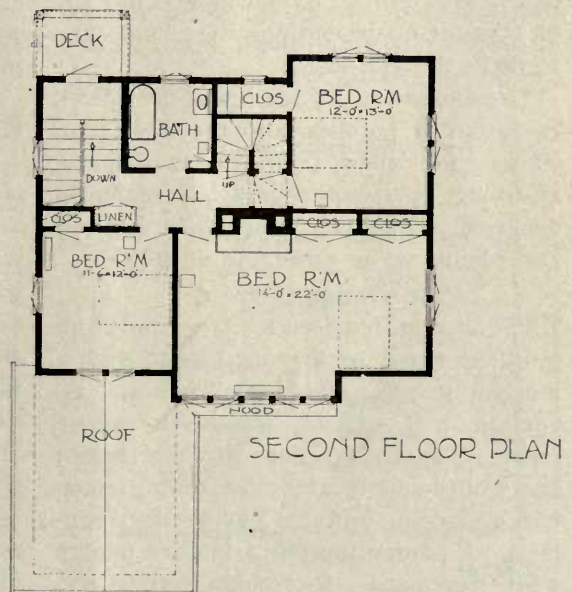
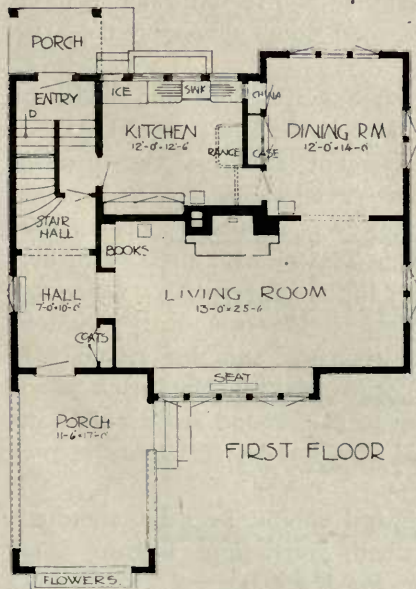
DESIGN B 470

Spencer & Powers, Architects.

A Combination of Wide Siding and Plaster

central chimney with fireplace in the living room. It is estimated to build this house for \$5,000, exclusive of heating and

plumbing. There is a good basement under the entire house exclusive of porches. The exterior wood trimmings,



cornices, etc., are to be painted white and the cement on the second floor tinted a light cream color. The brick used in the first story to be an Oriental brick.

Design B472.

This is an uncommonly interesting rendering of Elizabethan design in modern style. The design is carried out in brick and frame, the gables on the end having plaster panels half timbered, while the front gable is carried down to the windows of the first story in plain rough-cast plaster. The plaster is cream colored and the brick a rich, soft red laid in deep cream mortar with raked out joints. The influence of the English Gothic is very marked in the treatment of the exterior, appearing in the high pointed gables, in the vertical timbering, in the spindles of the Gothic porch and in the large, many-paned, mullioned windows. At the left of the porch, the deep reveal of the embrasured window is carried up through the second story and terminates in a pointed dormer. The treatment of this feature and of the twin front gables is a fine piece of architectural composition. The hanging oriel in the front gable adds to the interest. A spacious, tiled porch, is placed in the rear, on account of the outlook over landscape work in the gardens.

The dimensions of the house are 33x34, exclusive of porches, and the floor plan shows an excellent arrangement of space, affording spacious rooms, conveniently disposed. The cost, including heating and plumbing, is estimated at \$9,000.

Design B473.

We have in this design a large and commodious house so arranged as to give a minimum cost. The living room and reception hall extend across the entire front. The living room has a fireplace and built-in bookcases; the dining room has a built-in buffet. Beside the regular work pantry there is a kitchen pantry with cupboards for china, kettles, etc.

On the second floor the large owner's chamber has a dressing room attached which could be arranged for a private bath; also a French window leading onto a fair sized sleeping porch. The balance of the floor plan is taken up by two additional chambers, a large bath, and plenty of closet room. A stairway leads to a good attic where two servants' rooms and a child's play room is finished off. An excellent feature of this plan is the incorporation of the garage—the rear wall of the dining room forming the side wall of the garage. A group of high, frosted windows in this wall, prevents any diminution of the light in the living room.

With the garage located in this way it enables the occupants to pass from the garage to the house by way of the kitchen and rear porch which is covered without going outside, which is very desirable in inclement weather. This is even a better arrangement than having the garage in the basement under the house as it keeps the odors from entering the house.

The garage here shown is large enough to accommodate two cars.

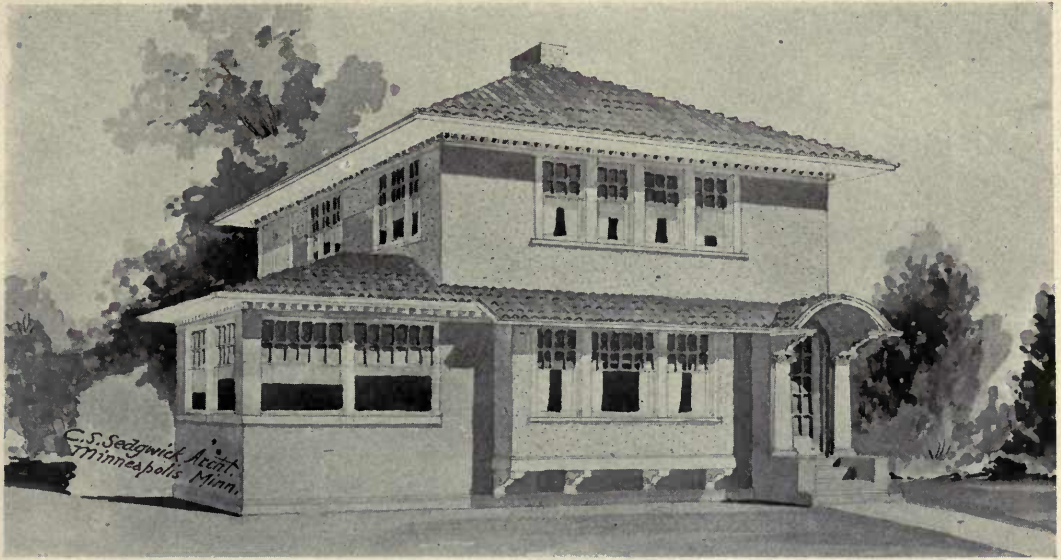
The first floor is finished in fumed oak and the kitchen and second floor in birch with hardwood floors throughout. Attic in pine.

The bath has tile floor and wainscot with tile floor in the front vestibule.

The basement contains the heating plant, laundry, vegetables, and fuel rooms.

The exterior is of frame construction with cement plaster over metal lath and half timber in the gables with a veneering of brick up to the first story window sills. The roof is of shingles, stained. A tile roof with perhaps the brick work carried up to the second story would increase the cost but be still more attractive.

This design should be built complete as described, including heating and plumbing, for \$7,800.00.



DESIGN B 471

Chas. S. Sedgwick, Architect.

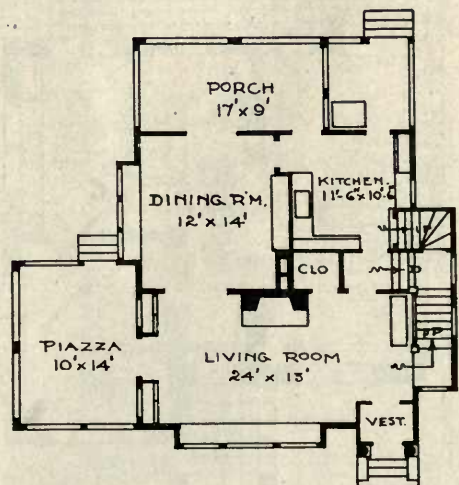
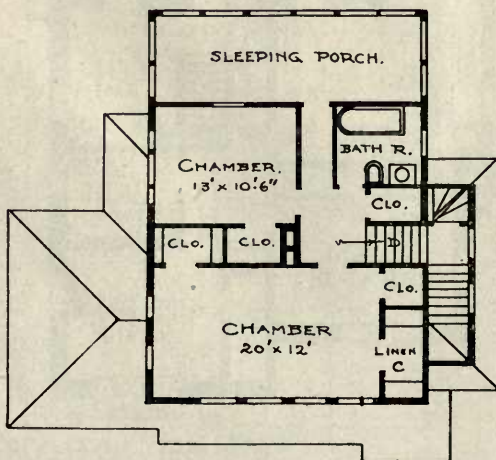
A Convenient Small Family House

Design B474.

This snug home was designed by the architect for himself and little family, just "Molly and I and the Baby." It is only 24 feet front by 32 feet in depth, exclusive of porches, and its approximate cost in California under the usual type of construction in that locality, including plumbing, electric wiring and fixtures, gas piping, cement walks, etc., is \$1,000. It should be understood, however, that

this amount covers only the cost of material and labor and if the house is to be given on contract the builder will probably charge two hundred dollars more.

The rooms are all of good size and well arranged. There is plenty of handy closet room; the kitchen is equipped in full cabinet style and there is a little nook opening off of the kitchen for the family dining room under ordinary occasions. "When we have company" the dining





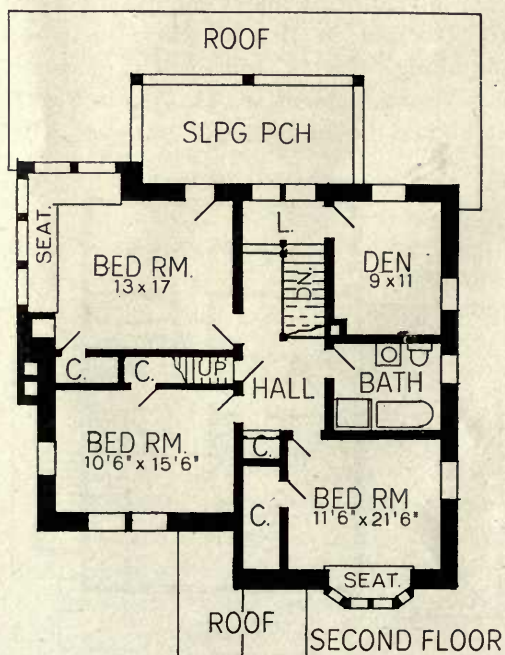
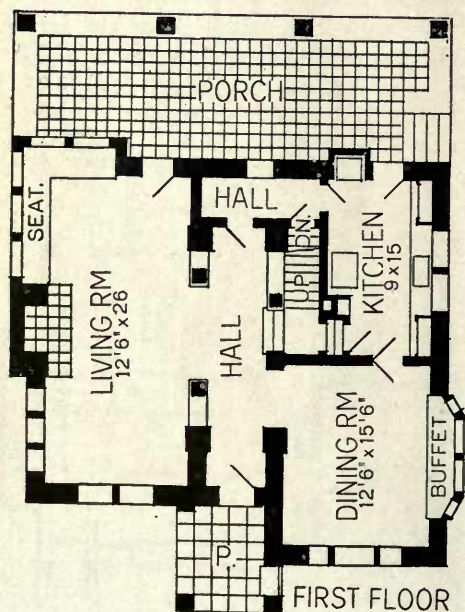
John Henry Newson, Architect.

DESIGN B 472

A Modern Rendering of Old English Design

room table is to be spread in the living room. There is a pressed brick mantel in the living room and the principal cup-

board in the kitchen is arranged as a buffet. The house is light and airy and can be well ventilated from any direction.





DESIGN B 473

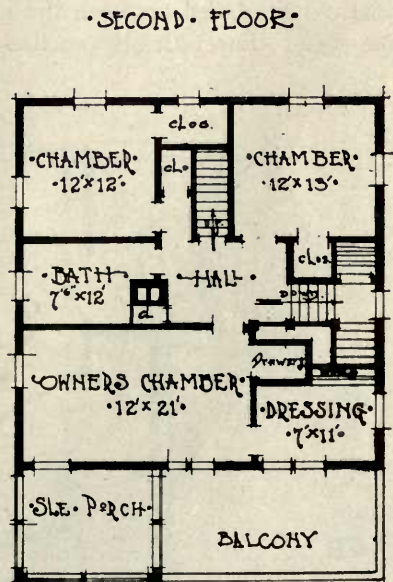
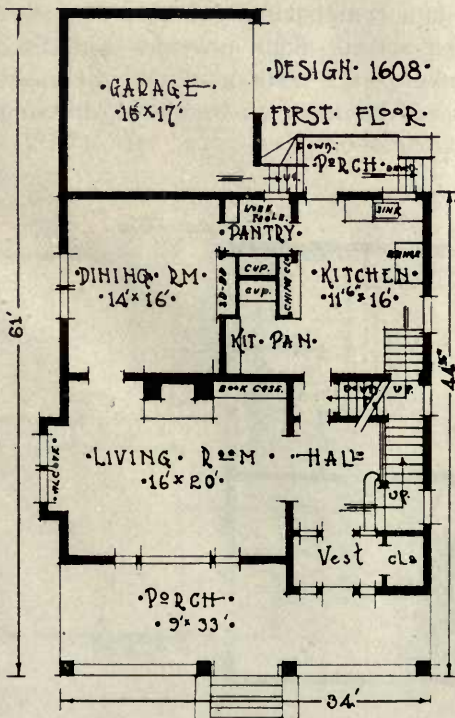
Keith's Architectural Service, Architects.

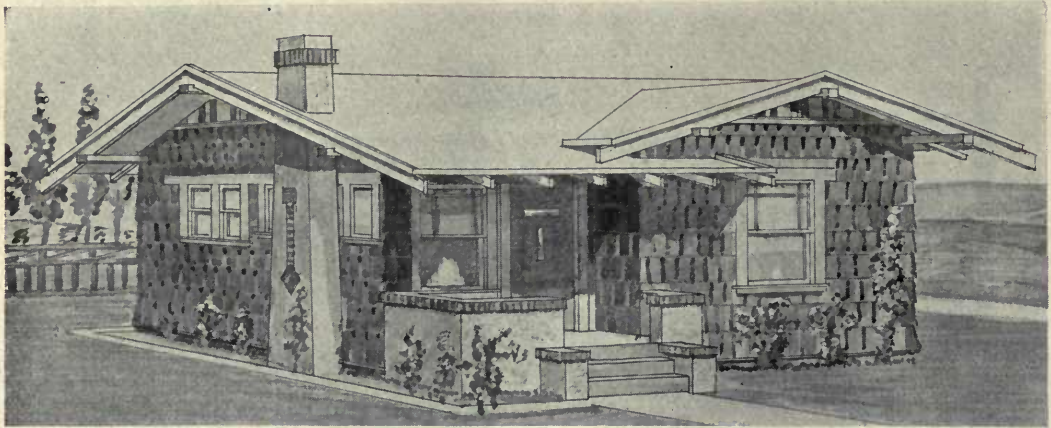
Where the Garage Forms Part of the Design

The picture shows very well the exterior appearance of the house which is most attractive from every point.

Design B475.

In the construction of this house several materials are combined in a rather



*Bungalowcraft Co., Architects.*

DESIGN B. 474

A Clever Little Four-Roomed Bungalow

unusual manner. Cobble stone, cement plaster, brick and shingle enter into the composition.

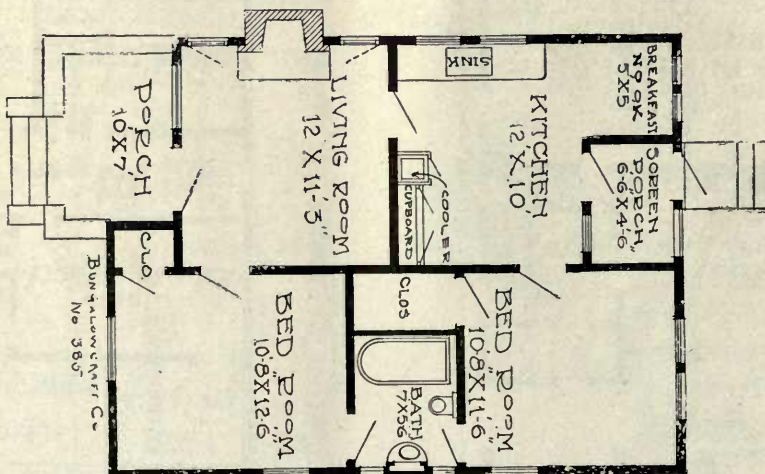
The upper section of the roof opens out like wings, admitting a group of dormer windows on both front and rear, with the chimney brought through in front. Flower boxes relieve the projection.

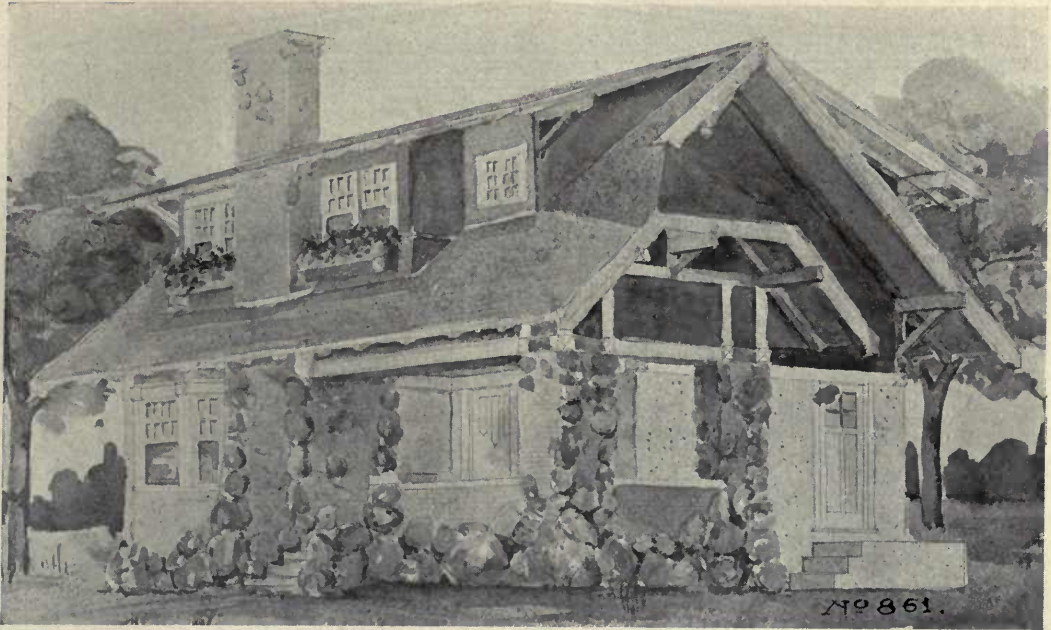
The floor plan is rather unique. From the porch one enters the hall, with a large coat closet placed between the porch and the stair. The living room has a cobble

stone fireplace and built-in bookcases. The kitchen has built-in cupboards.

The treatment of the stairway is very simple yet attractive, convenient though inexpensive being closed in the expense is reduced. Its location eliminates a back stair and the grade door basement feature is accomplished.

The second floor provides for three chambers each with a closet, the front bedroom having two besides a dressing room 7-6x8-6:





Arthur C. Clausen, Architect.

DESIGN B 475

A Combination of Materials

The bath has a built-in cupboard and medicine cabinet. A rear closet off hall.

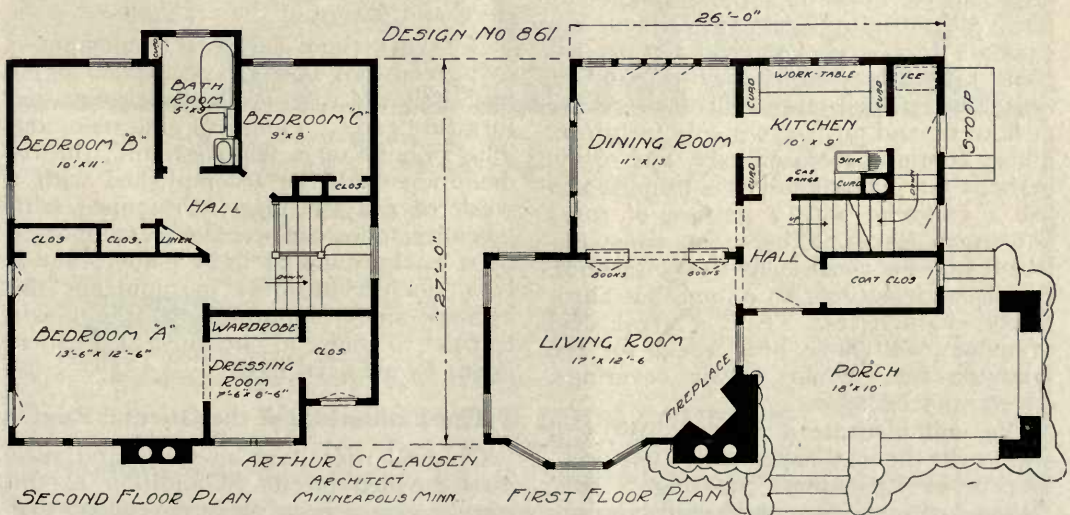
The basement has a den, laundry, vegetable and fuel room and hot air plant; concrete foundation.

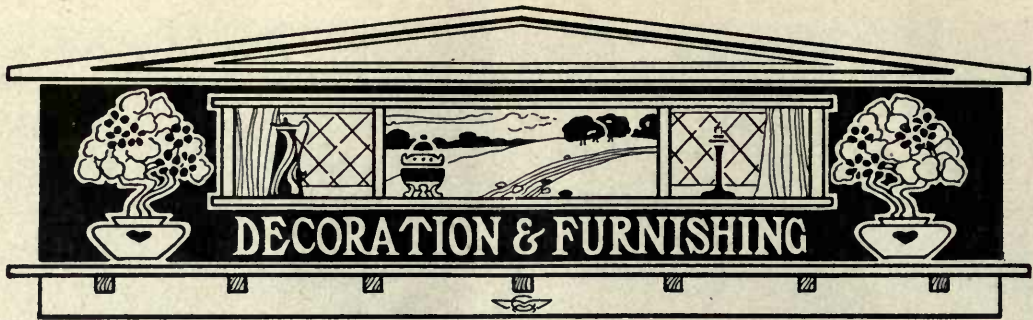
All exterior woodwork is stained.

The floors throughout are maple, with oak finish first floor; birch for the balance.

The second story rooms are all full height.

Estimated cost, \$4,100.





Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

The Value of a Definite Color Scheme.

THE average room has no special color scheme. I suppose the fact is to be attributed to the craze for the Oriental, which overtook so many people about forty years ago. Because the eastern rug often combine successfully nearly all the colors of the rainbow, people assumed that to have an effective room, you had only to revel in combined colors, very many of us have learned better, but the tradition dies hard. Moreover, as most people cannot afford to replace their household goods, the jumble of colors seems almost a necessity.

It is a gain not only in effectiveness, but in economy to have a definite color scheme. Take the use of cretonne, which is such a charming material for the furnishings of the country house. You can spend a great deal of money on the fittings for a single bedroom, and with the average characterless, if quite inoffensive wall paper, you may achieve very little else than a confusion of colors and an extensive repetition of pattern. A concrete example is always helpful. Let us assume that the room has white paint, a white satin striped paper with little wreaths of flowers, and birds-eye maple furniture, a very common combination. The rug is perhaps tan colored and it is proposed to use a cretonne with a pattern of roses and green leaves. The room, when finished will be clean, negatively tasteful, that is with nothing to offend, but absolutely characterless. And a great deal of money will have been spent for the cretonne for curtains, chair coverings, covers and bedspread.

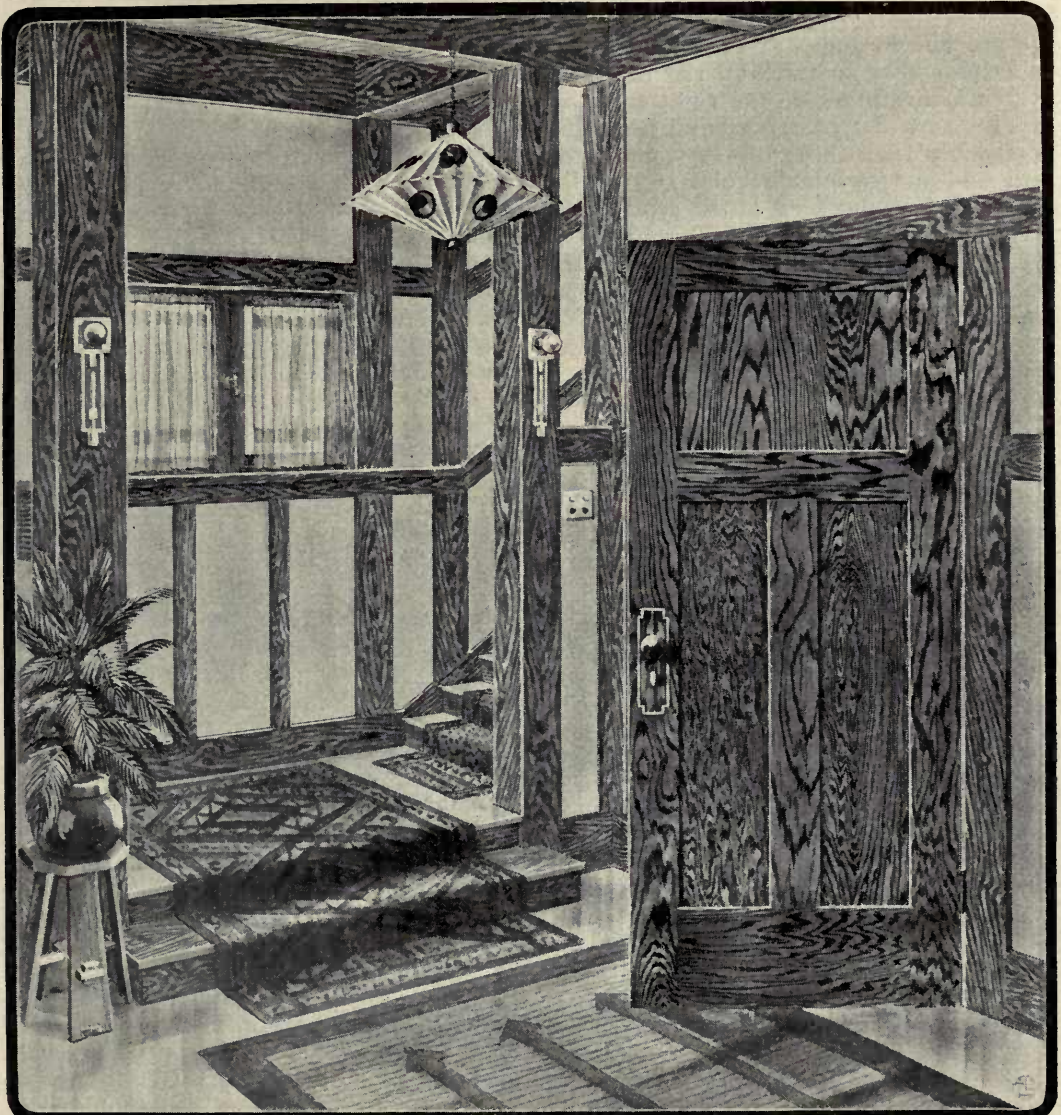
We will institute a reform. We will wash over the wall paper with some preparation of kalsomine, choosing a soft, rather dark old rose, which will harmon-

ize with the color of the flowers in the cretonne. We will discard the tan colored rug, using it in some room where it will contrast with dark colored furniture and with upholstery in brown and green or brown and blue, and we will have in its place a green rag rug toning in with the green of the cretonne. Instead of covering everything in sight with the cretonne, we will restrict it to a single large chair, and to a screen, if there is one in the room. For the bedspread and for covers we will use a cream white cotton taffeta, or mercerized poplin, with a border of the cretonne. The cretonne will also cover boxes for the dressing table and a writing set for the table. Whatever there is in the way of bric-a-brac will be either pink or green and we shall carefully avoid the least touch of pure white. Against the rose wall the beautiful color and polish of the birds-eye maple will have their full value, and the eye, unfatigued by the repetition of its pattern, will have an opportunity to appreciate the color and design of the cretonne.

If such a room had direct sunshine, a soft green wall would have as good an effect as the old rose. With white enamelled furniture and a cretonne of pink roses and blue ribbons on a white ground, the redemption could be accomplished with a wash of grayish blue. Cretonnes with lavender tones are excellently supported by a background of light mauve, but it is a ticklish business harmonizing the various tones of purple. It is not safe to trust to sunlight, one must also experiment by artificial light.

The Limitations of the Oriental Rug.

Oriental rugs have so many and such distinguished merits in addition to the very obvious one of their durability, that



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Architects see "Sweet's Index," pages 1004 and 1005.

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we are apt to jump at conclusions and to assume that an Oriental rug of whatever coloring must be the right thing in every place. Of some Oriental rugs this is possibly true, those of very small pattern and indeterminate color, especially those of medium tones, of the type which inspires the designers of the French Wiltons and the Anglo-Persian rugs. Whether a room whose floor covering is so neutral and so slightly related to its color scheme achieves its full decorative value is another matter. But when you come to lay an Oriental rug of positive coloring, like one of the dull red Bokharas for instance, in a room with green walls and furniture covered with flowered chintz, the whole color scheme is out of joint, and the same criticism applies to other Oriental furnishings in the way of draperies, couch, cushion and table covers.

The Oriental rug of strong coloring is at its best in a room with much dark woodwork and neutral toned walls and furnishings, when itself supplies the strongest color note. The lighter red Bokharas are admirable with old red walls and ivory woodwork, a color scheme which is especially admirable for a large hall. Now and then a Persian rug of good size combines a delightful old red with dull blue and brownish tones and is successfully associated with either a red or a blue wall. For a room in delicate colors, rose, or gray, or light green, beautiful harmonies may be found in some varieties of Persian rugs or carpets. Less familiar to the shopper but often admirable, and more reasonable in price, are the Indian rugs in light tones, although their rough surface seems out of keeping with the finer sorts of upholstery fabrics.

It is in the case of these rooms in delicate colorings, of a type of decoration which we are more and more coming to appreciate and admire, that the limitations of the Oriental rug are most apparent. You may harmonize your rug perfectly with the walls and furnishings, but the fact remains that the general effect is far better with a plain or two-toned carpet rug of some deep piled weave; velvet or Wilton, or Aubusson, dull blue, soft green, deep rose, or creamy

gray, which will reinforce the fainter tones of the other parts of the scheme.

Adapting the Room to the Rug.

Quite often the problem is how to create the proper setting for a rug, which is quite hopeless in the existing environment. The one possible place for a rug of positive color, say light red, old rose, or orange, may be a room whose walls are yellow. A valuable rug is generally worth a new wall paper, but in a rented house this may be out of the question. A simple expedient is to wash over the offending paper with one of the kalsomine finishes in a warm gray or what used to be called coachman's drab, a color for which the model can be found in some of the pressed papers with a pebbled surface. This latter tone and the kindred oatmeal color is an ideal wall for bright hued rugs of medium depth of tone. The vivid reds and blues of some of the heavier and coarser sorts demand a wall of stronger tone, say a medium golden brown.

An interesting color scheme which can be built up around a rug with deep tones in combination with dull blue has a wall covering of mulberry, perhaps one of the grass cloth papers with a sketchy design outlined in sepia, with curtains and some of the furniture coverings of English chintz in blue and mulberry, with a sofa and a large chair in dull blue. This combination of blue and mulberry is rather new and very satisfactory when well managed. While it looks best with dark oak or mahogany furniture it is not impossible with golden oak, which should certainly be a recommendation, as that wood is so common and yet so difficult to adapt to most furnishings. Blue china of the darker tones, like Nanking and some Chinese wares, should look well in this connection.

Washing Over Papered Walls.

The washing over of a papered wall with kalsomine is not formidable, although it will be steadfastly resisted by the average decorator. The only essential to success is that the paper should be firmly attached to the walls, and it may be necessary to put on fresh pieces if the corners are blistered. It is well to

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arrange for a drop ceiling by bringing the picture rail well down on the side walls and washing off the paper above it, coloring the washed space to match the ceiling. As the kalsomine preparation can be had in a variety of tints, and is accompanied by minute directions for mixing and applying, the work need not be beyond the skill of some member of the family. The pattern of the paper may show through the coat of kalsomine, but the effect is not disagreeable but gives a pleasing diversity of surface. The lighter the paper the better the result, and it is almost impossible to cover a red paper satisfactorily. Yellow and lavender are not colors to choose as they require a suggestion of textures or lustre, a flat yellow or lavender wall looking extremely cheap.

This wash treatment is very successful when applied to walls covered with burlap, which have become stained and soiled. They should be cleaned thoroughly before being washed over. Although the writer has never seen it done, it is probable that the treatment could be used with faded Japanese grass cloth, which has an even rougher surface than burlap.

The most satisfactory colors are the neutral ones, gray and drab, tan, gray green and blue gray and the light shades of terra cotta. In planning for a plain wall it should always be remembered that the tone should be rather deeper than you would choose for a figured paper of the same general effect. As a temporary improvement to rented quarters, or as a makeshift in one's own house, pending a more permanent wall finish, kalsomine is a godsend. A number of excellent preparations will be found mentioned in our advertising pages, any of which will be satisfactory, the only difference being in the range of colors offered.

A Bride's House.

The writer has recently seen an extremely simple and old fashioned farm

house which has been redecorated for the home of a young married couple, which seemed to her an admirable illustration of what good taste can do with very simple materials. No wall paper cost more than twenty-five cents a roll and most of them much less. The floors, old fashioned ones with wide boards, were all painted nut brown, given two coats of varnish and rubbed down, and all the woodwork was painted white.

In the very narrow hall, whose furniture was to be mahogany, the walls were papered a clear, rather light yellow, a two-toned stripe. The furniture of the living room was also mahogany and here the paper was a verdure tapestry design in tones of warm gray. Across the hall the dining room accommodated itself to white enamel furniture and blue china with a wall of dull blue oatmeal paper, not especially beautiful in itself, but good in contrast with the china and silver and as a background.

Upstairs the rooms were rather low studded and all the furniture was white. The bride's own room had a diamond pattern of narrow blue ribbons on a white ground, with a bow knot border of wider ribbons at the top. In the guest chamber the paper was a satin stripe in two tones of white with a narrow border of pink roses and blue ribbons. Another bed room had a striped green and white paper with a green ribbon border, while the fourth room, with a northern exposure, had the same striped yellow paper as the hall and a white moulding instead of the paper border. As the rooms were very low studded, not more than eight and a half feet high, the borders were narrow, three or four inches wide. The bath room, lighted only by a skylight, was enameled in white. The whole was a delightful setting for the bride's artistic plenishings and for her few heir looms of real distinction, and unlike much work of the same sort was quite in keeping with the simple architecture of the house.

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"Piermont-on-Hudson, N. Y."

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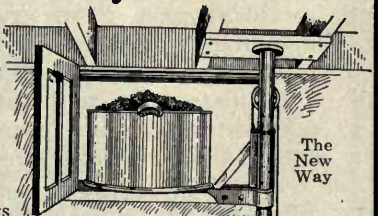
Home of Geo. E. DeGroat, Piermont-on-Hudson, whose architect endorses Beaver Board in the above letter.



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The Old Way

ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

A White Marble Mantel.

W. M. T. asks for advice as to the decoration of a dining room, 15x30x12½ feet, with a white marble mantel which he wishes to retain. The room faces south and east.

Ans.—Your idea of white enamel paint and mahogany furniture is excellent. Since the white marble mantel-piece is of good design we advise retaining it. You might have a mirror as long as itself, and about two feet high, framed in white enamel, hung just above it. Break the extreme height of the walls with a plate rail, which should be set somewhat below the upper line of the doors and windows. For the wall covering, would suggest a tapestry paper in a foliage effect in gray tones, tinting the ceiling a grayish white and the space above the plate rail a tone between that and the side wall. Or the space above the plate rail may be effectively covered with a silvery gray grass cloth. These gray tones are very good with mahogany furniture and for a background for silver and china. If you prefer a warmer color scheme use a small patterned paper in two tones of tan below the plate-rail, laying it in panels surrounded by a two-inch border, in soft rose and green. Tint the ceiling ivory, the upper side wall light tan, the color of the light tone of the paper.

So large a room certainly needs a rug and the floor should be stained a dark brown and waxed, or otherwise treated to give a high polish. With the tan coloring, you might use a rug in brown tones with touches of rose and green, while with a gray wall an Oriental rug with some red and blue will be a good contrast.

To Curtain Casement Windows.

M. C. B. wishes to curtain a set of six casement windows, 18x36 inches, set about four feet from the floor, above a long window seat, in a room with a color scheme of tan, ecru, brown and rose pink. She asks advice as to materials and method of hanging curtains.

Ans.—Each of your windows should be curtained separately, the curtain hanging from a rod set inside the window frame if windows swing out; on the sash if they swing in. A valance across the top of the group with draperies on the outside only is often the only curtaining. Material should match that of other windows in the room. You ask about shades for such windows. The difficulty of using the ordinary shade is one of the practical objections to the extremely picturesque casement window. On a casement window of ordinary size a shade can be bracketed on the inside of the window, but it is not usual.

As to the material of your curtains, we would suggest cream or ecru in fine drawn-work scrim, or heavy net with an edging of lace braid. Another good material is Madras in a small all-over pattern, without borders. Some of the newest are almost exact copies of the popular shadow laces. Filet net in small squares is very decorative indeed, and there is also a plain filet net with small figures which looks well.

To Harmonize Red Brick and a Red Rug.

F. C. asks for suggestions for papers and draperies for a living room and hall facing south and east, 15x25 feet, with a staircase leading out of it, and a high chimney piece of tapestry brick in red tones. The large rug is in tones of red, cream and black. Table and sectional

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ANSWERS TO QUESTIONS—Continued

bookcases are golden oak, mahogany piano and music cabinet.

She also asks about paper, rugs and curtains for the dining room, facing south and west, 16x13.9 feet, with golden oak furniture. Woodwork in both rooms is dark oak.

Ans.—Either a mulberry shade or a medium terra cotta will be good in your living room if—and this can only be determined by yourself—the red of your rug is dark and dull enough. Otherwise, you will have to fall back on the brown tones for your wall paper, and you must have a fairly deep tone to contrast with the golden oak furniture. Could you not use the rug you now have for the dining room, and get a two-toned mulberry or terra cotta rug for the living room? In that case you could paper the dining room in a two-toned striped buckram paper, in tan, carrying it up to a dark oak plate rail, and use red and cream Madras curtains.

For the paper in the living room choose an all-over conventional design in two tones and carry it straight up to the ceiling line. It does not seem to me that this room is well enough lighted for silk inner curtains. We should prefer net curtains in deep ecru with an edging of lace braid. It is not advisable to have shades of so positive a color as rose. An olive tan does not fade and gives an agreeable inside light. Many decorators use plain white, preferably striped holland.

Suggestions for New House.

P. C. M.—I am asking for suggestions for decoration, furnishing and color scheme. The house will be ready for the interior finishing in about a week; would like suggestions on the paneling. I thought of having dining room paneled in strips about two feet apart to plate rail about six feet from floor. The library den paneled the same as dining room. Ceilings all beamed on first floor.

Would you advise the living room walls to be paneled or just have the plain burlap wall. Shall I have the hall and vestibule oak wainscoted or paneled in strips with burlap, in the parts between strips. I thought of golden brown and orange and cream for ceiling for dining

room, and rich maroon and gold or ecru for den and hall, but what shall I have for living room, etc.

Ans.—On examining your very complete and excellent floor plan, we find an unusual amount of wood paneling and beaming in a house of this size. Such a finish demands decorations and furnishing of considerable dignity. The rich but quiet tones of wall hangings and furniture fabrics now in vogue will be quite in tune with all this oak woodwork. Answering first your question in regard to wainscoting, we strongly advise a wainscot of simply paneled oak in the hall at least, rather than the oak strips and it would be our choice for the dining room also. If, however, you prefer the oak strips, a handsome effect can be obtained by filling in between with a very rough heavy pebbled paper rather than burlaps. As this room has such a wide south exposure, we should advise another scheme of color rather than the brown and orange you suggest. There is a charming tapestry paper in blended smoke greys, dull but rather light blues and greens and mulberry shades, which we would use above the wainscot with the plain rough paper spoken of, below, though the all oak wainscot would be preferred with a rug in either dull old blue or sage green as you prefer.

Whichever color is chosen would be used at the windows in some of the thin sun-fast materials now so attractive. We would use a fumed oak stain, not dark, on the woodwork of dining room, hall and living room, but in the library a greenish bog oak stain with contrasting wall and rug in warm rose-copper tones. A Morris chair stained bog green with cushions of some of the new black ground cretonnes having a flower in the rose-copper tones, would be extremely effective here. In the living room we would use the brown tones, with relief notes of rose. There is a new fabric called "Shadow-Kona" in a very soft shade of brown with slight hint of gold glinting through, to give it life. We would use this plain up to the picture molding in angle. We would use fumed oak furniture with a fireside chair in wicker upholstered in dull rose velvet and tapestry combining brown and rose on the oak.

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The Pros and Cons of Corned Beef.

HERE was a real reason, though probably an unrealized one, for the traditional "boiled dish" of New England. The lack of real nutrition in the meat itself was offset by the abundance of substantial vegetables. Corned beef, as ordinarily eaten is a stimulant or a relish rather than an article of food. It is at its best when it is only corned two or three days and with as little saltpetre as possible. The saltpetre gives the beef a very red look and hardens the fibre making it difficult of digestion. The unpleasant taste so often noticed in corned beef is due less to the ingredients used than to the fact that the butcher does not clean out and empty his brine tank often enough. The one satisfactory way to get corned beef is to pick out a piece fresh and have it put into brine for a few days, not more than a week, preferably three or four.

For the family which will eat any fat at all, the lower end of the chuck ribs is a good choice, the meat being of good quality and the amount of bone small. The brisket which is so popular in New England is no better in quality and is very wasteful with its large proportion of fat and bone.

For people who do not care for fat the best pieces are the rump and the round, preferably the former, which has a little fat and is apt to be tenderer. Both of these pieces cut well, giving large handsome slices, when the meat is served cold on the second day. The chuck piece in the forequarter, which is sold for stewing is also very good corned, although it is not so firm and does not slice as well as the hindquarter pieces.

The Secret of Good Corned Beef.

You may have the best cut of corned beef possible and it will not be more than barely edible if it is cooked carelessly. Corned beef should be put on in cold water and cooked at the slowest possible simmer, the water never more than just smiling. If it has been in corn a week or more, the water should be changed when the meat is about half done. For this slow cooking three-quarters of an hour to the pound is none too much to allow.

If you want to cook the regulation vegetables with corned beef, you will have to cook the meat by itself and remove it from the kettle before you put in the vegetables. Then half an hour before serving time drop it into the boiling liquid and let it heat through thoroughly. The best boiled dinner the writer has ever eaten had all the vegetables cooked separately in clear water, liberally buttered and arranged around the beef on a large platter. She is inclined to think that the motive in cooking the vegetables in the pot liquor is the saving of butter, a matter which made for economy rather than flavor.

Glorified Hash.

Despite all the jokes about boarding houses, there is nothing much better in its way than good corned beef hash, made of lean meat and mashed potato, in equal quantities. For some occult reason, the flavor is better if the meat is chopped by hand instead of with the meat grinder. The fat of the meat makes it very greasy and should be saved to fry potatoes with. Plenty of butter in a thick bottomed frying pan, slow cooking to make a thick

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brown crust, and a liberal addition of butter, with a sprinkling of pepper to the top about midway of the process and you have a dish which, if not fit for the gods, is at least acceptable to most men.

In the South they make it very soft with thick cream; in New England they add chopped vegetables, generally beets, but it is hard to improve on the original model, especially when it is supplemented by dropped or fried eggs and feather light short biscuits. If one feels that she must improve, it may be mixed with very thick cream sauce and made into croquettes, which should be served with a tomato sauce. Corned beef croquettes and tomato sauce are one of the very popular luncheon dishes in the students' dining rooms surrounding one of the big technical schools in the East.

The principal value of corned beef is as a variant to the bill of fare. It is not easily digested and it is low in nutritive value, but it appeals to the palate and the eater is seldom aware of its deficiencies. Vegetables of real nutritive value, like sweet potatoes, beans, or peas, should be served with it, and if cheese in some form can be a part of the meal so much the better.

As a matter of economy, corned beef is a poor purchase, because only the fibre of the meat is used. The juice is entirely wasted. Some cookery books advise using the liquor in which corned beef has been boiled for the foundation of pea or tomato soup, but the writer's experience has not been such that she would advise anyone trying the experiment.

Edible Viscera.

The liver, the heart and the kidneys of a beef creature are all used for food, but tastes vary very considerably in the matter, and people who dislike any or all of them dislike them very much indeed. They have the merit of being cheap and are susceptible of many variations.

The heart is less used than either the liver or the kidneys. It is rather large in size for a small family, as it weighs five or six pounds and is solid meat. It is a very good piece for mince meat, but is rather dry for any other purpose, unless it is larded with salt pork. Larded and stuffed, roasted slowly and basted fre-

quently, it is extremely savory, tasting not unlike the dark meat of a fowl or turkey. Seasoning and cooking must be done with the greatest care, but it is worth trying.

Liver is always associated with bacon, but it may also be cooked with thin slices of salt pork. It is apt to be tough and should be fried very slowly to avoid scorching, the frying pan being kept covered, so that the steam may make the liver tender. The leftovers may be minced with an onion, browned in butter, mixed with a little gravy, or tomato sauce and spread on slices of toast.

Economy in Fuel.

These winter months bring home to the dwellers in the North the heavy cost of artificial warmth. The amount of money paid out for coal and wood almost always exceeds very largely the proportion laid down by economic authorities, a proportion which the writer is unable to state exactly. It was predicted as a result of the coal famine of ten or eleven years ago that the various forms of artificial fuel would come into general use, but such has not been the case to any large extent, possibly because they require so much care in the manipulation. In fact, as far as the writer's personal experience goes, it is doubtful if in the ordinary kitchen range the cost is much less than that of coal, although the heat given out is much greater. Moreover, as yet, the delivery system is rather imperfect.

Coke, always available in cities, is a cheap and valuable fuel, when well managed, free from the gases which make it so difficult to keep a coal fire at a low point of combustion. The writer has had personal experience of its use, both independently and with coal. She is acquainted with a family which has used it in their furnace for a number of years, maintaining in the coldest weather an admirably even temperature in a large house, saving about forty dollars a year as a result. The writer herself has used it in a kitchen range, keeping the fire in with much less effort than is needed with coal. The secret of its management is to give it a strong draught until it is thoroughly ignited, checking the fire as soon as this point is reached.



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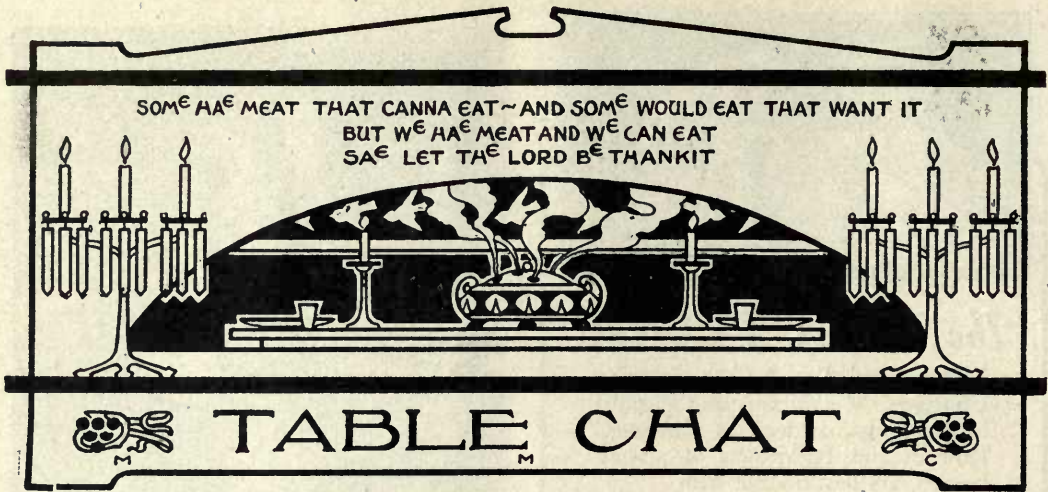
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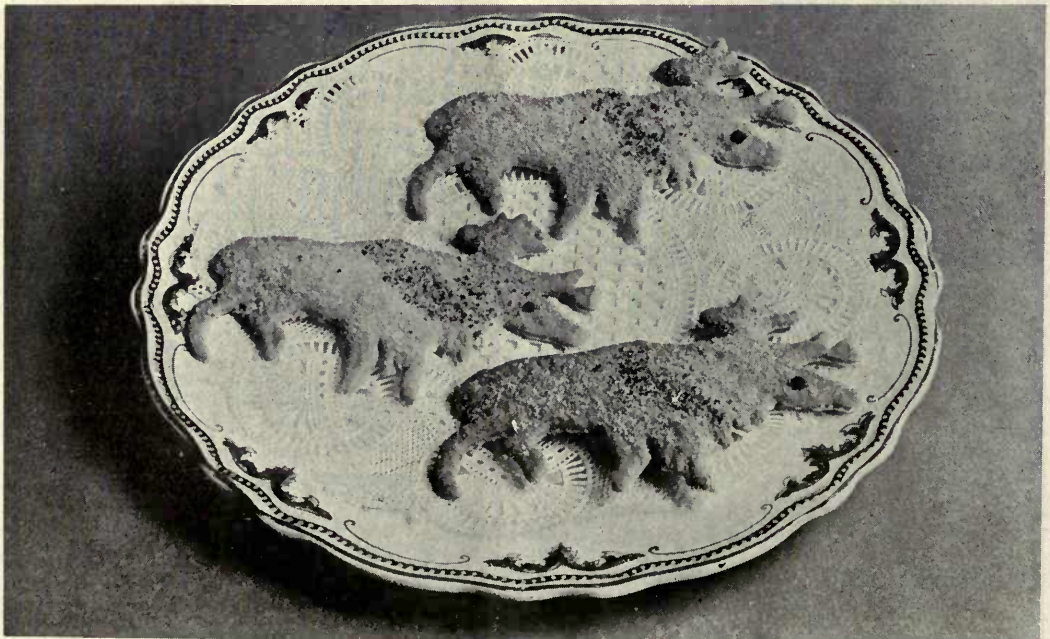
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The Season of Children's Parties

THE writer recalls a scene of mutual recrimination at which she was once an unwilling assistant, in which the husband summed up his sense of his wife's shortcomings as a mother by saying, "You never once gave him a party." A good many children are in the same predicament, no one gives them a party.

On the other hand there are the children of the rich or the would-be rich, who have more parties than are good for them. Their oranges are sucked dry before they are fairly in their teens. In their desire to do everything possible for their children, too many people forget that the simplicity of childhood is its most precious possession, and that nothing in



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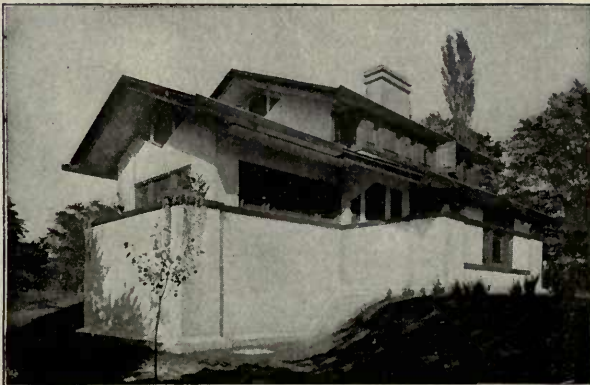
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TABLE CHAT—Continued

later life can compensate for the habit of boredom early acquired by those who have everything and give nothing. The judicious mother gives her children a good many parties, but of a simple sort, involving little trouble or expense, making the little guests happy not by an excess of food but by the cheer of her own personality and by the interesting sorts of amusements which she provides.

The Function of the Kindergartner.

The average mother is not skilled in games, or in amusing a number of chil-

the crepe paper which has quaint designs of Dutch inspiration. The difficulty of getting blue flowers in the winter can be met by the use of white ones in blue bowls or jars. If souvenirs of any sort are given to the children they can be wrapped in white and tied with blue. Blue ribbon favors can be given to the guests in the dressing rooms, and if a Jack Horner pie forms part of the festivities it can be white with the gifts attached to blue ribbons.

The one artistic association of blue is Gainsborough's picture, "The Boy Blue."



Small Round Cakes, Iced and Decorated with Dots of Icing and Walnut Meats.

dren, however delightful she may be with her own, and she is well advised if she invites to her party the kindergartner or her assistant. The small sum paid her for her intelligent supervision of the children's games and the cheerful atmosphere which her sort understand, the secret will be many times returned in the pleasure of the children and the ease of their mother.

The Color Scheme of the Party.

The party will be very much prettier if it has a definite color scheme. Pink is the color dearest to the childish heart but blue is a close second. A blue color scheme is not quite so easy as a pink one, but very pretty things can be done with

This can be had in color on a postal card, and the invitations might be written on the reverse side.

Everything is much easier with a pink scheme. There are delightful paper napkins with inch wide pink borders and clusters of gilt lines, and pink flowers are always available.

A very pretty effect results from the use of doilies and center piece of rose patterned cretonne or glazed chintz, preferably the latter, as its edges can be pinked. A set of these decorations can be used over and over again, and will appeal to the little guests far more than the daintiest lace or embroidery.

A central decoration which never fails to charm children is that of faience swans

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Boston, Mass.

TABLE CHAT—Continued

on a circle of mirror, with an edging of flowers and greenery. The cost of the swans is slight, they can be had in two or three sizes, and the mirror need not be French plate.

Rose postal cards can be had for the invitations to the pink party, but another way is to cut sprays of roses and leaves from wall paper, paste them onto fine Bristol board cutting that out in its turn, writing the invitations on the plain side. The work is much easier if sprays without much detail are chosen.

The Menu.

As most well regulated children have their dinner at noon, the party supper should not be too elaborate. For very little children it may very well be restricted to bread and butter, delicately thin and perhaps rolled, angel or sponge cake and ice cream, moulded custard served with whipped cream, with very milky cocoa by way of a drink.

With larger children a substantial variety of sandwiches is in order. Chopped chicken, deviled ham mixed with mayonnaise, peanut butter, cream cheese and chopped nuts are all good and digestible. The cake which is an essential at such a party should appeal to the eye but not be rich. The lightest sort of a cup cake, baked in layers and with a filling, lemon, orange, chocolate or whipped cream, and liberally iced appeals more to children than the richer sorts. For a small party the cake can be made without filling, baked in a single large loaf and with a tiny gift inserted at regular intervals, so that each slice will contain one. The gifts should be china or glass and their place in the cake must be carefully calculated, so that one will be found in each slice. This is a good thing to do with what is called a Mud Pie Party, at which the central object is a large chocolate cake.

Small cakes are less trouble than a big one and are as well liked. Some of them may be on the cooky order, cut in various fancy shapes. Cutters in the shape of various animals can be bought at the large shops. One of our illustrations shows cookies in the shape of reindeer.

Other sorts of little cakes can be

bought in great variety, but it is a distinct economy to make them at home. Any simple cake mixture can be baked in a thin sheet and cut into various shapes. Some pieces can be put together with a filling of icing and chopped nuts, others can be iced in various colors, still others can be coated with thin icing and rolled in nuts. Our second illustration shows small round cakes, iced and decorated with dots of icing put on with a pastry syringe, with a couple of walnut meats in the middle of each.

For the blue party the ice cream should be plain white, but at the pink one it may well be in strata of pink, white and green, although pistache does not perhaps appeal to the childish palate. The mud pie party naturally demands the combination of chocolate and vanilla.

Whether candy shall form one of the joys of the children's party is open to argument. One judicious hostess dispenses with candy on the day itself, but sends a package of simple sweets to each child the next day, as a souvenir of past joys. The hard candies so much used at afternoon teas are probably as harmless to juvenile digestions as anything, and have the merit of being so hard that they last much longer than the commoner sorts.

Pies Without Pie Crust.

It cannot be denied that many people have a certain tenderness for pie, even though it is accompanied by a conviction of the subtle dangers of pie crust. For such and for the numbers of people who enjoy the filling and eat the crust under protest, the filling mixture of such pies as custard, pumpkin, squash, or cocoanut, may be baked in a rather deep pie plate, but without the encircling crust, and topped off with a meringue. The crust, apt to be sodden with pies of this sort, is agreeably missed.

And in this connection it is worth noting that pie crust can be successfully rolled out on a sheet of waxed paper laid on a pad of newspapers, avoiding alike the handling of a heavy pastry board and its subsequent washing, as the waxed paper is rolled up and destroyed.

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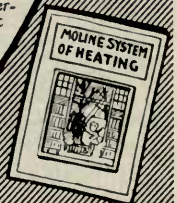
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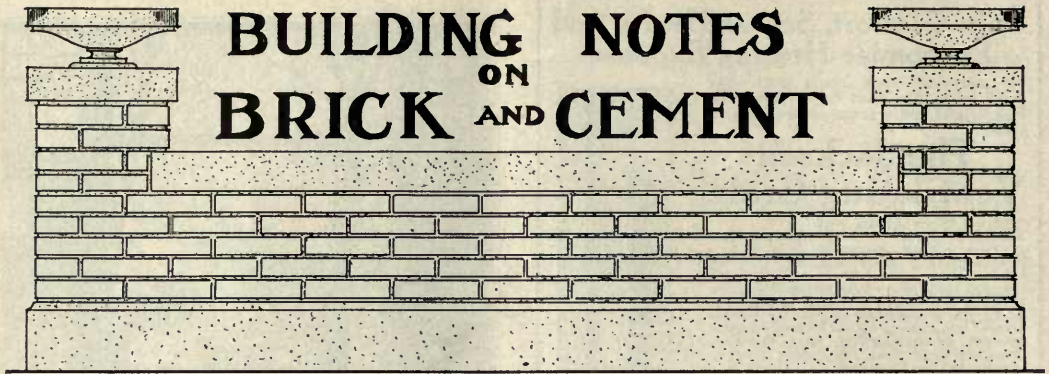
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Relative Cost of Brick Construction.

HERE is a belief in the minds of a great many people," says the Brick and Clay Record, "that brick construction costs from 40 to 50 per cent more than frame construction. Experience and investigation, however, have shown this belief to be a fallacy. The large number of brick residences that have been built during the last year have done much to establish the fact that brick is really the best material for the economical builder to use.

"And investigation of the costs of building materials with the aid of an architect will prove both interesting and instructive, especially when the brick construction is compared to the cost of frame construction. In frame construction, labor is employed in seven different instances, namely: (1) The studding, which forms the frame of the building; (2) the sheathing, (3) the building paper, (4) the weather boarding, (5) the lathing, (6) the plastering, and (7) the painting, which requires three coats to get good results. In brick construction, but two processes are necessary, (1) the brick work and (2) the plastering.

"Carefully compiled statistics show that the actual cost of brick walls over frame varies from 15 to 40 per cent, depending largely on the price of the face brick selected. As the walls of any building cost only about 10 per cent of the total, brick construction would add only from 2 to 4 per cent to the total first cost of the building. As it is necessary to repaint a frame dwelling every few years, it will readily be seen that brick construction, besides being the best, is the cheapest."

Benefits of Industrial Education.

The subject indicated by the above title is one of never-ending interest at the present day, and what follows are extracts from the speech of A. C. Ochs, on Industrial Education, at the banquet given in connection with the February meeting of the Northwestern Clay Association, at Minneapolis, Minn.:

Every thoughtful man must admit that something must be done for our youth who wishes to learn a trade.

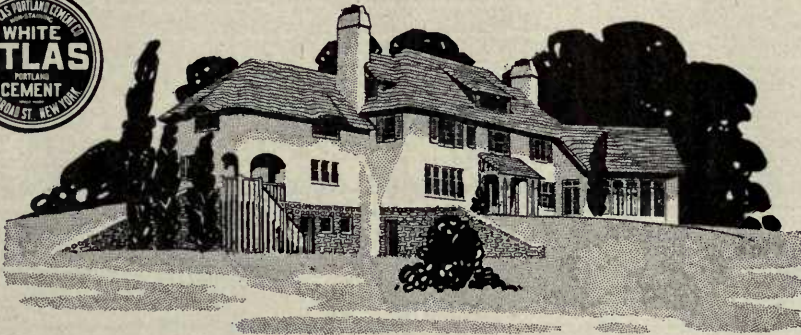
The world has never seen a time when this was more essential than at present because of the restrictions put upon the apprenticeship by all trade unions—especially so, by the bricklayers' unions. The situation has become so acute that we, who are dependent on the men that will place our material into the wall, are lying awake at night trying to solve the problem.

Our public schools have taken up manual training and in many of our country and city schools there has been a creditable showing made along the lines of woodworking, mechanical and other trades but thus far little or nothing has been accomplished in the art of bricklaying. This is not to be wondered at. It is doubtful whether very much can be done along these lines in our public schools since it would be quite difficult to handle the material in so small a place as the basement of the school. But the public school can do a great deal to further the building trades by teaching architectural drawing, etc., and thereby interesting the boys in the art of bricklaying. The teachers of the schools might also take the students to places where buildings

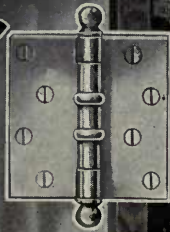
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BUILDING NOTES ON BRICK AND CEMENT—Continued

are being erected and interest them in the practical work.

A short time ago I spoke on "The Building of Clay Block Silos" to a class of short course students at the experiment station of the State Agricultural School. There were about 150 young farmers listening with interest to my explanation of how a silo should be built, and after the class was dismissed my time was occu-

facts obtained by different methods of "laying up." In the upper left hand corner, four bricks form one unit, alternating with two bricks for a header.

Brick is manufactured in an almost endless variety of shapes, sizes and color tints and is composed of clay, sand-lime, concrete and even glass. Clay is found in different colors and is treated in various ways to produce the many effects as to



A Panel of Golden Rod Matt Brick.

pied for fully two hours in further explanation to interested students.

I think that most of these young men are able to build their own silos. We now have several young farmers who will erect their own silos, and I know that the work will be fully as good as if a brick-layer had put them up, because it will be for their own use.

A Panel of Golden Rod Matt Brick.

The illustration shows as well as the black and white print can, the varied ef-

color and texture now upon the market.

The skillful mixture of different clays and various methods of burning produce surprising results.

Rough effects in brick work have a great vogue today and the house built of it will have a wealth of harmonious color and a picturesque feeling of its own, which it is utterly impossible to convey by the illustrations, excellent as they are. Note that the joint is made a feature of the work in wide lines, either raked or simply struck without pointing.

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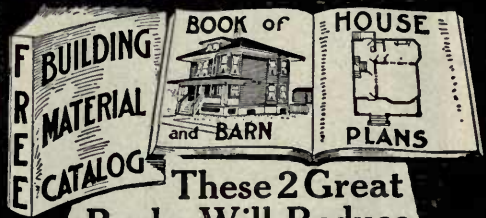
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Glass-Faced Bricks.

Glass-faced bricks with concrete backings have appeared on the market. They are said to be equal to any form of tile or glazed brick as a lining for tunnels, swimming pools or bath-rooms as well as for the inside walls of garages, engine houses, prisons, meat markets and other structures where perfect cleanliness is as desirable as it is difficult. They are heat and cold resisting, and are declared to be everlasting, requiring no paint or other treatment to preserve their appearance. For shops and factories the concrete-backed glass brick would seem almost an ideal material. The construction of the brick is as follows:

To a glass facing $\frac{1}{4}$ -inch thick at its thinnest part is attached a well proportioned concrete back. The concrete backing is attached to the glass front by three separate means, each entirely sufficient to secure the union of the two materials. First, the cement on the concrete adheres to the glass; second, both ends of the glass face are returned by greater than a right angle, thus imprisoning the concrete mass; third, a

dove-tailed rib of glass traverses the entire length of the back of the facing at once strengthening the glass face and also securing it to the concrete body. The glass face is $\frac{1}{16}$ of an inch larger all around than the concrete body, thus making possible a good mortar bond, notwithstanding that the mortar between the faces of the glass may be almost entirely pressed out. The new bricks are laid in exactly the same manner as other finished bricks.

A Refrigerator Built In the Ice House.

Recently an Iowa farmer demonstrated a practical use for cement; one that should be adaptable for every farmer living within a reasonable distance of a good sized body of water.

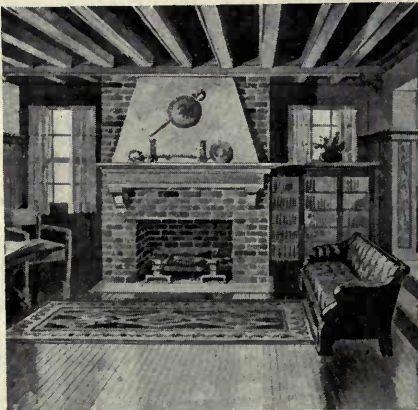
This man had used cement in many different ways on his farm on which he has passed his entire life of more than 50 years, but the idea of harvesting his own ice did not come to him until late in life. Living within a mile of a splendid river, he had formed a habit of driving four miles to town for ice and paying 40 cents per cwt. for a product that went to waste on his own land.

Recently he built a generous ice-house 60 feet from his kitchen. On the south end he made a refrigerator that would turn a city woman green with envy, for there was no cleaning after ice men, no worry about the drip pan or the ice giving out.

The refrigerator was built of solid cement, 7 feet high, 6 feet wide and 5 feet deep. Into the end walls, heavy iron hooks were cast high enough to allow a quarter of beef to hang without touching the floor. In the side, iron pegs were placed for the support of shelves on which to store foodstuffs and the products of the dairy.

Wood for Reinforcing Concrete.

Concrete beams can be successfully reinforced with wood instead of iron, if the proper proportion of wood is used, according to an engineer who has studied the problem. In many places where wood is plentiful it is difficult to obtain the iron needed for such reinforcement. He found that nine per cent of wood is needed to properly reinforce, to every one per cent of iron which would ordinarily be used.



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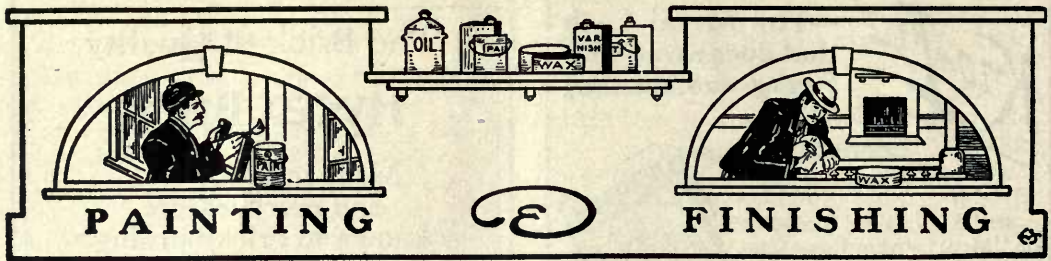
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Painting Concrete and Cement Surfaces.

The following extracts are from a paper read before the Ill. State Assn. of Master Painters.

IT must be understood that ordinary linseed oil paints cannot be applied with success directly to cement or concrete surfaces on account of the alkaline lime present in the cement. The action of this alkali is to burn up or destroy the oil, causing rapid fading of colored paints, and chalking and scaling off of the material. Therefore, it is necessary, if a linseed oil paint is to be used, that the surface be first thoroughly saturated with a neutralizing wash that will destroy the alkali action. The most approved method is to use a solution of zinc sulphate, made by dissolving sulphate of zinc crystals in water in the proportion of 3 lb. to a gallon of water.

A cement surface treated with this wash and allowed to dry can then be painted with any high-grade linseed oil paint without danger from alkaline action, and with the assurance that results will be lasting, as if applied to a wood surface.

Many manufacturers now put out cement paints in liquid form, ready for use, in white and all shades; the vehicle used in these paints being alkali proof and therefore requiring no treatment of the surface before the paint is applied. Paints of this nature are being used extensively on cement and concrete construction with the very best of results, and can be obtained at a very reasonable price.

"Water color paints" should not be used for exterior cement coating, as they do not form a waterproof coating (one of the most important requirements of a cement paint) and offer no protection from deteriorating influences.

All new laid cement surfaces, either

exterior or interior, should be allowed to become thoroughly dried out and hard before painting, and the best results have been obtained where the work has stood not less than a month before paint was applied. If the surface is dry and the paint right, it will penetrate freely on the first coat, filling the pores and rendering the peeling impossible, but this would not be the case if applied over a damp surface.

Painting of Cement Floors.

The painting of cement floors, especially in factories, warehouses, stores and public buildings, is a necessity in order to prevent the constant powdering of the surfaces from the wear, with consequent damage and annoyance from contact with this lime dust. For cement floors, the same as for other cement surfaces, the paint must be of an alkali proof nature, but quick drying with a good gloss and must produce a tough, elastic waterproof surface.

Many of the ready prepared cement floor paints, the quick drying vehicle of which is largely China wood oil, have been found to give excellent results, and I would recommend their use by the master painter, until such time as a more complete knowledge of the requirements in mixing of this material can be obtained. There is no doubt that, for some time to come, the master painter will be feeling his way, step by step, in his new realm of modern surface painting which cement construction has forced upon him.

How to Estimate a Room for Wall Boards.

Wall board is now being so largely used in interior construction that directions for estimating the quantity required to cover any given space are of interest.

"In ordering wall boards, it is well to bear in mind that the latter come in long lengths which reach from the floor to the

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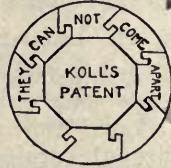
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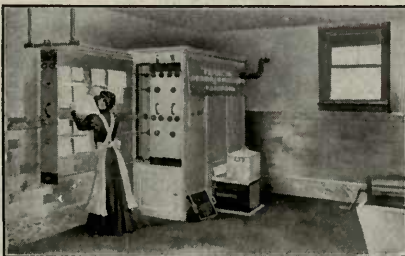
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ceiling and clear across overhead in any ordinary room. The side wall boards should be ordered long enough therefore to reach from the floor to the ceiling and the ceiling boards should be ordered long enough to reach clear across the room the way the joists run. The side walls are put on last, so that the ceiling boards should be ordered long enough to reach clear to the wall studding, thus permitting the side wall piece to fit up snugly under them. To obtain the number of feet necessary for the space to be covered measure the width of the space in inches and divide it by 32 or 48 (depending on the width of boards to be used), which will give the number of feet needed. The height of the room or the length of the ceiling joists will be the length needed."

Treatment And Cleaning Of Linoleum

Parquet Linoleum will wear indefinitely and will always look fresh and clean, but it must be properly treated and not abused as is often done through carelessness and ignorance. It should be washed or scrubbed with luke-warm water and a

good soap free from alkalis. Linseed oil soft soap is highly recommended. Soda or strong soaps destroy the color and finish of the linoleum. Parquet Linoleum should be polished the same as a parquet floor at least once a month with a good polish made of wax, pure oils and absolutely free of acids.

Calcimining Hot Walls.

A hot wall is a warm proposition, whether we are to oil or water paint it or paper over it. Hot walls are not really hot, and just why they are called hot I do not know, and would suggest that the word, soft or porous would be a better name for the condition under consideration. The prime cause lies in the fact that the plaster has neither been made right nor applied right. The practice now is to make the plaster or mortar fresh and apply it at once, then skim it with a coat of white that has more lime than plaster in it. The entire process of plastering the wall or laths may not occupy more than the daylight of one day, the mortar having been made the day before. The result is that the plastered wall is poorly done and dries out porous, not fit for paint or paper. In other days the mortar would be made maybe the year before, certainly several months prior to its using. It might also be put into a pit and be covered up for the winter before using. The plaster or white coat would be made mostly of plaster of Paris, with just enough lime to bind and make it work easier. Then the white coat would be troweled down with water, after it had been applied and set, then after much rubbing it would be like a piece of polished marble. I have seen such walls so hard that, in years after, it was next to impossible to drive a nail into them.

A very porous wall must be sized until it presents a hard, non-porous surface. Many things are used for this purpose, one of the best being a water-lac size, made from shellac and sal soda, then with some raw linseed oil added to it. A coat or maybe two coats of this size will give a good surface for oil or water paint, or paper, though I should prefer to size with varnish size for painting over, as the water-lac size might possibly not be so good for oil paint.

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Heating, Lighting and Plumbing

Water and Its Heating Qualities.

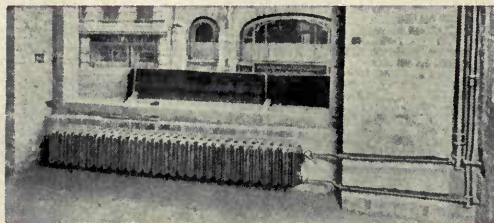
WATER requires more heat to raise the temperature of a given weight of water one degree than it does for any other known substance. The same amount of heat applied to equal weights of water and copper will raise the temperature of the copper about eleven times as much as it will in the case of water. While this means that it takes more heat to warm the water we use, it is otherwise to our advantage. If water changed temperature as readily as copper, iron or mercury, it would be impossible to go out of doors after a rain if the sun were shining, since we would be suffocated by the steam. Fires could not be extinguished by water, since the water would in many cases be turned into steam before it could reach the fire, and thus escape. Under present conditions it requires a large amount of heat to raise the temperature of water from the freezing point to the boiling point and nearly 5.4 times as much more to change the water into steam. In this way the water is kept in a liquid condition for a considerable time, even under favorable conditions."

It is quite frequently stated by people who know better, but speak thoughtlessly, that water is a great conductor of heat. But that is not true. Water is a very poor conductor of heat and yet has a great capacity for carrying off heat *when it is in motion*. How many boiler men think of this when they are designing a new boiler? To put it in another way, water at rest is a poor conductor of heat, while water in motion has a tremendous capacity for carrying off heat. Hence the desirability of *rapid circulation* within a boiler, for the purpose of absorbing the highest possible percentage of the products of combustion.—*Ideal Heating Journal*.

Heating Practice in Germany.

The German heating contractor is an engineer—an expert—having knowledge of the natural laws controlling gravity, combustion, evaporation, condensation, and friction. He is not an engineer perchance; he is an engineer performer.

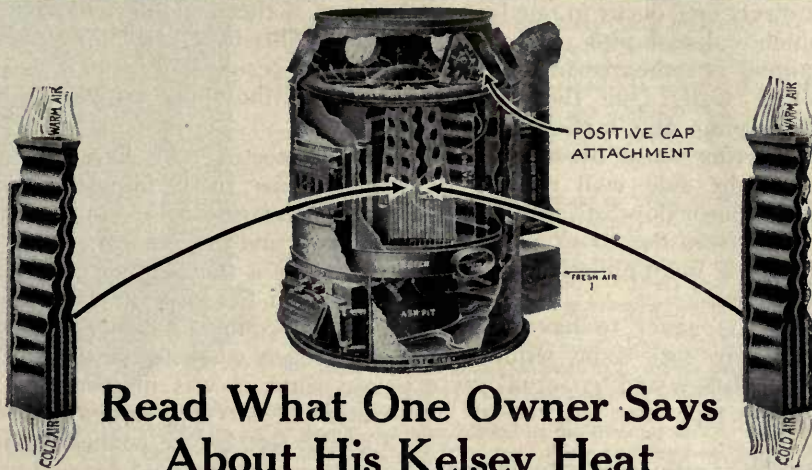
The German approaches each heating prospect with the deliberateness of an artist—subjecting each—inside—outside—thin—thick—stone—brick wall—glass—sash—ceiling and floor—to its known factor for heat loss; plus a known percentage—for points of the compass—for wind pressure—for double or single win-



Showing Typical Method of Recessing Piping; Radiators Without Feet; Pipe with Long Turn Bends as Used in Germany.

dows—using various condensing factors (not *one* only as does much of our American practice) for high or low—or one or two or three or four column radiation—as well as for other variations. His answer is the *exact* size of each radiator—as well as the supply and return pipe necessary to take care of exactly its condensation.

This comprehensive procedure evolves a pipe lay out of smaller diameters than obtainable on an average American job. The German takes advantage of this by eliminating all fittings (excepting R- and L-pipe couplings) and, instead, bends the flows and returns, and sometimes the mains, in any conceivable manner required. This he does dexterously and quickly, without flattening the pipes; a small portable forge with foot treadle for blower forming part of his tool kit.



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HE is art editor of a big magazine. His house is a Long Island one over 100 years old. He writes:

"I believe in Kelsey Warm Air Heat because of its *vital fresh air principle*. Also because I *dislike to live with a lot of radiators*.

"The registers in my house are partly wall and partly floor openings. The heat ducts were run inside the walls without

disturbing the structural timbers or disfiguring the wall surfaces in the finished work.

"I have no difficulty in heating any room. My house is 65 feet long."

To which we add that we will gladly send you the name of the owner and print of his charming old house on request.

Furthermore, ask us questions—we will answer them fully and clearly and send along a catalog.

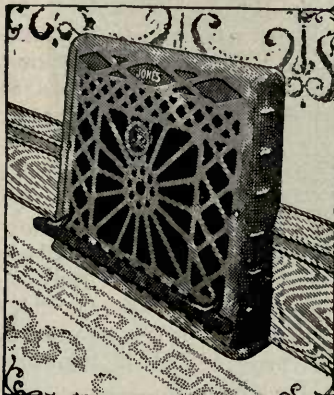
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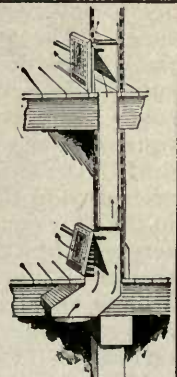
during the coldest weather may be secured by installing the "JONES" System of Heating, one principal of which is the heating of one room on two floors from the same basement pipe, insures not only a saving, but produces the results wanted.

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As many as six long turn bends, each in different directions, occur in one length of, say, $\frac{3}{4}$ -inch or 1-inch pipe. All except the cellar piping is cemented in the brick or terra cotta walls (see the illustration accompanying this article). The radiator connecting stubs protrude horizontally from the side wall exactly in line with the radiator flow and return tapings (never up from the floor), and have a long right angle bend and coupling for attaching to same.

The practice is never to have a pipe connection of any sort come within the walls, and the job is tested by actual operation before the pipes are covered up in the walls.

All of the above refinements to an ordinary two pipe water job (with every feature, every factor of draft, fire, water, radiation, velocity, and transmission just balanced) results in a striking effectiveness. I can liken the difference between such an installation—and the not infrequent one seen in America of an over-fed or over-liberal installation—to nothing better, perhaps, than the transmitting effectiveness of a loose and a tight leather driving belt.—*Ideal Heating Journal*.

Connecting Two Flues to One Chimney.

QUESTION: Will you advise us as to which is the best of two methods of ventilating a gas heater in the same flue with a furnace? Will the heater ventilator below the furnace opening or will the range heater above the ventilator give trouble?

ANSWER: Of the two positions, the one below would be preferable, but there is little choice, as either arrangement will be apt to interfere with the furnace draft at times. The pressure within the flue, if there is any draft, will be less than the pressure without and any opening will allow the colder air to rush into the base of the flue, equalizing the pressure and destroying the draft. If the products from the gas heater are raised to the same temperature as those in the flue, or above, there will be no interference with the draft in either case. When the gas heater is inoperative and the flue leading therefrom left open, the condition above described will occur and produce interference. This may be mitigated by carrying the flue leading from the gas heater

up several feet within the furnace flue proper, if there is sufficient area available. It may also be carried up separately several feet beside the furnace flue, entering on one of the upper stories, the higher the better.

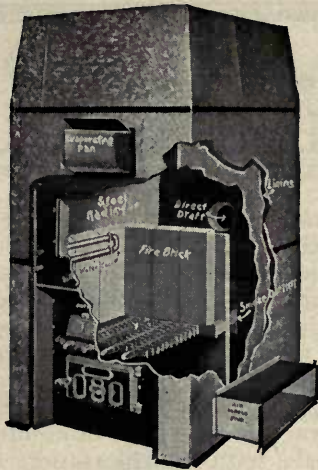
In connecting two fixtures to a flue in this manner, it is impossible to prevent draft interfering if one or the other is inoperative and the flue left open. If the gas heater has a thermostatic arrangement for turning on the heat, it would be a simple matter to connect a damper in the flue that would open when the heater operated and close when it was inoperative. The precaution of carrying the gas heater flue up 8 or 10 feet before connecting it into the chimney proper would be well as an extra safeguard.—*Heating and Ventilating Magazine*.

Placing Air Pipes to Get Maximum Heat.

The majority of experienced furnace-men favor the shortest pipe from the furnace and to have the register placed near one of the inside rather than near one of the outside walls. It has been given as the experience of successful, observing furnace-men that registers near the outer walls are not as efficient as if placed contiguous to the interior walls of a room.

With any system of heating the warm air at the ceiling on approaching the outer wall, strikes a cooler surface and falls along the wall, increasing in velocity as it follows down the cooler wall until it drops with some positiveness near the floor. Consequently when a warm-air register is put in the path of these down currents the warm air that should rise from it is retarded and in some instances the outflow is entirely stopped. This leads to a down current of cool air through the pipes of the furnace, if the furnace is not adequately supplied with air from some other point.

It has been observed that the positions of a radiator and a register are selected from directly opposite points of view. Radiators as a rule are placed near windows, where the greatest amount of cold air falls, so that they can warm it as it falls, or drive conflicting currents of warm air against it, while the radiator proper sends its heat into the room.—*Building Age*.



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WE have made furnaces forty years, *good ones*, too. The first furnaces we made were full of radiating flues, gas burning channels, complicated grates and other fittings, which, forty years ago, were regarded as essential to good furnace construction.

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The *Hess Welded Steel Furnace* of today is about as simple as a hat box, but it serves the purpose of a hot air furnace better than anything we ever made, and better than anything we have seen in the furnace line. The radiator is an immense square steel box with *every seam welded absolutely tight*. There is no possibility of leakage of gas, smoke or dust, *now or hereafter*, for welded joints will *never* open with expansion and contraction.

The fire box is lined with brick slabs, which go in through the fire door, without the use of tools and without taking anything apart. The grates are simple, straight, rocking grate bars, each one separ-

ate, and drop into position without any difficulty.

The dampers and regulation are as simple as the regulation of the simplest stove. The whole combination is so effective that we are able to offer it to you on *sixty winter days free trial*, before we are paid, with the understanding that if you are not entirely pleased the furnace may be returned at our expense for freight both ways, and you need not pay us one cent.

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SPLINTERS AND SHAVINGS

Growth of Small City.



CAROL ARONOVICI, Secretary of the Suburban Planning Association, Philadelphia, in an address recently, before the State Federation of Women in annual session at Swarthmore, Pa., said in part. "We must not overlook the hopeful movement countryward that is taking place in the vicinity of metropolitan cities, which have heretofore tolerated increasing evils of congestion without hope for relief.

If we consider the communities within 15 miles of the limits of the American metropolitan cities, we find constantly growing and prosperous residential and industrial communities which occupy (3,531,736.4 acres) over three times the amount of territory occupied by the metropolitan cities, the satellites of which they are, while they accommodate only a little over one-quarter the number of people.

The facts stated point the way toward the solution of one of our most serious problems, "congestion," but the hope for the solution of this momentous problem is not in the mere shifting of population, but in the farsighted control of this growth in the direction of constructive community planning.

The suburbanizing of the wage-earner is a great social and economic opportunity. The increase in the population of a county like Delaware, in Pennsylvania, representing a gain of 199 per cent in 40 years, holds a warning and a hope. The smaller cities and boroughs of the state which have grown more than twice as rapidly as our cities of more than 100,000 hold out a golden opportunity, and it is for us to say whether this growth will result in a contamination of the open country by the city slums or whether garden communities will look upon the bleak horrors of our urbanized life and give men, women and children a new lease on

life, and industry an opportunity to serve men rather than to enslave them.

Town planning deals with the distribution and arrangement of building land so as to avoid congestion. It deals with the location of shops and factories so as to make them accessible, and yet unobjectionable to the home districts in which the wage-earners must live. Community planning deals with transportation and street development so as to provide the greatest facility of distribution of population, accessibility to the industrial and social centers and easy access to food markets necessary to insure a proper standard of living on a moderate income. Town planning deals with sewage systems, water supply, waste disposal systems, so as to insure the greatest protection of the health of the people, while it concerns itself with the distribution of churches, schools, parks and playgrounds, so as to give every man, woman and child an opportunity to develop spiritually, intellectually and physically.

These are large claims that we are making for town planning, but they are faithful to the facts. The large cities present an opportunity for reconstruction, for palliative town planning, while the younger cities and towns have the open country before them, little to rebuild and readjust, and a great advantage over the congested city slums, which they have now, the opportunity to condemn to everlasting death by their superior living advantages and their free opportunity for shaping their future growth to meet future as well as present needs.

A House Built in a Day in Hamilton, Canada.

On Wednesday afternoon, Aug. 13th, the last stroke was added to the House Built in a Day, erected by Ald. James Bryers, and with its completion came the consummation of one of the greatest events ever attempted in the building line in Canada.

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The first sod was turned at a quarter to five, and the building five hours later was up within a few feet of the second story. The house is equal to the average eight or nine-roomed residence. It is two stories, and the completion of the house included every detail of steamfitting, plumbing, finishing and furnishing.

As the workmen were at work all night, arc lights were strung on poles around the building. There were at midnight between 300 and 400 men at work. The carpentering went on simultaneously with the bricklaying, and, as concrete mortar was used, a concrete mixer was kept at work.

The building is 34 by 33 feet outside measurements, and may properly be called a four-story house. It contains a basement, first and second floor, and finished attic. The roof is gothic in design, and the general architecture of the building is anything but simple. The foundations are cement, with brick facings, the upper portion of the building proper being solid brick. Everything in the house from start to finish is the best to be had, all materials used being first grade.

Some idea of the rapidity of the work may be gathered when it is understood that the plasterers using special prepared quick drying plaster applied their first trowel of mortar at 12 o'clock noon, Wednesday, and at 2:30, just two hours and a half later, every room in the building, including clothes closets, was finished with second coat, hard white enamel finish, in every way just as pretty and just as well put on as is usually the case where several days are taken for doing the same work.

Foundation Walls.

To be a satisfactory foundation wall it should possess five characteristics.

1. *It Must Have the Strength* to support the superstructure under all conditions of strain and pressure. The bearing pressure of any structure upon its foundation, with all added loads and pressures, is very readily figured by architects and engineers.

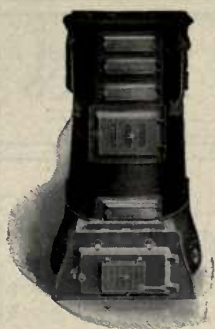
2. *It Must Have a Wide Bearing Surface for the Superstructure.* Regardless of

the bearing strength it is never safe to support a structure on a narrow foundation wall. Winter freezing pressures against the foundation, slight settlement and shifting of superstructure, wide floor bearings and other permanent and emergency considerations demand a twelve-inch foundation wall of any material as the minimum even under a one-story bungalow.

3. *It Should Be Continuous with the Superstructure.* In the average house construction the weakest point is the line between foundation and superstructure.

4. *It Must Prevent Seepage of Water* through the foundation. The supreme test comes during the spring thaws when the frozen soil is impervious, has cracked away from the foundation and leaves a flood of water bearing against the foundation. Then if there are mortar joints running unbroken through the wall they will leak. Then unless the foundation material has an absorption under eighteen per cent it will leak. If the absorption is about twelve per cent it may not leak, but will become a sponge absorbing and holding moisture to the detriment of its strength and the health of the occupants. To prevent seepage the foundation material should have an absorption under ten per cent and all mortar joints should be broken so as not to be continuous through the wall.

5. *It Must Prevent Condensation of Moisture* on the basement walls under extreme conditions of temperature and humidity. For there is no place where conditions which cause condensation are so extreme as in a basement during summer; the exposed water pipes sweat, the cellar air is charged with moisture, the soil against the foundation wall is cold. If the foundation wall is a solid conductive wall it will assume the cooler temperature of the earth without, and condense the moisture from the air, making a wet, sweaty wall which retains its dampness in spite of ventilation and permeates the house with damp odors. If the foundation wall is non-conductive so that its inner surface readily accepts the temperature of the basement, it cannot sweat, the moisture remains in the air, and by slight ventilation any damp air is readily swept out of the cellar.—From *The Interlocker*.



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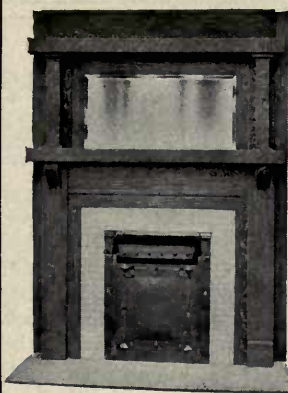
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New Booklets and Trade Notes

E have received from the Chicago Millwork Supply Company two large and very complete catalogs of their offerings, illustrating and describing 8,000 separate articles. This company furnishes everything in the line of building material, including lumber and millwork. They also handle furniture, art glass, fireplace fittings, gas ranges—in short everything to build and furnish the house. Catalogs sent on request.

* * *

The new catalog of the Bridgeport Wood Finish Company, Chicago and New York. Modern Wood Finishing—is not only handsome and complete, but will undoubtedly be of great assistance in solving the problems encountered by every housebuilder. The illustrations in color show uses of Washotint, are artistic and suggestive.

* * *

The McCray Refrigerator Company, Kendallville, Ind., send us a very artistic catalog in grey and gold with a landscape in soft coloring on the front cover. The pages within show in beautiful press work, many of the finest residences in all sections of the country together with illustration and description of the particular McCray Refrigerator they are equipped with.

It is a pleasure to look over such a beautiful catalog.

* * *

Trus-Con Floor Enamel is a new finish for cement floors, set forth in the booklet of the Trus-Con Laboratories, Detroit, Mich., including sample page of their principal colorings in very attractive shades.

* * *

Unfortunate people with damp cellars, will be interested in the little booklet—The Automatic Cellar Drainer—sent out by the Penberthy Injector Co., Detroit, Mich.

The Honeywell Heating Specialty Co., Wabash, Ind., send out a small booklet showing their latest "Model Eight"—an eight-day clock which automatically regulates the thermostat. The booklet gives diagrams and full description, explaining the construction of the clock and its action, the clock being so adjusted as to require no attention except winding once a week. It certainly simplifies the heating problem.

* * *

The metal casements manufactured by the George Wragge Co., Ltd., New York, are illustrated with photographs and a working drawing in a booklet sent out by the company. These casement windows are of solid rolled steel, to be hinged to wood frames, and fitted with special hardware. They open out and are especially adapted to dwellings of moderate cost, such as bungalows and cottages where the sizes of openings do not exceed 4' 6"x2' 0".

* * *

The Florian Sound Deadening Felt is a late product of the Neponset Co., East Walpole, Mass., and a sample of the article itself is attached to their booklet, which is sent on request.

* * *

The Denison Interlocking Tile is well set forth in the November issue of their monthly bulletin—Interlocker—a little publication which is full of live information on topics interesting to builders. The bulletin contains a number of photographs showing residences recently erected and in course of construction where this product has been used, and certainly puts up a strong argument for the use of this material in construction.

* * *

A Song of Joy.

*There are songs we heard in childhood,
Like the memory of a dream,
But they are not half so cheerful
As the gurgle of the steam.*

KEITH'S MAGAZINE

ON HOME BUILDING

WITH WHICH IS CONSOLIDATED

THE JOURNAL OF MODERN CONSTRUCTION IDEAL HOMES MAGAZINE

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Home of Mr. B. G. Hodges, Pasadena, Cal.

KEITH'S MAGAZINE

VOL. XXXI

FEBRUARY, 1914

No. 2

A Colonial House in Pasadena, Cal.

By Margaret Craig



ONE of the most attractive houses that have been built recently in Pasadena, is in the residence district of Oak Knoll.

It immediately attracts attention because of its charmingly related position to the heavily branched walnut tree near its entrance, and because of its splendid proportion and striking resemblance to historic New England homes, a type of architecture which is rather seldom met with in this section of our country.

A great deal of careful thought has been given to the exterior of this house. In the first place the entrance with its rather pointed hood, the simple lines of the supporting posts and the enclosing lattice, its plain, substantial door with typical sidelights, is very satisfying.

A wide brick terrace extends across the front and around two sides of the house, but is covered only on the two sides. The trellis work is placed in the front of the house in a most interesting way. As the



The Pergola Treatment of Porch.

house itself is covered with grey shakes this trellis of white corresponding to the rest of the trim is most effective. It runs over the front door and down between the two sets of windows. Each side of this door climbing roses, the roots of which are provided for by square holes in the terrace beneath the ends of the trellis, have already been trained to grow.

The front doorway opens directly into the large living room. This room is square, and the first impression is of spaciousness and at the same time a sense of cosiness and comfort. The coloring of the room is wonderfully charming, with its dull grey walls, white woodwork, and prevalence of pinkish purple tones in draperies, rugs and lampshades.



The Brick Terrace Running Around the House.

The side terraces were built to use as outdoor living rooms, and in summer the north exposure, which is the most comfortable, is supplied with easy chairs provided with tapestry cushions.

Pots of cool looking green plants are placed at intervals at the edge of this terrace and blend very beautifully with the green blinds that adorn the windows.

A red-brick chimney, substantial in line, is evident as it protrudes very effectively against the north exposure.

At the north end of this room is the fireplace, with its dull greenish grey tiles that harmonize most delightfully with the grey walls. Above it is hung a print of a foreign painting, whose harmony of colors seem to bring the shades used in the room together.

The hangings in this room are most decorative and are a feature. Huge clusters of purplish pink flowers are splashed across a background of a restrained black and white net effect. These



The Living-Room, with Its Colonial Atmosphere.



The Study, Opening from the Living-Room,

curtains frame the French doors each side of the fireplace, and the two windows in the east wall. The colors used here are reflected in the tints of the wall-paper and are repeated in the flowered lampshades.

Opposite the front door and extending almost the entire length of the western wall, is a very commodious, built-in bookcase. Doors at each end, with noticeable

are not disturbed in their lovely simplicity by any distracting wall ornamentation.

The only decoration is a large plaster cast of the Dancing Children which hangs above the serving table on the south wall.

The study that opens off of the living room at the right of the long bookcase is also worthy of note. The woodwork is of cedar, oiled and left in its natural shade. The walls are putty color and the



The Exquisite Purity of the Dining-Room.

single panels, open into a study at the right and a service hall at the left.

In the southwest corner was built a broad staircase, with colonial balustrade above the landing. Between the stairs and dining room doors on the south, is a large grandfather's clock, that gives a touch of atmosphere of olden days.

Purple velvet curtains accent the lovely vista through the French doors into the dining-room. The exquisite carving of the mahogany dining table in the Adam style with chairs and sideboard to match

furnishings of the room are in red-blues and yellow upholstered mahogany.

All is light in shade because its situation is in the northwest corner of the house. The windows are cut wide, because of the lack of sunshine and thus admit more of the lovely garden view that adds its note of cheerfulness.

In mounting the stairs to the second story, we observe, with pleasure, the hall window at the landing. It is strikingly colonial, with its upper semi-circular window opening, which admits the much

needed light. It is hung with draperies similar to those in the living room.

Upstairs the front of the house is devoted to a suite of two rooms with bath between. They are both furnished in dainty colonial style with papering in French cream with a fine satin stripe. The windows here have little white ruffled curtains with side drape of English print similar to that used on the four-posted mahogany beds.

The other half of the second story comprises two sleeping porches, a maid's room and bath. The first sleeping porch is reached through a little dressing room, furnished with telephone and wardrobe closets.

The service quarter thus occupies the southwestern corner of the house and is supplied with every comfort, with separate porch on each floor.

The garage of the house is reached through a driveway, which consists of

two narrow strips of cement, made in this way to avoid too much destruction of the lawn. It is built of the same grey shakes as the house and has the white trim and green blinds.

The house is placed on the lot so as to furnish seclusion to a greater portion of the land. So on the south is a large rose garden at one side of the extensive lawn, and a large spreading oak and many shrubs at the other.

Thus situated on a broad sweep of land, the house has a glorious view of the mountains, and is an admirable example of a successful introduction in western lands of the good and enduring colonial features of architecture. Perhaps our colonial ancestors might hardly condone the western frivolities of pergola trellises and lattice work, of wicker chairs hobnobbing with antique mahogany—but we like it so, and all must acknowledge its charm.

An Interesting House in Spokane, Washington

Residence of Mr. Frederick Wilson



HIS home, designed after the simple Italian Renaissance, has almost its nature setting mid the pine trees and under the sunny skies of Spokane, Wash. The site is on the brow of a bluff over-looking the city to the north, while the street entrance is on the south. A spacious veranda with arched openings stretches across the north parade, from which to enjoy the magnificent view and broad steps descend to the terrace below.

The construction is of frame with metal lath and plaster veneer tinted a cream color. The roof is of shingles stained a dark green. The plaster is carried down

to the ground over foundation, giving the much sought for effect of low lines to the stone exterior.

The grouping of the windows in the second story of the front is unusual and gives character to this facade. The handling of the bay projection below—always a delicate problem—is exceedingly good, its roof supported by the slender, springing columns, while balance is preserved by the simple lattice decoration on the other end of the front.

The green and white awnings supply an additional color note, until the greenery of shrubs and vines shall soften all severity of unrelieved surface and add



Residence of Mr. Frederick Wilson, Spokane, Wash.—Geo. H. Keith, Architect.

their touch of artistic grace to the feeling line which this beautiful dwelling conveys of admirable proportion and perfect out-



The Mantel in Living-Room.



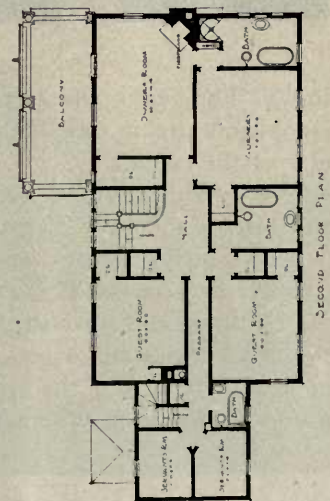
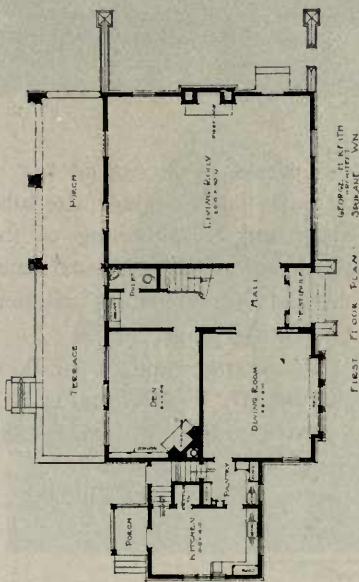
Dining-Room, with Wainscot Paneling in Blue.

The front entrance floor is of red tile 6x6 inches in size. French doors lead out onto the porch both from the living-room and den, also from the owner's bed-room onto the balcony above.

The interior finish of the living-room,

hall and dining-room is quartered oak; den in curly fir, balance of house in enamel, oak floors are laid throughout except kitchen and baths. Baths have tile floors and wainscot

Of special interest is the magnificent



living-room, 25x30 ft. in dimensions, only a glimpse of which is given in the photograph. The fireplace facings and hearth are of Gruby tile. A plaster cast in old ivory of the winged steeds of Victory, is inset as a decorative panel above the mantel shelf, with small oblong panels on either side which carry the beautifully and specially designed electric light fix-

of trees and foliage in rich greens, blues and faint, dull rose.

In the den the ceiling has been furred down on the sides and arched up in the center, giving a pleasing effect in this room which does not appear in the photograph. The hood on the fireplace is of hammered copper with brass plates over the edges, the facings are of plain Gruby



The Den.

tures. The heavy wood cornice and ceiling beams are in keeping with the dignity of the room.

The wall decorations are done in gold and brown and tints of green. A corner is shown of the dining-room, handsomely treated in Elizabethian woodwork with the richly carved furniture of that period. The oak cornice and wainscot are paneled in blue velvet, and the walls above the wainscot are hung with a cloth tapestry

tile with three insets of decorated tile.

The private bath has a shower, the tubs are of porcelain and all plumbing of the best. The basement contains the usual laundry, vegetable and store rooms, fuel bins and hot water heating plant.

The admirable arrangement of the floor plan with its eminently livable quality and its abundant provision for comfort, speaks for itself.

The cost to erect was about \$14,000.



“Homes We Have Built” Series

EDITOR'S NOTE.—A fund of \$135.00 is to be divided among the best twelve contributions to this series received by April 1, 1914, as follows: \$20.00 for the best, \$15.00 for second best and \$10.00 each for the next ten articles accepted for publication. Let us hear from many. Address Editor for further particulars.

Building a Home in Ohio

By Oatis Wilcox



THIS is with the hope that I may give a mite in aiding a fellow wanderer on his journey toward a “Home Beautiful” that I gladly take this opportunity of giving a brief summary of my experience in building a home, appreciating fully the value of the experience of others that I have received

from time to time in the past through these same columns.

The first step in building a home is necessarily a “plan.”

*“To attempt to build without a plan,
Recalls childhood houses on the tide-
washed sand.”*



Showing Use of Cobblestone in the Exterior Design.

My wife and myself were aided in reaching a decision as to the plans for our home by two factors: First—by the fact that we were the owners of about thirty wagon loads of cobble-stones. Second—by the fact that about the time that we began to think of building, a certain issue of "Keith's" contained a plan showing a cobble-stone treatment of an exterior that was very appealing to both of us.

We had previously decided on many of the details of the floor plan, as to room

The cobble-stones used in our home were procured from a street paving contractor, who had secured a contract for removing a certain section of a cobble-stone pavement and repaving it with brick. I observed that the stone were being carted to a nearby dumping ground and given a last resting place among ashes and rubbish. I examined the stone and found that it was a good, firm grade of lime-stone that had been quarried and split into irregular pieces, averaging about

eight inches square and four inches thick. They had been placed with the narrow surface uppermost and were worn smooth on one side. As they had been bedded in a sand bed they needed only a few good rains to wash them



Front View, Showing Planting of Vines and Shrubs.

arrangement, and we next took up the task of making the interior plan adjust itself to the exterior selected without injury to either. The final result the reader may judge for himself by referring to the accompanying plans and cuts, as for ourselves, we are well satisfied and feel amply repaid for the time, thought, and study we have given to the preparation of the plans for our home. A house plan developed from our own thoughts, ideas, and needs, from the advice of our friends, and from a study of the experiences of others, as given us in such magazines as this, must surely mean more as a home, than a contractor's plan of "as big as can be built for the money" house.

clean and remove all evidence, except on the one surface, of their many years' service as a street paving.

I at once conceived the idea of using them as foundation material, and found that as they represented no value to the contractor, I could procure them for the cost of hauling, so I purchased thirty loads at one dollar per load, delivered.

It was shortly after this that we were attracted to the exterior before mentioned, and we found that by placing the rough surface of our cobble-stone outward we could get a wall with much of the rough-cast effect so appealing in the design we had selected. The stone varied enough in size to give the uneven and



Fireplace, Bookcases and Pew-End Seats in Nook at End of Living-Room.

Craftsman effect, yet they were not so irregular and bulky as to be expensive to place in the wall and this fact reduced the mason labor to a minimum.

To harmonize with the rough effect of the mason work we decided to use the rough surface siding. The siding used was a six-inch poplar siding laid five inches to the weather, which we dipped in dark brown creosote stain before using.

We used a thirty-two inch, open pattern cornice and shingle roof. The cornice and all of the exterior trim was painted an ivory white, which produced a very desirable contrast to the dark brown of the siding. This effect was also aided by the use of interior window shades of the same color as the trim. The roof shingles were stained a rich mossy green, which brightened up the general color scheme. Flower-boxes at all available windows add the touch of life necessary to properly complete the desired effect in this type of a home.

The accompanying floor plans show

plainly the room arrangement. We find the double entrance, from the front porch and the porte-cochere, into the one vestibuled hall is a very handy arrangement. Double colonial, glass vestibule doors separate the vestibule from the living-room. The use of two doors in the closet



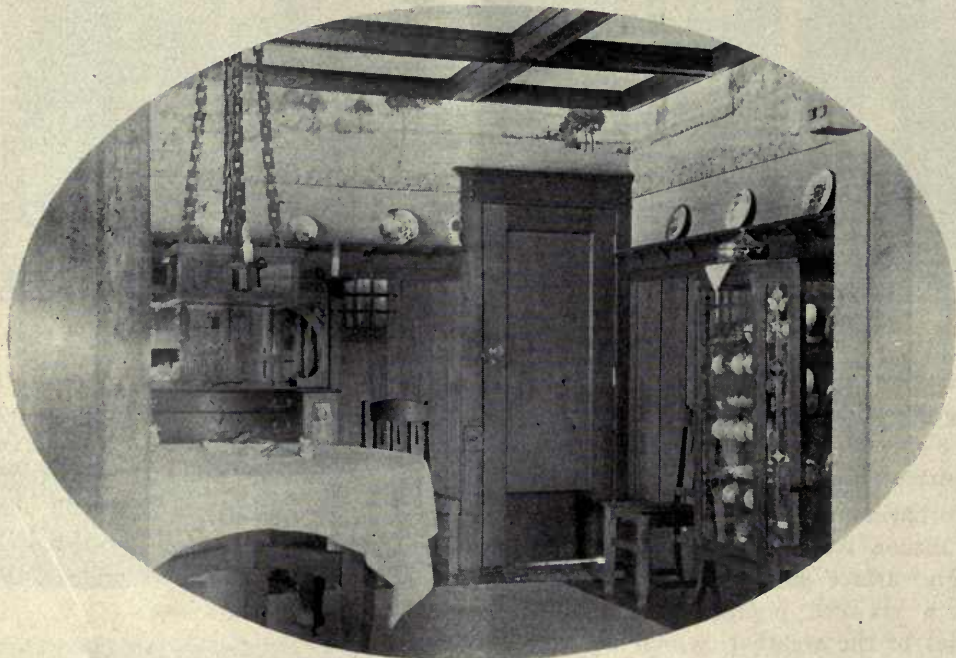
The Cobblestone Pedestal for Street Light.

of the front bed-chamber permits easy access to the back hall and bath without going through any other room and at the same time eliminates the waste of so much room in long halls, so commonly found in homes with similar plans.

The kitchen and bath are both equipped with tile floors and are well arranged as to the plumbing fixtures, cupboards, cabinets, etc.

in the archways to support the head casings, imitation wood pins and tenons, where applicable, heavy pew-end seats and a broken field stone fireplace in the nook, beam ceiling and two-third paneling of oak in the dining room, and massive fourteen-inch base or chair board throughout.

A rather unique and original feature of our lighting scheme are the electric



Corner in Dining-Room—Notice the Electric Lighted, Opalescent Window Next to Buffet.

The second floor contains two of the largest rooms in the house, much to the surprise of the usual outside observer. They are well adapted to serve as a billiard-room and small dancing-room, but could be rearranged so as to make three good sized bed-chambers if desired, provision also having been made when building, for an additional bath-room on the second floor.

The general design of the interior finish is of the style usually termed "craftsman." Square cornered and extra heavy casings and trim were used. We also used such details as heavy wood brackets

lighted windows in the dining-room. We had four, fifteen-inch square openings arranged, at the desired points between the studding of the partitions before plastering, and had electric wires run to each of these openings. They were located so that the buffet could be placed between the two on one wall, and the china closet between the two on the other wall. They were equipped with a green and amber opalescent glass to match the glass used in the heavy wooden mission lighting fixture supported from the ceiling, in the center of the room. These windows were given the effect of barred gratings, by the

use of four wooden bars, placed in front of the glass of each window and held in place by large-headed mission nails.

The back hall, bath and rear bed-chamber seem to be, to an extent, separated from the remainder of the house, occasioned by the use of the dining-room door leading into the hall, this fact, we considered would enable us to use white enamel and mahogany as a finish for these rooms without interfering with the effect of the mission finish in the other rooms. We are gratified with the result as the light finish seems to be the suitable one for the bath and sleeping room, as it adds to the airy and sanitary appearance so much to be desired in these rooms.

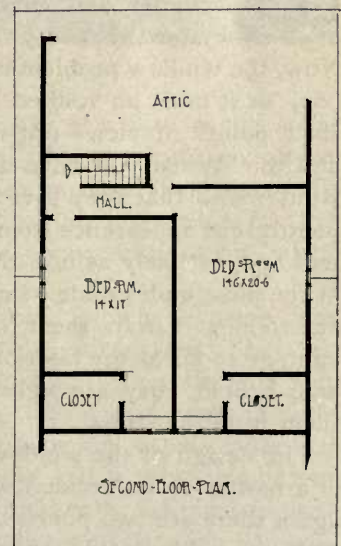
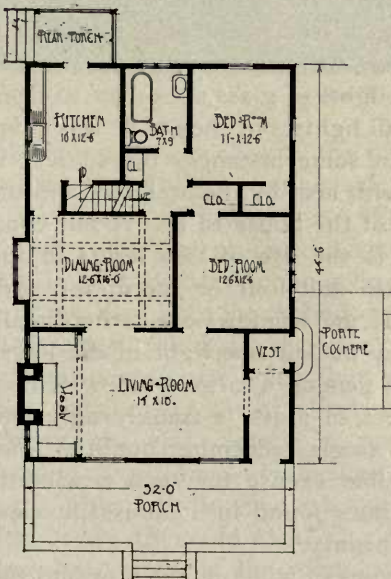


Fountain Near the Porte-Cochere Made of the Same Cobblestones as Mason Work of the House.

A good grade of paper was used as wall covering in each room, the designs and colors harmonizing with the furnishings and trim in the respective rooms.

Most of the electric lighting fixtures are on the craftsman order, of hammered metal. They are well adapted to this type of interior finish.

As some of our Ohio winters are very severe, we thought it advisable to use the sheathing, paper, and lap siding construction on all outside walls. It has proven a big factor in the saving of fuel.



The basement or cellar is seven feet high and is under the entire house.

The heating is accomplished very satisfactorily by means of a hot-air furnace of local make.

The cost to build the house complete, finished as we have it, is in the neighborhood of \$3,900, but this can be lessened considerably by eliminating some of the more expensive details. A practical duplicate with the warm climate construction would cost much less.

Our home is located on a corner lot, having 75 ft. frontage by 140 ft. depth. The house is placed well back on the lot to give a chance for a broad lawn, while many shrubs and small trees are placed near the house walls. A stone edged fountain located near the porte cochere,

supplied with a few pond lilies and a number of gold-fish, aid in completing the make-up of a pleasant setting for "Our Home."

To speak frankly of a home, which you own yourself and with which you are well satisfied and in which you take pride, must of necessity, at times sound boastful, but my aim in this brief recital of some of the details which make our home a restful and pleasurable place in which to live, has been that some thought or suggestion of mine may aid another, and that by the continued exchange of ideas, made possible by such magazines as this, we may all be better able to promote the cause of the "Home Beautiful" and make our country a more sightly and more beautiful place in which to live.

Windows That Give a House Character

By E. I. Farrington



ARCHITECTS prize a window. With it they can give a house character and charm not to be obtained by any other means. Now, the window problem is not a simple one, or it must be studied from two distinct points of view—outside the house and in. When you have arranged your windows so that they give your house a picturesque appearance from without, you will find, as likely as not, that they come at the most undesirable points in the various rooms. Locate them to the best advantage so far as the interior is concerned and, behold, they are ugly as you view them from the street.

The design of the windows themselves is a matter to be decided with care, and again there are two points of view, effect and cost. The latter point in particular

must be thought of by the builder of a modest home, because it is a great saving to buy stock frames and sash rather than those made for a special purpose.

Large lights of glass are easier to clean than small lights, but they have less character. In some instances the subject is argued with heat by the architect and the mistress of the house to be. A fair compromise is the use of two lights in the lower sash and four or six in the sash above. If the windows are rather small, there may be but one light in the lower sash. In general a large window with a solid sheet of glass is frankly ugly and minus a single redeeming quality. The one possible excuse for such a window is sometimes found in a landscape view of great beauty.

Two types of window, the bow and the

dormer, may give character to insipid looking houses or they may make them uglier than before. All depends upon the way in which they are handled. There are rules to be observed and harmony of design and proportion to be sustained. Take a bit of advice, and get a good architect to draw the plans when you decide to add a dormer or a bay. There are several distinct styles of dormer and if

them and offer opportunities for interesting decorative effects. The bay, therefore, is much in evidence and properly so.

Both bays and dormers must be honestly and skilfully constructed, however, or there will be leakage of air around them, a fault which is not so uncommon as it should be. Unless its purpose is largely decorative the bay should be not less than eight feet wide and three feet



A Bay Which Helps to Give a House Distinction.

the wrong kind is chosen, the result is a sad misfit. Fully as important, though, is the matter of proportion. When this is just right, one or more dormers may help in giving character to a house.

If the roof may be carried down over them, these tall bays may look like an integral part of the house, but too often they seem like a lot of wood and glass glued to the wall. Small bays are charming and larger ones, confined to a single story, often help to give a house distinction. Also, they add greatly to the spacious appearance of the room containing

deep. Such a bay is a very useful addition to a small dining room, giving an appearance of more space than it actually provides and making it possible for the maid to move about more freely when serving.

Little windows known as oriel windows are sometimes used to advantage. They are really miniature bays three or four feet from the floor. The ledge they provide is an excellent spot for potted plants and such a window is well adapted to a dining room. Not infrequently art glass is used in an oriel window and the plan has par-

ticular merit if the window opens upon a court yard or toward a view which is not attractive. Yet art glass must be used with caution. Too often its effect is to cheapen the house in appearance rather than to give it character. Especially must care be exercised in choosing the glass if it is to be exposed to direct sunlight. The design may be good in itself and yet the colors may create distressing discord

to have more character without them. The colonial house, on the contrary, lacks dignity and charm unless its windows are fitted with blinds or shutters—blinds in the north, usually, and heavy shutters on the first story in the middle states and south.

It will be seen from all this that the windows of the house are something more than apertures to admit light, or openings through which to see out. They are the punctuation marks with which the design is emphasized and reinforced. They are among the architect's best assets.

In a colonial house or, in fact, any house with simple, regular lines, it is safe to place the windows symmetrically, those of the second story directly over those of the first. The effect is one of quiet dignity, and always pleasing. With houses of other types, however, it is often much better to group the windows.

Sometimes a great deal of character may be added to a house by setting a third window between two already in place.

Many ways of bringing about highly effective results through this plan of arranging the windows in groups have been worked out by various architects in individual cases. Illustration No. 4 shows a \$6,000 house in which the architectural scheme includes an interesting and unusual, although altogether simple, manner of grouping practically all the windows. No one can deny that this modest



An Oriel Window Filled with Art Glass.

when they mingle with those used to make the decorative scheme of the room.

With the grouping of windows and other innovations has come the passing, to a large extent, of blinds and outside shutters. Inside shutters, too, are going by, although in some sections of the country, like parts of Pennsylvania, they are still hung in most of the new houses. It is obvious that blinds can not well be fitted over windows arranged in groups, and it has to be the custom to omit them from most plastered houses, which seem

house has character and individuality, and that both hinge on the windows.

Fig. 5 gives another example of a small house, the charm of which hangs largely on the manner in which the square-lighted windows have been grouped. This house is an excellent illustration of results which are architecturally pleasing, although secured in a very unpretentious manner. The large lights in the windows flanked by smaller lights on each side are an interesting departure from the conventional, although not, to be sure, an innovation.

Casement windows have made a place for themselves in American architecture solely because of their decorative possibilities. It is the casement window which gives old English houses much of their charm, and all over continental Europe, wherever there are picturesque homes, the

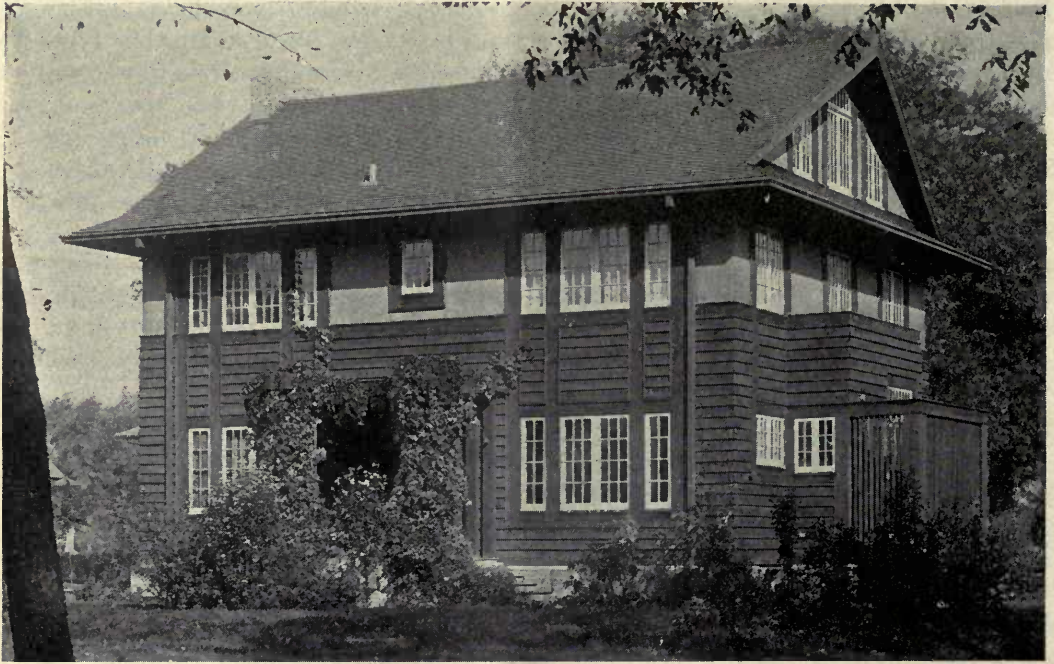
casement window will be in evidence. Small wonder, then, that this type of window has found favor in this country and is being largely used in houses of the better class, especially in those which have departed in design from the colonial, and still more especially in half-timbered and cement houses.

Casement windows may open in or out. If out it is important that they should be fitted with good bronze adjusters and that the hinges should have brass pins, which do not rust out.

"How about screens," you ask, "when the casements open out?" The screen difficulty has been solved in two ways—by the invention of a roller screen which may be run up out of the way like a common roller shade, allowing the window to be opened or closed at will, and by the use of adjusters controlled by a rod at



Interesting Treatment of Windows Filled with Art Glass.



The Grouped Windows Play An Important Part in This Architectural Scheme.



Windows Do Much to Give This House Character.

the base of the sill in the room. By moving this rod, the adjuster may be made to hold the window at any angle. Then, too, the screens may be hinged on one side, so that they will open into the room when it is necessary to manipulate the window.

It may as well be freely admitted that the casement window possesses character

practically every window is a casement, so that there can be no serious objection to this arrangement. Houses, however, in which the casement type of windows prevails are likely to be of unconventional design and with the windows playing a leading part in the architectural scheme.

Casements may be of wood or of metal. The windows cost more when the latter



All the Windows Are Casements with Diamond Panes.

and charm such as seldom can be found in a window of the double hung pattern. Whether they are fully as practical and as easily managed is a matter about which there seems to be no unanimity of opinion. When architects disagree, the layman may well be puzzled. Perhaps it is safe to say that fitting out the average house with casements entirely would be a serious mistake. Yet there are many residences all over the country in which

material is employed, but they are stronger and have less tendency to sag. Such windows usually are made narrow and arranged in pairs, if not in groups.

Often casement windows are given additional charm by filling them with lights of small size set in lead, after the English fashion. Diamond panes are commonly used across the water and occasionally here, but not always as successfully as might be wished.

The Fancy for Violet in House Decoration

By Eleanor A. Cummins



It is not so many years since that no one thought of using violet in any of its shades for decorative purposes. Once in a while an imported paper or cretonne apprized us that the foreign decorator saw possibilities in the derivatives of purple, but his example was not followed. Now we are beginning to see that violet has its possible merits, and may be the color note of a scheme of beauty and distinction.

Perhaps one reason why we were so slow to use violet is that we have not taken very kindly to monotone schemes of color, and violet does not combine well with other colors. Nor is it effective with the light colored woods which are so much used for interior finish. The foreign decorator has not our reverence for natural wood and is quite content with stain or paint. I have read within a year or two of a drawing room decorated by a well known Englishman, which had a white ceiling, an upper side wall of a light shade of mauve, below it a deeper tone of mauve, woodwork and ceiling beams of plum color, floor and rug gray, and the furniture covered with cretonne with a pattern of lavender roses on a greenish gray trellis. The furniture was old oak, there were cabinets of china and miniatures on the walls. The effect was doubtless admirable, but few of us would have had the moral courage to attempt it.

The Limitations of Violet

At the best violet is not a color of wide application. No one can imagine a library or a dining-room in violet; its use is of necessity restricted to bed-rooms

and drawing-rooms. It has also possibilities as the color note of an alcove off a larger room in contrasting color and for porch furnishing in just the right sort of house.

Certain things must be discarded if you want to have a successful violet room. You cannot have pictures of many colors, except in low tones of what are called the pastel colors, faded pinks, mauves, and greens, and that charming shade which used to be called maize. Blacks and whites and the copper plates or mezzotints printed in purplish tones are ideal, the former in narrow black frames, the others in very dull gold. Brass strikes a false note as does bright gold. On the other hand silver is at its best in a violet room, and the deep tones of cream and ivory and the low toned greens are much at ease. If the room shades up from light violet to plum color, you have a chance for one of the most fetching of Chinese color notes, the combination of plum color and the gray blue of their porcelains.

The Best Tones of Violet

Violet is modified by artificial light more than almost any other color, and becomes in some of its tones positively ugly. This is the case with all the blue tones, which are a peculiarly unpleasant stone color by artificial light. The only safety is in selecting, or at least testing, papers and textiles by gas or lamp light. The more red there is in the tone of violet, the better it will look by artificial light.

Another point to be considered is the depth of tone. The very pale shades are

singularly characteristic and become more so with the passage of time. A cold color must have a certain depth of tone. Moreover violet is a color which looks extremely cheap in common materials. It is not to be chosen for kalsomine or for cheese cloth. Pattern and texture are of great importance in its management.

Perhaps no one ought to need the caution to avoid mixing up the red and blue tones of violet, but it is not uncommon to find printed materials in which they are jumbled. The blue tones are hopeless in the evening, but when both are combined in a wall paper or a cretonne the effect by artificial light is grotesque.

As a general thing there is an entirely different range of colors used for decoration to that chosen for dress goods. To a great extent violet shades are an exception to this rule and it is often possible to supplement the rather meagre assortment of decorative textiles by an excursion into the dress goods department. Many of the mercerized silk and cotton mixtures are available in the violet tones and are useful for curtains or for pillow covers.

The Possible Combinations with Violet

Perhaps violet is at its best against a background of cream or greenish gray, but when combined with a good deal of white or cream color it looks well with low toned greens. One sees in old pastels, or their copies, the combination of faded pink with violet, but this seems more adapted to clothes than to furnishings, although sometimes a bunch of pink roses is charming in a lavender room. I have already spoken of the Chinese combination of blue and plum color, and the modern French woman embroiders wreaths of violets knotted with blue ribbon. Yellow and violet would seem an impossible combination, but the guest chamber in a very successful house has a deep frieze of lilacs on a creamy ground, above a wall of clear light yellow, with

furnishings of a lilac patterned cretonne. Unusual things like this take a fine color sense and sometimes succeed by their very audacity.

Violet Wall Papers

The choice in violet papers is rather limited. There are always a few floral papers, lilac, wistaria, or iris, imported, striking, and rather expensive, the sort of papers one would choose for an old fashioned bed-room of good size, but not exactly suited to the average house. Then there are a good many nondescript things, of which the best to be said is that they are inoffensive. Better than either for a bed-room is a narrow stripe of violet and white, whose general effect is of a medium tone of the color, not so light as to be washy, nor so dark as to be purplish.

To go with these striped papers are borders which are a sort of festoon of rather small flowers with perhaps six inches of plain white above it. This border is laid all around each of the four walls, below the ceiling line, down the sides and above the surbase. The effect in the corners of the room where the two stripes of white meet is very good indeed. No picture moulding is needed, the pictures being hung invisibly, though the wall treatment is decorative enough to dispense with them.

Another wall paper for the violet bed-room, or for a parlor is in two tones of soft gray, mastic or putty color, in a pattern of small diamonds. This is intended to be finished with a narrow border, possibly in a paneled effect, or else below a deep drop ceiling and is accompanied by a three-inch floral strip in violet tones.

For the drawing-room, in which a somewhat formal treatment is desirable, ivory white woodwork and an ivory brocaded paper are admirable. Or the paper may be a two-toned satin stripe in ivory. If one is determined upon a decided contrast some rather nice things have been done with violet and green, and a low-

toned, rather light green wall in a two-toned ingrain or Japanese grass cloth is a good foundation.

I have spoken of violet as a possibility for an alcove off a large room. It is in such an alcove that one of the very decorative imported papers in violet tones can be used, and it goes without saying that the adjoining room should be in sober coloring. The use of violet for porch furnishings is of course a matter of chintz or cretonne. The porch of a cement house will look extremely well with gray green wicker furniture, cushions of wistaria patterned linen taffeta and jardinières of Italian terra cotta.

The Possibilities in Rugs

Manifestly the Oriental rug is out of the question, unless it is one of those extremely neutral ones whose blending of cream and brown, yellow and dark blue is so close that no definite impression of color is made. A few years ago I saw a clever arrangement by a well known decorator of Jacobean oak furniture, pewter, violet brocade and velvet cushions and a brown Chinese wool rug, and I have carried the exquisite contrast of the violets and browns in my memory ever since. In the Anglo-Persian Wiltons are close copies of Persian designs carried out in low tones of brown, ivory, green and rose, which with their general ashes of roses effect would be satisfactory in a room combining violet and green, or in an ivory white room with violet furnishings. The gray rug, either made from two-toned Wilton, or Savonnerie, or woven in a single piece, of heavy Scotch wool, may solve the problem of some other room.

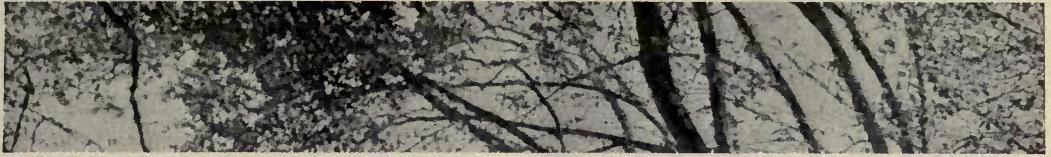
For the bed-room in violet there are always rag rugs, of which the most satisfactory are woven of plain colored rags,

with white stripes across the ends. It is always possible to get a particular tone of color, if the rug is bought through some large firm. Or, if it seems desirable to cover the entire floor white cotton warp matting will be harmonious, with white fur rugs at the fireplace and bedside.

Cretonne is the great resource for the violet room. You may furnish your drawing-room in violet enamel upholstered with gray silk tapestry, but it will not be half as interesting as if you had used for easy chairs and couches a cretonne generously patterned with lilacs, or wistaria, or foxglove. Or if you prefer a contrast you may have cretonnes in which violets and greens are about evenly balanced, and these are particularly charming with enamel or wicker furniture in either silver gray or grayish green.

For curtains, unless the cretonne is used, the choice is rather limited, that is if colored ones seem necessary. Linen or cotton taffeta in natural gray edged with a gimp of the same color will fit into many violet rooms. While upholstery silks seldom come in the lavender tones there is a good choice in the various Shantung and Rajah pongees, as well as in some of the soft finished linens. For bedrooms the latest thing is a curtain of crossband dimity with an applied hem of plain colored lawn, and this carried out in the bed-spread and bureau covers.

For coverings of a more expensive sort there is an occasional furniture brocade and some of the Liberty fabrics. Cotton velvets and velveteens are useful for hangings or cushion covers. There is always the possibility of discovering unexpectedly just the thing to complete the room, whether it be a bit of porcelain, a picture, or a writing set in violet leather.



When Wintry Boughs Are Bare.

Home Grounds and Gardens



The All-The-Year-Round Garden

By

Harry Franklin Baker



N order that I may be better understood I first wish to explain that by a garden I do not mean a small corner of the grounds set aside for growing flowers or vegetables, but the entire grounds immediately surrounding the house.

Why is it so many people have gardens that are only attractive from the first of June until possibly the middle of September, when by the proper selection of plants and material the garden can be made a source of pleasure for twelve months in the year?

To me the country is as attractive in the fall and winter as at any other time of the year and some of the most beautiful color effects are seen in the autumn months or in the winter when the trees and shrubs are loaded with snow. At that time it appears like another world, most wonderful and enchanting. How we miss all of this around the house where there is nothing but a flat expanse of snow,

while the only objects to relieve the monotony are, very likely, a set of clothes poles and some ash cans and for a background possibly we see some unsightly buildings or simply a bleak sky.

I have no doubt that everybody enjoys the fall and winter woodland scenes but there are some to whom it never occurs that they can have some of these same features around their own homes and that by proper management their gardens and grounds may present, in a small way, most attractive winter landscapes.

Some people think of a garden simply as a few flower beds or some vegetables growing in a row. Now let us picture in our minds a garden consisting of flowers alone or, if you will, vegetables alone set on a level piece of ground and with nothing but an expanse of grass surrounding it. Is it a pleasing picture? Undoubtedly it is for flowers are always pleasant objects to look at while in bloom,—but it is all over by October and then we must

wait until the following May or June.

Let us now look at another garden, a garden where the flowers have a background of shrubs and evergreens, where there are trees to spread their shade, seats and hammocks to rest in, paths winding in and out among the shrubs and trees inviting us for a stroll to further inspect the beauties of the garden, all of which we can not see at once. Is not such a garden a delightful place?

If the paths be made wide enough and sufficient open space provided it will make the best possible place for the children

to play in. Let them have a part of this garden for their very own where they can grow flowers or vegetables for themselves. Children take a special delight in cutting flowers from their own garden to present to teachers and other grown-ups.

A garden of this character will leave a lasting impression on the lives of those who grow up in it. Always in after life will the children look back to the happy days they spent in their home garden. It will be as much a part of the home as any part of the house. By providing the proper facilities for resting and privacy

a most delightful place will be furnished in which its owners may entertain their friends or rest themselves.

In the evening this garden by its fragrance, purity and freshness of the flowers, exerts a peculiar influence over anyone who will sit in it quietly for a few minutes and give himself up to the pleasure of enjoying the flowers.

The time spent in this way after a hard day will do wonders to restore one's peace of mind and faith in the future.

Think of the possibilities of a garden of this kind. With the first spring days the bulbs begin to bloom as well as many of the early spring flowering plants such as the columbine, arabis or rock cress, alyssum saxatile, iberis or

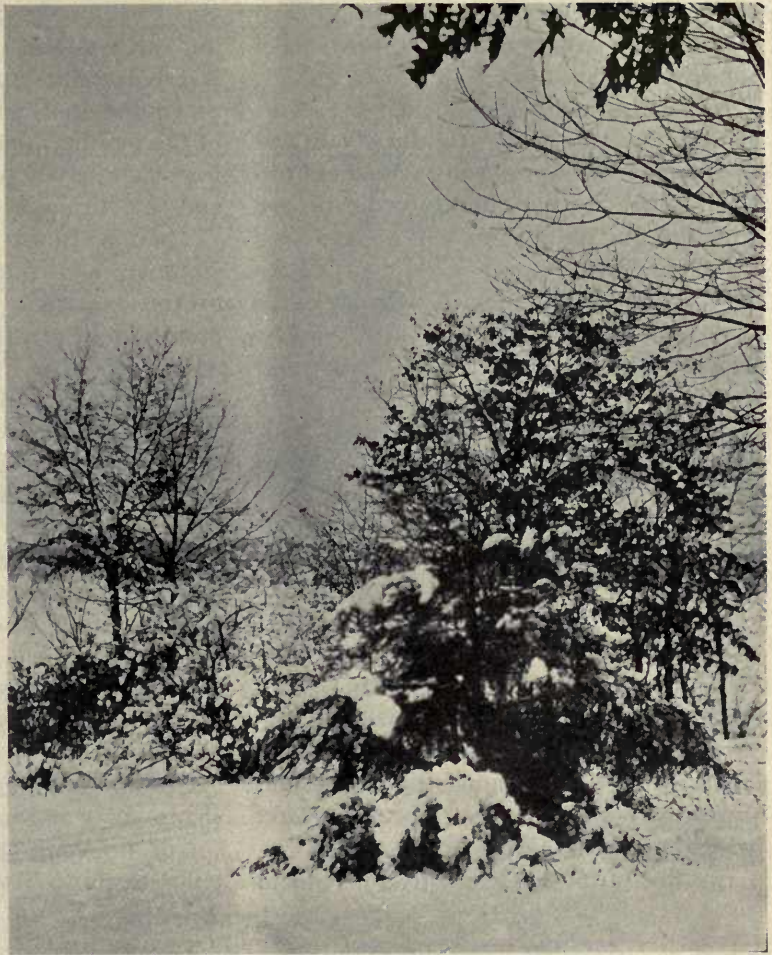


Out-of-Doors in Winter.

hardy candy - tuft, the trollius asiaticus, one of the brightest little yellow flowers I know of, and then the flowering almonds, flowering plums, iris, lilacs, peonies, and syringas are all in bloom, some of them even before the ground is ready to plant the seeds of the annuals. These are followed all through the summer by a succession of the most delightful and interesting flowers imaginable. No two weeks in such a garden are alike, as the passing of the days are marked by the changed appearance of the garden as the different flowers come into bloom.

When autumn approaches the helianthus, rudbeckias, hydrangeas, pyrethrum uliginosum and many other flowers begin to come into bloom. Then along comes the frost, but who cares when one knows that instead of finding the beauty of his garden destroyed he will simply find it changed. For now while the annual plants will probably disappear a large number of the perennials will still add color to the landscape, some by their blossoms and some by their foliage which will remain green for a considerable time.

Now the foliage on the trees and shrubs begins to change, making the most wonderful color combinations we have yet had in the garden and finally when the leaves begin to fall the bright berries of



A Corner of the Garden in Winter.

the viburnum, barberries and rugosa roses begin to assert themselves.

Next the evergreens come into prominence and when at last the trees and shrubs have all dropped their leaves and the snow covers the ground what beautiful lines are traced against the sky by the branches of the trees. It seems as if we can appreciate then more than ever the gracefulness of their outlines while the evergreens, birches and dogwoods add their brightness to the scene all through the winter and if any of the perennials have been left standing, the brown of their stalks too makes the picture more interesting. Possibly a great many of the

shrubs will carry their berries well through the winter before the birds have consumed them all.

As spring again approaches the evergreens take on a little brighter shade and the buds on the shrubs and trees begin to swell until we can hardly wait to see which of our old friends will appear first.

In this short space it is not possible for me to describe in detail how to make such a garden as I have tried to picture. In a general way one should keep in mind some of the following points:

Provide a good expanse of lawn leading up to the house. Do not plant shrubbery and flower beds here and there over the lawn. Screen from view by planting tall shrubs and trees or evergreens any undesirable views—such as unsightly buildings on your own or adjacent property.

Plant around the foundations of the house for the purpose of softening the abrupt angle made by the foundation and lawn, which ties the house to the ground and gives it the appearance of fitting and belonging in its location.

For this purpose use mostly shrubs and

small evergreens and by judicious planting of vines and tall shrubs the more attractive architectural features may often be emphasized, while if there is any part of the building that is not so attractive its lines can be softened by the use of vines and tall shrubs.

Then we must plant for shade in the summer months and sometimes for the protection from winds in the winter months. In planting a garden one of the most necessary features is the background. This can be furnished either by a wall or lattice with shrubs or trees or the wall may be emitted entirely, depending for the background upon the shrubs, trees, and plants.

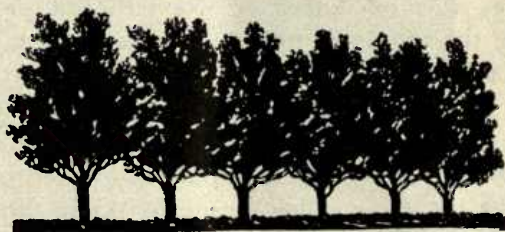
Garden Axioms.

No. 1. Out-of-doors can be as attractive in the fall and winter as at any other time of the year.

No. 2. Gardens and grounds may present in a small way most attractive winter landscapes.

No. 3. We want trees to spread their shade, seats and hammocks to rest in.

No. 4. With the first spring days the bulbs begin to bloom.



Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 477 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 478 BUNGALOWCRAFT CO., Los Angeles, Cal.

Design B-476.



HERE is perhaps nothing so satisfying to the new home-builder as the feeling that his house is built of good material, well constructed, and substantial.

A house might be well constructed and of good materials but not necessarily substantial and lasting.

People are beginning to realize this more and more and with the advent of various kinds of fireproof building materials such as asbestos, slate, tile, concrete, hollow tile blocks, and many varieties of brick are building in more substantial form than ever before. A substantial house, however, need not be an absolutely fireproof house with brick or tile walls reinforced, concrete floors, and tile, slate, or asbestos roof; wood floors, joists rafters, and shingle roof, such as is here illustrated makes a substantial, permanent dwelling. A slight additional expense would put on a tile roof and this house will look as well in twenty-five years as it did the day it was built and the owner is not constantly having repairing done, new steps, roof shingled, painted, etc.

The plan is a popular one with the wide central hall, the living-room on the right with an open fireplace; back of this, a library, or the two rooms might be thrown into one large room. The dining and sewing quarters are on the left and a toilet and coat closet in the rear of the hall is convenient.

Design No.

B 480 F. E. COLBY, Sioux City, Iowa

B 482 JOHN HENRY NEWSON, Cleveland, Ohio

On the second floor are four large chambers, each with ample closet space, a bath and a sleeping porch over the first story porch. A stairway leads to a well ventilated attic. A slight rearrangement of space would give two bathrooms instead of one.

The basement contains the laundry, vegetable room, storage and heating and fuel room.

The house has hardwood floors throughout with tile floor in toilet and bath and cement floor on the front porch.

The main portion of the first floor is finished in oak, while the kitchen and entire second story in brick. This may be white enameled, stained, or finished natural.

Estimated to cost as described, including heating and plumbing, \$8,000.

Design B-477.

The cottage here designed is specially adapted to a city lot, having an east front, being 28 ft. wide by 35 ft. in depth. The arrangement is somewhat different from the average cottage.

The entrance is with a vestibule at the right side opening into a recess and thence into the large living room on the left. This room is 12 ft. wide by 20 ft. in length, with grouped windows in front to the east and a wide fireplace at the opposite end of room, the one chimney has a large flue for heating plant and another for kitchen. The south side of living room opens on a wide piazza with French windows; this piazza is on the

south side and is glazed in for winter use as a sun room and screened in summer. The rear door from piazza opens on the lawn. The dining-room also opens on the piazza with French windows; this room has a recessed sideboard and connects with the living-room with wide opening. The main stair extends up from the rear of living room and connects on the landing with combination stairs from the kitchen, with a basement stair and grade entrance underneath. The first story is finished in fir with mission brown stain and natural oak floor. There is a good full basement. The second story has three good chambers and sleeping porch accessible to two rooms; there are ample clothes closets and bath room. The finish of this floor is pine stained and birch floors. The exterior is covered with cement stucco, the trimmings, cornices, casings, etc., painted white with the roof shingles stained red. The cost is estimated at \$3,500.

Design B-478.

The floor plan of this bungalow is quite elaborate with many attractive built-in features. Both living-room and den have brick fireplaces, the dining-room has a built-in seat and buffet. Two bed-rooms, a bath and breakfast room complete the arrangement.

The unique feature of this plan is the open court, upon which the living-room, hall, and breakfast room open attractively.

The attic is reached by a scuttle and is for ventilation only.

No basement is provided, it being intended to heat the house by the fireplace and range in the kitchen.

The floors throughout are hardwood with fir and pine finish.

The exterior walls are covered with shakes, the roof with shingles; chimney and porch pins are of brick and stone with cement floor; the body is a dark brown with white trim, the roof shingles

are stained a moss green. The estimated cost is \$2,750.

Design B-479.

Builders of homes are ever on the alert for new ideas and new effects. This charming design at once interests and attracts the searcher after new ideas. Every one loves a cottage exterior, but the trouble is to get a full height sleeping-room in a cottage design. The problem is here happily solved in this design having the popular cottage lines with full walls.

The exterior is cement stucco and the roof may be stained to suit the builder's taste. The generous porch may be easily glazed for winter, as the treatment is well adapted for that. The outside chimney pierces the door picturesquely and the grouping of the windows is fine.

The floor plan shows unusual features and in a house of such modest size would open magnificently for entertaining. The treatment of the hall and stair is especially interesting. The curving lines of the staircase, made possible by the half circle of the inner wall of den being of grace and beauty.

The service arrangement is also unique. The pantry is placed as to communicate directly with the sideboard in dining-room.

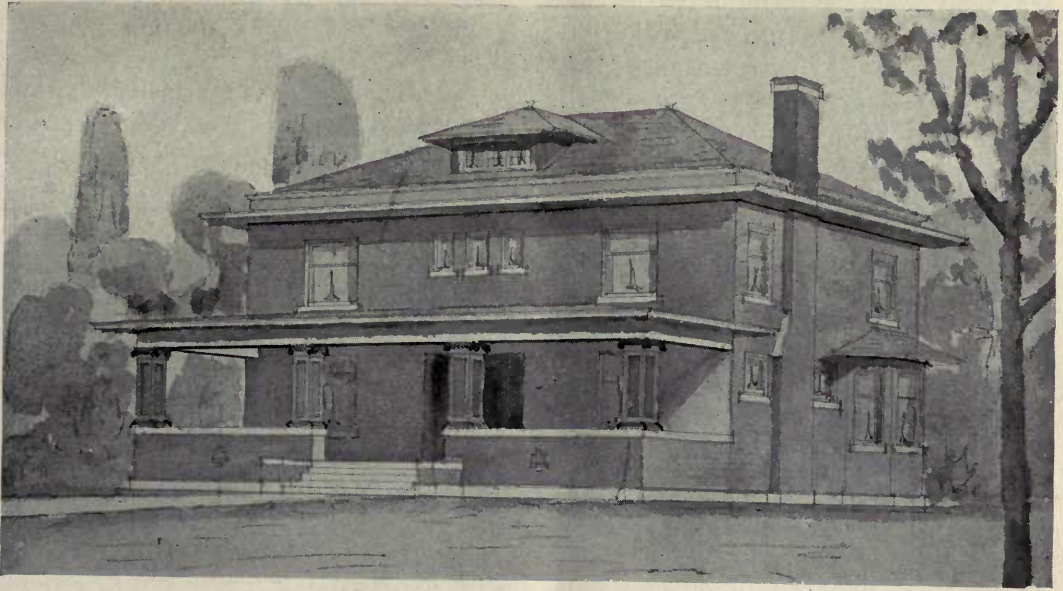
A sleeping porch could take the place of the open balcony over rear porch. There is abundant opportunity for two or more chambers and another bath in attic.

The estimated cost including hardwood finish, hot water heating, the usual plumbing and basement features is \$6,200.

Design B-480.

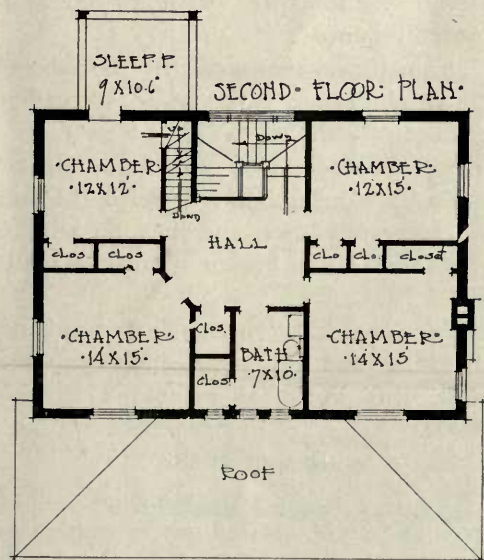
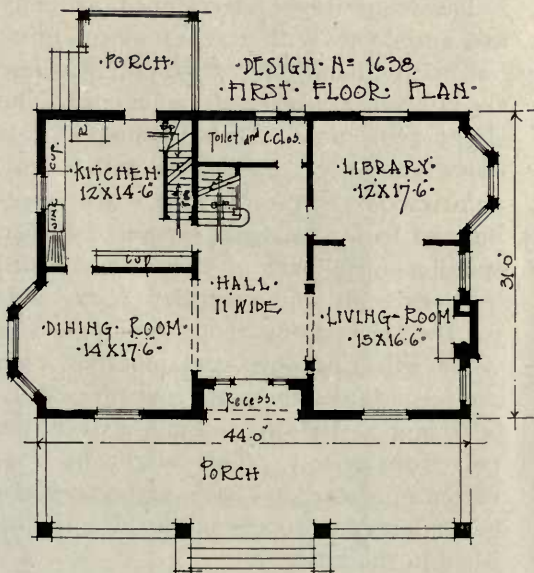
The principal feature of this house is the unusually spacious porch across the front and around the side.

The entrance is through a hall with a parlor on the left and a living-room 17x6x20 in the rear. There is a lavatory and toilet on the side. The dining-room is



DESIGN B 476

A Substantial, Well Designed Brick House



separated from the living-room by sliding door and has a large bay window.

On the second floor are four nice chambers and bath. The closets are unusually large. A stairway leads to a good attic where a couple of rooms may be finished off.

The basement contains besides the hot water heating plant, a laundry, vegetable, fuel and storage rooms.

Hardwood floors throughout with oak finish for the first floor, pine for enameling on the second floor.

A large sleeping porch could be added over the kitchen and entry portion.

Estimated cost to build, \$7,200.

Design B-481.

This design was made for extensive grounds, and presents an ample front. The entrance, with its bracketed hood above, is simple but pleasing. So is the hanging bay, its roof repeating the lines of the main roof.

On the south side is placed a generous sun porch, 27 feet in length and opening through French doors with both living and dining rooms, both of ample dimensions.

The plain roof without dormers has a restful, serene aspect, with its one substantial chimney.

The pantry is conveniently placed and the combination stair helps to utilize space to advantage.

The exterior walls of shingle are relieved by a belt course beneath the second story windows, and may be attractively treated in a brown stain with white trim.

With hot water heat, electric wiring, plumbing and the usual basement features, this house is estimated to cost \$4,200.

Design B-482.

This is a house possessing good character and style, carried out in cement on hollow tile to the top of the first story

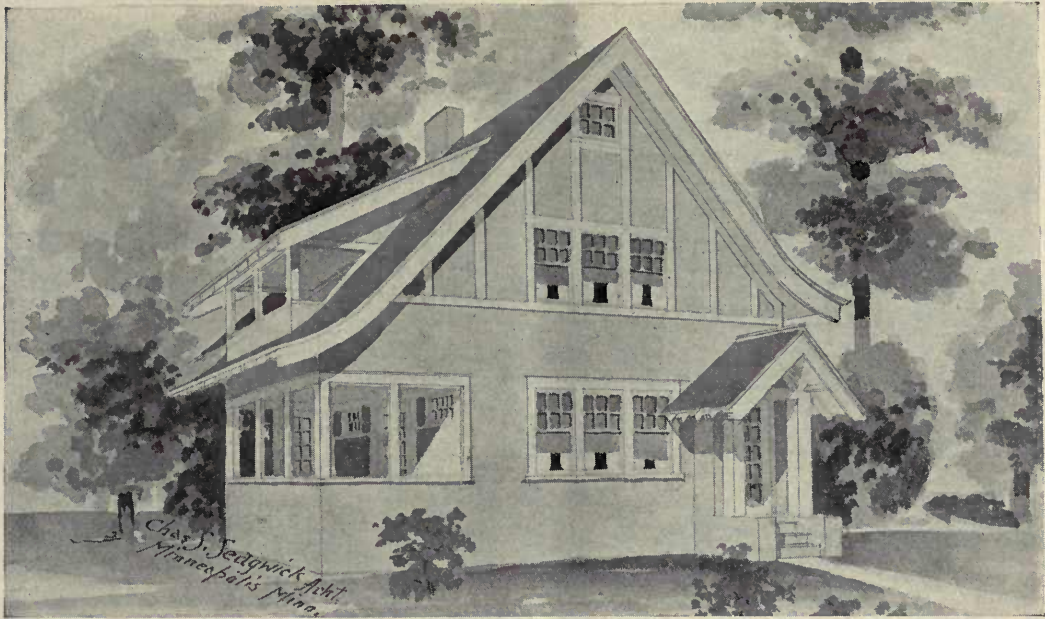
windows. Above this shingle is used and a shingle roof flanks the entrance on either side and form with the overhang of the second story the principal feature of the front facade. This is further emphasized by the cutting in to the low hanging roof of the second story windows. The wall shingles are stained gray and the roof brown. The chimney is built of red brick and all trim is stained brown.

The plan is one of the center hall type with a porch off the living-room in the rear. The living-room occupies the entire right hand side of the hall and on the left hand side are the dining-room, kitchen, pantry and ice room. The kitchen has a separate rear porch. The second floor has three bed-rooms and a sleeping porch and has a bath-room placed over the center hall. The attic may be divided into a servant's room and a large play-room. Cost to build, \$5,000. Size, 43x31.

Design B-483.

A square house is the most economical to build, especially with a hip roof. The ground area of this house is not large, but a great deal of livable space is obtained by the floor arrangement.

The vestibule is not cramped, as many are, and opens with a generous reception hall with a handsome stair landing where the kitchen stair meets the main one. The slight projection of this landing affords opportunity for a pretty bay with a seat, an attractive feature as seen when entering the hall. An open screen of turned spindles form part of the division wall between stair and reception room adds to the interesting composition. The whole effect is open and pleasing. On the second floor there are four nice chambers and a dressing room between the two front rooms. This might be converted into a second bath, and one chamber enlarged. Rooms might also be finished in the attic.



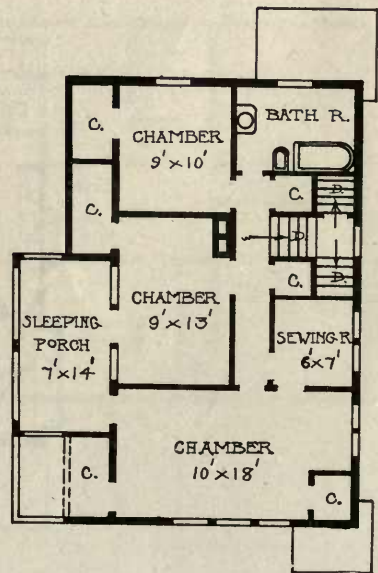
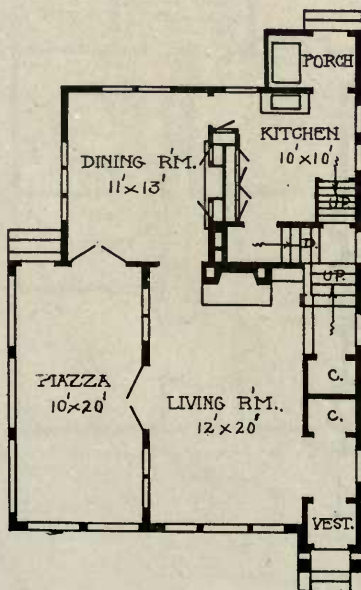
Chas. S. Sedgwick, Architect.

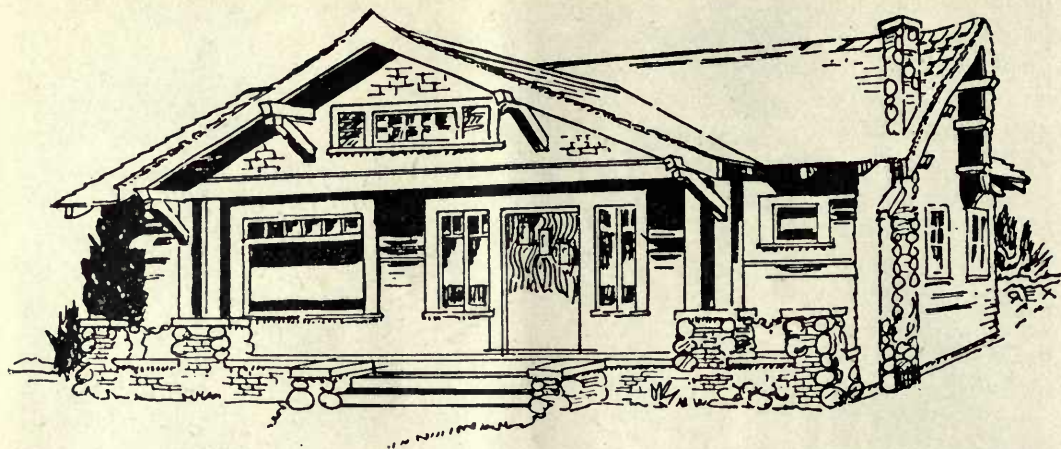
DESIGN B 477

A Modern Cottage

The exterior is designed for alternate wide and narrow siding below the second story windows, but this adds something to the expense and plain siding could be substituted. Above this is cement plaster

on metal lath. The entrance portico is also of cement. The cost estimate of \$5,000 includes laundry and cement floor in basement, hot air heat, and hardwood finish on first floor.

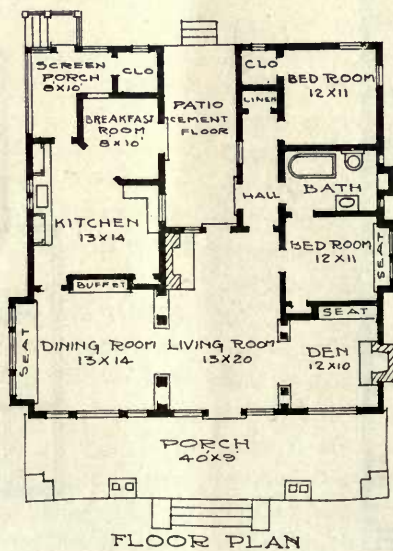


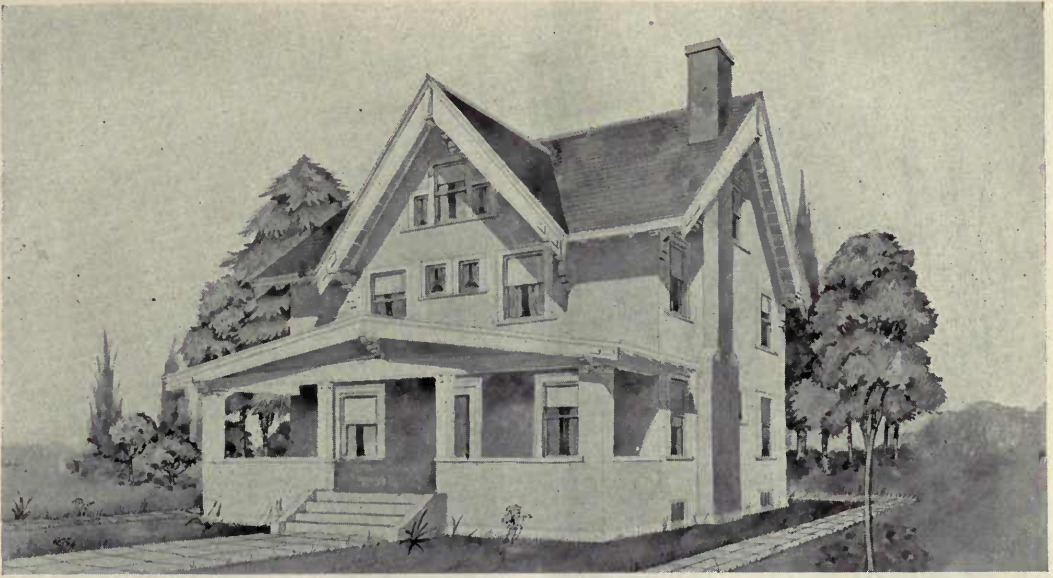


DESIGN B 478

Bungalowcraft Co., Architects.

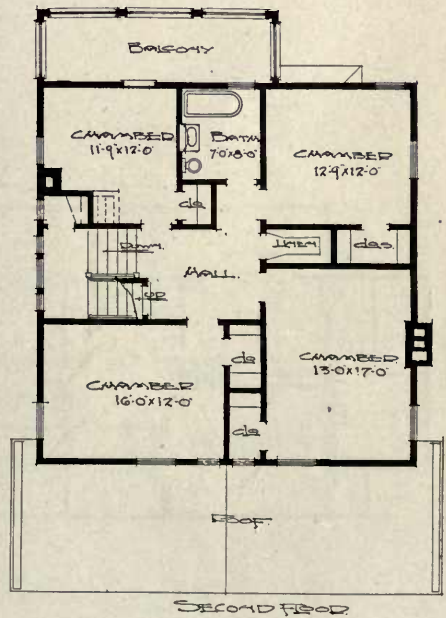
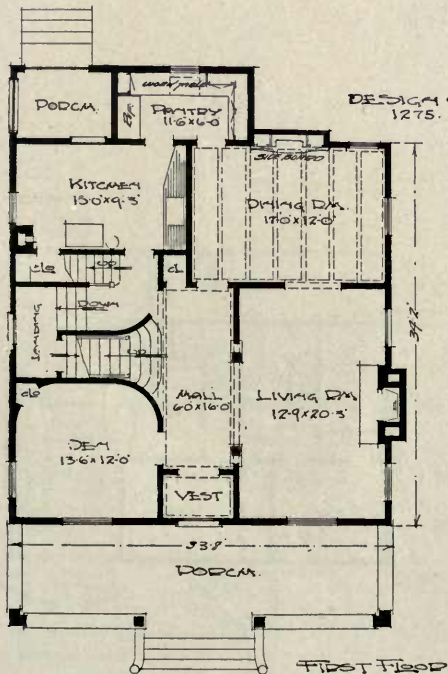
A Typical California Bungalow





DESIGN B 479

A Charming Design in Cement Stucco

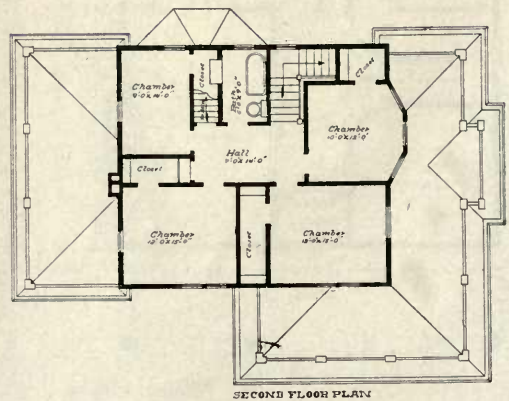
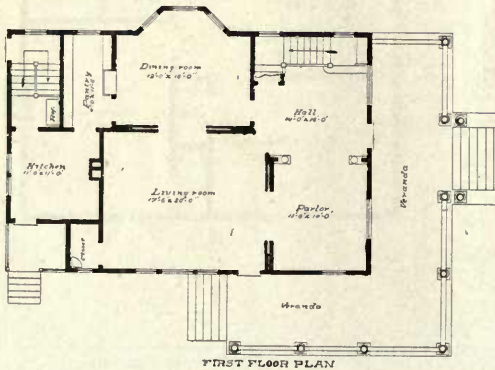




DESIGN B 480

F. E. Colby, Architect.

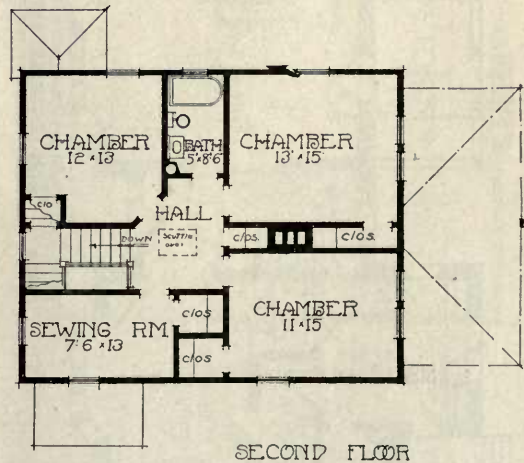
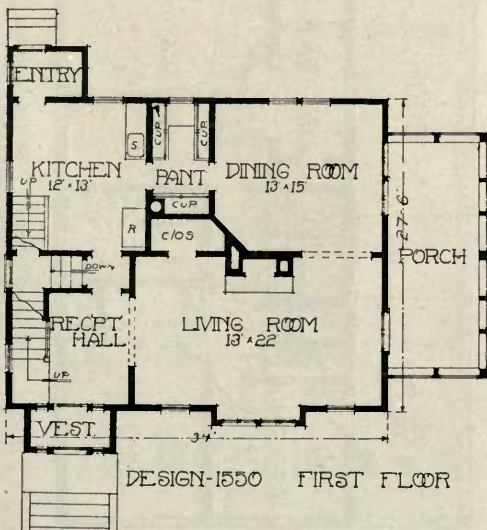
A Frame Colonial House





DESIGN B 481

A Modern Two-Story Cottage on Colonial Lines

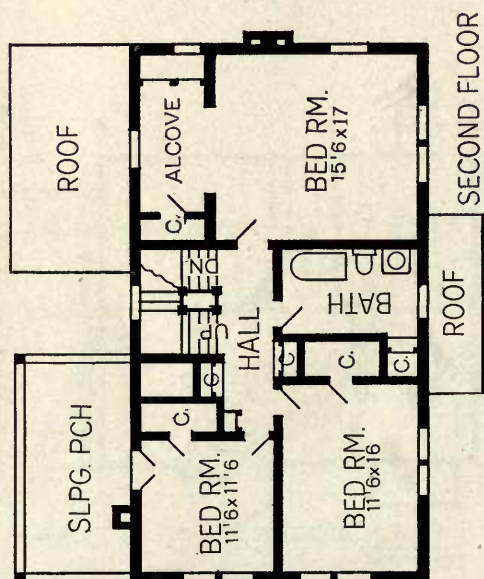
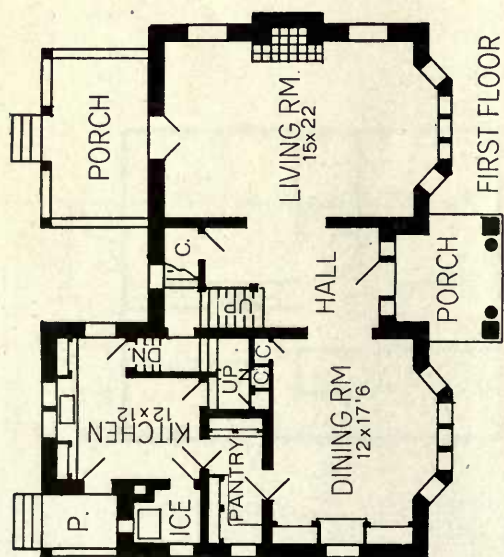




John Henry Newson, Architect.

DESIGN B 482

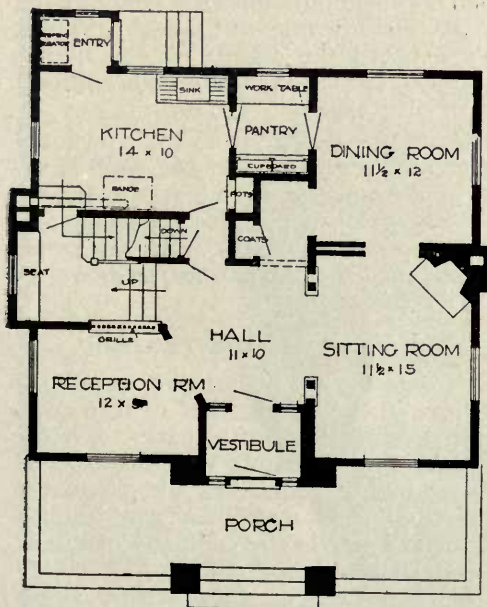
A Shingle House in the English Style



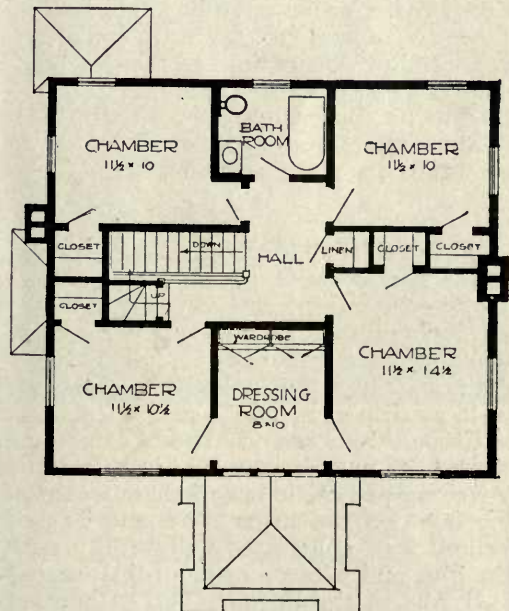


DESIGN B 483

An Economical Home to Build



FIRST FLOOR PLAN



SECOND FLOOR PLAN



Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

Your Very Own.

IT is quite possible that the ideal house is composite, reflecting the individuality of each member of the family, blending all into one harmonious whole, but one craves some spot which is the expression of one's own personality, of all one's own little preferences. It may not be practicable for the mistress of the house to have a den of her own, but she may at least have a retired corner sacred to herself, some alcove off a larger room, an end of an upstairs hall, perhaps no more than a roomy, windowed staircase landing, furnished to her own taste and adapted to her ideas of comfort. It may be argued that her bedroom is such a place but it is seldom hers alone and even if it were it is best not to use a bedroom for anything but sleeping and dressing. One ought to leave the cares and preoccupations of the day without its doors. More and more it is getting to be the custom to make the bedroom a mere sleeping place, whose two essentials are quiet and pure air.

"A Light Closet."

I have in mind an old fashioned city house in which the front bed-rooms have a queer little projection over a built-out vestibule on the first floor, not big enough to be called a room and yet much larger than a closet. A bookcase against one wall, an arm chair and a cushioned stool, a circular light stand with a lamp and work bags and baskets, and inkstand and a writing pad made one of them a charming nook off the larger room and its pale yellow wall contrasted delightfully with the blue and white scheme of the other.

It was in the upstairs hall of another old fashioned house, under a skylight and looking down over the well of the stair-

case, that its mistress chose to establish herself of mornings away from the activities of the house and yet near enough to be reached at a moment's notice. Here was her desk inviting prompt attention to the morning mail, the newspapers and the mending basket ready to her capable hands. And in a scheme of soft olives for walls and floor she chose to cover her large easy chair with an English linen of bright hued birds and tropical flowers and leafage.

More practical in the average house is making a snugger of the front of the upstairs hall, with a sofa and a desk and one's favorite books, with perhaps a screen for privacy. Sometimes it is possible to work in for a covering the cretonne that one fancies immensely, but which seems impossible for a whole room. Or the comfortable but shabby couch, quite beneath the dignity of the living-rooms can remain in commission without fear of disgrace.

Such corners, aside from their personal aspect add very much to the general effect of a house, in giving it the livable look which is such a great charm, and which is so often absent from the house which is furnished all at once, or by a professional decorator.

The Fancy for Gray Enamel.

One sees a great deal of gray enamelled furniture in the shops, some of it in combination with canework panes. While white enamel demands a rather special setting of white woodwork and associated happily only with mahogany, gray enamel is quite at home in the company of fumed or even of weathered oak.

The best shades are those with the very slightest suggestion of green, or what may be described as putty color. It is

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most effective in combination with bright colored cretonnes or linens, and for formal parlors with delicate colored French tapestries in stripes and small floral designs.

One of the pieces shown in gray enamel and cane is a modification of the Pickwick chair, with its high back in three sections slanting outward from the seat. The seat and the central panel of the back are upholstered, while the cane shows on the two side panels.

While most of the enamel furniture shown is expensive, especially that with cane panels, the fashion is a desirable one in that it offers many opportunities for the clever amateur. With patience and a good varnish remover shabby old pieces of fair design can be reduced to the bare wood, given several coats of good paint, mixed very thin and well brushed in, and finally finished with the best enamel attainable.

One piece of furniture very easily managed is a chest of drawers, for which one can utilize one of the old cottage bureaus. Sometimes the mirror is possible, standards and all, but more often it is best to take it off and merely hang it above the bureau. The wooden or brass handles to the drawers should be taken off and glass ones substituted. The golden oak of commerce is also capable of the enameling process and the mirror and standards need not be removed in most cases. Such a chest of drawers with a single iron bed in the same gray, two simple chairs with loose cretonne cushions and a small table with a circular cretonne cover, a rag rug and a tinted wall, soft rose or dull green, is adequate furnishing for the bed-rooms of a modest house and in far better taste than mahogany or oak.

The Weak Point of the Professional Decorator.

The professional decorator too often errs on the side of splendor. One may well ask if wall papers costing four dollars a roll are in keeping with a house which cost seven thousand to build, if there is much harmony between velvet curtains in the dining-room and a menage of one servant. Does the decorator really like such things or is he moved by the thought of his commission on his pur-

chases? Perhaps the fault is with the system rather than with the man, but certainly the houses one sees which have been turned out by professionals are most of them quite out of keeping with either their owners or their standards of living.

On the other hand the decorator has its own griefs. He has to see Chinese vases posed on Henri Deux chimney pieces and pianolas installed in old French music rooms, and absolutely incongruous plates touching each other on his carefully adjusted plate rails and many other minor tragedies and to bear them uncomplainingly because he wants to decorate another house for the owner.

Chinese Cretonnes.

If one have Chippendale, whether real or a reproduction, even if it does not belong to his Chinese period, it is the proper thing to have curtains of cretonne in a Chinese pattern, with quaint jars and bunches and baskets of flowers, with possibly a suggestion of landscape in the background. Most of these cretonnes have yellow or yellowish grounds and are excellent in combination with Japanese grass cloth of the same tone. With this coloring are used Chinese wool rugs in tones of blue and brown, the blue predominating. Perhaps the latest caprice in things Chinese is lacquer of vivid green with designs in gold. One finds in a short story, "The White Pagoda," by Anne Douglas Sedgwick, some clever suggestions about the management of Chinese furnishings.

The Judicious Use of Cretonne.

Beautiful as many of the cretonnes are it is quite possible to have too much of them in a moderate sized room and several expedients are resorted to.

One of these is to use the cretonne for large pieces, a Davenport or a large arm-chair, perhaps also for curtains, and to cover the seats of smaller chairs with glazed chintz with a white ground and a stripe of some color harmonizing with the patterned fabric. Or sometimes the chintz corresponds to the color of the furniture. Mauve enamel furniture will have chair seats of mauve and white chintz with arm chair and sofas covered with a printed linen with a pattern of lilacs. Or



A mahogany finish that will not fade

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A striking effect is suggested in the picture—white woodwork, light tinted walls and mahogany doors. You can secure this most satisfactorily with Lowe Brothers Mellotone for the walls, Linduro Enamel for the trim and Non-Fading Dark Mahogany Oil Stain, with Mahogany Glaze and Varnish for doors.

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gray enamel will have green and white chintz and curtains and covers of a verdure cretonne.

Another way is to combine a plain material with the figured, either a heavy linen, a mercerized armure or toile, or a seeded taffeta. The figured material is still used for the large piece but covers and curtains are merely bordered with it, while the plain fabric is used for the outsides of chairs and sofas. The effect is good and the saving in the quantity of the more expensive material is very considerable.

Some table and couch covers seen in one of the New York shops carry out this same idea. The greater part is the natural color of the canvas, not unlike natural burlap and there is a wide border, sometimes a center of a decorative pattern of fruit and flowers in rich, deep tones of coloring. Yard square table covers are \$1, couch covers \$3.75.

Artistic Lighting Fixtures.

For a dining-room which needs a central light nothing is more satisfactory than an alabaster dome, which sheds an indescribably soft light over the table, protecting the eyes perfectly. They cost about seventy-five dollars but are worth the money in beauty.

At the Oriental shops one finds lamps of various sizes in pierced Damascus brass, graceful in shape and delightful in tone. One six feet high costs \$125. The shades as well as the standards are of the pierced brass and the lamps have real distinction.

Most effective in a room of dark, rich coloring is one of the Tiffany lamps, the base of copper, the shade of dull red Favril glass. Such a lamp, standing about two feet high, costs \$28.50. For rooms of a more delicate style and lighter coloring are Colonial glass lamps which can be fitted for electricity and are supplied with shades of various quaint shapes covered with cretonne or with Chinese brocades. The use of a crystal fringe is better honored in the breach than the observance, as it gives the light an unpleasant striped appearance as it strikes the table. The handsomest imported shades are finished either with a gold gimp or with a plain silk fringe. One of these glass

lamps without the shade costs \$4, and stands about two feet high. Smaller sizes can be had and it is a pretty idea to have a lamp and candlestick for a bed room supplied with cretonne shades to match the furnishings.

The Stained Glass Window.

Almost all of the houses of a certain pretension built twenty years ago boast of a stained glass window, perhaps several, which, with the development of better taste, have become eye sores. A stained glass window may serve a useful purpose in a hall, but is seldom at home in the living rooms. At its best it is too pretentious for a modest house and at its worst it throws the color scheme of the room out of joint and is generally placed so high that it gives a singularly unpleasant top light.

In most cases, if courage is lacking to take it out altogether, the only thing to do is to curtain it so as to shut out the light altogether. Stained glass windows in churches are sometimes toned down by painting over the outside with gray paint which tones down light and colors alike, and this may be done in the room whose other windows are curtained in white or cream, using a similar curtain over the stained window. When the curtains of the room are of thick material, those of the stained window can be drawn over the entire window, shutting out the obnoxious light. Often the light from the window is objectionable only when the sun shines through it and then some sort of a temporary hanging can be provided for use at need. In the case of a window high up in the wall it is sometimes possible to fill in the recess with a picture, of a sort which will look well from below, such as an architectural photograph. Some of these openings are of such a shape that they may be filled by the Aurora or The Harvest Moon, both of them easily attainable, and good when seen from a distance. Perhaps the best thing to do with one of these windows is to leave it to its original function, but to substitute small leaded panes or bullseyes for the stained glass, a matter of a few dollars but more satisfactory than any make-shift in the way of special arrangements.



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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

A Southern Bungalow Interior.

G. H. S.—We wish to ask some advice about finishing the woodwork of our new bungalow which we are building. It is a six-room house with hall in the middle. We will finish the hall and dining room in Beaver Board. Enclosed is a sketch of rooms.

The living room contains mahogany finish furniture. Dining room has oak with finish on wall as mentioned. This we had thought of having green tint, the hall golden brown, and have strips of wood three inches wide on the joints of Beaver Board, which is about every four feet. We have for the bed rooms, brass and oak furniture, and white enamel bed and mahogany dresser. In the second we will have hard pine floor, with pine casings and pine doors. The house is well lighted. What do you thing will look best for finish on doors and casings, Old English or Flemish? What is Flemish shade?

Ans.—Since you already have oak furniture for the dining room, a brown stain will be best for the doors and casings, but Old English or Flemish is much too heavy a finish for a cottage. A medium brown, such as brown oak, is better. You can use the same stain on the doors of all rooms opening into the hall, on the hall side, but the woodwork of the bed room containing the brass bed and mahogany dresser should be cream white. Also the remaining wood trim of the hall should be cream white, even the cross pieces on beaver board, as the long hall, lighted only from adjoining rooms, needs light walls. The side walls may be painted a very pale ecru, ceiling cream, but brown would be too dark. The floors can be stained brown and a brown runner used.

Returning to the dining room, a green tint on the side walls will be very good, provided it is not a strong green. It must be soft, not dark. With the mahogany furniture for living room, it will be best to stain the woodwork of that room mahogany unless the furniture has the brown, antique finish, when it will harmonize with the brown oak advised for dining room. If the mahogany stain be used, the sliding doors can have that finish on the living room side and the brown stain on the hall and dining room side.

Finish of Woodwork, Etc.

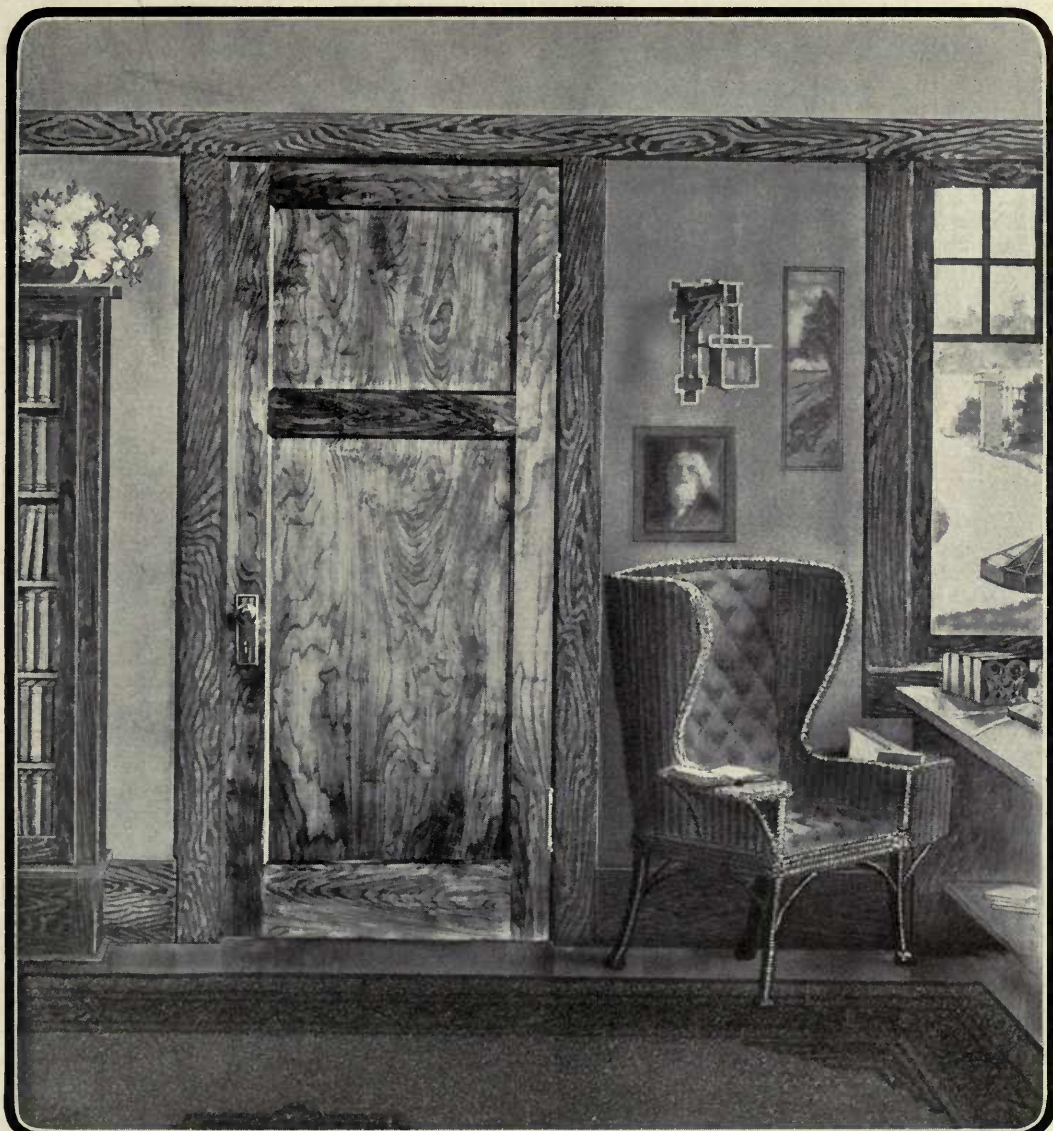
C. M. W.—“To me, your advice seems of higher standard than that given through any other magazine, and as I am unable to complete my plans I appeal to you for aid.

We are building a bungalow, floor plan enclosed, which we are fashioning after Design B349 as it appeared in “Keith's magazine on Home Building” for June, 1912.

For the outside we have chosen the color of cigar brown with cream white trimmings. The brick work is in yellowish brown (more yellow than brown) pressed brick laid in black mortar.

I have planned to have music room and library finished in the fumed oak stain, the dining-room in early English and all other woodwork white enamel with mahogany doors in bed-rooms, and one side of sliding door between music-room and bed-room the same. But since there is no door between library and dining-room, I fear the fumed oak and early English would not harmonize, etc.

Ans.—The dining room can have the Early English finish if you prefer, allowing the Fumed Oak of library to run through the casings of opening and also use on columns. It would be much bet-



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ANSWERS TO QUESTIONS—Continued

ter, however, to do the two rooms in the same stain, especially as Fumed Oak dining-room furniture is very lovely. We would use blue and green color scheme for walls and rug in this room, with green as the complimentary color in living-room, viz.: for rugs and furniture coverings. Maroon would be entirely "off color" with tans and browns. The wall should be a soft ecru, and curtain draperies may be either of tan casement cloth to match wall, or green to match rug, etc.

A soft rose in rug and draperies will be very good in library, with a warm grey wall. We should continue the rose and gray tones in the east bedroom opening from music room, only of course a different style of treatment. We think a soft yellow wall would be excellent in northeast bed-room, but would make the wood-work ivory instead of white and have deep ivory finish to the furniture instead of white. Rug, rose and green on ecru ground. This would be soft and not "glaring" like yellow and white. We would prefer brass to iron for library light fixtures. The brass knocker on door will be entirely appropriate.

Spar varnish is too fine for floors. You should use a good floor varnish like Liquid Granite or Marnot, or else wax.

Placing Rugs.

R. R.—"We are building a new home and would like your advice on papers or shades of tints to use on the three bedrooms for which we have the rugs and for two of which the furniture. The middle room faces (only one exposure and that a bay window) northeast, the front room southeast, lighted only at the front from bay window, and the third faces northwest, one window on northwest side and one on northeast side. We have not selected any furniture for this room as yet but on account of size of room will have to use a green flowered rug with pink roses. The woodwork in all the bedrooms will be white enamel over poplar. Our two other rugs are, one a brown tone and the other a green, no large figures in either, but small figures in square center with border of about one foot. One set of furniture is mahogany and the other bird's-eye maple. In what rooms would you place each rug and set of fur-

niture and with what shades of walls and ceilings?"

Ans.—We would use the brown rug in the middle room with northeast exposure and put the new furniture there, either Circassian Walnut or Fumed Oak. The woodwork here should be cream, not white. This room should have a wall paper, soft tan with dull pink flowers and cream ceiling. Then the over-curtains and other accessories should be plain taffetas or linen in a soft old pink shade.

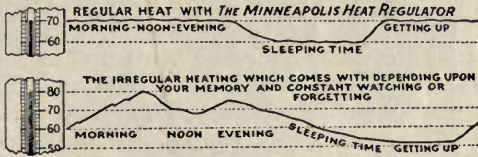
Put the green rug in the southeast room with the birds'-eye maple furniture and tint the wall old gold with cream ceiling. Run a border around the room just below picture molding, of pale yellow flowers and green leaves and have cream scrim curtains with a similar border. The mahogany must go with the green colored rug, but let the wall be a warm grey with rose border at the top and white ceiling.

General Advice.

C. C. G.—"I am enclosing blue-prints of the house I am building, and would like very much to have your help on the interior finish and some ideas on furnishing. It is situated on a side-hill with trees surrounding all but the front. It sets 35 feet back from the street, and is stained brown with white trim and green roof.

The living-room, dining-room and first and second-story halls to be finished in the best selected birch including the stairs. Rest of house in best selected spruce. The floors in living-room, dining-room, and lower hall to be oak, the balance best selected spruce. The dining-room is to have a built-in buffet which will be red oak when it reaches us. Doors inside to be two panelled birch veneered. Now I would like your idea as to what stain and finish you would use on the three rooms downstairs, also the wall treatment, and whether you would advise a beamed ceiling for either or both rooms with panelled walls or not. We had thought of white for the other rooms, and if that is your idea how would you treat the doors? What is the difference in cost between papering and painting the walls, and which do you prefer?

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ANSWERS TO QUESTIONS—Continued

We have a nearly new dining-room set in mahogany for dining-room. For the living-room we have a variety of pieces, among which is an old haircloth sofa which has been in the family for years, and which we hope can be utilized by being reupholstered to go with color scheme. Table in mission that can be restained, an Indian Oriental rug (9x12) with red center and border in soft shades of buff and blue and just a little bit of green. A large Turkish rocker in red plush, a grand piano. We also have an old-fashioned secretary with glass doors in upper section, and an old long mirror that we should like to use somewhere in the house. Would you advise window-seats or book-cases under the casement windows. We had thought of brown for these lower rooms.

I wish to say that your magazine has been a great help in building this house, and I have watched your columns with a great deal of interest."

Ans.—You have an interesting home on a beautiful site. We like your exterior color scheme. Neither your letter nor the blue prints give a definite color scheme for the interior; with regard to the finish of the woodwork, inasmuch as your dining-room furniture is mahogany, the birch in this room should have a mahogany stain. As, however, there is no

wide opening between his room and the living-room, they need not be exactly alike. Birch is beautiful in a brown stain, and we think this finish would be better with the miscellaneous furnishings you describe. You could use a dark mahogany stain on the dining-room woodwork, dark oak in the living-room and hall, mixing the two stains slightly; using say, one-quarter brown in the mahogany and one-quarter mahogany in the brown. It would bring the rooms more together and the effect be good.

The old sofa should by all means be retained, but we should reupholster the red plush Turkish rocker, doing that and the sofa alike, in a small figured tapestry, having brown, dull red and dull green tones.

As to ceiling beams, two beams cross-ways of the room starting each side the group of windows, might be an addition, and beams crossing hall ceiling each side the large opening with one between and equal distance the other side. We should not beam the living-room. A paneled wainscot in dining-room would be excellent, but the hall is rather long and narrow. We would use instead a two and one-half dado, placing a four-inch molding at that height and paneling the space between that and baseboard with natural burlaps, painting it the color, or a shade darker, of the wall. Such a protection is quite necessary in the hall.

As to papered or painted walls, both have their good points; the chief objection to the latter being the liability to chip and cracks showing. We should use a decorative paper above the wainscot in the dining-room, gay plumaged birds and blossoms on a cream ground with plain cream tinted ceiling. Such a treatment is well suited to your location. The living-room wall can be painted a soft gray or tan, gray if a south exposure, tan if east or north, using either of the wall tints we advertise.

We should use no decoration on living-room wall, but the hall could have a stencil decoration. All are good and several of them furnish fine stencil designs. We approve of white paint for balance of the woodwork. The doors opening into the hall can be stained on the hall side to match hall.

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EDITOR

KEITH'S MAGAZINE



The New Economy.



RECENT writer calls attention to the change in the conception of economy in the last few years. Once the economical person was expert in saving money, buying as little as possible and at the lowest possible price, making a dollar go as far as might be. The new economist is not a saver but a spender. She studies the matter from the standpoint of efficiency. What sorts of food will best promote the efficiency of every member of the family and where can they be bought in perfection? She may reduce the cost of living by buying in quantities, she may discriminate between fancy and staple groceries in favor of the latter, but she never saves for saving's sake as her predecessor did.

This conception of economy is hard on the limited incomes, whose every dollar has a number of applications, but it is possible to carry out the idea, even if one has to modify it in details. After all the principles of judicious expenditures are the same for the thousand dollar income as for one of ten or even twenty thousand.

As meat is the most costly article of food which comes to our tables, it has occurred to the writer that some of her readers might find it helpful if she were to take up the different kinds in turn, with a view to suggesting some ways in which the cheaper cuts can be made palatable and nutritious. The standard of living here in America has always been so high that most of us are reluctant to believe that anything but the best cuts are good enough to eat, and in consequence we lag far behind Europeans in the art of preparing the less choice parts of the ox, calf, or sheep.

To begin with the fibre of meat has the same nutritive value whether it is found in the porterhouse or in the shin. The difference is one of tenderness. The constantly used muscle of the leg is of necessity harder than that upon the animal's back and must be artificially softened by slow cooking. On the other hand the best flavored piece in the creature is the round. A gain in tenderness often means a loss in flavor.

One aspect of the use of the cheaper cuts of meat must not be forgotten, the cost of cooking. When coal is the fuel used this is immaterial, in fact the advantage is on the side of the slow process, as the amount of fire required is much less than when a hot fire must be made up for roasting or broiling. But with gas or electricity the length of the process adds just so much to the cost of the food. Often, however, this difficulty can be overcome by arranging to use the oven, regulated to its lowest temperature, and to cook a number of things at the same time as the meat.

A Cheap Roast of Beef.

The best roasts are in the forequarter, beginning with the prime ribs, which correspond to the floating ribs in the human anatomy. Of these the second and third cuts are the most desirable. As the body broadens out toward the shoulder the amount of flesh on the ribs increases so that two of the stationary ribs, which are called the chuck ribs, will weigh from eight to ten pounds. Next the rib bones are separated from the coarser flesh next the skin by a thick layer of yellow cartilage is what is known to butchers as the eye of the chuck, a solid piece of lean

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beef, of fine texture and flavor, making an excellent roast, quite as good as the prime ribs. When cooked with the coarser parts it loses much of its goodness, and it has not the layer of fat which adds to the excellence of the prime cuts. This is, however, easily remedied by skewering on thin slices of fat, as one does with salt pork on a shoulder of veal.

An accommodating butcher will sometimes cut out this piece, selling it at a price slightly less than that charged for the choicer cuts. But the better way is to buy the whole chuck of two or three ribs and have the lower end cut off and corned. The coarse, lean meat above the cartilage can be used for a stew, or can be roasted in the pan with the eye and later used for hash or a meat pie. It takes some time to cut the chuck apart and it is well to have it done on Friday rather than Saturday, when the butcher is not in the mood for niceties. Always choose a chuck from a large creature as it will be much tenderer. Being a lean piece it will require more basting than other cuts.

What to do with Flank Steak.

The flavor of flank steak is delicious, but it is very fibrous. A simple way of serving it is to cook it rather rare in a hot frying pan, merely rubbed with a bit of suet to prevent sticking, and then run it rapidly through the meat grinder. Add a cup of boiling water and a good lump of butter to the liquid in the frying pan, season it with pepper and salt and stir in the chopped meat. Have some slices of crustless toast in the bottom of a covered dish and pour the mixture over it.

Select a large flank steak and have the butcher make a pocket in it. Fill this with a highly seasoned dressing, roll the steak, skewering it into place, tie it up in a floured cloth and boil it gently for a couple of hours. Eat cold, slicing it across the fibre slantingly.

Flank is not a good piece for a stew as it has a fashion of disintegrating, but a pound added to two or three from the forequarter improves the flavor greatly. The secret of a good stew is to brown the meat thoroughly and to cook it on the slowest possible simmer for several hours.

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Therefore insist that your architect provides for the necessary wiring and piping in your plans and specifications. Have the rough work done while the house is building and thus save money and trouble at a future date.

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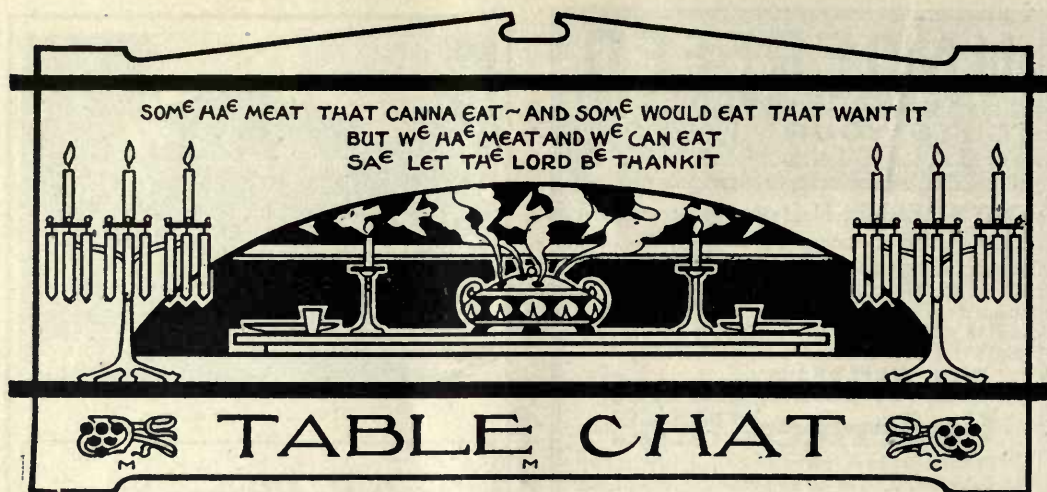
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See owner's letter above.



Simple Entertaining.

THE craze for bridge is responsible for a great deal of informal feeding in the late afternoon of a sort which makes no great demands on the family resources. Still not all people play bridge (fortunately) and the occasions for a non-intimate hospitality are numerous. It is a great mistake for the woman with children to get out of the habit of any sort of formal entertaining, as she is sure to feel the lack later on when her children are of an age to appreciate the value of a definite social background.

Luncheon or High Tea?

Which form the entertainment of a few invited friends, more or less carefully chosen shall take depends upon local customs. In the smaller places, where the midday dinner is the rule giving a luncheon involves a general upsetting of the domestic arrangements and is attended by so many practical difficulties as to be very difficult. In that case what our English friends call a high tea is more easily managed, setting the hour a little later than usual for the evening meal, and including men as well as women. On the other hand, a luncheon for women only involves much less trouble and expense and its ease may well balance the bother of arranging an earlier meal for husband and children.

Entertaining Without a Maid.

It may be questioned whether it is not quite as simple to give a small luncheon without a maid as to depend upon the

awkward ministrations of the usual general servant. It is not difficult to arrange a menu which will almost serve itself, provided one is willing to depart a little from the usual selection of viands. A chafing dish is a great help, so is a casserole and still another is a two or three shelved table at the hostess's side.

In many places occasional help is available. In a town in which there is a colored community one may often run across a grown boy of good appearance who can be pressed into service. I have known of luncheons at which the waiting was very gracefully done by the two young daughters of the hostess, while in another house, on a Saturday, a fourteen year old boy brought in the courses and changed the plates.

Luncheon Menu.

Here are suggestions for simple luncheons, to be given in midwinter and requiring the minimum of service.

Oyster Cocktails

Creamed Chicken	Delmonico Potatoes
Peas, Olives	Bread and Butter
Orange and Lettuce Salad	
Chocolate Layer Cake, Custard Sauce	
Coffee	
Grape Fruit	
Oyster Pie	
Cold Boiled Ham	Hot Rolls
Potato Chips	Crabapple Jelly
Lettuce and Celery Salad	
Olives	Neuchatel Cheese
Moulded Custard, Caramel Sauce	
Coffee	

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TABLE CHAT—Continued

For the first of these luncheons everything but the coffee can be prepared ahead of time. Assuming the use of the serving table beside the hostess, when the guests are seated the chafing dish with the chicken is in front of the hostess, peas and potatoes in covered casseroles beside her. The cocktail glasses may be set on the bread and butter plates with a brown bread sandwich, in front of each guest. The hostess has a pile of plates for the chicken at her left, and if there is no maid

the beverage to one of the guests, passing the cups with the substantial course. The after-dinner cups used in the library are replaced by those of ordinary size when this is done.

Laying the Luncheon Table.

The use of a tablecloth for luncheon is out of date. Either a bare table is used with individual doilies at each place, or else there is a circular cloth of lace or embroidered linen, or the combination of

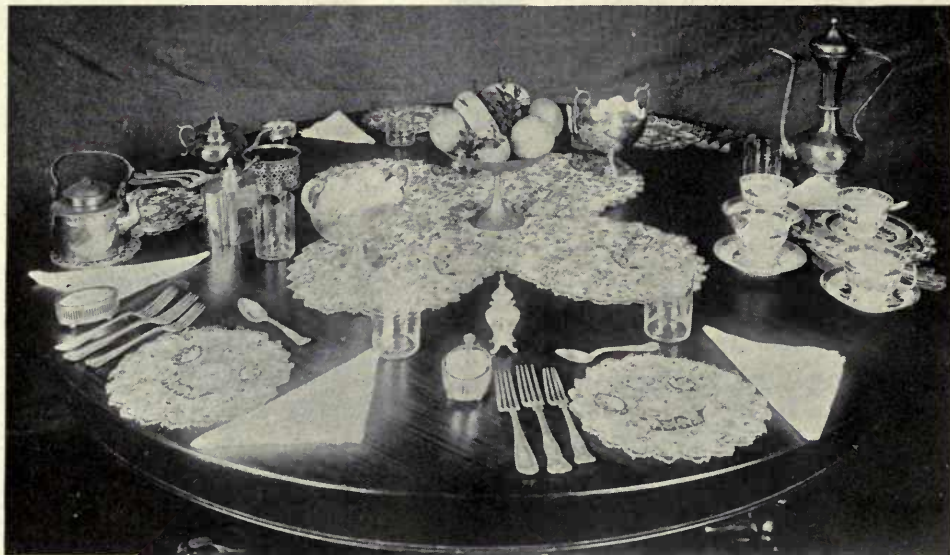


Table Laid with Doilies for a Luncheon or High Tea.

the guests pass their cocktail glasses up to the head of the table and they are put on the lower shelf of the table. In due time the plates of the next course are passed up and also deposited.

"The salad and its plates are before the guest opposite the hostess, and the bread and butter sandwiches and the olives for the second course and the wafers for the salad are also on the table during the whole meal. It is a simple matter to clear the table for the dessert which is served on a side table, and coffee can be served in the library or living-room.

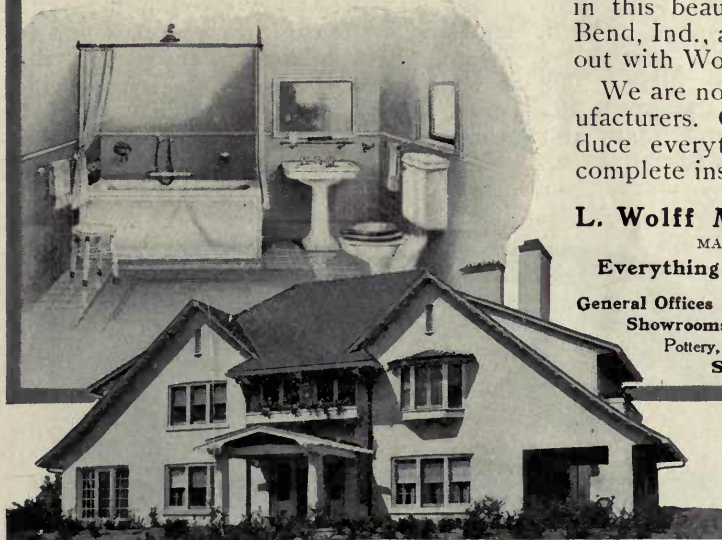
While the second luncheon has an additional course the service is equally simple. Many people, of course, prefer tea or coffee during the meal, and in that case it is well to use an urn, if one can be secured, and to commit the service of

both. Pretty and not expensive luncheon sets are made from woven filet curtain net in the familiar square patterns. A single square answers for a tumbler doyley, four for the plate doyleys and sixteen for the centerpiece. The squares may be edged with a narrow, matching lace or, with a crocheted picot edge, of the sort familiar to all who make Irish lace. The squares of the net should be about four and a half inches each way. A yard and a quarter of the net, which costs about seventy-five cents a yard, will make a set.

A floral centerpiece of some sort is assumed. It is rather a good idea to have a group of the little ferns, sold for a few cents, preferably the holly fern, in the middle of the table, the pots hidden by

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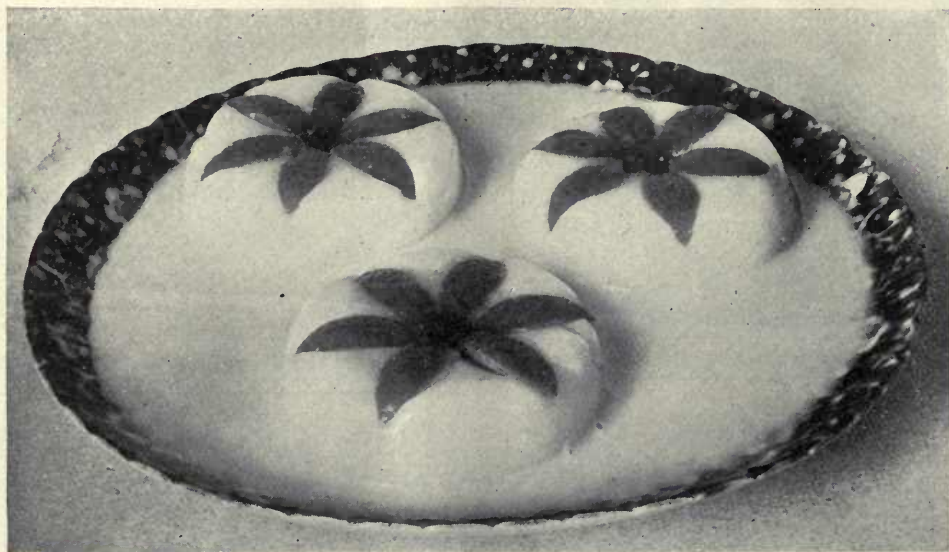
TABLE CHAT—Continued

green crepe paper and to give one to each guest as she leaves.

All the silver to be used should be at the covers arranged in its order of use, the first fork farthest from the plate. It is quite permissible and saves some confusion, if the silver fork or spoon, or both, for the dessert course, are placed by themselves in front of the plate. The tumbler is at the right, on a line with the knife, the bread and butter plate and knife on the side of the forks.

a suitable finish. Most people serve tea or coffee throughout the meal, but either beer or mineral water may take its place and the coffee service be found in the library when the company adjourns.

A well served and cooked high tea is an extremely agreeable luncheon which the average man is likely to enjoy more than a formal dinner and makes less demands upon the hostess than a luncheon. The entire day is at her disposal for preparation and she has her husband's assistance



Orange Jelly in Individual Molds.

High Tea.

It is a matter of legend that when an eminent American statesman was asked exactly what was meant in his family by "high tea" he answered ingenuously, "It's a dinner at which my wife lets me have butter." That is not, however, the general significance of the expression. The arrangement and service is the same as at an ordinary supper, except that there is more variety and that the meal is at once richer and more substantial. The course idea is less rigidly followed out than at a luncheon or dinner. If soup begins the meal it is served in cups with wafers or breadsticks, but the meat course and something in a chafing dish may be served together. Hot bread is usual and one of the heavier salads, chicken, lobster, or crab, while cake and preserves are

in the actual service of the meal. The arrangement of the table is the same as for a luncheon except that candles are lighted. Dressing is informal, the men appearing in dinner coats, the women in dressy afternoon frocks.

Individual Moulds of Jelly.

A dessert of jelly is much prettier if each person is served with a separate mould. The illustration shows a service of orange jelly for three people, the mould used being a small shallow tin pan, the figure being made by the arrangement of sections of small oranges in the bottom of the pan. White of egg whipped into the liquid jelly, gives it a light color which contrasts prettily with the sections of fruit.

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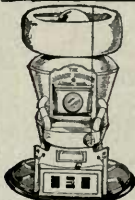
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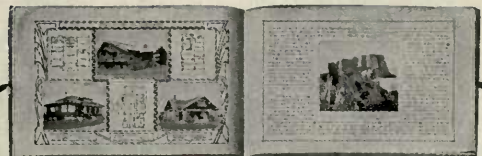
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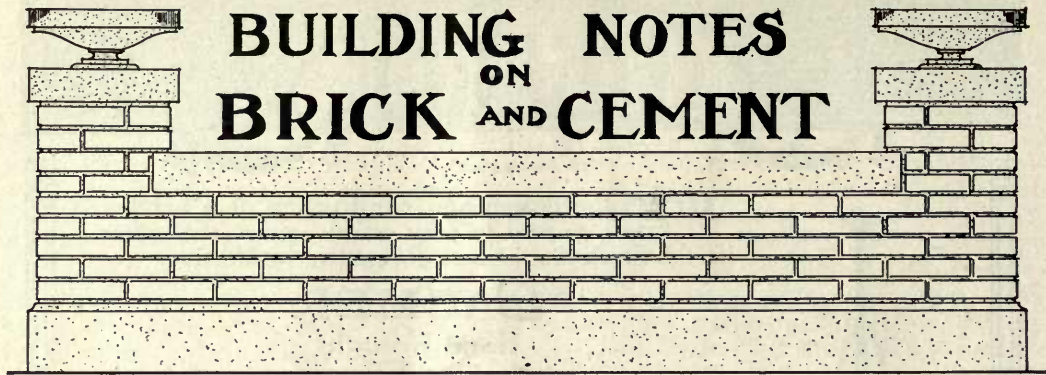
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Application of Tile to Concrete Surfaces.

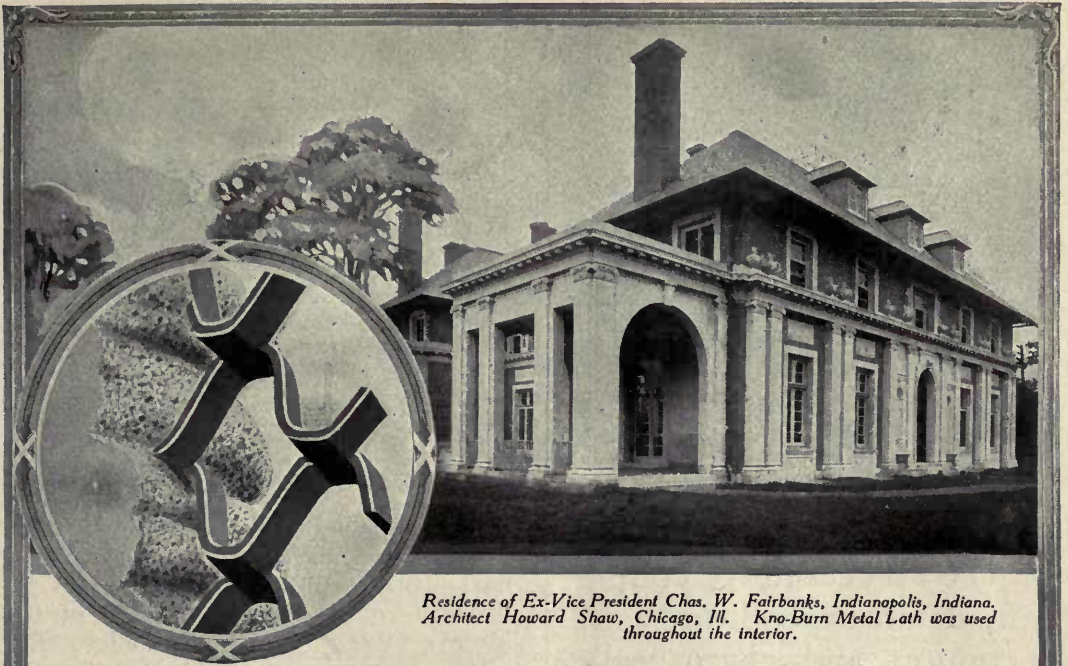
THE intensely practical advantage of concrete have so impressed themselves upon the public that there is no longer any question as to its use from that point of view. The beauty and treatment of concrete surfaces, because of this utilitarian development, have not received the important study warranted by the nature of the material. A few authorities advocate leaving concrete surfaces just as they are when the rough forms are removed. However meritorious this may be, the majority of architects look upon concrete as a material which from its very nature gives a most extended opportunity in surface decoration and color. Architecture in stone is essentially dependent upon architectural lines—shade and shadow—whereas architecture in brick or concrete is dependent upon the actual treatment of their surfaces for their character and effect.

From this viewpoint, which is that of the majority of architects, any material enriching the surface of a concrete wall without interfering with its structural strength is possible and worthy of consideration, says John Wynkoop in the *Mantel Monthly*. Of stone, brick pigments and tile, the latter is, undoubtedly, best adaptable because of its beauty and extreme simplicity in application. In France, Italy and America the application of tile to concrete surfaces has been considerably exploited, so that many actual examples exist upon which to base an opinion as to the effect produced. From these and from the general principles of design involved, it may be seen that extreme accuracy of tile setting as

we know the material in general use is harmful to fine effects and not to be desired. Concrete, especially for exterior use, should be sufficiently rough and uneven to insure artistic surface modeling when seen from a considerable distance. This necessitates a free and varied treatment of any tile applied to it, both as to setting and as to coloring. The color of the concrete itself in the main determines the color scheme of such tiles as are applied to it. Rough and deeply colored tiles are found to blend most easily with the rough surface of the concrete, although it can easily be imagined how certain bands or spots in tile could be highly colored and finished to bring out accents sought after by the designer.

Contract an Important Element.

Especially in country house work the application of tile must be concentrated largely because of the costliness of entirely covering the concrete. As a matter of effect, from an artist's point of view, what a concrete surface needs is contrast with some material which is more refined and decorative than itself. Panels, band courses or scattered designs in tiles, so long as they do not become all over patterns, seem particularly advisable in this kind of work. As much depends upon concentrating this decoration as does upon an intelligent selection of colors and an artistic placing of the individual tiles. Without doubt there can be no limit to the ways in which tile employed in this way may be treated. Practically any size and shape, any color, any surface are being manufactured continually, and along with this molding and special colors and combinations may be



*Residence of Ex-Vice President Chas. W. Fairbanks, Indianapolis, Indiana.
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BUILDING NOTES ON BRICK AND CEMENT—Continued

obtained, provided the manufacturer considers the amount to be ordered as warranting him to produce special ideas in this way.

In fact, a rather new and certainly delightful avenue of designs has been opened to the architect by the increasing prominence of concrete and its allied arts and materials. An original and pleasing type of building is to come from concrete, and without question, decorative tiles are to play an important part in this new type of the twentieth century.—*The Concrete Age.*

A Concrete City in the Desert.

A model industrial village, together with the buildings constituting the industrial plant, is under construction of reinforced concrete in the middle of the Mojave Desert near Death Valley. Reinforced concrete was adopted for the work after an exhaustive investigation looking to the production of permanent sanitary, fireproof houses which would largely eliminate the cost of painting, repairs, etc. The dwelling houses of the model village will be grouped around a garden court and will be constructed by the use of steel forms as invented by Milton Dana Morrill, the well-known Washington architect. The industrial plant is being constructed by the American Tromma Corporation and the factories will manufacture borax and potash.

A concrete hardening material now being introduced contains 95 per cent iron dust or iron flour, which is mixed with cement for finishing the surface of concrete floors, says "Engineering News." From 15 to 25 lbs. of the material is mixed with 100 lbs. of the cement while dry, and one part of this mixture to two parts of sand makes the slush for the top coat, which varies from one-half to 1 inch in thickness. It is said to make a hard and durable floor, which is waterproof and not slippery. The hardening material is used also to make new concrete adhere to old concrete in repair work. This concrete hardener is made by the Globe Steel Company, of Mansfield, Ohio.

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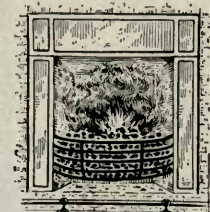
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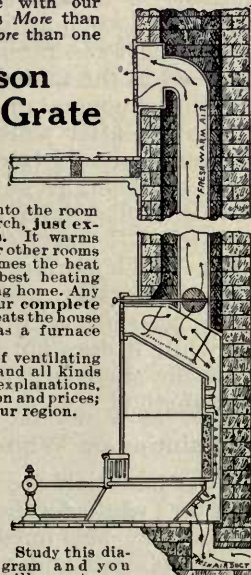
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does all these things, and *More*. It draws in fresh air from outside, warms it by circulating it around the fire in a warming chamber and then pours it out into the room thru the register over the arch, just exactly as a furnace does. It warms several connecting rooms, or other rooms upstairs, furnishing four times the heat from the same fuel. The best heating investment for a cheer-loving home. Any mason can set it up from our complete plans furnished Free. Heats the house in Fall or Spring as well as a furnace with about half the fuel.

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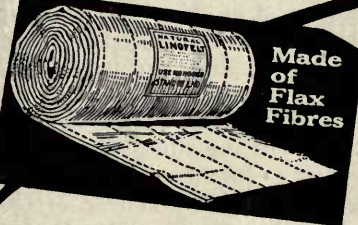


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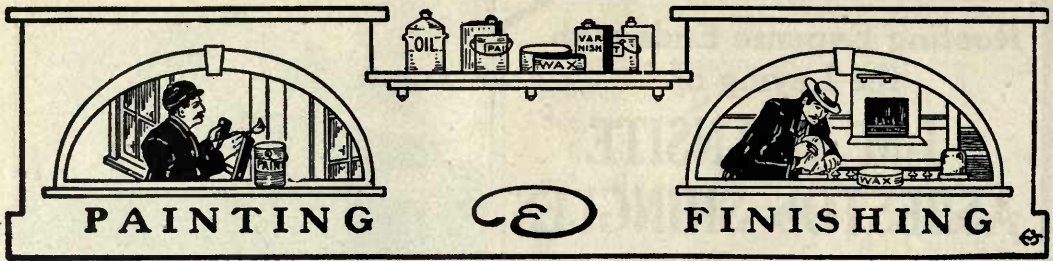
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The Treatment of Shingles.

By Chas. A. King.

OWING to the high price of shingles, it is economy to use preservatives at the time the roof is laid, and for this purpose a number of preparations have been placed upon the market which may be applied with a brush, by dipping or by pressure. As the latter method requires a specially constructed tank with some provision by which the chemicals may be forced into the pores of the wood, we shall consider only the brush and dip methods which are commonly used.

Shingles which are to be treated should be quite dry, or the preservative will not enter the wood as deeply as it should to give the best results. Paint is sometimes used for this purpose, and is generally applied after the roof is laid. This fills the pores of the exposed upper surfaces and the butt ends of the shingles with a water proof coating, forming a ridge between the butt ends and the course of shingles below; while this will allow the rain to run off without soaking into the painted wood, much of the moisture which settles between the shingles cannot escape, thus creating conditions favorable to decay.

The chemical preparations and shingle stains are generally more efficient preservatives than paint, as most of these, instead of closing the pores of the wood, impregnate the fibers, leaving the wood sufficiently porous to allow any moisture which finds its way under the shingles an opportunity to escape. From the nature of the preservative, moisture is repelled, and the life of the roof thereby lengthened.

Liquids may be applied after the roof is laid, but it is difficult to obtain the highest efficiency by this method, as the

undersides of the shingles will still be unprotected, and their subsequent shrinking and warping from the influence of the weather will allow the unstained edges and places between them to show. A better plan is to apply the stain with a brush before laying the shingles, but if a large roof is to be laid, the most efficient and economical method is to dip them into a tank of the preserving liquid which will completely cover the sides, edges and butt ends.

The tank for dipping should be large enough to permit the butt ends of the shingles to be dipped at least ten inches deep, thus each shingle will be protected until it has passed under the second course above, where there is little likelihood of the moisture reaching the unprotected wood. If a tank of suitable size is available, a bundle of shingles may be dipped by loosening it to allow the stain to enter between the layers, and standing it on end in the tank for several minutes. The superfluous stain should be allowed to drip off, after which the other end of the bundle should receive the same treatment; the shingles should then be separated and placed so that they will dry readily.

The rough surface of shingles is not adapted to paint, and the beautiful soft effects possible with a stain, which colors, while it does not destroy the character of the surface, can be obtained by no other method.

Painting on White Cotton Cloth.

What materials are required to make a size for white cotton cloth and how should they be mixed and applied; also can white lead and oil paint be used to letter on same?

Ans. The cloth should be stretched on a rack; then brush on it a weak solution of gelatine, or a white glue to which a little



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PAINTING AND FINISHING—Continued

glycerine has been added to keep the size elastic.

For the first coat of paint mix pure white lead with one part of linseed oil and two parts turpentine with the necessary drier and color. For the second and third coats use two parts oil to one part turpentine. White lead, linseed oil and color are the proper materials to use for the lettering.

Painting Surfaces Covered with Mud and Grime.

I am a painter located in the district which was recently flooded and most of my work at present consists in restoring

surfaces that have been submerged in water and which are covered with mud and grime. Kindly advise me of the best method of restoring such surfaces?

Ans. About the only thing that can be done with painted work that has been submerged in water and which is covered with mud and grime is to scrub it clean with castile soap and clean water.

If the varnish and graining have been marred or dulled in places they should be touched up with stain of the necessary color and re-varnished. If the paint comes off in places the cheapest and quickest way of bringing the surface back to its original condition is to repaint it and grain it the desired shade.



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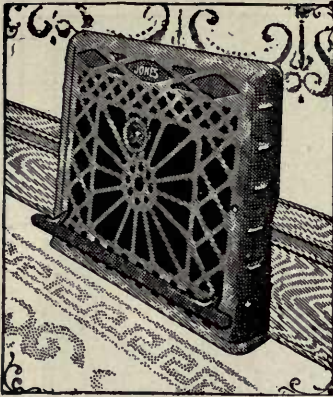
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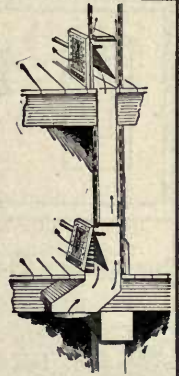
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Heating, Lighting and Plumbing

Operating a Hot Water Heating Plant by Electricity.

THE success of recent experiments in Tacoma, Wash., in connection with the use of electricity as a medium for operating a hot water heating plant has led to a permanent installation in the residence of George Franzenburg, in Tacoma, the architect being C. F. W. Lundberg.

In a report made recently to the city council, Superintendent of Light and Power B. W. Collins stated that the most successful method of using electricity for heating is in connection with a hot water heating system. By this method, electric coils are placed in the firebox instead of coal. The lighting department of Tacoma is now figuring on a suitable rate to charge for heating both houses and larger buildings through this arrangement.

Mr. Collins stated that the rate for electricity in Seattle is $\frac{1}{2}$ cent per kilowatt hour, and he gave it as his opinion that this rate can be equalled and probably lowered in Tacoma. The council has authorized Superintendent Collins to experiment with electric heating in buildings of various sizes. One of the large department stores now being built will be made the base of one experiment.

The heating load on a hydro-electric power plant like Tacoma's is the most profitable of any. The current is taken at periods which are technically called "Toff-peak." During cold weather, when water is going to waste at the headworks, the heating load is the largest, and in the dry summer months, when low water may make it necessary to conserve every drop, the heating load is practically nil. Heat is also used during the day when the heavy lighting load is not "pulling."—*Heating and Ventilating Magazine.*

The Plumber's Opportunity.

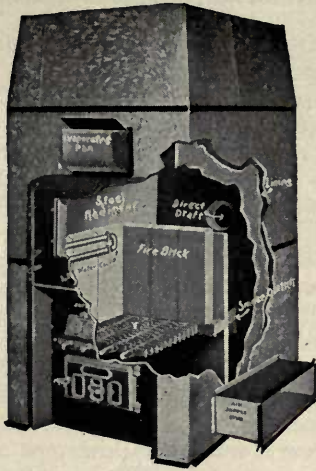
In the basement of a new hotel in one of those thriving cities of the Middle West, is a well-appointed toilet room. Taken generally, the plumbing work in this building is a credit to the plumber who installed it, and to the town where the hotel is located. But, after admitting that, it can still be said that there is an opportunity in that room for a plumber which it is almost criminal carelessness for any business man to overlook. Of course, the plumber who did the work ought to have enterprise enough to be the one to take advantage of the situation, but if he neglects the opportunity, there is a chance for some other enterprising concern to get that hotel proprietor as a customer.

The Abuse of Plumbing Fixtures.

In that basement toilet room, under the ceiling, is run a 2-inch cold-water main, with several branches leading in different directions. The pipe is uncovered, and during humid weather water condenses on its surface to such an extent that it drips to the floor. As a consequence, there is projected on the tile floor of the room an exact pattern of the system of pipes overhead. Not only does that pattern stain the floor a rusty color, but the condensation is so great that it keeps the floor sloppy all the time, in spite of the watchful care of the porter who tries to keep it mopped up. The water on the floor is so suggestive of damaged and broken plumbing fixtures, that one hates to enter the room, and owing to this effect on the guests, an otherwise good toilet room is spoiled.

The cost of covering that pipe and stopping the damage would be almost insignificant. It would cost the plumber, perhaps, not over \$10.

Now the point of this editorial is, there are sweating pipes or nuisances of



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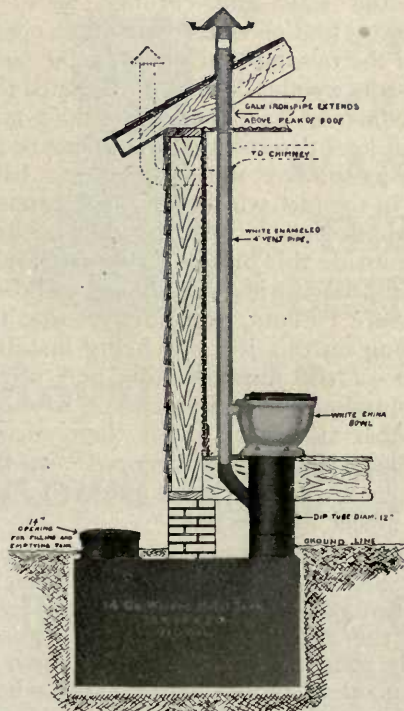
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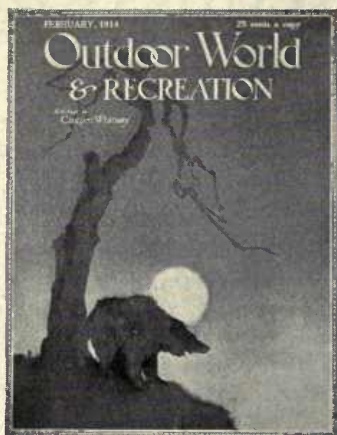
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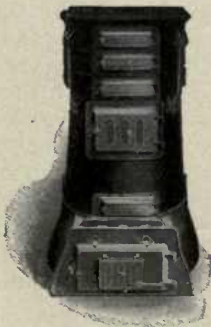


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SPLINTERS AND SHAVINGS

A Plea for Heavier Framing.

INDIFFERENCE to the insistent demands of common sense, regarding the use of dimension stuff in house building, causes great dissatisfaction, and very often expensive trouble. When you walk across the floors of new houses which are supposed to be honestly and carefully constructed, don't you feel the vibration of the joists, the trembling of timber which causes a rattling of dishes or bric-a-brac on the tables and walls? Nothing is more annoying or aggravating, and nothing is more inexcusable on the part of the builder or owner, or both.

Then let us begin at the foundation! In most cases the joists are too light. Lower sleepers or joists should, by all means, be never less than 2x10, and 2x12 is better. The habit of using 2x8s is too common in foundation work. The heavier dimension should be used, and spaced not farther apart than 16 inches on centers. In case of short spans of 10, or the most 12 feet, 2x8s may be used if close enough to insure solidity. But this size joists should never be used on 16-foot spans, or above that. Bridging can be employed to good effect on wide joists if spaced closely. On narrow stuff the truss effect is lost almost entirely, owing to the horizontal position; they cannot possibly have the rigidity which is so necessary.

It is time and material lost to bridge narrow joists unless very closely together.

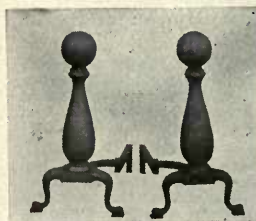
There is a way, however, which is always available, and it beats all the bridging you may do—a foundation wall under the center of the joists. If no wall is built, across and under the center of a stretch of joists, place a good, heavy piece of timber, supported by three piers of concrete, being sure that every piece of timber has a firm bearing on this support, says E. H. Clark in a recent issue of *The Carpenter*. You will find that this plan, if carefully done, will be much more effective than bridging.

For second-floor joists of course, no center supports can be placed across rooms, so they should be 2x10, which will admit of very effective trussing, being spaced on 16-in. centers.

It is very important to give sensible consideration to studs and rafters. If you are building a tall house, the only thing to use for studs is a 2x6. A 2x4 is too light for two-story houses, only measuring, in most cases, 3 $\frac{3}{8}$ inches. Studs of this dimension, braced in the manner described in a former article, have 100 per cent more wind resistance than the size usually used. The strength of these heavy studs is not impaired by cutting gains for joist-bearer, braces, etc., as is the case in lighter stuff.—*The Building Age*.

Bungalows on Roofs of Store Buildings.

Some time ago we briefly described in these columns a bungalow which had been built on the top of an eight-story apartment house in Chicago, and now we learn of a colony of bungalows which has been built about a court on the roof of a block of one-story store buildings at Long Beach, Cal. The arrangement is such that from the street the construction looks like an ordinary brick business block with stores below and flats on the second floor, but the stairway from the street instead of leading to a second story lands one in a sunny court on the roof



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SPLINTERS AND SHAVINGS—Continued

of the shops. Down the center of the court is a pergola with flower boxes beneath it and around the four sides are the low gables of 17 one-story bungalows which in architecture remind one very much of Swiss chalets. In all there are 2 two-room, 4 three-room and 11 four-room bungalow apartments about the court. The kitchens and dining-rooms face the court and the living and sleeping rooms overlook the street.

There is a common laundry located on the roof of one of the bungalows and clothes are hung out on the roofs of the kitchens unseen from the street below. Garbage is taken care of in boxes with ventilating pipes leading through the roof.

The floor of the court in question is covered with heavy canvas and drained by a gutter in the center.

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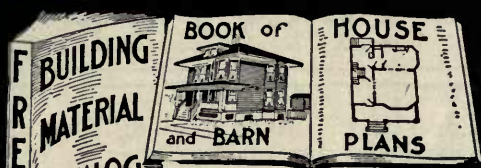
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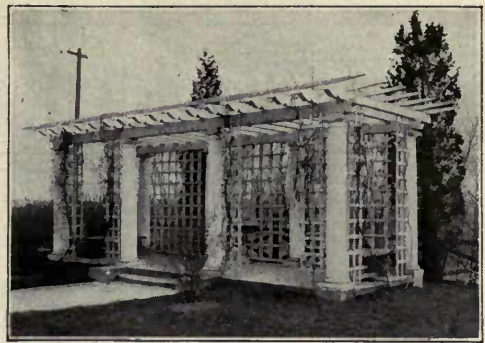
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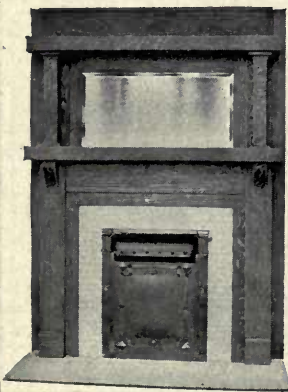
New Booklets and Trade Notes

CORBIN SPECIALTIES—the new 1914 Portfolio of the P. & F. Corbin Co., New Britain, Conn.,—is a very classy piece of engraving and press work. The large pages of heavy enameled paper bring out to the very best advantage the clear and splendid type and the beautifully executed engravings which show the hardware specialties manufactured by this old established company, so noted for the superior quality and excellence of their products. This portfolio is devoted principally to the illustration and description of some of the new and improved specialties devised by the skilled inventors constantly employed by the Corbin Company, such as the Concealed Transom Lifter—a boon to the home builder who desires the ventilating quality of the transom but detests the old ugly fixture

to operate it. Many working drawings supplement the photographs of completed doors. Another welcome device is the Concealed Casement Operator. The casement in use is shown, also drawings showing vertical sections of the woodwork with the operating fixture exposed. The new Blind and Awning Fixtures are other features. Also the Automatic Exit Fixture. The portfolio is sent on request.

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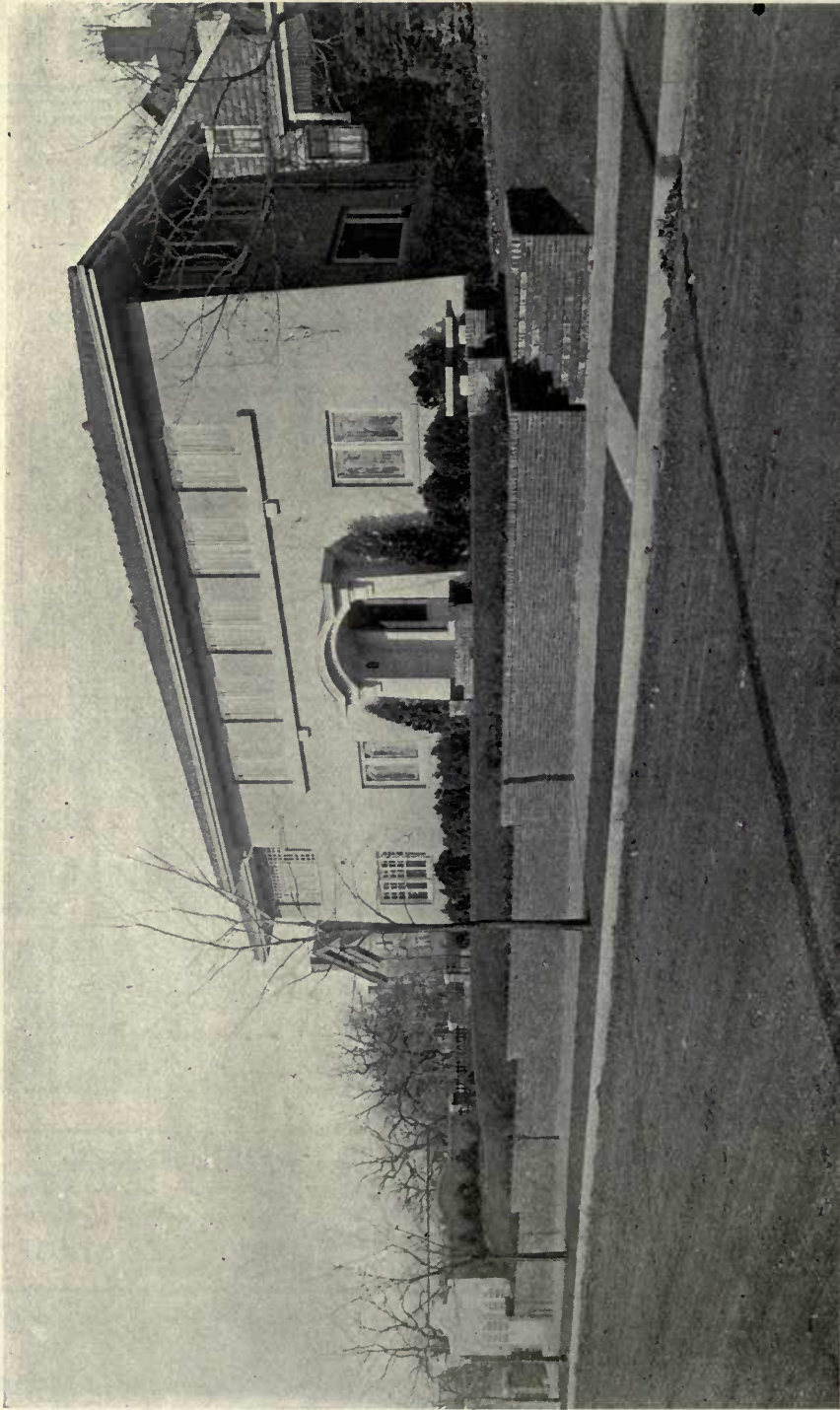
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An Example of Careful Architectural Handling and Placement of Garage.

KEITH'S MAGAZINE

VOL. XXXI

MARCH, 1914

No. 3

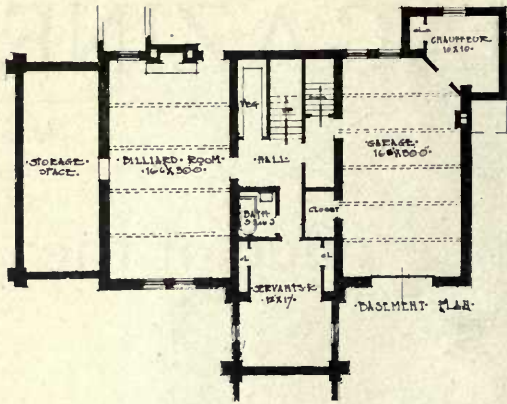
The Growing Importance of the Garage

By Henry K. Pearson

NO feature of domestic architecture is attracting more attention and is considered more carefully nowadays, than the garage. The automobile habit has come to be well nigh omnipresent in the last two or three years and none seem too poor to do it reverence. Far be it from us to moralize on the possible evils of the automobile craze; we shall neither wag our heads solemnly and deprecatingly, nor deplore the folly of those misguided ones who—we are told—do not hesitate to mortgage the house if they cannot compass their hearts desire in any other way. The fact remains, that an automobile or an electric *is the* heart's desire of nine-tenths of the people, hence the garage. For a car must be housed as surely as people, nor can it be run under a shed, as we used to shelter buggies.



An Architect's Solution of His Own Garage Problem.



Floor Plan of Architect's Garage.

The car is an autocrat in more senses than one, and its necessities and demands in the way of a "home" are as exacting as some of its owners.

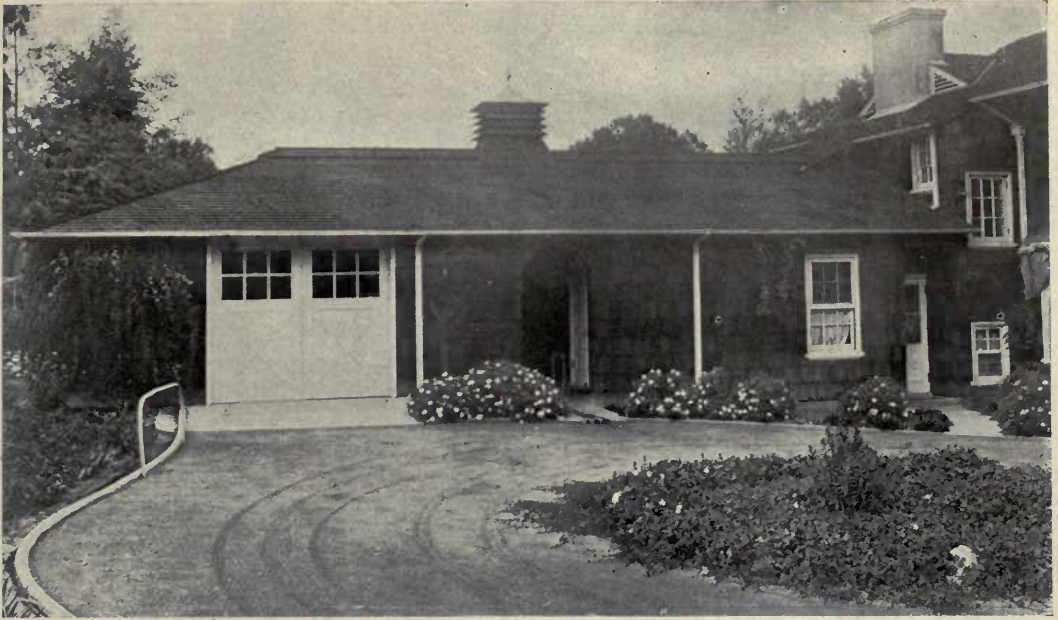
One cannot go about on the residence streets of a large city, without observing the change in the character of the subsidiary structures, the attention paid to their architectural appearance, their relation to the dwelling itself and to the grounds. No longer does the ugly and bulky stable with its pungent but not fragrant odor, its ungainly heaps of dressing and miscellaneous litter—affront our

sense of beauty; no longer do steaming horses and stately cows promenade the front lawn. Even the long, winding carriage drive, once the proud approach to a handsome place—has given way to a shorter, more direct entrance, suited to the machine instead of the horse. Almost we could mourn over the loss of this last feature of home grounds, for where grounds were ample enough to admit of relegating the stables to a distance, the curving drive with its long approach beneath the grateful shade of spreading trees was truly a thing of beauty and radiated an aspect of welcome to hospitable portals.

It must be confessed that the treatment of the modern garage is governed largely by considerations of compactness and convenience. Especially is this the case in the location and treatment of the garage attached to the low cost dwelling, and these constitute the large majority. One is surprised to find how great a number of three and four thousand dollar homes have their garage. Cost limitations naturally prohibit any expenditure except for the barest necessities of housing in these



Garage as Integral Part of the Dwelling.



Showing Relation to the House by Means of Arched Opening.

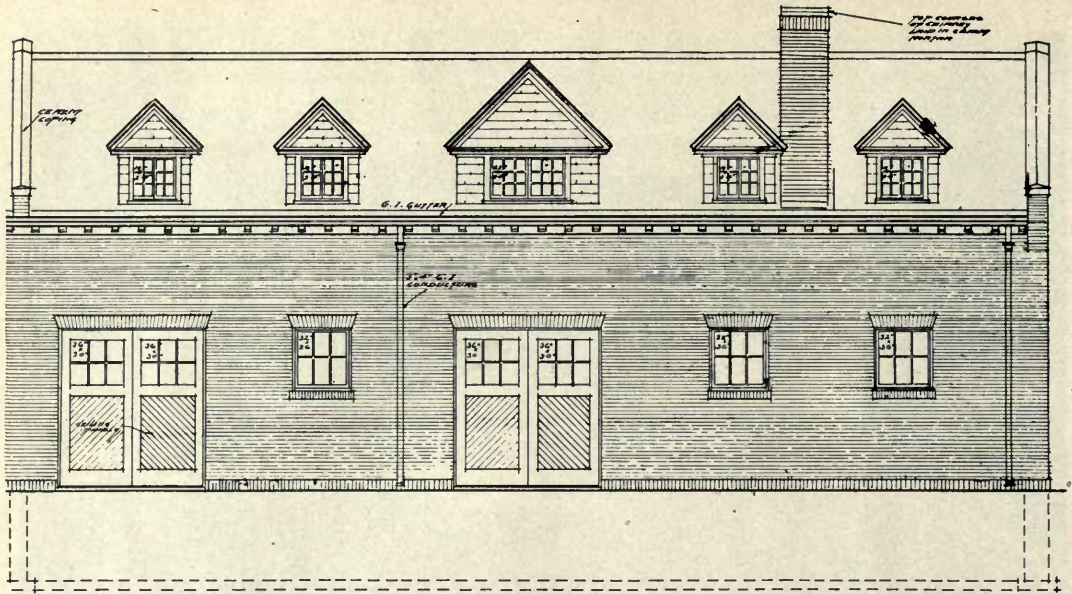
cases. When a slightly higher plane of expense is possible, however, we find picturesque exterior effects sought for, with convenient and even luxurious interiors. The beautiful Minneapolis residence shown in the frontispiece is a fine example of careful architectural handling of the garage combined with its effective placement both for convenient entrance and as a feature of the grounds. Its location on the extreme left, taken in connection with the abrupt drop from high to low ground, constitutes it part of the natural boundary and also affords an opportunity for effective shrub planting against the upper wall. The architectural lines of the house itself are reproduced sufficiently, yet not slavishly, and unify the delightful whole.

The limitations of ground area in a large city are constantly recurring problems in garage construction for the architect. An interesting solution of this problem by one architect for his own garage is shown in the second illustration. Here the billiard room, the garage and part of the service rooms constitute the ground

floor, while the living rooms above open on the left and in the rear upon a much higher level of ground. The convenience of this disposition of the garage is apparent from the photograph and from the floor plan. As the whole house is of fireproof construction, it is admirably adapted to such a plan. A double fireproof concrete wall divides the garage from the main house, and reinforced concrete slab floors are effectual sound deadeners



Small Electric Garage for Bungalow House.

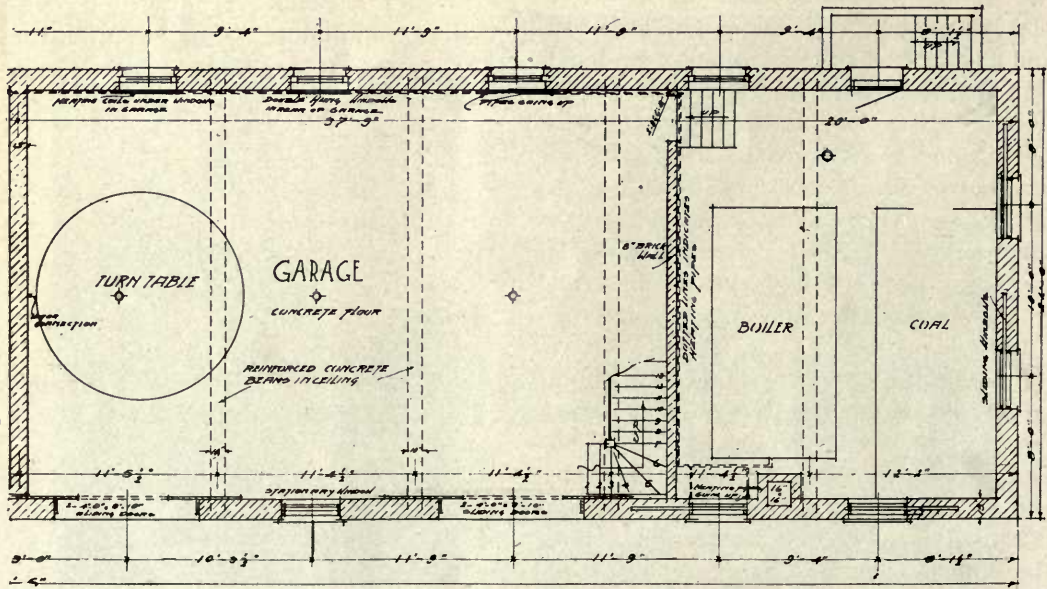


Front Elevation of Combination Stable and Garage on Maryland Ranch.

to the rooms above. The garage room is located immediately over the heating plant in the basement below, and it is interesting to note that though radiators are placed in the garage they are never required, as the concrete floor warmed from the boiler under it radiates sufficient heat for the garage. Reference to the plan shows the chauffeur's room adjoin-

ing, also small room for storing robes and other belongings. A gasoline tank is sunk under the walk outside and connected with a pump and faucet attached to the inner wall. Hot and cold water faucets mix the water to the right temperature and the floor is graded to a catch basin for washing.

Two other illustrations show solution:



Floor Plan of Garage Division of the Above Building.

of the garage problem on city lots and how the garage is made a part of the house construction itself in a very pleasing manner. In both instances advantage has been taken of the high ground, the terrace forming part of the garage wall.

In marked contrast to these compact arrangements are the floor plans and front elevation shown, which have just been completed for a combination stable and garage on a hundred acre ranch in

A heating plant large enough to serve both house and garage has been installed in the garage; reference to the floor plan shows the location. This part of the building is isolated from the rest by a solid fireproof wall, and the floor is dropped some four feet below the main level. The pipes carrying heat to the house are laid under ground and wrapped with asbestos. The second floor contains five large chambers and a bath.



Happy Union of Garage and Dwelling by Pergola Treatment.—Courtesy Hartmann-Sanders Co.

Maryland. The garage half only of the structure is reproduced, the other half, which is an exact replica of the exterior shown, is separated from it by a solid concrete wall and divided into stalls, etc., for the fine stud of horses which divide the owner's affections with his cars. The building is of brick and the design is a felicitous adaptation of that material to the low, long, rambling lines demanded by the situation.

The house architecture is of the farm house type, along the same low lines, and the garage stable is some 200 feet distant.

For the small garage the heating problem in cold climates is probably the most difficult one. Few have the experience of one owner, who complained that he was often driven from the house to the garage to get warm. Many let the business go by default and make no attempt to heat the garage, merely letting the machine stand idle through the cold months.

This is, however, a poor economy, as a car rapidly deteriorates in a temperature below sixty. Continued cold causes the varnish to crack and check and the metal

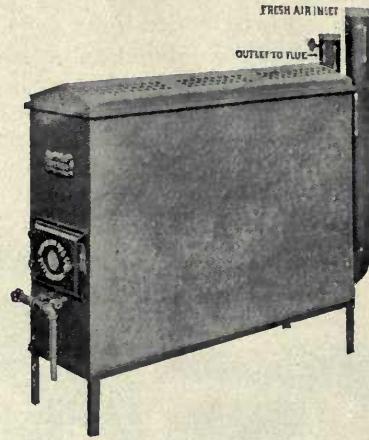
parts to grow very brittle, which, of course, renders the machine unsafe.

If the distance from the house is not over 60 feet, pipes can be carried from the house plant to the garage. A separate heating plant is subject to city restrictions, and involves the problem of ashes and tending.

One of the best solutions which has come under the writer's notice where gas is obtainable, is shown in the accompanying cut. The unique feature of this gas heater is that it draws a supply of pure air through pipes from above and outside to an air-tight, combustion chamber on the inside of the heater, while upright tubes distribute the heated air. The air inside the garage passes through these tubes and all around and over the hot fire box and radiator, yet none can possibly enter therein, thus ensuring safety. As the cost of the heater is only \$20.00 it is within the reach of all.

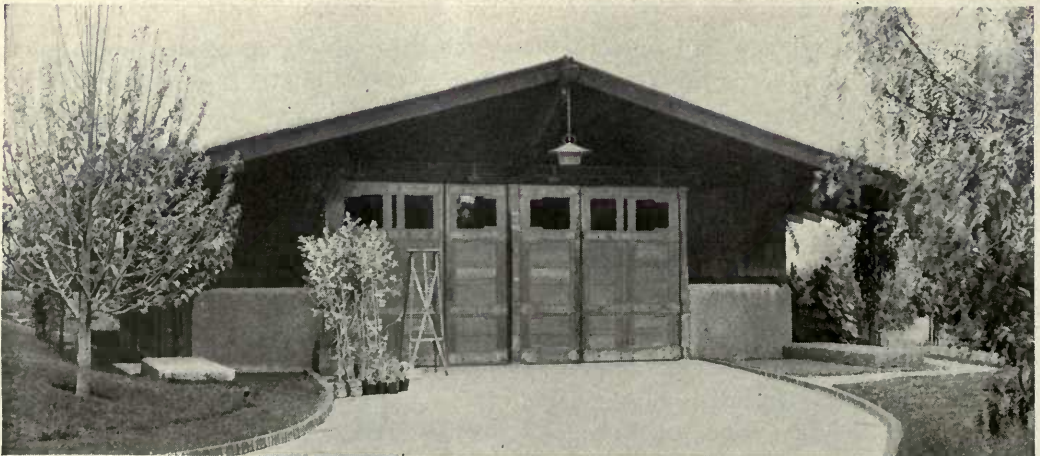
Electric lighting of the garage is of course imperative; but where impossible, gas jets can be placed in wall niches furnished with plate glass fronts. An interesting novelty in electric lighting is a row of 4 or 5 lamps set in the wall just above the floor to light beneath the machine. Another illustration shows an example of the happy union of garage and main house

by means of a pergola and lattice effect, extending over the drive. Many variations of pergola columns are possible, where space between the buildings is more contracted, and may be applied to any exterior, whether frame, brick or stucco. The writer has in mind such a plan where



A Safety Garage Heater.

the garage was made extremely pleasing and picturesque and added both architecturally and as a garden feature to the place. The pergola roof of the sun parlor of this stucco exterior, was repeated in the design of the garage while columns and a lattice made it a part of the whole. Of course vines and shrubbery must complete such a scheme.



Garage in Harmony with Bungalow Dwelling.

Some Interesting Houses Around Chicago



HICAGO suburbs offer a wealth of architectural interest and are full of suggestiveness for both those who are contemplating building and they who have achieved that undertaking. The Chinese have a proverb that no man has lived till he has

tions of construction thus imposed. The group of homes here shown do not, however, present the rather *outré* and freakish features that characterize some of the modern work about Chicago and its environs. Rather they have been selected because, while individual, each possesses



Residence of W. G. Goeletz, Oak Park.—E. E. Roberts, Architect.

built him a house, and true it is, that house-building has a never ending fascination for most normal people. There is always the possibility of what we might do, to entice us on to fresh adventures.

Never was domestic design more individual in character than now, and this is true despite the handicap of extreme practicality, which our more rigorous northwestern climate enforces. It is surprising indeed that our homes can be so varied and so individual under the limita-

to a marked degree that livable quality whose appeal is so universal.

In the first two illustrations, half timbered effects with plaster on the upper stories, are combined with brick walls below, yet nothing could be more distinctly individual than the appearance of the two dwellings. In the first instance, the recessing of the center hall in both stories, with the resulting projections capped by beautifully proportioned dormers let into the roof; the grouping

of the many windows and their over-hang in the third story, together with the departure from the usual and conventional brown stain of the half-timber work in favor of white—all these features create an exterior of unusual interest. Effect-

of the commonplace. The second illustration, while designed more simply, shows the same careful attention to line and detail. The grouping of windows in the third illustration goes far to giving distinction to a quite simple house. Effect-



Residence of C. C. Collins, River Forest.—E. E. Roberts, Architect.

tive use has been made of long, slender brackets on the window framing, giving apparent support to the over-hang above; these in turn supplemented by square, sturdy, projecting beam-ends on either side of each group. Even the gutters have been carefully detailed, so that they are ornamental rather than a blemish. It is such thoughtful and refined detail that gives distinction to design and lifts it out

tive use has been made of small square lights, repeated on each side of the recessed entrance door with its porch-like shelter. The placement of the sunporch at one side relieves the exterior of any squareness and stiffness of outline.

Our two remaining illustrations are devoted to the all-pervading bungalow. We feel a sense of pleasure in these two renderings of the bungalow idea, so free



Residence of E. B. Rathbone, Wilmette.—Effective Use Made of Small, Square Window Panes.—E. O. Blake, Architect.



Bungalow at Glencoe.—Thornton Kerr, Architect.

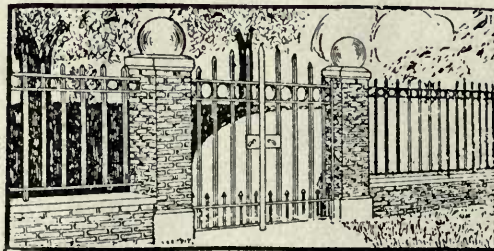


Residence of A. J. Newberg, Kenilworth, Ill.

from the freaks and fancies, the cobblestone and shingle effects that meet the eye at every turn. There is an air of simplicity and dignity about these homes which proves that even bungalows may take on that aspect. Especially is this true of the last example, evidently a small home and treated with great simplicity, yet how pleasing and refined. In the fourth illustration our satisfaction in the general design is marred by the inappropriate introduction of Moorish outlines in the treatment of the entrance.

There is about all these dwellings the sense of livableness.

A pleasant and intimate air pervades them, and we feel a relatedness to their surroundings in them all. Each house has an individual story, each takes on the character of its setting. While simple in design with no attempt at importance, these dwellings are excellent examples of a thoroughly livable architecture in scale with their surroundings and presenting a picture upon which the eye lingers with satisfaction.



Home of An Interior Decorator

A Modest Frame Dwelling Tastefully Decorated

By Evelyn Watson



IT IS something interesting to find the decorator at home; to learn how he, who gives suggestions to others as to the decorations of houses and public buildings, beautifies his own house, making it not only comfort-

below—painted yellow with white trim, and dark green shingles above. The lines are dignified, substantial and pleasing. The entrance is at the side, a pergola door-hood protecting the in-built steps and the doorway.



Home of Mr. Harry Male, Buffalo, N. Y.

able and livable but attractive to the eye—pleasing in color and line. The home of Mr. Harry Male, decorator and artist, will, we are confident, be of interest, for it shows the ideas of one who, with every freedom, has put his talents into the creating of a beautiful interior for his own home.

The house itself is a neat, modest one, a frame dwelling with clapboard siding

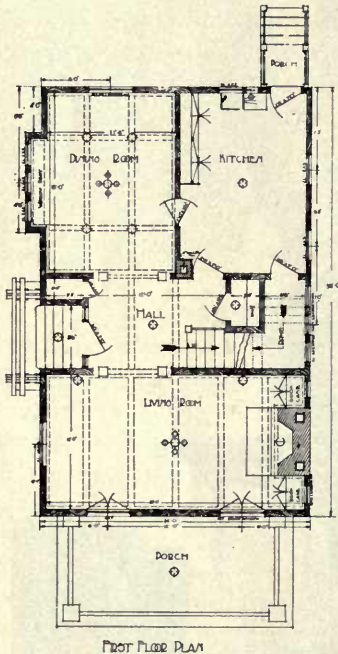
The hallway, the first room entered, is done in dark maroon and cream. The maroon is used for the lower walls and the deep cream for the upper ones, the same color continued on the ceiling. Lattice strips of oak the same tone as the other dark golden oak woodwork divide the wall space into panels.

At the right of the hallway is a living room extending across the front of the

house and opening on a large closed porch which during the winter is a sun parlor and in the summer months an out-of-doors living room. The living or family room is finished in tones of red-brown and gold, the colors blending from a very dark rich brown at the base of the panels to a light brown stippled with gold. The tints and shadow-colors are lost in a dull cream ceiling. An Italian Renaissance stencil in deep brown

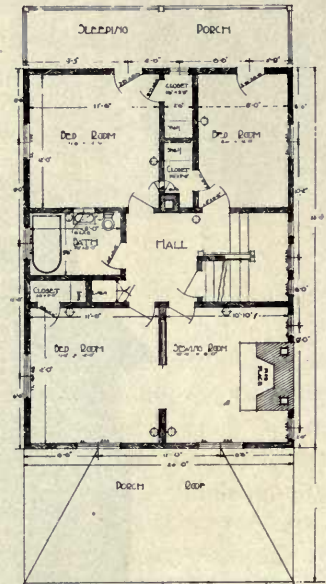
kitchen, both opening into the hall. The former, like the living room, opens by means of an archway, the latter, by an inobtrusive, but convenient door.

The dining room is the most beautiful room on the first floor. The simplicity and dignity of the living room give way to a certain friendliness and suggestion of informality and good cheer in the dining room. Here the artist has caught the spirit of the hours to be spent



FIRST FLOOR PLAN

FLOOR
PLANS
OF
A
DECORATOR'S
OWN
HOME



SECOND FLOOR PLAN

touched with red and gold is used at the top of the panels. A wide hospitable fireplace of dull red tapestry brick runs from the floor to the ceiling. There is no mantel shelf, but an ivory-toned bas-relief is inset in the brick high up on the chimney breast, and gives the final touch to the room. The little book cabinets with their mullioned panes at either side of the fireplace and the wide, cheerful window should not be omitted from the description.

The space at the left of the hallway, as will be noticed in the plan, is divided into two rooms, a dining room and a

in the room. The lower walls are of brilliant greens and red-browns, mottled and shadowed in with golden-yellows in a manner that suggests sunlight through early autumn trees. It is an atmosphere of harvest, richness, and plenty that is created. The frieze is a deep one, showing full views of an autumn woodland during the different periods of the day. So realistic is it, that one guest suggested that he would come next time with rod and line to fish in the brook. The ceiling is a dull cream.

In all the rooms of the first floor the ceilings are tinted cream, and in these



The Living Room in Tones of Red-Brown and Gold.

rooms—the hallway, living room and dining room—beams are used in an unbroken line; these beams, together with the uniformity of cream ceiling panels, makes for the unity of the three rooms, which are further joined by having the same dull, red brown appear in the decoration of each. The house is finished throughout with a pure wood fibre wall board. Mr. Male reports that it was a very easy matter to decorate the pebbled mat surface and that he had the additional advantage of being able to prepare many of the panels at his studio and then take them to his home. In some of the rooms he applied and decorated the panels himself during odd times. Wall boards are not only convenient to apply, but offer many advantages to the decorator.

The kitchen is a convenient one, with its many cabinets and cupboards. The lower walls are of gleaming white enam-

el tile and the upper walls are painted cream white with a dull brown Greek key stencil, harmonizing with the dull oak woodwork.

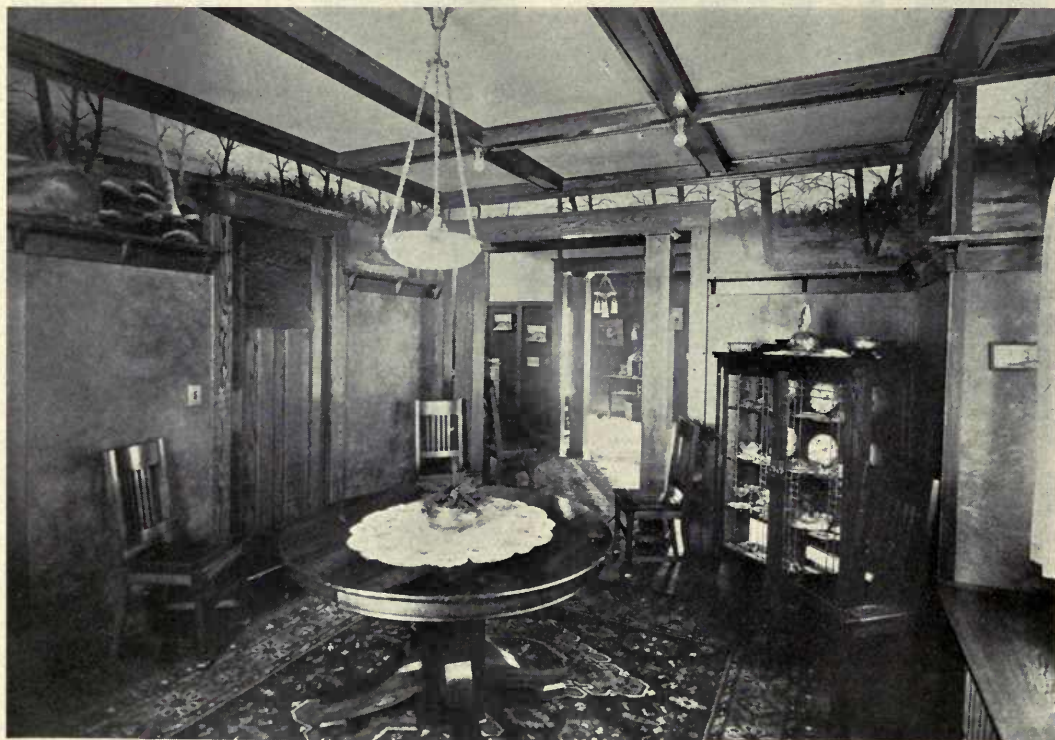
Upstairs the rooms are just as suitably and attractively decorated, just as conveniently arranged and as pleasant as below. The coloring of the hallway is continued up the stairs, only instead of the deep maroon, the lower wall is gradually modified to a rich crimson with the same cream white for the upper walls and ceilings. The oak woodwork is continued, and oak paneled doors open into the hall, while interesting dust cupboards and linen closets take up otherwise lost spaces near the attic stairway.

At the right of the upper hallway is the guest room—the walls in dull gray, decorated in rose pink, shading to a salmon rose, with delicately tinted draperies in rose and gray. The wide bed, with its rose covering, is of silver bronze.

Opening from this room and also from the hall is a sewing room in soft tones of pink, mottled with cream white and blending to a cream white ceiling.

At the left of the hallway are two bed rooms, one in blue, decorated with a merry troop of boy scouts, and one in pink, suitably decorated with sunbonnet babies, literally running across the upper

plete. A hot water heating system and the best kind of plumbing, with pedestal lavatories and attractive glass and nickel fixtures, add to the conveniences of the house. The fixtures of the living rooms and all the other metal appointments appearing in full view are of dull brushed brass in square or hexagonal designs. The cost of this home complete was \$4,200.



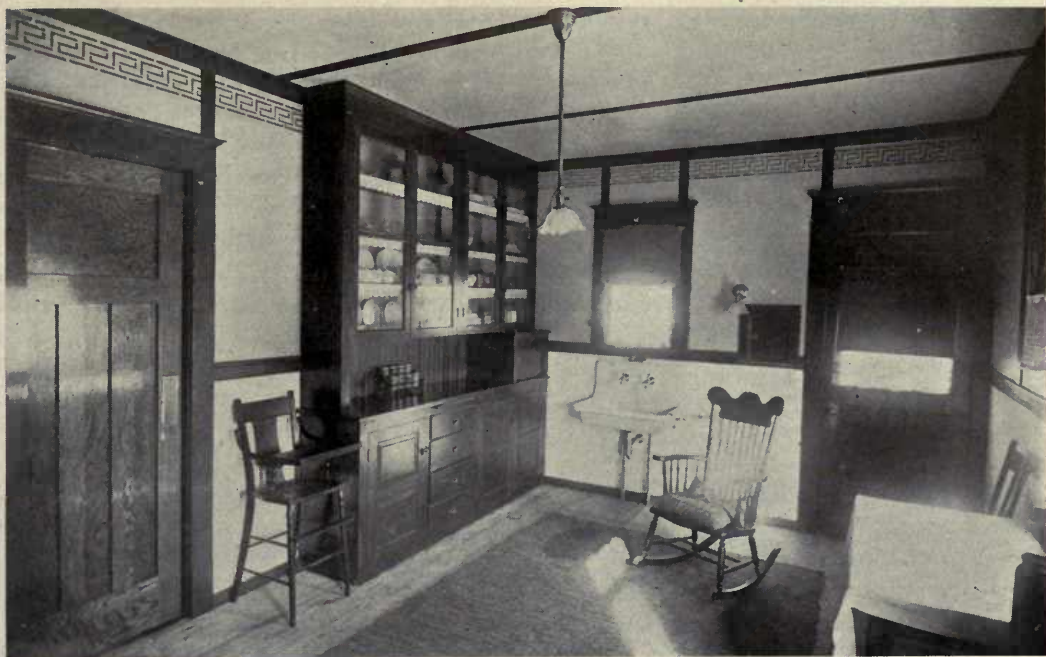
The Dining Room Atmosphere Is of Sunshine and Cheer.

wall. These two rooms open on a sleeping porch.

The bath room is of white enamel with the upper walls of pale blue stencilled with darker delft blue scenes. The cream ceiling is used here as in the other rooms of the house.

There are many little conveniences, cupboards, closets and cabinets dear to the heart of the housewife. From the finished cellar to the maid's room on the third floor and the trunk rooms under the roof-slope in the attic, the home is com-

Not only with view to its decorations, but to its arrangements, this is an ideal home for a small family. All the rooms are convenient. There are no lost spaces, no opportunities overlooked. It is compact, cheerful, convenient. Although the house is small, there is not the slightest hint of one's being crowded in it. In the same way outside, although the house occupies a 40 foot lot, it seems to stand apart in the row of other pleasant homes, with a certain dignity that is sometimes



The Ideal Kitchen in Cream and Brown.

lost when there is a necessity to economize in space.

One thing this house teaches—it is not *what* we have, but *how* we have it, that counts. A modest home, artistically decorated, conveniently planned, may have about it a suggestion of elegance and a

lasting beauty that sometimes costly residences lack. In the last analysis, it is this touch of individuality in the interior treatment of the house that gives it distinction, and it is good for us to find the “decorator at home” and study his ideas as shown in his personal environment.

Renovating the Old House with Paint

By Eleanor Allison Cummins

IN building and decorating the new house, one strives to reach an ideal: in making over the old one, one institutes a series of compromises.

The salvation of many an old house is achieved by a judicious use of the paint pot. Structural deficiencies are less obvious when the offending members are of agreeable color, and the dinginess ac-

quired in years of hard use disappears under the friendly cloak of enamel or flat tone. In this connection it is pertinent to note that the recently finished new house of a very distinguished New York woman-decorator, has painted walls throughout.

Paint as an interior finish has certain substantial advantages. It is sanitary, durable and not too expensive. It can be

bought ready mixed in a great variety of colors, and its manufacture has been so standardized that any color scheme can be carried out with absolute certainty. Another consideration is that while, except in story books, laying paper is quite beyond the skill of the average amateur, it is a comparatively easy matter to paint.

The art of laying an even coat and of brushing in the successive layers of color is not a difficult one to acquire.

Paint is not necessarily cheaper than paper, but it is often possible to get a more artistic effect with it than with the average wall paper. Seldom, indeed, are good design, agreeable color and moderate price associated in one paper. If they are, the introduction of a patterned wall is apt to increase the difficulty of obtaining a harmonious whole, while the flat toned wall, nicely adjusted to the furnishings

of the room, is a nearly perfect background. If it can be given by clever stippling a slightly roughened surface, a suggestion of texture, it leaves nothing to be desired.

Another advantage has to do with the almost inevitable deflections from regularity, we are sure to find in an old house. With the settling of the foundations and the consequent sagging of the walls, parts at least of the rooms will be out of plumb and the application of paper, especially if it is striped or of a pattern with a rectangular repetition, makes such defects very noticeable, while they can hardly be detected on a plain surface. So we find that paint is the medium par excellence, for renovating an old house.

Many people think of a painted wall as having a gloss, a definite "shine." Who does not remember the lustrous green



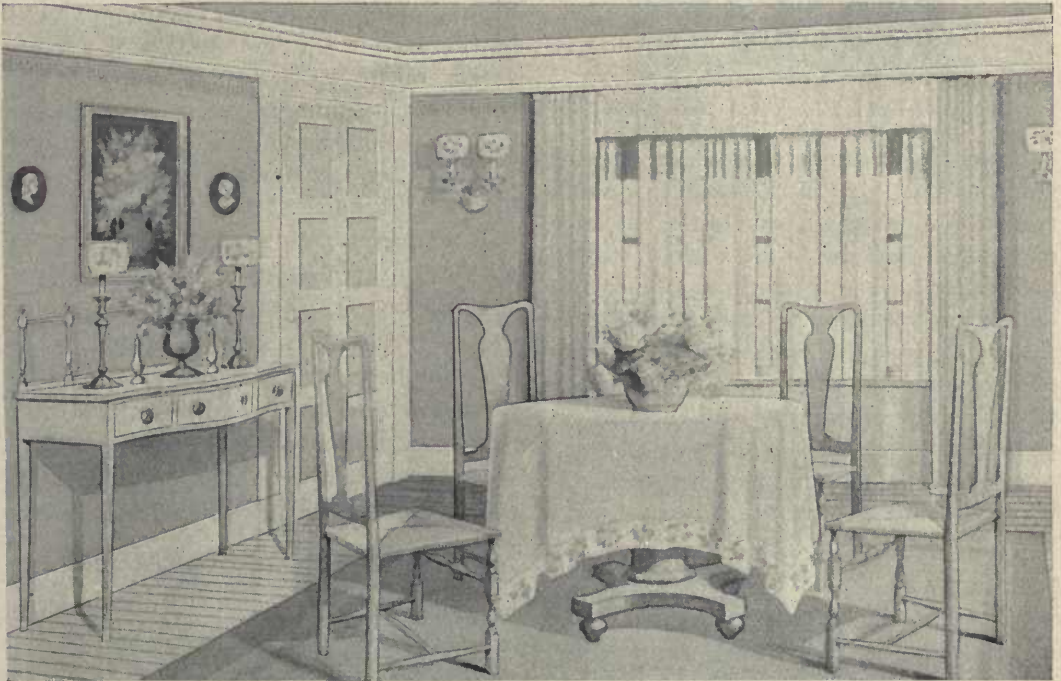
Living Room Having Grey-Green Wall, Oak Woodwork and Furniture of Woven Grass.

walls once found in all well regulated kitchens? As a matter of fact a painted wall, as understood by a good decorator, is absolutely flat in tone, having very much the appearance of an imported ingrain paper.

The quality of the paint used is a matter of great importance. There is a lamentable tendency to substitute benzine for turpentine, fish oil for linseed, and the

one of the several excellent wall coatings on the market and the same surface may well be applied to drop ceilings and to the wall spaces above plate rails. As there is absolutely no wear upon these surfaces, the use of oil paint for them is an unnecessary expense.

When these technical points have been decided the selection of a color scheme is in order. Whatever the color chosen



The Charm of a Dining Room in Which the Green Note Is Emphasized in the Enamel Furniture.

only security against such performances is to buy the needed paint of a reputable firm unless an absolutely reliable decorator can be found. One does not wish to have paint laid which wipes off, the first time it is cleaned, in long streaks, as may happen when the benzine has evaporated. Other matters must be considered, such as the removal of the former finish of walls and woodwork, the possible need of sizings or wood fillers. All these are technical points and the solutions of the problems presented vary with each house. The ceilings should be treated with some

it should be carried out in all the rooms on the first floor. The best selection for the average house is one of tans and golden browns.

Another gamut of color of great refinement, tones from the delicate gray of putty through darker tones to a gray-blue or a gray-green. This is specially good for houses in the warmer sections of the country, but though capable of much distinction is cheerless in the extreme in the gray winters of the northern states, unless offset by the introduction of warm color in the furnishings and pictures.

When this scheme is chosen the lighter tints should be used in the living rooms and hall and the gray-blue for the dining room, as either is a charming background for silver and crystal. Sometimes this stronger color, gray-blue, or gray-green, may be used for two rooms, one at either end, with the lighter tones in the middle,

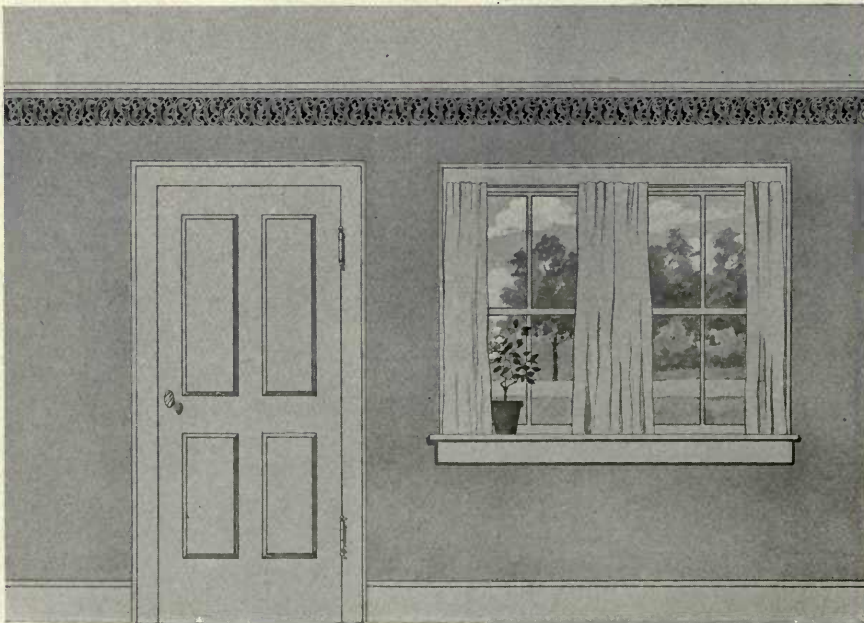


Enlarged Section of Stencil Used in Room Below.

varying the treatment of the rooms as much as possible. For instance, a small reception room at one side of the entrance may have the blue wall with a rug in green and blue and furniture of verdure tapestry in blue-greens and olives—while the dining room has a dark blue rug, curtains of blue and white crepe or cretonne, with the blue of the rugs and curtains repeated in the china. Or, if the wall color is gray-green, one room may be green and white, white woodwork, furniture cov-

ered in a green and white striped material, rug in light tones of green, while the other emphasizes the green note with woodwork of a darker green than the walls, furniture of weathered green, green curtains and pottery. The choice of green requires great discretion, for the deeper tones of green, which are rich and restful when they have the suggestion of texture, are not particularly agreeable in paint or wash. A compromise which will give the desired green for at least one room would be the use of that combination of yellow, green and brown, which is known as citrine, as a medium between a golden tan and a medium green of a distinctly olive tone. This particular combination is helped by the use of dark woodwork, and it is well to use the green wall in a room with a southern exposure.

While the first floor should have a single color note, no such necessity exists with the bedrooms, each of which can be treated as an isolated unit. The color of the lower hall should be carried to the roof, but this is all the agreement with the first floor scheme which is necessary.



Sleeping Room with Old Rose Wall, White Woodwork and Stencil Design in White on Darker Background.

The colors chosen for the individual bedrooms will naturally be largely regulated by the furnishings. With golden oak of the lighter tones a green or blue wall is advisable; with the darker wood a terra cotta or old rose. Mahogany furniture and brown oak are both at home with a warm gray, which is a good background for the cretonne curtains and coverings which seem indispensable to either. Mahogany also looks well with a soft, yellowish green or with a not too blue gray-blue. Birdseye and silver maple and white mahogany are specially happy against an old rose wall, as is brown oak, if the wall tone be deep enough. Variety may be given by the use of yellow in one room and it is a good background for dark furniture, or for white enamel, while the gray enamel furniture which has such a present vogue is best relieved against a dull pink wall.

White paint throughout a house is seldom advisable; also the furniture to be used must be considered. Mahogany and white paint is a good combination, but oak is quite a different proposition, and most houses are largely furnished in oak. In carrying out the wall color schemes suggested for the lower floor of the renovated house, a medium brown, about the color of French walnut, is suggested for rooms in the shades of golden brown and tan, although deep ivory woodwork is charming with golden tans and brown. When the rooms are in gray the wood finish should be gray somewhat darker than the walls, with white woodwork in the rooms with blue or gray walls. Or if the gray is toned into a gray-green, the trim of that room may be either white or a tone of green darker and grayer than the wall. It may be remarked in passing that this gray scheme is not one which is adapted to the miscellaneous furnishings of the average family, but requires things of a special sort.

A word about the floors of the renovated house. Naturally with old floors there must be a thorough filling up of cracks before paint is applied. After the successive coats of paint are thoroughly dry they should be varnished. A special varnish without rosin is made for floors. If two coats of this are used and rubbed down with oil and pumice stone a floor results which is equal in appearance to a waxed one without its slipperiness, and is proof against heel marks.

With so much plain surface, devices to break up the wall spaces are in order. The deep drop ceiling is the salvation of many a painted room. If the room is of average height, a slightly tinted ceiling with the drop in a deeper tone is preferable to white or cream. Harmony rather than contrast should be sought in the painted room.

Another way of breaking the walls is by the use of some sort of dado. This may be made by setting a bracketed shelf or a heavy plate rail at a height of perhaps five feet from the floor, carrying it around the room, either leaving the wall below it plain or making a paneled effect by the use of narrow strips of wood nailed on at regular intervals. Sometimes this lower space is covered with canvas or burlap, sometimes it is left plain, but in either case it should be in a darker tone than the upper section of the wall.

Stencilling when done by a professional decorator is an expensive process; but the painted walls of the renovated house offer a great opportunity to the clever amateur. The regular repetition of a single figure, as a floriated fleur-de-lis, a heraldic emblem like a lion or a griffin, is sufficient to give charm and distinction to a neutral tinted wall in the hall, while in other rooms simple borders placed below the picture mouldings add much to its attractiveness.



“Homes We Have Built” Series

EDITOR'S NOTE.—A fund of \$135.00 is to be divided among the best twelve contributions to this series received by April 1, 1914, as follows: \$20.00 for the best, \$15.00 for second best and \$10.00 each for the next ten articles accepted for publication. Let us hear from many. Address Editor for further particulars.

Cottage Home at Beula Villas

By A. H. Benhoff



HAVE had the pleasure of working out personally the plans of this home and it has been most interesting and fascinating to see my ideas put to practical use. There is an old adage to the effect that “Fools build houses for wise men to live in.” This remark was doubtless originated by someone who attempted to build a home

without any knowledge as to values or as to what they really wanted.

My experience has taught me that the essential features connected with home building are: 1st. Know how much you want to spend. 2nd. Know what you want and how it is going to look when finished (this can only be done by inspecting a number of buildings similar to



Cypress Shingles, Weathered Golden Brown—Ivory and Dark Brown Trim.

the one you have in mind). 3rd. Study your blue print carefully and see that windows and doors are placed in the proper place to allow wall space for the furniture you have or expect to buy. 4th. Give your contract to cover your home complete and to a builder who makes a specialty of the kind of house you want, he can do it better and cheaper than a builder who will make a special job of yours. When the cottage shown here-

I found it easy to change my plans as I discovered new suggestions.

To give your interior character and distinction it is well to select your fixtures, wall paper and wood finish; these, of course, will have to be controlled by the furniture you have. My living room, dining room, hall and den are all early English finish, oak floors; hammered wrought iron antique brass finish fixtures which were made especially for me by

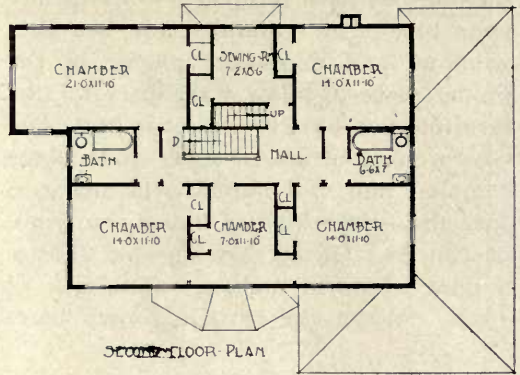
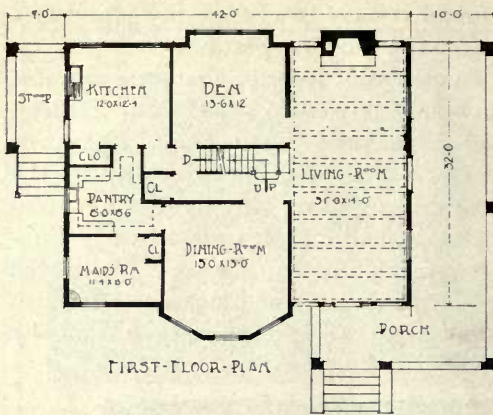


Showing South End of Living Room and View of Dining Room.

with was turned over to me there was a charge for nine extra electric switches, in addition to the contract price; if you know what you want before your drawings are made, your house cannot cost more than the price made by the contractor, but if you start making changes after the building is under construction there is no telling where you will land—it is most gratifying to build your home after your own plans. My way was to go through every new cottage I saw go up, remember the good ideas and when I was ready these were combined into a set of plans on which I had worked for a year.

making changes in regular stock designs. These rooms are all furnished with oak early English finish and Spanish leather; the wall paper used is bronze (imitation) grass cloth and in the den we used imitation Spanish leather which makes a handsome wall covering. The features of my first floor are the fireplace, beamed ceiling, stairway, fixtures and wall covering. The dining room is paneled six feet high with Wood Crusta stained to match the wood finish.

I have placed the maid's room on the 1st floor and in this room I placed a sta-



tionary wash stand with hot and cold water combination.

The pantry and kitchen have enameled sinks with a large closet and dresser in the kitchen and an abundance of shelves in the pantry. These were laid out to allow space for the refrigerator, a dresser, small wine closet and sink.

My second floor shows large closets and many doors, there are eight rooms,

seven of which are en suite. It is not necessary to go into the hall to enter the bath rooms and a private bath can be devoted to any of 4 rooms by closing two doors. At night we close all the hall doors and still have access to the bath rooms, this is very pleasing to the women folks and the children.

I have found Keith's Magazine and Interior's Beautiful very helpful in forming my ideas.





Home Grounds and Gardens

March Daffodils, Before the Snow Is Gone.

Making Your Own Hot-Bed

By Harry Franklin Baker
Landscape Gardener

GARDENING, like most other things in life, pays the largest dividends to those who put the most into it. You will never know what fun it is to garden, how much good, spiritual and physical it can do you, until you try growing things yourself and personally caring for your garden.

It is not yet too late to plan a garden for this year, neither is it too early to begin, for gardening, unlike most other things in life, begins to pay dividends the day you make the first investment, and the first dividend is pleasure in planning.

To be a gardener one must be an optimist,—you simply must have faith in the future. How much time is spent looking forward to repeating next year the successes of the past—not much! Your true gardener is looking forward to the future, planning how in the next year he may do better the things that have not quite come up to his expectations in the past year.

The first cash investment may very well be made in multiples of two cents



Sifting the Soil Through a Screen.

and should be in the form of letters to some good seedsmen or nurserymen for their catalogs. Better attend to this today as there are some seeds that should be planted at once if you wish to have good plants for setting out the latter part of May. For this purpose you will find seeds of the following varieties very desirable,—asters, a few early, but mostly late branching kinds, antirrhinum, alyssum, nicotiana, petunias, salpiglossis, scabiosa, stocks, salvia and verbenas.

Before the seed arrives prepare to plant it. If the weather is apt to be cold for

surface loam and should be first passed through a screen of about an eighth inch mesh. Before sifting, if the soil is somewhat heavy, mix in a little sand. No manure should be added but a small quantity of leaf mould may be beneficial. Now we are ready to sow the seed.

Generally it is best to sow in rows about an inch apart. By using a ruler and drawing a small stick or pencil across the surface of the soil the rows or furrows may be made straight and any depth desired. Sow the seed in these furrows, draw the soil over them and press down firmly with hand or block of wood. Water thoroughly, using a can that will give a very fine spray. Give enough water so that it will penetrate to the very bottom of the box, but be careful not to pour the water too fast or you may flood it and wash the seed out.



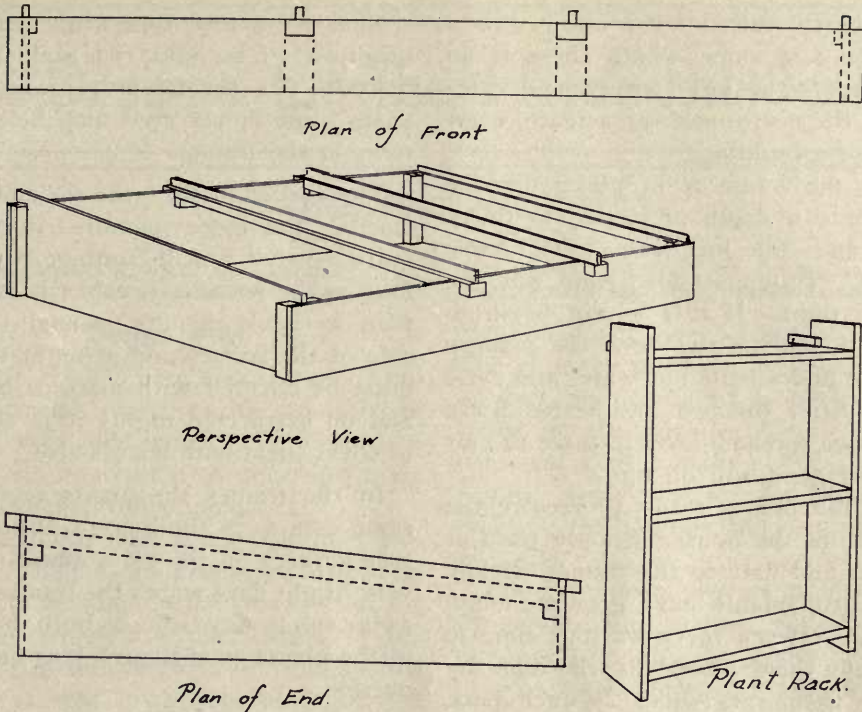
Transplanting Into Pots from the "Flats."

some time—say 20 degrees above to zero or below, the seed may be planted in small boxes or seed pans. Florists generally use boxes about 18 by 30 inches and three or four inches deep, which they call "flats." For the amateur empty cigar boxes will prove to be capital "flats." Punch two or three holes about the size of a lead pencil, in the bottom to provide for drainage in case of over-watering and to help prevent "damping off."

Cover the bottom of the flats with a shallow layer of sand, about an eighth of an inch deep. Next fill the flat with soil, damp but not wet, pressing it down with a block of wood so that it is quite firm and about one-fourth inch below the edge of the flat. This soil should be good light

If there is any old window glass about the house it is a good plan to cover each box with a piece. This will provide a moist atmosphere and will aid in conserving the moisture in the soil.

Now place the boxes on a table in front of a south or an east window in a room having a night temperature of 50 to 60 degrees. When space is limited a rack may be made of six-inch boards to fit the window. The bottom of the rack rests upon the window sill and two screws through the horizontal braces will hold the rack firmly in place. The rack should be carefully made and painted the same color as the window casing. It can be put in place or taken down and put away in five minutes and will hold from twelve to twenty flats. The writer has started



Showing Good Method of Constructing a Hot-Bed and Window Rack.

hundreds of little plants in this manner.

No more water should be given until the soil begins to dry out a little. In case the soil begins to mould or turn green admit more air by raising or removing the glass.

When the seed begins to sprout and the plants appear (which should be in from eight days to two weeks), the plants should be supplied with plenty of air by raising the glass and finally removing it. On cold nights draw the shade to protect the seedlings from being chilled.

One of the most vital points in caring for plants is the watering and drainage. When you water give enough to penetrate to the very bottom, and do not water again until the surface soil begins to dry out. If the drainage is good there is no danger of the soil souring. To keep the soil continually wet and to allow the drainage to become clogged or to fail to supply any at all is a sure way to develop a state of "indigestion" in your plants. This condition is shown by a

"bad complexion," the leaves turning yellow and finally resulting in the death of the plants.

As the weather begins to grow warmer the hot bed or cold frame must be made ready. The hot bed may vary in size, from one sash to as many more as you wish. A frame consisting of three sash, each sash to be three by six feet, glazed with double strength glass, will be found a very convenient size.

In a frame of this size one would have room to grow from ten to fifteen hundred little plants and still have space under one sash to start some early lettuce, radishes and a few tomato plants, etc.

Hot bed sash may be purchased from almost any sash and door company and the frame can be made in a few hours by anyone handy with tools. There are different ways of building frames, but the one sketched here has given the most satisfaction to the writer. A more permanent construction would be cement or brick.

The best location for a hot bed is a south or east slope where there is an abundance of sunlight and some protection on the north, such as a fence, evergreens or a building.

After the frame is in place, dig the dirt out to a depth of twelve to thirty inches and fill up with fresh, horse manure. Tramp it down and put the sash on tight. If it does not begin to heat in a day or two fork the manure over and add a little hot water and close again. After the bed has heated for a day or two spread a layer of three to four inches of good soil on top.

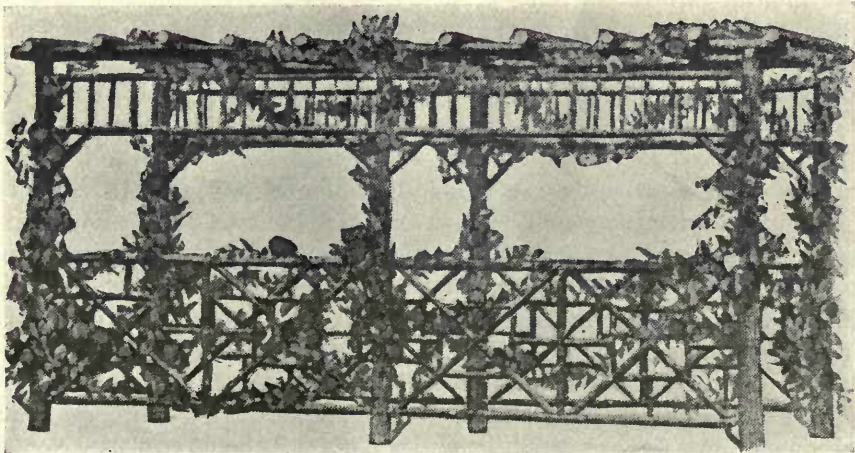
Now the bed is ready to receive the plants from the house. Simply transfer the pots and flats to the frame. If any of the little plants have grown enough to cover between the rows it is time to transplant them. This may be done by shifting them into small $2\frac{1}{4}$ -inch pots, or they may be set out in rows in the frames. In either case plant them just a little deeper than they were growing in the flats. Spread the roots out well, water and shade with newspapers or lath

screens for a few days while the sun is brightest. Use light rich soil sifted as before. The vegetable seed and, if you wish, some flower seed may be sown in rows in the frame.

The earlier in the year the hot bed is started, the more manure it will require, so that it will continue to heat as long as the weather is cold. It is a good plan to bank manure around the outside of the frames and at night the sash must be covered with mats or blankets, and on extra cold nights it is advisable to cover them with boards also.

In the frames the plants require the same care as in the house. When moisture gathers on the glass admit air. On very bright days watch the frames closely as the sun is very liable to burn the foliage of the plants even though it is quite cold outside.

As the nights become warmer, 50 degrees or better, leave the sash off to "harden off" the little plants in preparation for setting out, which may be done as soon as all danger of frost is past.



Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 485 JOHN HENRY NEWSON, Cleveland, Ohio
B 487 GEO. H. KEITH, Spokane, Wash.

Design B484.



WE HAVE here an exterior of unusual charm, with an interior floor plan which is noticeable for its impression of generous space and excellent arrangement.

The exterior lines are wonderfully balanced. The long roof lines are broken up agreeably by the unusual character of the dormers, which are the feature of the house. In the design, wide, rough-sawn siding, stained brown, is used for the lower story and cedar shingles, brushed with oil, for the gables. The roof shingles are stained moss green and the trim is white. The foundation walls may be of brick or stone.

The delightful floor plan opens hospitably from broad steps into a wide, central reception hall, with stairway recessed in the rear and circling around the great inglenook. On either side spacious rooms open into the hall and to each other. A bath room on the first floor is provided and a breakfast room, which may be used as a bedroom. The many chambers above have two bath rooms conveniently connecting. Two other rooms are finished in the attic, with storage room. The basement has every equipment of a modern house, and the design is ideal and economical for the demands of a large family.

Design B485.

The exterior of this design contemplates the use of lap siding for the first story with the upper story and gables

Design No.

B 488 BUNGALOWCRAFT CO., Los Angeles, Cal.
B 490 CHAS. S. SEDGWICK, Minneapolis, Minn.

of stained shingles. The roof is slate. The chimney of brick, in a general tone of dark red. Interest is given the exterior by the outside chimney and the pent-roof shelter of the porch. The wide terrace with pierced balustrade adds much to the comfort and pleasure of the dwelling.

The floor plans provide good sized living and dining rooms, with hardwood finish and floors. The upper floor, comprising three bedrooms and bath, with maid's room, are finished in white enamel. The architect states that this house has been built for \$4,000. Its cost, figured under our present basis of cost estimates, is given on page 188.

Design B486.

Bungalow ideas have an unfailing charm, and this design presents an unusually happy rendering of them. The combination of shingles in the first story, with cement plaster and half timber in the second, is not new, but it is well handled, and the cobble stone foundation, porch piers and parapet wall, lend a picturesque interest. The wide front dormer, with its pleasing slant, back to the very ridge pole, is the feature of the house.

There is a wonderful amount of room space provided for the ground dimensions—a splendid living room, with brick fireplace, beamed ceilings, combination stairs, refrigerator entry in rear, a grade door to a complete basement. Three chambers above and bath.

The cost estimate includes hot water

heat, full plumbing, hard wood finish and floors, electric lighting.

Design B487.

The house illustrated herewith is a two family residence designed for suburban residential district, and it was the intention that the owner should occupy the first floor apartment. This apartment is entered from the front of the building, through a vestibule into the living room, which is provided with built-in bookcases, seats and fireplace. Just back of the living room is the dining room. At the right of the living room is the bedroom and private bath, off of which is the sleeping balcony.

The kitchen is fitted up with all necessary cupboards.

The owner has direct entrance from his kitchen down the cellar stairway six steps to the ground level, where entrance to the garage is obtained. The garage is provided with a cement floor with drain and catch basin. The door between garage and main house is of metal to prevent fire getting into the house, should there be any blaze from gasoline.

The rear porches provide places for refrigerators. These porches are entirely screened in.

The entrance for the second story apartment is from the side. This apartment contains a combination living room and dining room, with built-in cases and fireplace, two bedrooms, bath, kitchen and balcony.

The attic is provided with two rooms for the use of maids, one for each apartment; also the second story apartment has a storage room in the attic.

The basement provides a store room for the first story apartment, a general chore boy's bedroom, vegetable rooms for both first and second story apartments, common servant's toilet, laundry and the heater and fuel rooms for the building.

Inasmuch as the basement and attic are all finished off with plaster and finish, it

makes practically a four story building. All walls of the foundation are of concrete and the superstructure walls are of hollow terra cotta tile, on which rough cast cement plaster is spread. The exterior is made interesting by the use of the hood roofs over porches and entrances, flower boxes and the blinds made of rough boards and stained.

The interior finish of the two living rooms and the dining room is of oak with oak floors. The rest of the house is finished in white enamel, the attic and basement finish being of pine.

The architect's estimated cost of the building is \$7,000. The cost, figured under our present basis of estimates, is given on page 188.

Design B488.

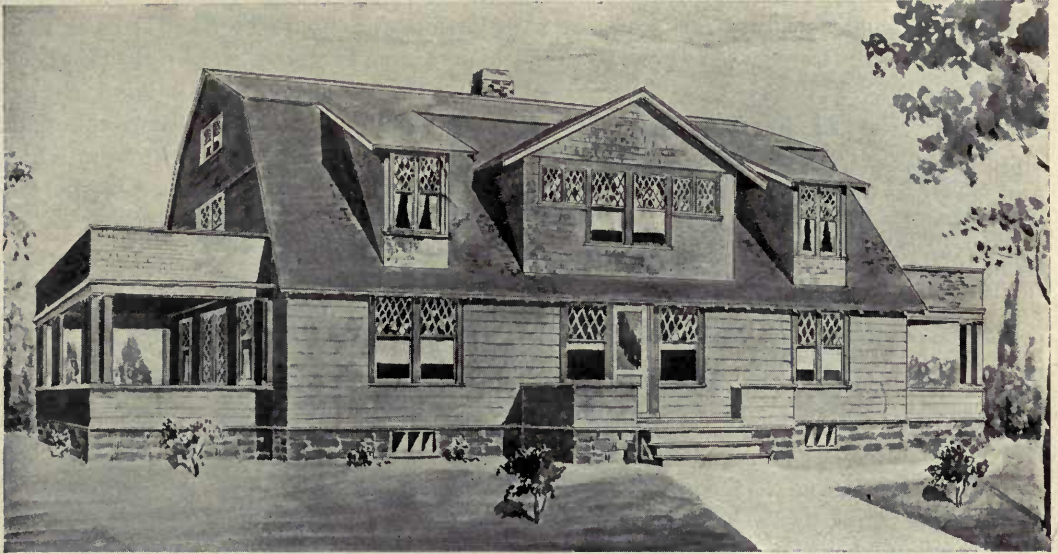
This may well be called a very big little house. There is not an inch of waste space and the rooms are well arranged and well proportioned. An earnest endeavor has been made to secure the maximum of convenience and space at a minimum cost.

Every step in the designing of this house has been made with economy of expense in mind. One chimney carries both fireplace flue and the kitchen flue and in case a furnace is required in the cellar, this same chimney will carry a flue for it.

It will be noticed that there is not a "jog" or projection or odd corner in the foundation wall. The doors and windows have been cut down to the smallest possible number for absolute convenience and for ample lighting and ventilation. The kitchen may seem small but it is fitted up in full cabinet style and will be found ample in size and most convenient.

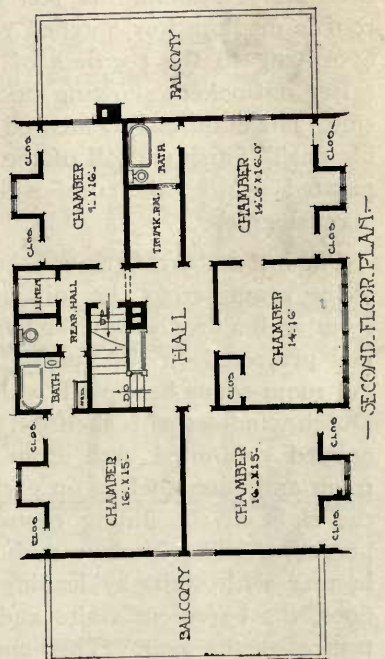
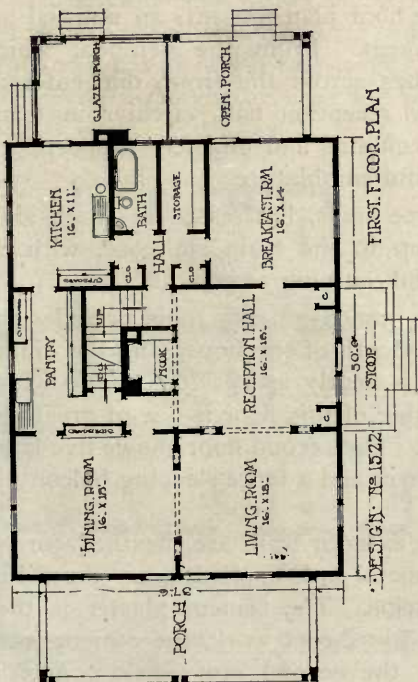
Design B489.

This design, delightful in its simplicity and absence of unnecessary detail, is in line with the trend of modern ideals, which turn ever more and more toward the goal of simple living. Certainly it



DESIGN B 484

An Unusual Treatment of the Gambrel Roof



presents a strong contrast to the embellishments of cheap mill work, which, a few years ago, were tacked on to the smallest cottage.

The materials of construction are of the simplest—being rough, undressed siding, and shingles. But the proportions are excellent, the lines interesting and the interior arrangement all that one could demand. The formal entrance has a chapel-like shelter, repeating the lines of the main roof. The family porch is on the side, and the whole house sets squarely on the ground. The low, broad dormer is well designed.

There is a spacious living room, a good dining room and kitchen, and three fine chambers and bath above. The cost estimate given includes heating, plumbing and electric wiring.

Design B490.

The bungalow shown in this design is 26 feet in width and 50 feet in depth. The main floor is 3 feet above the grade line and the principal story 9 feet high, and the rooms on the second floor 8 feet high, the outside studding 14 feet high. The roof is medium low, pitched with a wide over-hang to the cornices of 3 feet, the rafter outlookers showing on the underside. The exterior is cemented with "pebble dash" finish and all of the trimmings painted white, the roof shingled and stained green.

The interior arrangement shows a large living room across the full width of the front with a fireplace on the left and chimney projected on the outside. The dining room opens back with wide projected Dutch window, with shelf for flowers and opened columned arch from the living room and book shelves on each side. At the right of the dining room is a large bedroom. The kitchen and bath room in rear with stairway leading to second floor, the basement stairs and grade entrance at the rear. This main floor is

finished with Washington fir stained dark Mission and floors of natural oak. The piazza space across the front is glazed in for a sun parlor with sliding French windows opening into the living room and small porch space at the right from which the living room is entered. On the second floor are two good bedrooms.

The architect states that this bungalow is now building at a cost of \$3,200, exclusive of heating and plumbing. It has a very jaunty appearance, the arrangement is convenient and one that will appeal to the house-wife who does her own work. The basement is full and complete under the bungalow with cement floor and ample space for heating apparatus, fuel, laundry, etc.

Design B491.

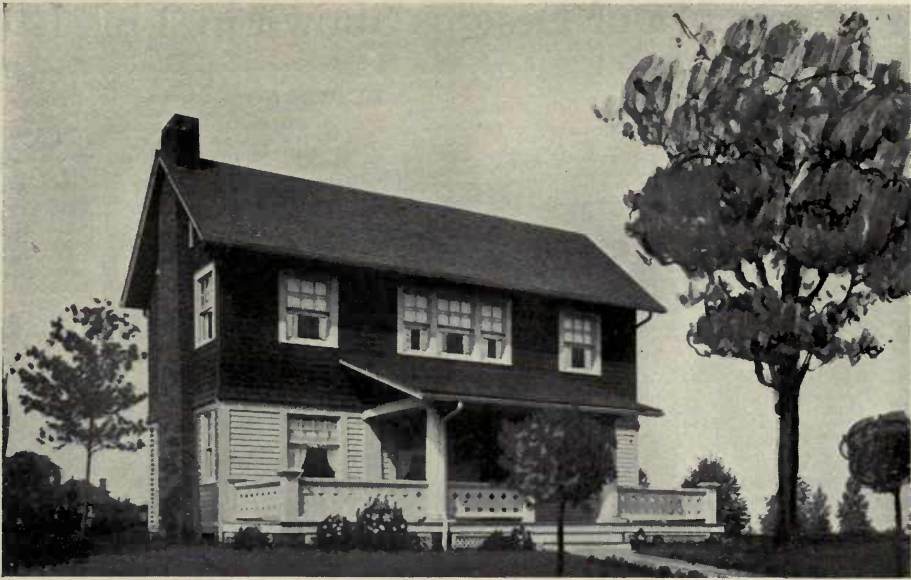
The broad lines of this fine design give it dignity and character. Though rather imposing in appearance, the design is extremely simple. Of cement exterior with roof of warm, red tile, it attracts immediate attention especially when the environment is sympathetic and intelligent.

The floor plan presents an unusual arrangement. From the veranda, which stretches across the front, one enters a stately reception hall, circular in form, with columns and pilasters supporting a beautiful entablature.

Three steps, buttressed at each side, lead up to the main staircase, with its graceful, curving sweep.

The immense living room occupies the entire depth of the house and the dining room is nearly as spacious. The whole ensemble of this floor is one of great elegance. The second floor shows five large chambers and a large sleeping balcony in front.

The exterior walls are sheathed, furred, then metal lath applied over these furring strips. The cement plaster is then applied in 2-coat work, the cement work below the second story belt course is



John Henry Newson, Architect.

DESIGN B 485

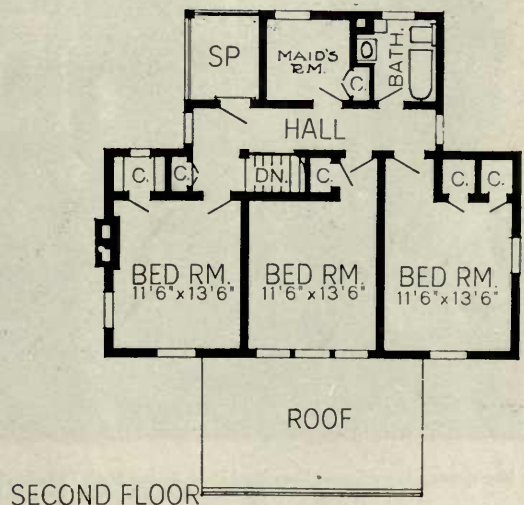
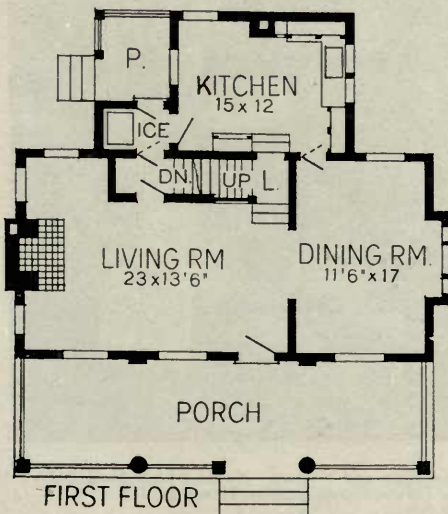
A Shingle and Clapboard House

leveled down smooth, while above the belt the cement is thrown on with a paddle or brush and left as rough-cast work.

Hollow tile might be used for the ex-

terior walls, which would slightly increase the expense.

The ground area of the house is 63 ft. x 37 ft., and the estimated cost follows:



Cost Estimates of Designs Shown in This Issue

	DESIGN NO.						
	B 484	B 485	B 486	B 487	B 489	B 490	B 491
Excavation @ 30c. per cu. yd.	\$125	\$60	\$60	\$85	\$41	\$60	\$205
Mason Work, to include							
Foundation Walls @ 20c.cu.ft.	350	210	200	235	160	250	700
Cement Floors @ 45c.sq.yd...	90	45	45	70	31	65	185
Hollow Tile Walls.....	....	....	....	425	....	....	....
Chimneys and Brickwork							
@ 65c. hr.....	275	200	150	400	140	135	600
Tile Work for Roof.....	....	....	....	....	....	....	1,500
Tile Floors and Wainscot.....	....	....	....	....	....	....	290
Lumber.....	1,700	695	615	650	544	480	1,850
Millwork.....	1,625	705	620	800	512	540	3,100
Exterior Cement Plastering							
@ 90c. per sq. yd.....	....	....	90	455	....	225	490
Interior Plastering @ 26c.							
sq. yd.....	625	360	298	465	252	300	1,400
Painting.....	475	200	165	375	165	185	825
Carpenter Labor @ 45c. hr.							
Common labor @ 30c. hr...	1,630	725	600	710	528	575	2,500
Hardware (Rough & Finish) ..	400	230	215	260	165	190	600
Electric Wiring.....	120	55	60	75	38	43	200
Galv. Iron and Tinwork.....	175	90	76	100	64	56	300
Heating, Air or Water.....	500	415	390	725	150	325	1,200
Plumbing and Gas Fitting....	600	265	250	500	225	245	1,500
Miscellaneous.....	120	55	50	65	35	43	250
Cost.....	8,810	4,310	3,844	6,395	3,050	3,717	17,245
Contractors' Profit, 10%.	881	431	384	639	305	371	1,724
Total Cost.....	\$9,691	\$4,741	\$4,228	\$7,034	\$3,355	\$4,088	\$18,969

This table is computed on the basis of prices of labor and material now prevailing in Minneapolis and vicinity.

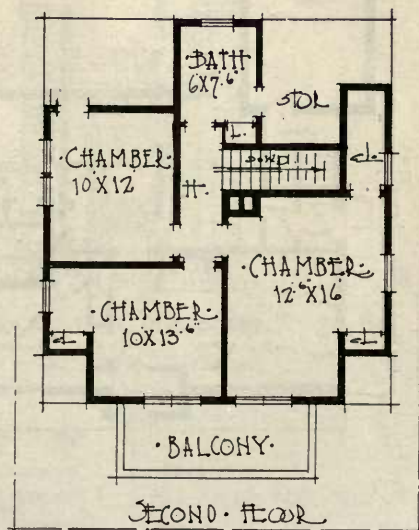
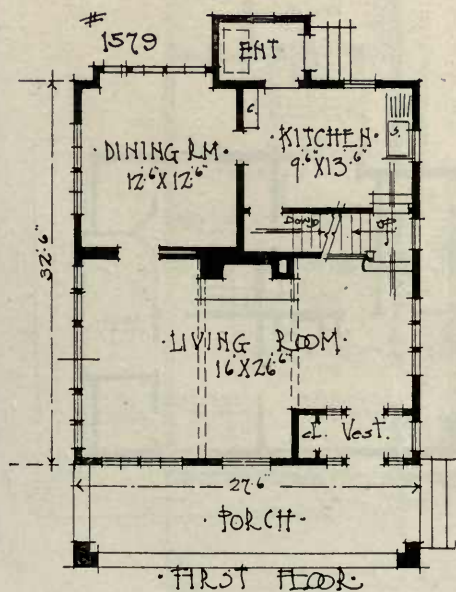


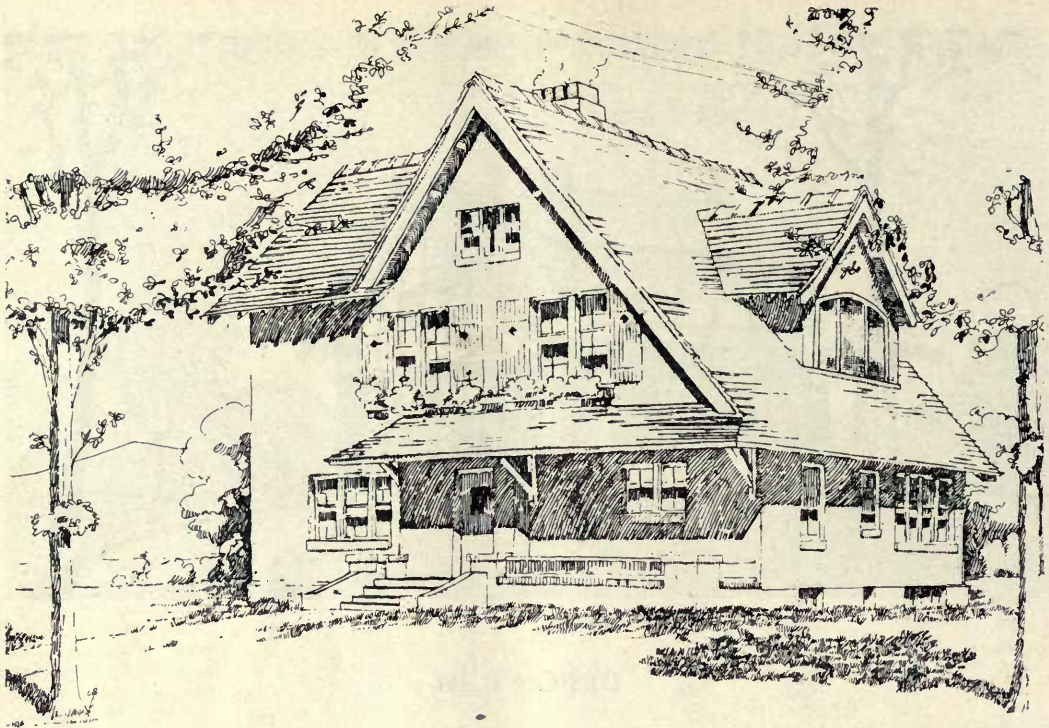
Interesting Dining Room Showing Frieze Above High Plate Shelf in Greens, Blues and Yellows. Hanging Light Shades Over Each End of Long Table, Carrying Same Colors. Blue Tiles in Fireplace, Blue, Heavy Craftsman Linen Hangings in Arch.



DESIGN B 486

An Attractive Semi-Bungalow

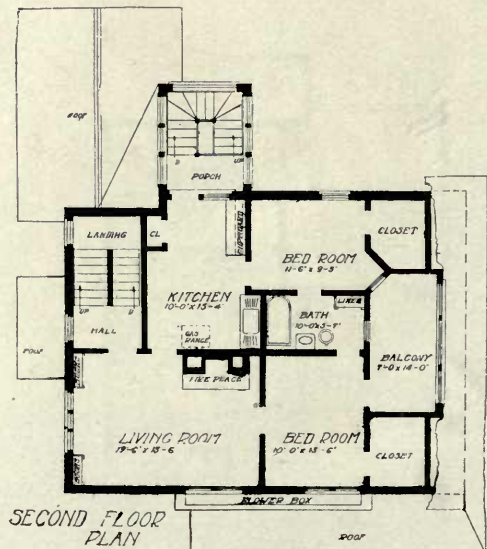
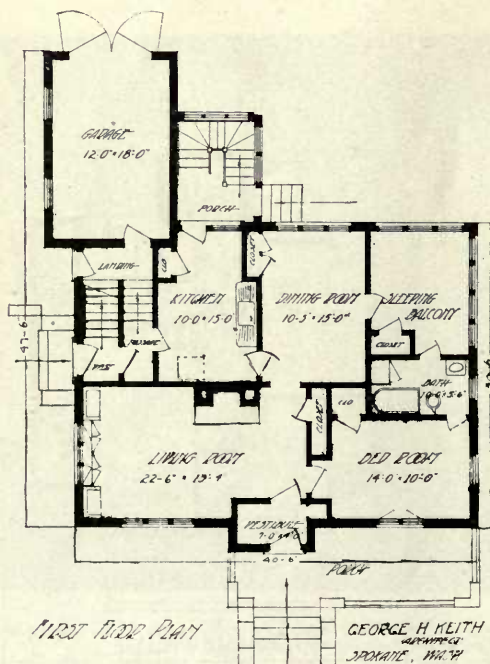


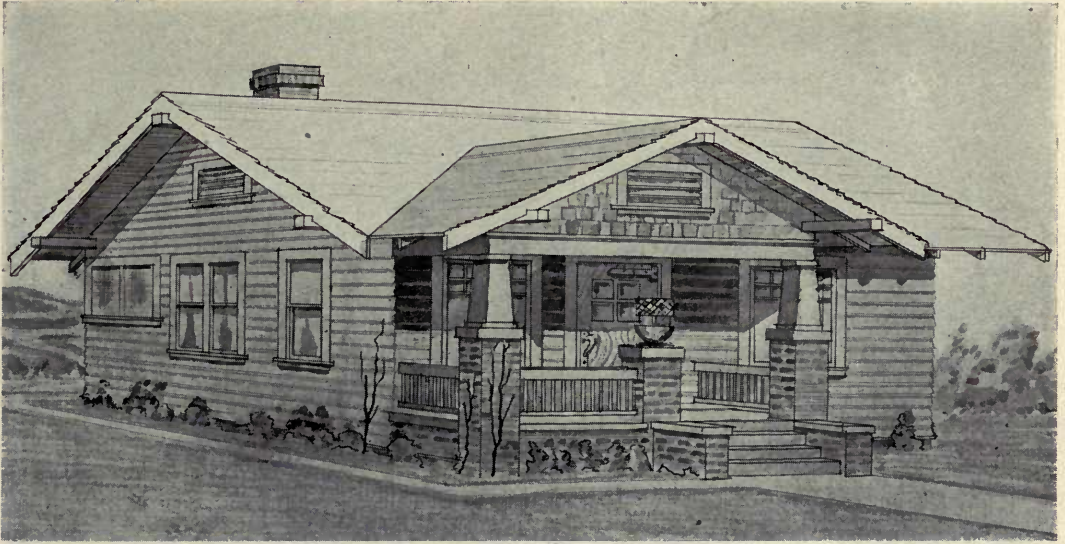


Geo. H. Keith, Architect.

DESIGN B 487

A Two-Family House of Unusual Charm

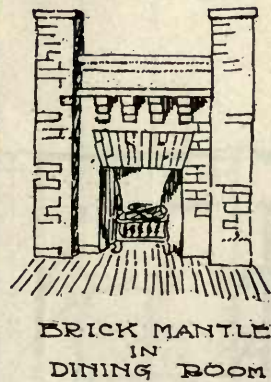
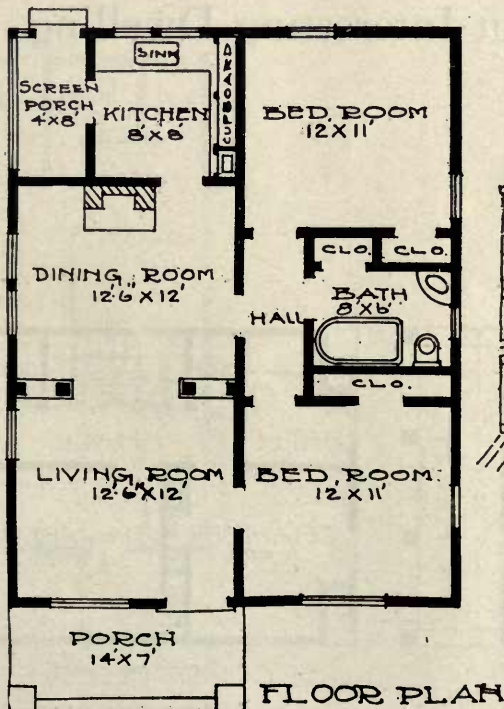


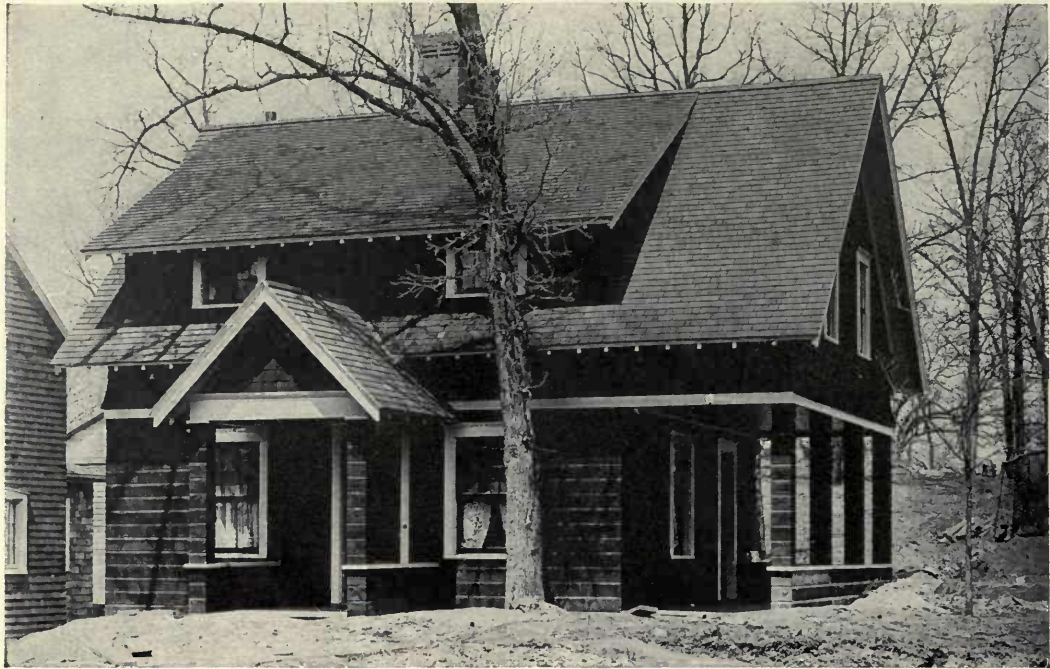


Bungalowcraft Co., Architects.

DESIGN B 488

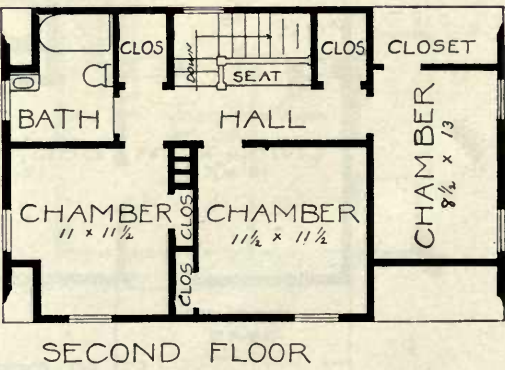
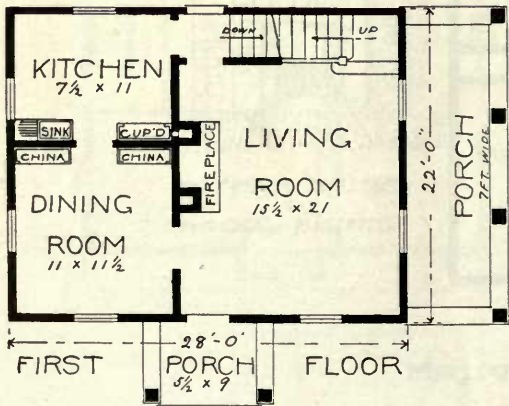
An Inexpensive Five-Room Bungalow

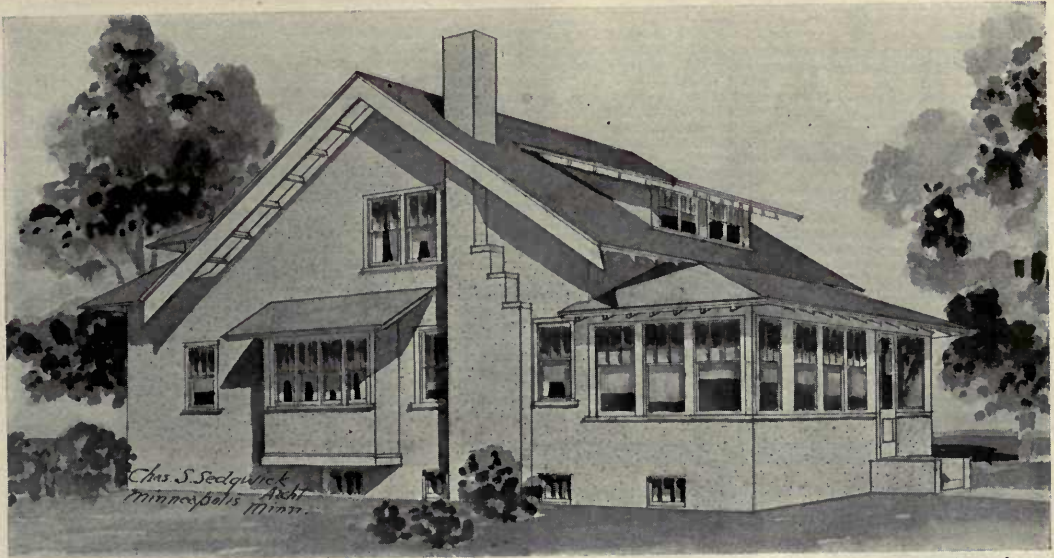




DESIGN B 489

A Plain But Interesting Dwelling

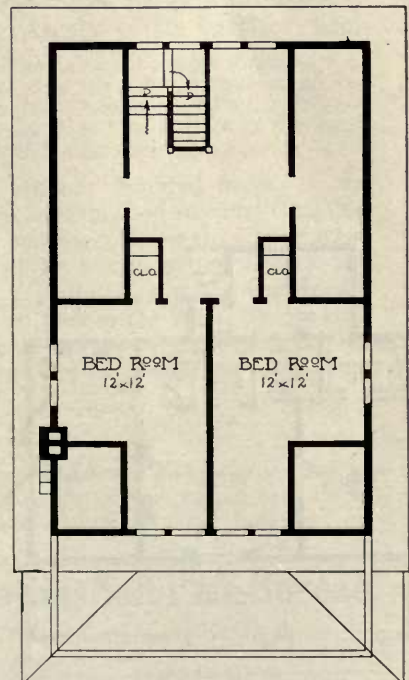
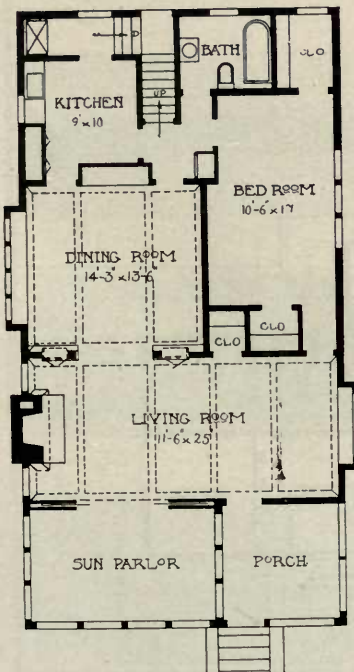


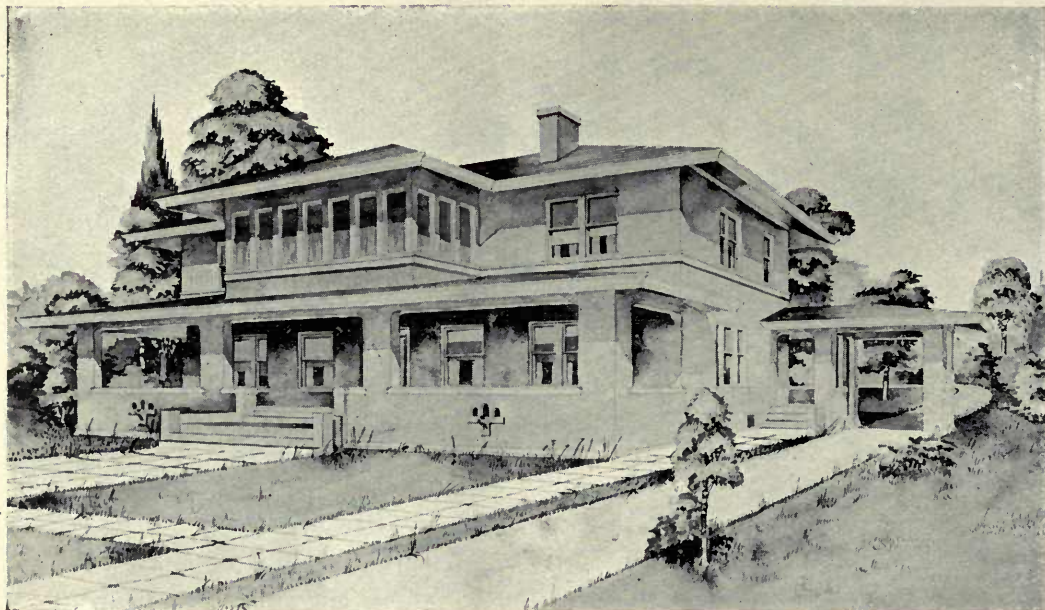


Chas. S. Sedgwick, Architect.

DESIGN B 490

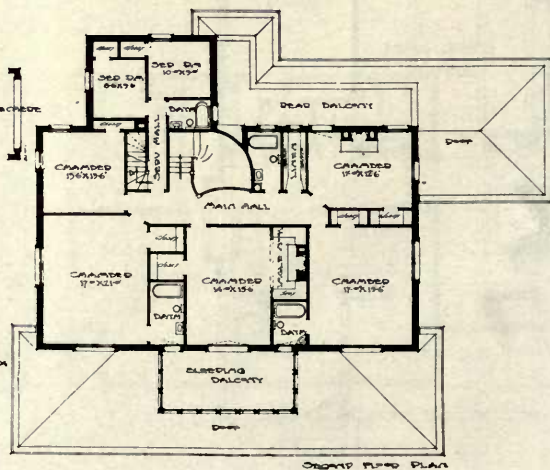
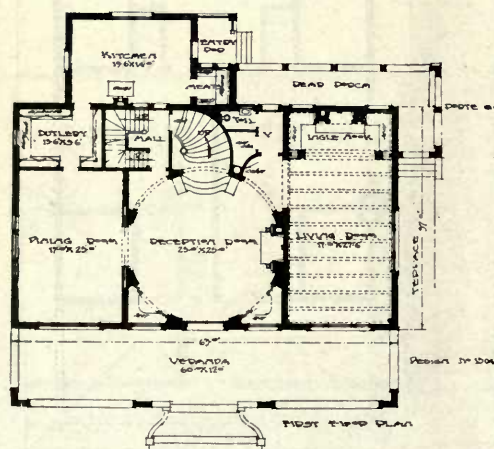
Another Attractive Bungalow

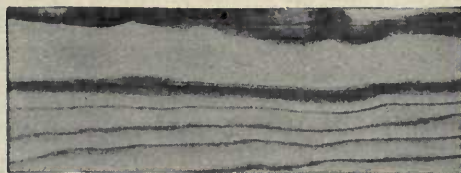




DESIGN B 491

A Stately and Beautiful Home





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Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

The Possibilities of the Red Room.



THE average man thinks the red room is "the best ever." His taste may be crude but for the sake of domestic peace it must be reckoned with. There are, of course, tones and tones of red, many of them exquisitely beautiful but something may be done with the ordinary tone which is common in wall papers and is the cheap decorators conception of what is suitable for a dining room. Red, be it said right here, is not a dining room color and is justified only by stern necessity. But there is something to be said for plain red, the typical color, which comes to the mind at the utterance of the word, a pure tone deeper than scarlet such as is much used in stained glass windows.

The trouble with most red rooms is that they are too monotonously red and totally unrelated to the other rooms on the same floor. The use of white woodwork is almost imperative with red and the combination of red and white should be carried out in the various details of the room, if the introduction of a contrasting color does not seem advisable. Often a slight modification of the tone of red will do wonders. Deepen it and give it the slightest tone of blue and you have a crimson which is still red, but infinitely more interesting than the original tone. Or with a hint of orange you have the immensely decorative Spanish red which is so delightful with the warmer browns. These, however, are side issues, and may be left till later.

Make up your mind that red is an exclusive color. You may not use golden oak or mahogany with red. Except in its dull olive shades, green is ruled out. Your brass will be garish in its company. Oils and blacks and whites will look well

enough on the walls but woe betide the picture in delicate tones, water color or sepia. An essentially dark colored carpet or rug is the only sort possible.

But within these narrow limits something can be done. Take a room with white woodwork, and walls papered in a two-toned stripe of red. For the floor we may choose small oriental rugs in dark tones showing a good deal of red, or better a made rug of two-toned Wilton a little darker than the walls. To bind together the white woodwork and the red wall we will use curtains of printed cotton Liberty or Morris in red and white. One specially good Morris cotton has a bold design of red with white ground powdered with red dots. Straight curtains of the figured fabric hanging to the floor will be best and they may be supplemented by net curtains next the pane.

Oak in some of its darker finishes is best for the furniture and it may well be covered with the material of the curtains. But the taste which demands a red room is quite likely not to be in accord with cretonne furnishings and if a red fabric is used it must be confined to pieces of furniture which stand away from the walls. The fashion of standing a davenport parallel with the central table and facing the fire is helpful in this emergency. If the chairs are of brown wicker in the general color of the oak the red fabric need not come in contact with the walls.

Red has a peculiar quality, it advances toward the spectator, therefore a red room seems smaller than a blue or green one. Devices to increase its apparent size are in order and one can hardly have too many mirrors—mirrors of generous size reflecting a considerable part of the adjoining rooms or of the outside landscape. The large mirror fitted in above the man-

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tel shelf and made a part of the construction of the room is invaluable, and a wonderful addition to the beauty of the red room is to have it open into another room in lighter tones of red.

Certain things in the way of ornament seem made for the red room. Such are silver or Sheffield plate vases and candlesticks. One needs to have seen the silver collection in its room lined with red brocade at the Metropolitan Museum in New York, to realize the charm of the contrast. All the oriental jars and pots in ivory and grey tones with touches of effective black are at home with red walls. So too are the crackled wares with neutral grounds, grey or cream. Sometimes a bit of one of the jewel-like flame colors turned out by the modern potters gives just the needed high light to the otherwise sombre room. In smaller things we must not forget the beautiful things for the library table done in dull red leather, tooled or illuminated. A nice attention to details of this sort will give a certain distinction to a color scheme which is too often commonplace.

Combinations With Red.

Once the fancy for an entirely red room can be compromised, the way is open to a good many modifications of the dominant color extremely good, if well managed. It takes a bit of courage sometimes but the results are worth while.

Take the mingling of red and blue often found in oriental rugs and textiles. It can be managed in two or three ways with dark woodwork and a wall of low-toned red, paper or grass cloth, the rug would be in blues and reds, the curtains of the same combination of color, while the upholstery would be partly in blue, partly in red. Bronze or wrought iron and oriental porcelain in blues and reds and gold would complete an effective scheme whose materials could be gathered together easily enough in any larger city. It is possible to reverse the arrangement, using blue for the wall, but such a room would fall into the blue class, as does the very effective combination of a clear grey blue with bright red.

The beautiful printed linens and some of the imported cretonnes often employ red and blue together in their conven-

tional designs. While they are effective with red walls a neutral tone is a better foil for them, using more or less plain red as well, say for the rug and for individual pieces of ornament. Another way of using them is to have a neutral wall and floor covering and have furniture of red enamel, using the figured material for cushions and covers. It sounds extreme but if well done is charming. Naturally a scheme of this sort is only adapted to a bedroom or an upstairs sitting room.

Colonial Styles in Furniture.

We are apt to think of all old furniture as mahogany and the product of the immortal trinity, Chippendale, Sheraton and Heppelwhite. Such was the furniture of the rich, but the middle classes had to content themselves with the work of the village craftsman who wrought with simplicity and sincerity in the simple styles possible to him.

The same middle class exists today and for its benefit are being copied in oak or birch, and at moderate cost, the work of our early cabinet makers. Substantial chairs with rush seats and slated or banistered backs, gate legged tables, beds with low head and foot boards and tall corner posts, prim dressing tables and capacious chests of drawers, solidly made and rubbed to the dull antique finish are available and are peculiarly suited to the modern house of modest pretensions.

Bed room furniture can be had in grey or white rubbed enamel at an advance of twenty per cent on the cost of the ordinary finishes. While wooden knobs or handles are the rule it can be arranged to substitute glass or metal. Most of the styles shown have real distinction and the cost is much less than is usual in retail shops.

For the living rooms of the house are shown various pieces in oak in the substantial styles in vogue in the Dutch colonies whose general lines are those of mission furniture, but without its clumsiness. Other furniture is reminiscent of New England, especially the Windsor chairs with their circular spindled backs and spreading legs. There are low seated, high backed, slatted chairs, which might have come out of the kitchens of old Deerfield, and high backed Puritan settles of similar ancestry.



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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.
 ☞ Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

An Old-Fashioned Bed-room.

J. R.—“In our new home, now being constructed, I am planning an ‘old-fashioned bed-room.’ Black walnut furniture, of my grandmother’s day, stained floor to match, white woodwork, blue (colonial) rag rugs, and wish to know what kind of inexpensive paper, bed-covering and window drapes to use for perfect harmony with them. I have dresser-set and window drapes of the same shade of blue in Japanese crepe. Would they be appropriate? The room is large and very light; east front, four windows.

Is it customary to extend the wall paper from the downstairs reception hall to, and including, the upstairs hall?

I am expecting to use dark brown hangings (cotton with conventional border) at the windows in our long library (13x25) without any other curtains; is that correct? French doors open from one end onto a porch, full length, clear beveled glass. The brown material gathered on would close out the light. Can you suggest any other treatment? Would ecru net be all right, when it is not to be used in any other way in the room?

I trust I have not imposed in asking so many questions.

Keith’s has been a welcome visitor to us for the past three years.”

Ans.—There is a paper having a design of tree branches in deep blue on a white ground, rather Japanese in character, that would go with your Japanese crepe hangings and be in tune with the antique walnut. We can send you a sample, and purchase paper if desired.

You must either run the lower hall paper up the stairway through the upper hall, or cut it off at the head of the stair with a narrow molding. You can run a plain paper, the shade that best har-

monizes with lower hall, above it, or you can tint such a shade.

We should not like to use the dark brown hangings described, in any way, in living room. Certainly not alone. We would prefer ecru net, either with or without outside hangings, both for windows and French doors. The same material should be used on both, and the brown would not be right at all with net on doors.

Tints for Walls.

M. M.—“Am very much interested in your magazine and find you are helping others, so want to ask you to help me.

Will you please give me some suggestions on the enclosed rough sketch of our new brick house? House faces west. Inside finish is chestnut. We wish to tint the walls. What color scheme would you suggest and what kind of rugs and furniture?

Please answer as soon as possible.

Could you give us some help on the porch? We had thought of running the porch the whole length front and at the side just so it passes the dining room door, with a brick balustrade surrounding the porch.

Can you suggest anything better? How would you make the brick balustrade and the roof? Would you put gables on and where the steps?”

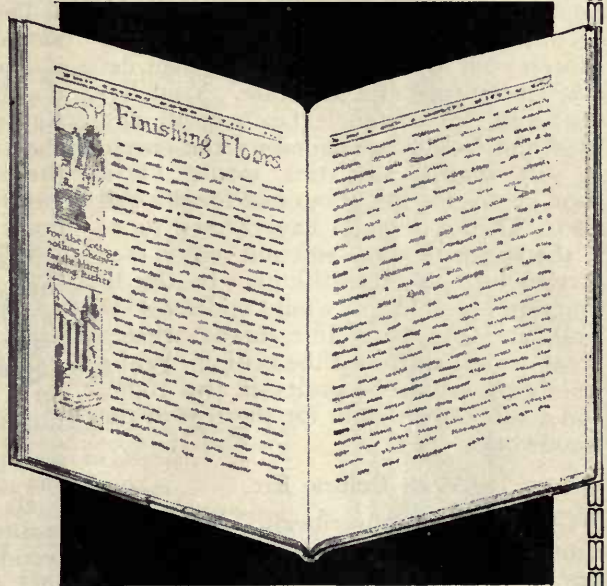
Ans.—Regarding your exterior, your idea of the porch across the front and around to the dining room door seems good. We should not like it of wood. A brick balustrade and pillars, would make a far nicer house, but this would necessitate a cement floor. It is impossible to tell you whether to place the steps at one side or in the center. It depends on your grounds. Neither can we tell you what kind of a roof to have.

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As to wall tints, we have so many times advised our readers to use warm tones, as browns, terra cotta and tans, in rooms facing north or east, and cool tones as gray, blue or green in rooms facing south and west. You had better send for the color samples of the different manufacturers of tints and select from these. Having chosen your wall color, you can then decide on the rugs and furniture. Your living-room, for instance, faces north and west and would be shaded by the porch. A soft warm ecru tint would be a good choice for this room and for the hall also. Then we would have brown tones in the rug with some soft old red or rose carried into the furnishings. In the library an old gold tint would make a good wall, and the same tint mixed with a great deal of white for the ceiling. White woodwork would be pretty in this room, and a soft brown stain for the rest of the woodwork.

Wall Colors, Etc.

G. P.—“As a subscriber to your magazine, I wish to ask you for a few suggestions as to the interior finish of our new home, which faces east.

Living room is 14x28; has windows on east, south and west. Woodwork to be birch stained mahogany. Floors in living and dining-room quartered oak. Would you advise to stain floors or treat natural? Furniture for living-room is mahogany. For this room we have a large Oriental rug of old rose color. Have window seat on south. How would you advise cushioning this seat? What decorations would you suggest for this room?

Dining-room has three windows in east and built-in buffet similar to your cut on page 96 of *Interiors Beautiful*.

Woodwork is quartered oak, beamed ceiling and paneling in oak up to plate rail. We have thought of burlap between paneling. How decorate above paneling and ceiling? Have golden oak furniture for this room. Should woodwork be stained and what?”

Ans.—You do not state your preference as to treatment of your walls, whether paint, tints or paper. It is therefore difficult to give definite advice. We can only suggest a gray tone for the well lighted living room and the carrying the

rose tones of the oriental rug into the draperies and furniture coverings. Some of the new mulberry shades border on the rose and are very delightful. Either mulberry or rose are beautiful with a gray wall.

The dining-room with east exposure would be in creams and browns. There is a very charming dining-room decoration in paper, a tapestry foliage effect, design of horse chestnut leaves, in creams, shadow grays and russet, to use above the plate shelf, and there is an imitation burlap in the russet tone that would be good between your wood strips below.

We should use a brown oak stain on the woodwork with a wax finish; tint the ceiling a deep cream and living room ceiling light gray. As to staining the oak floors that is a matter of taste. We prefer a light brown stain, but they are often finished natural.

Fireplace Facings.

H. H. B.—“I enclose a little sketch of mantel to be made of tapestry brick with wood top, which am placing in bungalow just started.

For the first time we are finishing living-room and dining-room in mahogany, and we are somewhat at loss as to the proper colors to use with mahogany woodwork.

The yellows so commonly used with mahogany we don't like. Would be very glad to receive your suggestion as to color scheme with advice as to just what tone of gray is sometimes used with mahogany, and in the event of using such color for walls, what shade should be used for curtains and overhangings.

Coming back to the question of the mantel, we are going to put in the living room, on sketch we have indicated a slab of granite which we thought might lend attractiveness to such a material.

In the event that we use the gray walls in our living room finished with mahogany, would you think that the gray granite or the red granite would harmonize best if placed in the mantel of tapestry brick as indicated by sketch.

In reality the mahogany granite runs a little darker than our photograph sample shows, and would blend very nicely with

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the tapestry brick, and not have a great deal of contrast.

The gray would give a greater contrast and be approaching that used in the wall decoration."

Ans.—We are inclined to think as near as we can judge from the color reproductions sent of granite samples, that the dark red granite would look best introduced in the brick mantel. The gray seems dark and cold and forbidding and we would prefer accordant rather than contrasting tones in the mantel itself. The wall decoration is a different matter. Here gray tones would be desirable and afford the contrast you desire. Let the gray wall be soft and warm, however, not hard and cold.

The over curtains and other hangings may be either dark rich blue or green, or dull rose-red. The latter we imagine would blend best with the tapestry brick.

A Remodeled House.

S. L. M. "Will you kindly give me by mail suggestions for our house which is being remodeled by throwing hall and parlor into a reception hall 16x19? Am enclosing a roughly drawn sketch.

Woodwork throughout will be fumed oak, but furniture mixed oak and mahogany. Want living room in blue and grey tapestry paper. Will have new rug here.

In hall will use a large and two smaller Anglo-Persian rugs, light tan and mulberry predominating. What papers for this room and should same continue through upper hall. Will use four-piece parlor suite here in mahogany, but will re-upholster same. What should be used, tapestry or velour? Dining room will have fumed oak furniture. Had thought of dull grey and blue for this. Have sideboard built in under casement windows. Would you use a Hartford, Saxony or Shawmutt rug?"

Ans. We have in mind a very lovely foliage tapestry effect for dining room in blues, dull olive green and grey to use above plate rail, with a grey crepe paper which has effect of rough plaster, below. We would use one of the new Scotch rugs, Kilmarnock, in blues and greens. A 9x12 would answer, price \$35.00. We think with this paper in dining room, you

will prefer a tapestry paper in self tones of grey for living room, bringing the color relief in with a Shawmutt rug in rich tones of blue, and upholstering the furniture in velvet the same blue. We have used such paper recently and are extremely pleased with it. In this way the harmony between these rooms with wide opening would be excellent.

There is also a very beautiful tapestry paper for reception hall, dull rose and very dull grey-green on a golden tan grass cloth ground. It would probably go well with the rugs you mention. Presumably this paper need only be carried to the level of the second floor, using in upper hall the plain golden tan grass cloth effect, with a small molding between where the papers come together. Yes, we have a few copies of the January number.

Ivory Paint, Etc.

E. H. D. "We are building a pretty colonial home and I would like to have your advice as to the interior finishing. We expect to have the entire house in white enamel. The first floor plan calls for large sliding doors opening into the hall, and I have been anxious to have all doors of birch, stained in mahogany. Now will it be appropriate to have these dark doors sliding into the white frame? Would you advise using birch doors? Would it be advisable to use birch doors even if we paint them white? We want to use an inexpensive finish on plastered walls, with a view to papering later. What would you advise? What is the difference in white and ivory enamel? Would you advise using ivory? Trusting that you can assist us in our problems, etc."

Ans. Your colonial house will be very appropriately finished inside with white woodwork and mahoganized birch doors. It will be perfectly proper to give the sliding doors a mahogany finish with the white frame. We very much approve of birch for doors even if they are enameled, as the door of heavy wood hangs so much better than pine and the additional cost is not great. It is not necessary to use an enamel finish everywhere in the house. Some of the second floor rooms could very well receive a flat finish. The different paint manufacturers have different



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ANSWERS TO QUESTIONS—Continued

tones of "wory" paint. Some times it is a deep cream, some times it has a slightly greenish tinge. It is best not to get it too yellow. As to where to use it, that depends altogether on the furnishings and wall treatment. The creamy worry goes with a yellow wall, or golden tones better than white. It is beautiful with some foliage effects in blended greens and blues, in a dining room. Or the worry with slightly greenish cast coat is good with rose tones. There are several wall coatings manufactured which will give you good satisfaction.

Woodwork in a Southern Bungalow.

F. W. H. "I am sending a rough sketch of my new bungalow home. I have one bedroom set of Circassian walnut, and excepting a grand piano of mahogany and music cabinet of the same, I have no other furniture. Will you please suggest the wall color for all rooms except the one next to back porch. I can't afford mahogany furniture for the dining room yet but would like some suggestion, also concerning the woodwork and decorations in the drapery line."

Ans. For a southern bungalow like yours, we think interior woodwork of white or ivory would be a good choice not only in the bedrooms but in living and dining rooms. You could stain the doors mahogany if you prefer. This would suit your mahogany piano and for the other furnishings of living room you could use mostly willow. Possibly you would want the library table mahoganized birch, which is not expensive. We would make the woodwork deep ivory and use natural willow or wicker, upholstering the chair seats and wicker couch in cretonne. As this is a northeast room, we would use browns for wall and rugs and creams, with touch of red. You will find this suggestion pleasing and inexpensive.

In the west dining room we would have the same woodwork, with a soft grey wall and some of the pretty enameled furniture that is so much in vogue now. Apple green furniture with rose hangings and deep rose rug would be very charming. One of the decorating firms advertising in this magazine show a mounted color card of such a dining room, which they will send you on request with directions

for doing it. Perhaps you could paint some second hand furniture yourself.

In the bedroom with Circassian walnut furniture, the woodwork must be deep cream, and walls an old fashioned chintz design in dull blue and dull red on a grey or tan ground.

General Advice.

C. W. W. "The specifications for our new house call for varnish finish rubbed dull. Do you approve of that finish? If not please suggest something more appropriate.

What kind of finish do you advise for walls, tints or paper?

The hall is to be furnished as a library in oak furniture, thought of using olive green for wall. The parlor a tan or brown wall with furniture to go with piano. I prefer mahogany furniture. The dining room I want in brown and blue. Think I had better use oak furniture as it is not so hard to keep as mahogany. The living room I want in green (not too dark) or gray which will be prettier. I want to furnish it in wicker furniture including a couch or davenport. The toilet room is finished in oak with tile floor. Would it be easier kept if I enamel the oak?"

Ans. Inasmuch as your woodwork is oak with brown stain, you are almost compelled to the use of oak or walnut furniture, as mahogany would not be in harmony with such a setting. It is very difficult to furnish a parlor in oak; a parlor should have a lighter, more dainty air than oak imparts. There is, however, a new finish just out for oak furniture called the Jacobaen, which is very elegant, and the pieces made with it are not so heavy as the ordinary oak furniture. It is, however, expensive. It is possible you could find circassian walnut pieces that would go with your piano. We would advise you in this room to use a davenport or couch with very little wood frame showing, mostly upholstery. The walls of this room should be very light, soft ecru with deep cream ceiling, and the rug should have much cream in it with the browns, also some dull rose, and the furniture and hangings should introduce rose.

In the hall we have seen a rather light



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tapestry paper combining dull greens with rose on a pale tan ground, which would open well from parlor coloring. We should much prefer a grey wall to the green in living room using green for the rug and furnishings. Wicker furniture upholstered in green foliage cretonne would be exceedingly pleasing with the plain green rug. The dining room which opens out of parlor and has only a north exposure, must certainly have a light treatment, and should be in harmony with parlor tones. We do not think it would be pleasing in browns and blues, but there is a decorative paper in brown foliage, horse chestnut leaves and burrs, on a deep cream ground, that we think would be lovely here above a plate rail, with a plain russet grass cloth on burlap or leather effect below and ceiling tinted cream. Fumed oak furniture.

In regard to use of tints or paper, we prefer tints every time for ceilings and for much of the wall surface, but we have suggested paper in the two places where a decorative wall would be more desirable. Oak must be cheaper with you than with us, or you would never think of using it on a back screened porch. Why not finish it natural and tint the plaster a soft ecru? A varnish finish for woodwork is all right if rubbed dull, and probably wears and cleans better than the waxed finish.

We would finish the kitchen woodwork natural, varnished, paint the dado a cigar brown and the walls and ceiling deep cream. This is pleasing and not so delicate as white.

A Bungalow in Idaho.

C. H. E. "I am enclosing plans of a house we are building and wished to ask for some suggestions on the finishing and furnishing. The house faces north and east, with the long way to the north, facing the mountains. Would you have a green roof? What color and what kind of finish would you give the woodwork in living and dining rooms? I don't like too dark a finish. My furniture is oak, not very dark. I have one Wilton rug, mostly green with tan and black in the border and touches of red in the small figure, two small orientals in dark colors and red, and two bear skins to use in win-

ter. For my lounge cover I had thought of one of those imitation oriental rugs that come at about twenty-five dollars. What colors should I have in that? Would rose shades do? For the walls I had thought of a tan or dull gold with cream ceiling. What kind of shades should I use at the windows and what curtains? I have looked at sunfast materials in golden brown for side hangings with cream scrim for the other. Have also looked at cretonnes. The fireplace will be of pressed brick. Please suggest color of brick and what it should be put together with, would reddish brown do. The bedrooms both have four windows, two on either side of the corner. How would 'Dutch' curtains do for them?"

Ans. We regret that reply to your letter has been delayed owing to error in address. Your bungalow is very attractive with either white or a light grey exterior and leaf green roof. It would be pretty to paint the window sash on outside a leaf green; they should match the woodwork on the inside; use green window shades. Your own ideas as to the interior seem very good.

With your oak furniture and the rugs you describe, a brown stain seems inevitable for the woodwork, but you could use a fumed brown which is not very dark. The soft tan walls will be best and the old gold furnishings are good. The fireplace brick will be much better in the tan also. It is a thousand pities the chimney is not in the center of that wall instead of tucked up in the corner. We should much prefer the lounge cover in tans and gold with a little green, but to get this you would have to find tapestry goods and make it yourself. We do not think cretonne would suit this room, but it might be used for dining room windows. We think a bog oak stain would be attractive for dining room woodwork with the tan of the living room walls below a plate rail and a bright flowered paper on a cream ground above, with cream ceiling and cretonne curtains. This will make the north room cheery.

We think your ideas about bedrooms very good. We should certainly prefer white or cream paint for woodwork, it need not be enamel, but if it must be stained, a silver grey stain would be best.



Certainly

the exterior of this house is Atlas-White Portland Cement stucco. It wouldn't have been possible to obtain the stainless white surface in any other way.

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“How We Helped to Solve the High Cost of Living Problem,” the Personal Experiences of Three Householders

By Charles K. Farrington

NEW offices have been created lately for those who seek to better conditions under which human beings live. Certain localities have a “Doctor of Public Health.” It would be beyond the scope of this article to mention the excellent results which have so often followed these efforts, but the writer thinks there should be “Doctors of Household Economy” also. It is simply astonishing how much money is wasted in the average family each year, largely of course through ignorance, for after a person has been taught to economize, he or she, as the case may be, is generally willing to do so. Of course the ever increasing cost of living about which we hear so much these days, and not only about which we hear, but feel, most keenly of course when our household bills come in, makes it absolutely necessary that every penny should be saved whenever it is possible to do so. In this article the writer will mention what was accomplished by three families to aid in “making ends meet.” The incidents mentioned may be considered typical of many others which could also have been given if it were not for lack of space. There is an old saying, yet a very true one, “Experience is the best teacher for those who will be taught.” This article will therefore give experiences.

A householder, Mr. “X,” had a long talk with his wife one evening on the subject of household expenses, or rather, how to reduce if possible the household expenses. Of course the high cost of living was responsible for his being obliged to do so, and while they were talking, a friend, Mr. “A,” stopped in to make a call. Mr. “X” explained the matter to him, and a most interesting discussion followed. “Well, ‘X,’” said his friend, “I think you are in about the same position I was until eighteen months ago. I bought my groceries in quantities, also my vegetables; I took advantage of every special sale too, still, the ever increasing cost of food made me find it difficult to get along. You know how much sickness we have had at home; you have had a great deal also. Well I simply knew I must reduce expenses in some way. I thought we were spending too much for coal, both for the kitchen range as well as the furnace. One evening ‘C’ stopped in to see me, and during his call the subject of the cost of coal came up. He wanted me to come right over and inspect his furnace and range, and I went with him and did so. We had a long talk that evening; what he told me was simply a revelation, and I am so glad I saw his heater and range, and learned his plan for saving coal by their use, for I have been able to do equally as well.



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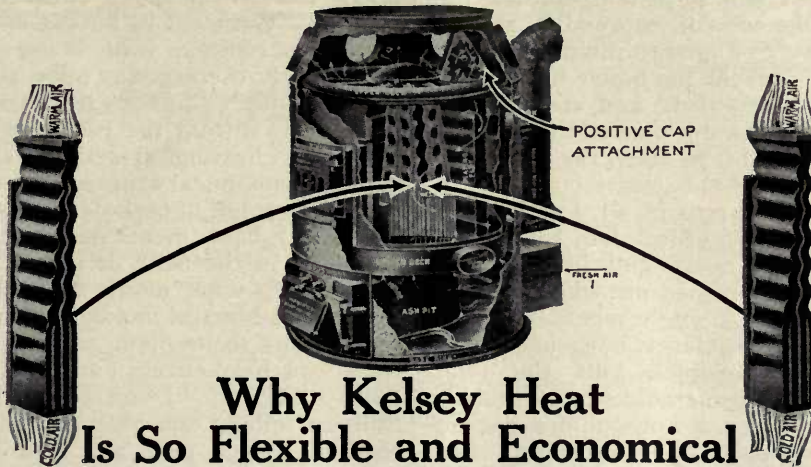
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THE HOOSIER MFG. CO., Builder Dept., 143 Kenilworth Ave., New Castle, Ind.

HOUSEHOLD ECONOMICS—Continued

As soon afterwards as was possible I installed a new furnace and range exactly like his. Of course our range would cook and heat hot water by using on abnormal quantity of fuel: also our hot air furnace would give enough heat except in cold winter weather if we burned enough coal, but so would the ones 'C' discarded. He was willing to make an outlay at the start in order to save later on in operating expenses. He had formerly a hot air heater as I did, but he decided upon hot water for his new form of heat, because hot water is the most economical to operate. It costs more at the start to install a hot water heating system, steam costs less than it does, and hot air less than steam, but to operate hot water burns less fuel, steam comes next, and hot air last. Hot water is also the most desirable kind of heat for the average home. Well it cost 'C' \$59.00 for his new range installed, and \$637.00 for the complete hot water heating plant, put in the house, ready to operate. The two items totaled \$696.00. A steam or hot air plant would have cost less to install, but 'C' was not looking for such a saving, he wanted to save later on. He had not had the amount of sickness you and I have had, so he had this amount laid aside in the bank. He was willing to spend it for two reasons: he knew he would have a much more comfortably heated house; also that he would save such a large amount of coal that in time he would pay for the entire cost of the improvements, and then he would have an up-to-date heating plant which would last for years, and in addition a very nice kitchen range. The results far exceeded his expectations. I followed out his plans to the letter except in one detail. Having no money laid aside in the bank I had to borrow. Let me show you how I financed the improvements, also how I calculated the saving. My house is approximately the same size as 'C's' and yours is also. We all built about the same time you will doubtless remember, early in the nineties. If I am not mistaken 'C' went in in December, 1892, I moved from our old home in November, 1893, and you in August of the same year. I borrowed on a mortgage \$696. At 5 per cent this required a yearly payment of \$34.80 or \$2.90 per month as interest. This I figured I could

easily pay when I found out how much I could save each year to add to a fund to pay off the mortgage. I knew what 'C' had done under almost the identical conditions. I had been burning 13 tons of coal a year in my range, he approximately the same, both ranges being the same size and make. At \$6.50 per ton this cost \$84.50. My furnace consumed 21 tons. The average season in which a furnace must be kept burning is 28 weeks. Sometimes when cold weather comes early or stays late this may be lengthened. I find, however, one must figure on at least 28 weeks. 21 tons at \$6.50 cost \$136.50. For furnace and range the outlay was \$221.00. 'C' was spending about the same. But with my new range, with a far more economical coal consumption, I reduced the amount necessary to six tons, or an expenditure of \$39.00. The furnace also made a substantial saving, 14 tons carried us through the winter. This cost \$91.00 or a total of \$130.00 for furnace and range. I find, therefore, I save each year \$221 less \$130 or \$91. Deduct from this the interest charge on the \$696 mortgage, \$34.80, and I have a yearly net saving of \$56.20. I am laying this amount aside in the savings bank at 4 per cent interest, so all the time I am getting a fund to pay off the mortgage. In less than ten years I will, therefore, own my new furnace and range, the yearly saving making this possible. All this time I must also remind you I have a furnace and range of the latest pattern. Our house is always comfortably heated in all kinds of weather. On bitter winter days we have an abundance of heat, on mild winter days we can adjust our drafts and dampers so as to send the water heated to a moderate degree of temperature throughout the house, not only making it pleasant to live in, but also making it healthful, for it is well known that overheated rooms are unhealthy to inhabit. With our old hot air heater it was almost impossible to heat some of our rooms when the wind blew from a certain quarter. Then in cold weather our house was never warm, and our plumbing suffered, causing large bills for repair work. Our old range burned a great deal more coal, much of this was wasted, and in addition to the waste of coal it caused other difficulties.



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STEAM or Hot Water radiators are not only in the way, but are ugly. Tint them, paint them, or gild them; still they are the same unsightly radiators.

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To start up a water or steam boiler, is a task—in fact it is a good husky job. After the radiators have finally become hot, they continue to continue hot long after the sun has warmed things up, making the rooms uncomfortable. You are helpless, you must wait for them to cool.

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The water in the range boiler was heated to too high a degree of temperature, the piping broke down, especially at the joints, we were obliged to run much water to waste to prevent the boiler from being damaged, it 'rumbled,' and steam came out of the hot water faucet in the sink when we opened it to allow the hot water to escape. All of this cost me money for coal, water and repairs. I looked over my back plumbing bills before I made the changes in the range and furnace, and they simply astonished me when I added them together. A single repair bill often does not seem very large, but when one is constantly having such bills the total amounts to a considerable sum of money. I think too often a householder has no idea of how much is spent during a year's time on repairs, especially to plumbing and heating appliances about the house. The cost of labor as well as materials is very high on this class of work. We could have used our old range for a far longer length of time, it was not used up, we had renewed the grate at intervals, but it was costing us indirectly a good deal of money as I just explained. It was to avoid this needless expenditure that we renewed it. We have had no repair work to our piping since the new range was installed, and although we have an abundance of hot water we do not allow any of it to run to waste. Add the amount saved on plumbing repairs and water to what we saved on coal and I will not have to pay off \$56.20 for ten years to clear the mortgage. In a like manner I am saving on my furnace repairs. If I had retained my old one it would have necessitated a large outlay for repairs. Then in some years I would have had to discard it altogether. Then, 'X,' I would have been obliged to make the outlay just the same for a furnace, also for a new range. But think how pleasant it is to have a new up-to-date heating system, also a new range, now, and in a reasonable length of time to be able to pay for it all with the amount saved on coal and repairs. My repair bills indicate that I can reduce the length of time I first mentioned, ten years, to seven and possibly even less, because with the new heating and cooking appliances the money we yearly used to spend

for repairs on the old ones can be applied toward reducing the mortgage. Now, 'X,' you must be having exactly the same experiences, your house was approximately the same as mine as regards these details. You see great strides have been made during the past few years in perfecting heating systems, also in designing economical ranges. It is possible for the average householder to make the changes I have mentioned whether the money is in the bank or not. I did and you can do what many a business concern does, borrow money to enable improvements to be made so that large returns can be realized, and the borrowed money paid off. Don't you often see a railroad selling 'equipment bonds'? The road may need new cars of a large capacity to enable it to secure additional freight. In time not only has the interest been paid from the returns from an increase of business, but the bonds themselves have been paid off. I could give many such instances but you see the point; one must be willing to make an outlay at the start to allow a saving to be made in the future. That has been the secret of success of many a railroad, banking or commercial business house. And there is no reason a household cannot employ similar methods. Then I also hope if we are free from sickness to pay off some additional money; still that may not be possible; however, I know what I can pay off simply with money saved on coal and repairs and water. No, I have not mentioned the saving on nerves and health from having a cooking and heating system which gives satisfaction; it is considerable as you know; few things break one down so as household worries. Now one thing more, 'X,' a little thing, but a big money saver. You rent your water meter from the water company I suppose. I did until 'C' showed me the folly of doing so. I used to pay \$1.25 every six months for 'rent of meter.' I did not pay much attention to the item. Well a new meter costs \$10. If I borrowed ten dollars it would cost me at 5 per cent fifty cents per year. I would save \$2.00 therefore each year, and in five years own my meter with the saving. It is the little here and there that one saves that helps

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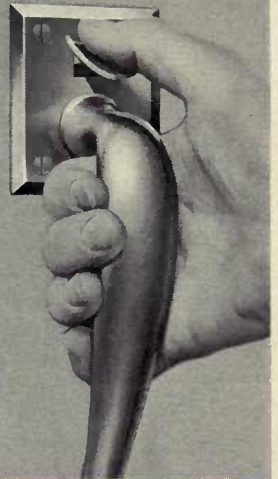
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Shower fixture, complete, as illustrated, 5-light, \$5.25, 4-light \$4.50. 3-light, \$3.75.

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to make it possible for one to get along. Will you not try the plan, 'X'?"

Mr. "X" did so, and found he made the same saving as both his friends. He was so pleased with his success that he told "A" and "C" that the results ought to be published, so that many a householder could make a like saving. Hence this article. The writer sincerely trusts those who read it may profit by following out the plans and methods which it describes. It would unduly lengthen this article to tell in detail what improvements have been made to ranges and heating systems during the past few years, which improvements make them so much more economical as regards the coal consumption. I said at the beginning of this article that many incidents could also be given if it were not for lack of space. Let me mention in closing one typical one. Manufacturers of ranges have discovered by the experience of years that the old smoke pipes were made too small. Our new range although the fire pot is much smaller than our old one will burn up in a remarkably short space of time. It is equipped with a much larger smoke pipe, the draft is very carefully designed, also the dampers. It is set in exactly the same position and connected with the same chimney as our old range, yet we can "heat the lids red hot in no time" as our old servant expresses it. We have no waiting as we used to for the fire to burn up, so baking or other cooking can be done, this "building up" of course necessitated using much coal needlessly. Now the fire comes up as quickly as one could desire. As soon as the front is opened and the damper in smoke pipe adjusted, etc., it cools down as rapidly. This means it will stay in such a state with a minimum of expense for coal. Hence the large saving on coal bills. Its water back connects with the old large hot water boiler. We always obtain plenty of hot water. Science has aided even the designing of a kitchen range. We reap the benefit. And of course so can any reader of this article by simply being willing to spend at the outset in order to save in the end.

The Low Priced Steak.

Broiling is a process only adapted to the tender cuts of the loin, and it may be frankly admitted that none of the cheaper cuts is ever really tender, although oftentimes the flavor is so good as to compensate for the additional chewing required. For fine flavor no cut in the animal compares with the upper cut of the round, and a steak from its thickest part can be cooked in a hot frying pan, seared on both sides and then turned constantly just as if it were broiled and be extremely good eating. Covering the pan for five minutes after the steak is cooked and before the gravy is made makes it a little tenderer, and it may also be brushed over with oil and vinegar in equal proportions an hour or two before cooking.

When the last steak has been cut from the upper round a lump of meat remains sunk in the cavity of the pelvic bone, which is much tenderer than the rest of the leg, and will give enough steak for two or three people. It is worth watching for, as it is about as good as a Delmonico steak.

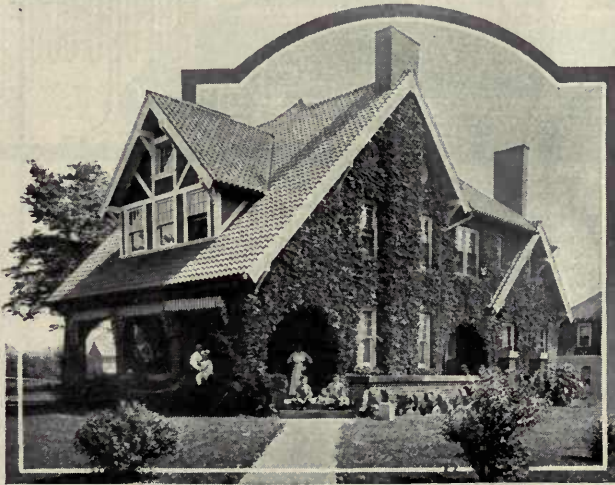
The best way to cook a round steak is to have it cut very thick, brown it and cook it in a casserole in the oven, covering it with thinly sliced carrots and onions, also browned. Just before serving, drain off the liquid and add to it a small can of Italian tomato paste.

Beef Loaf.

This is a very delightful sort of cold meat and is best cooked in a steamer. Allow two ounces of fat salt pork to each pound of finely chopped lean beef, a teaspoonful of salt and a saltspoonful of pepper, also a little kitchen bouquet. Work the ingredients together with your hands and pack the mixture in a deep, narrow oblong pan. Steam it for two or three hours, then brown it in a hot oven, basting it with melted butter. A lean cut of flank steak or the under cut of the round is suitable for beef loaf. The odds and ends of a roast chicken chopped with the beef are an improvement. If wrapped in waxed paper, a beef loaf will keep two or three weeks in the refrigerator in summer and indefinitely in winter.

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is well within the means of any family that can afford a stationary heating system in the basement, stationary plumbing and electric lights.

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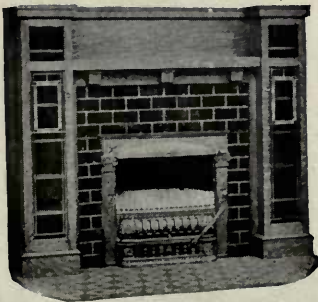
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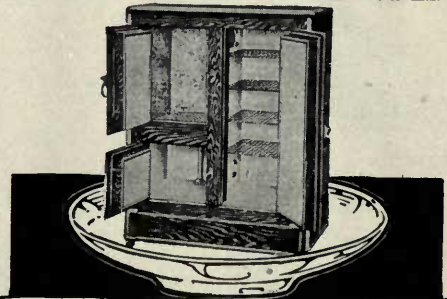
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Superb Porcelain Lined—the delight of every woman's heart—the pride of every housekeeper. Here's that famous Refrigerator with the seamless, scratchless, dish-like lining, the genuine

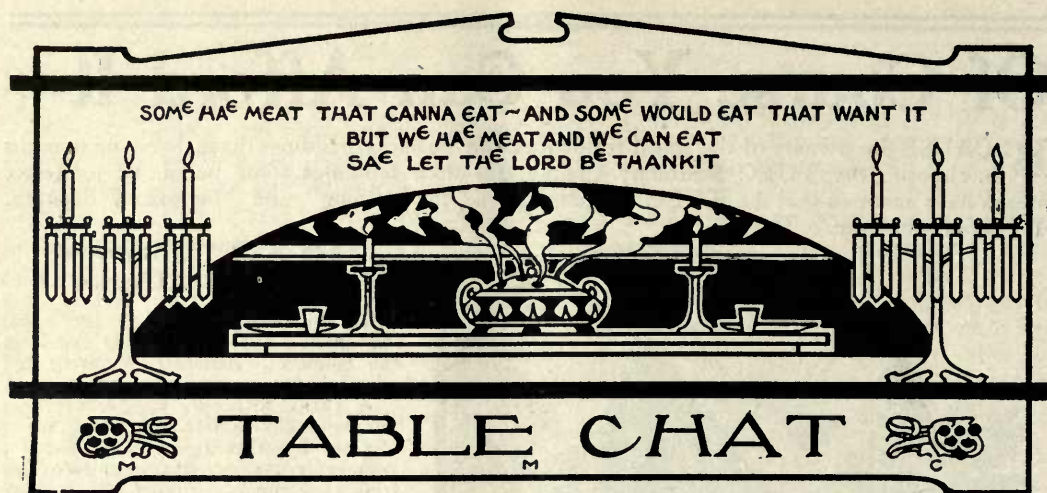
Leonard Cleanable

Don't confuse this wonderful sanitary lining with paint or enamel. I will mail you—free—a sample of Leonard Porcelain that will quickly show you the difference. You can't scratch it even with a knife. It's everlasting—easily kept beautifully sweet and clean. You'll never be satisfied with anything else. Can be arranged for outside icing and water cooler. Style shown is No. 4, in polished oak case. Size, 35x21x45 . . . **\$35.00**

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To Ohio and Mississippi Rivers. I take the risk; send for catalog today. Money returned if you are not perfectly satisfied. Ask for sample of porcelain and I'll mail my booklet "Care of Refrigerators." Every woman should have a copy of this valuable book.

C. H. LEONARD, President, Grand Rapids Refrigerator Co.
138 Clyde Park Ave., Grand Rapids, Mich.



Permanent Table Centers

FLOWERS or ferns for a table decoration are not always available, and in that case it is convenient to follow the foreign fashion of having an ornamental piece of silver or china in the middle of the table. Pieces distinctly ornamental in character

are used for this purpose, rather than those which have a definite use. Some people have revived the old silver epergnes, some of which were really beautiful. A group of bisque figures is also effective, while quite ideal for the purpose are those charming pieces of



Table Centerpiece—Fruit Arranged in Basket of Japanese Wicker.

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You Can Buy These Pieces Direct From Our Factory—In Sections—For LESS THAN HALF Retail Store Price

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We build Come-Packt furniture in sections—ship direct from our factory to you in compact crates, at knock-down freight rates—you set it up in your own home in a few spare moments—you save over half what you would pay at a retail store. Furthermore, your protection in quality is absolute—you see each section separately before it is assembled. Nothing can be covered up—no flaws could escape notice—you get full 100% quality. Three such pieces at any retail store would cost you \$89.50—our price, only..... **\$42.35**

Each Piece Is of World's Finest Genuine Quartered White Oak

Not red oak, or any other cheap grade of oak, or imitation. Any cabinet maker will confirm the fact that there is but one oak of quality—Genuine Quartered WHITE oak. Years of hard usage will enhance the beauty of Come-Packt furniture—it is solid worth and character throughout. Built in modern designs with the care and skill of the old master cabinet makers—possessing an individuality and charm befitting the home of quality. We ship to you at actual factory price of lumber and mill work. All you need is a screw driver and a few moments of spare time. Eight different shades of finish from which to select. Every piece sold on a full year's guarantee. If you are not satisfied, your money will be immediately returned, including freight.

New 1914 Catalog FREE Shows over 400 other beautiful examples of Come-Packt craftsmanship in living, dining, bedroom and den furniture—in sections—at a saving in some instances of even 60%. Color plates showing exquisite finish and upholstery. Sent free—postpaid. Write for it today. A postal will bring it.

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Our booklet is a handbook on casements.

CASEMENT HARDWARE CO.

516 - 9 S. Clinton St., CHICAGO

TABLE CHAT—Continued

Italian faience, whose forms are suggested by shells, with a decoration of beautifully modeled flowers in brilliant or delicate colors. Fruit offers an agreeable and obtainable variation for a table decoration for the winter months, especially when arranged in one of the many lovely imported wicker baskets now in vogue. Some of these, delicately tinted, are a decoration in themselves. The illustration shows such a centerpiece with golden pears, green grapes and blush apples arranged in a graceful basket of Japanese wicker of green and amber.

Early Spring Salads.

Some sort of a green salad ought to form a part of the dinner menu all through the spring. Not only are these salads healthful but they are an economical way of using the new vegetables, a small quantity of which can be combined with lettuce, always cheap at this season. Two or three stalks of cooked asparagus, run through a ring cut from a green pepper and laid on lettuce is enough for a single portion. The small Southern tomatoes or early string beans make a delightful salad and either can be supplemented with thin slices of cucumber.

For a very decorative salad remove the seeds from a green pepper, stuff it with cream cheese and let it get very cold. Cut across it with a very sharp knife and arrange two or three slices on lettuce leaves, garnishing them with tiny radishes. Use French dressing with all these salads.

The Making of Sauces.

It was the gibe of a French diplomat that the English had a hundred vegetables and only one sauce. That sauce was drawn butter and probably pasty. It is quite possible that the average American household is not far ahead in the matter of sauces.

You do not need a sauce for the best cut of the ribs or for the second joint of a young turkey, but not all our food is of this sort, and a knowledge of the sauce making art is a great help in rendering the commoner sorts of food more palatable and in using up the odds and ends from the meals for which large cuts have been served. And while the initial

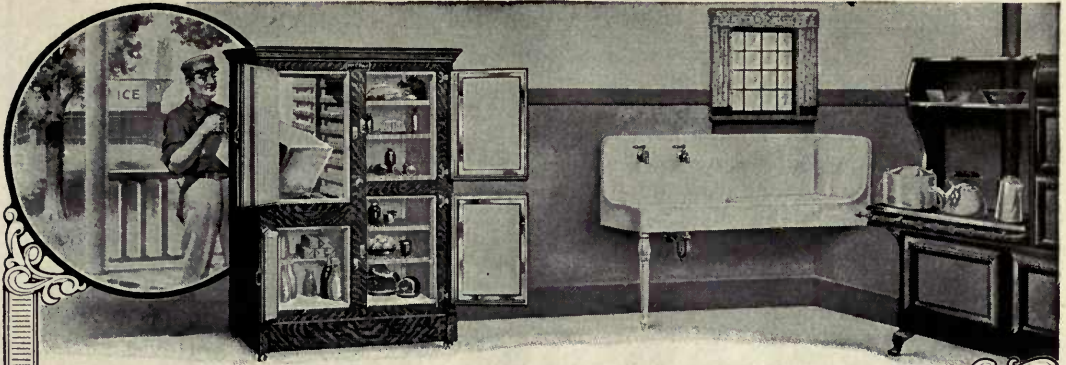
process and the materials for the foundation of most sauces are the same, the variations of flavoring are almost infinite.

A clean agate saucepan, holding about a pint, a tablespoonful of flour and a tablespoonful of butter are the fundamentals. Let the butter melt and bubble but not color, put in the flour and cook for a minute or so, stirring all the time. Add by degrees, still stirring, a cupful of liquid, milk, water or stock, hot but not boiling. Do not stop stirring until it has thickened. Add pepper and salt and a second tablespoonful of butter and the sauce is complete. If you let it boil after it has thickened, it will get thin, and if it is to be kept hot for a time must be set in a dish of hot water, or far back on a coal range. All tablespoonfuls are not of the same size but the finished sauce should be about as thick as heavy cream.

This sauce, made with water, is our old friend drawn butter, useful for vegetables if milk happens to be short, and the basis of most fish sauces. Made with milk or cream it is cream sauce, with part milk or cream and part chicken or veal stock it is white sauce, and with any sort of brown stock it is brown sauce. A properly made brown gravy is an example of a brown sauce, in which the dripping from the meat takes the place of butter, while cream toast is nothing in the world but toasted bread in a cream sauce.

The fat used need not always be butter. In making a gravy of any sort one naturally uses the drippings from the meat or poultry as the medium in which to cook the flour, and the oil of a can of salmon can be used just like butter. Many of the highly flavored sauces used in the south of Europe are made with olive oil. When these other forms of fat are used it is not necessary to keep the exact proportion of fat and flour, but the fat must always equal or exceed the flour. It is possible to incorporate a good deal of additional fat in this way, always a gain as comparatively few people will eat it in its natural state.

Half the battle with a sauce is color and flavor. The various white sauces need only salt and pepper, but brown sauces are flavored with onions and sweet herbs. These to give the best results should be finely chopped and browned in



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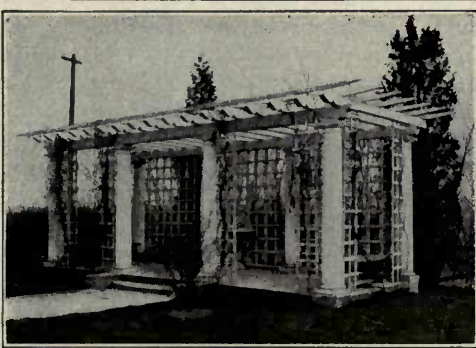
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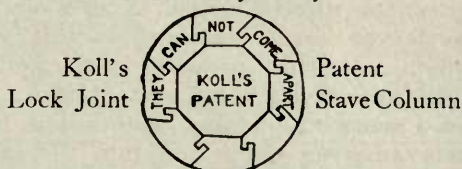


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TABLE CHAT—Continued

butter before being added to the sauce. A short cut is the use of kitchen bouquet, a teaspoonful of which flavors a sauce very delightfully and colors it as well. Curry powder is good in a brown sauce and either tomato ketchup or the Italian tomato paste can be used, while Worcestershire is an unfailing resource.

Drawn butter may be made with oyster liquor and have a few oysters which have been cut small, cooked in it for a minute or two. This is for a boiled white fish, like cod. Halibut asks for a plain drawn butter with chopped egg, a little parsley and a dash of lemon juice. The lobster sauce sometimes served with salmon is merely a drawn butter mixed with lobster rubbed to a paste.

A white sauce can be modified with boiled onions cooked to a pulp and rubbed through a sieve, when it becomes sauce Soubise and is served with lamb cutlets, or with a liberal allowance of sharp grated cheese and is then useful for various vegetables, especially for cauliflower and celery.

Sauces Made with Eggs.

There are a few sauces of another sort, whose method of making is entirely different, and these have no flour but are thickened with eggs. Some are uncooked, like mayonnaise, others, as Hollandaise, require indirect heat, that supplied by a double boiler. It is not necessary here to describe the making of mayonnaise which everyone understands, theoretically at least, but Hollandaise is generally considered difficult. It is really only a matter of care. Cream a heaping tablespoonful of butter and add to it, one at a time, the unbeaten yolks of three eggs. Put the mixture in the upper part of a double boiler and add very gradually half a pint of hot water. Stir it all the time until it thickens, add the juice of half a lemon, a little salt and a dash of cayenne. All danger of its curdling is obviated by mixing with the creamed butter a dessert spoonful of flour, which is not to be detected in the finished product. For a very rich sauce add a second tablespoonful of butter at the last.

A Newburg sauce is a variant of Hollandaise. Thick cream is used instead of water and the fish for which the sauce is intended is simmered in sherry before the sauce is added. Or the wine can be added to the hot sauce a little at a time, beating it all the time with a Dover egg beater and keeping it closely covered until serving time, as the flavor of the wine is very volatile. While a Newburg sauce is generally used with some sort of shell fish it is also applicable to any sort of flaked boiled fish, or even to canned salmon. It is extremely rich and should not be served with equally substantial accompaniments.

Canned Soups for Sauces.

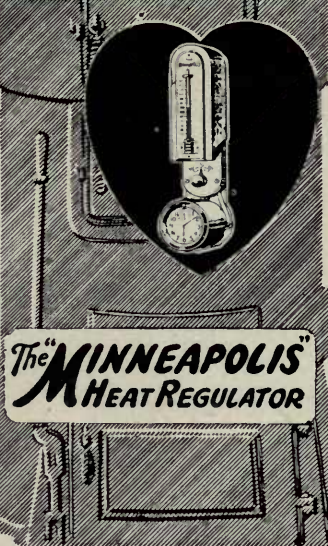
In the various sorts of canned soups, well seasoned sauces are ready to hand with very little trouble. Take half the can of soup, add enough water to make half a pint and use it for the liquid of the sauce, adding the necessary salt, as these soups are apt to be rather fresh. Oxtail, Mulligatawny, consomme and chicken are the soups available for this purpose. While you can make a very much better tomato sauce in other ways, tomato soup will supply an acceptable substitute in an emergency, especially if it is helped out with a dash of Worcestershire. One thing must be noted, that in using these soups the second tablespoonful of butter is essential.

Serving Water Ice with Fruit.

A new way is given here of the serving of water ice in sherbet glasses. Half a banana is put at each side of the sherbet dish, the ice in the center, and the whole is garnished with white grapes and walnut meats. Rather a large sherbet glass is needed.

With the great variety of cold desserts, frozen or merely chilled, it is a simple matter to have something of this sort which is specially palatable, if the family does not prefer some sort of fruit. A good many hot puddings will cook in less than an hour and if put into the oven when the preparations for dinner begin will be cooking while the other courses are being eaten.

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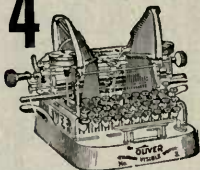
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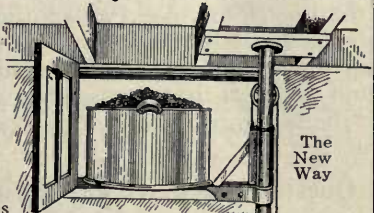
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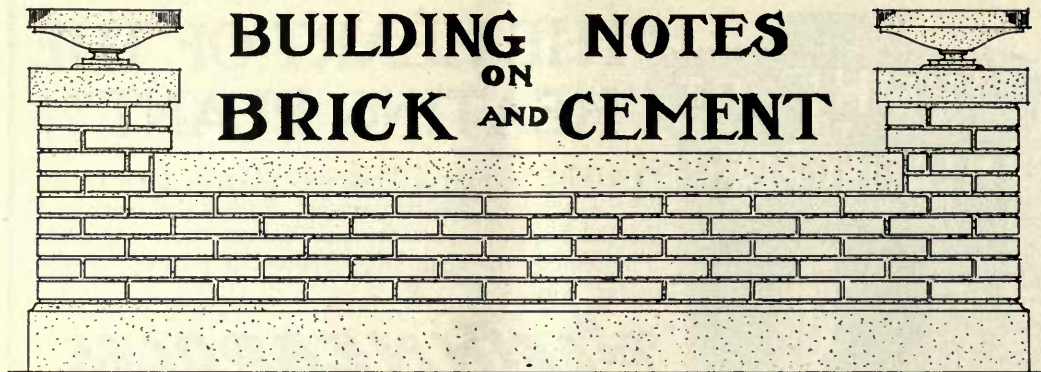
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The Old Way

BUILDING NOTES ON BRICK AND CEMENT



Concrete Houses.

LIMITATIONS imposed by cost, which in most cases prohibit the attainment of even ordinary architectural attractiveness, have restricted the use of concrete in houses of average size. For fireproof dwellings on a more pretentious scale reinforced concrete is gradually taking a prominent place. At the other extreme, for workingmen's houses, it has been found possible to cast groups of small houses, all alike and very plain, that are satisfactory from the standpoint of use and are low in cost and in upkeep. These have been built recently in various localities—one group in Nanticoke, Pa., another in Oklahoma, while similar development is taking place in France and Ireland. In Ireland 39,000 of these houses have been built in the last three years.—*Engineering Journal*.

Question Answered On Construction.

Ques.—There are two questions that I would like to ask. What is the difference between stucco and cement? and do either give trouble with absorbing the moisture?

Ans.—The terms cement and stucco when used with reference to an exterior coating on a residence wall, are rather synonymous; some people refer to such a wall as a "cement" wall, others as a "stucco" wall, and the two terms mean the same thing to the majority of people when applied in this way. Stucco, however, is not necessarily or technically, cement, for we may have a stucco wall which is an asbestos, fibrous composition or a hard plaster composition, either one of which is not cement but a little cement

is in both, and yet a wall made of these materials would be termed a "stucco" wall just the same if it was Portland cement mixed with sand. So I would say that "stucco" is a cement plaster in the usual sense of the word. It is produced by mixing sand and cement. Sometimes hydrated lime is used in mixing the first coat as it works easier over the lath, but understand that stucco doesn't necessarily need to be cement; as, for instance, a plastered wall or an asbestos composition may be termed stucco.

I think I have indicated what the difference is between stucco and cement in the customary use of the terms. The technical description of cement, artificial cement or true Portland cement, shows that it is made by mixing together in suitable proportions, clay and finely pulverized carbonated lime; this may be either chalk, marl or compact limestone. The mixture is burned in kilns at a high heat and then is ground into a powder.

Concrete Electroliers Form Part of Architect's Design.

A new concrete office building in Los Angeles has secured a very pleasing effect in its design by combining electroliers as a part of the architectural plan. These are of concrete and rise from the cornice of the building to about 10 ft. in height. They terminate in five lights which form a cross.

These electroliers, which extend around the building, give a dignified touch to it in the day time as well as at night, when the lights are turned on.

—*Concrete and Cement Age*



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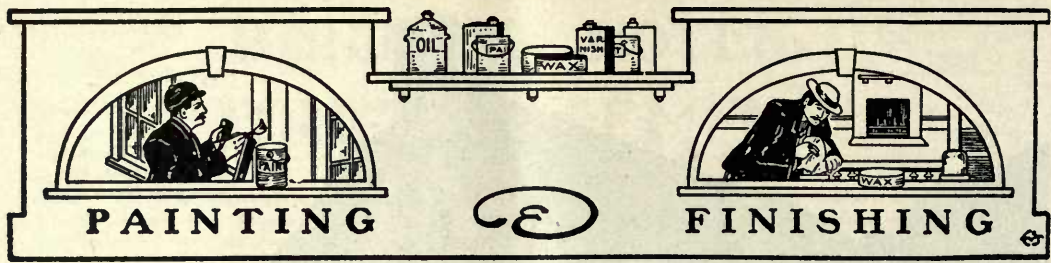
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Detecting Lime Spots in New Walls.

LIME spots in the walls of a new building occasion much loss of profit and the loss of many customers if such spots are not effectively killed before the paper is applied, for the decorator must often make good by doing the work over again, which takes the profit, while the annoyance and delay make an unfavorable impression on the customer, often discouraging him from giving work to the same decorator again.

The R. J. Sisk Manufacturing Company, makers of Sisk's paperhangers' size, feature the fact that spots of free lime can be located by applying this sizing, for wherever they may be such spots will show up and can then be treated with shellac or flat white preparatory to papering. It is stated that this sizing is superior to the home-made glue size and that it will make wallpaper, burlap or lincrusta stick over old painted, calcimined, or varnished walls without preparatory washing or scraping of the walls.

This sizing has been largely used throughout the country for the past twenty years. It is stated that it will keep for years without spoiling and is a concentrated material—one gallon of which makes four gallons when reduced for use—and that the sizing for any ordinary room can be had for eight cents.

Red Lead in Paste Form.

Pure red lead ground in pure linseed oil to a paste of the same consistency as white lead in oil is the latest addition to the painter's conveniences.

Old style red lead is not sufficiently high in true red lead (Pb_3O_4) to permit of its being put out in this form without danger of hardening, but red lead-in-oil will keep indefinitely, and will harden no more than white lead under like conditions.

For use on structural steel, or as a first coat for railings, cornices or ornamental iron work, red lead is without a rival, and tests have shown that it is also superior to all other paint pigments as a primer on wood or brick.

It is especially valuable for priming resinous or pitchy woods, such as yellow pine and cypress, for it seems to prevent the resin from striking through better than other materials.

Experience has shown that red lead affords a foundation which binds itself so tightly to the surface to which it is applied, and affords so firm and elastic a base for the succeeding coats, as to add to the wearing qualities of the paint.

The inconvenience of mixing dry lead entirely by hand as required has heretofore restricted the use of red lead, except on iron and steel, even among painters who appreciated its value as a primer on wood and other materials. Our paste red lead, however, can be broken up as easily as white lead and with no more danger of loss from hardening. It can, therefore, be conveniently used by painters wherever its merits as a pigment make its use desirable.

By reason of its freedom from litharge, red lead-in-oil will not dry more rapidly than white lead, and requires the use of about the same driers as would be used with the latter under similar conditions.

Red lead-in-oil opens up new possibilities to the up-to-the-minute painter.

Paint Problems.

From the Dutch Boy Painter.

Kindly advise me what to do in the following case: I painted a house with three coats of lead and oil paint. About a year ago another party painted the piazza railing, the siding of the house under the piazza and the piazza ceiling with red paint. The house is a clear



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PAINTING AND FINISHING—Continued

white with the exception of the parts described, which are a salmon pink. I applied one coat of gray and four coats of white on the siding under the piazza, but the red seems to strike through.

Ans.—Evidently the red paint used on the parts you describe is what is known as para red. There are two ways of overcoming the difficulty you state. Either clean off all the old paint, or give the surface a coat of varnish and re-paint over that. A thin varnish sizing is recommended. Whenever a painter has to paint white, light drab or cream on a house which was previously painted red, he should always paint a small section first to see whether the red will strike through.

Scraping Old Varnished Floors.

By E. W. Anderson, *Floor Smoothing Specialist.*

Have you ever tried to scrape an old varnished floor by hand? Many a man has tried it once, and said, "never again!" If you are one of these I cannot blame you, for I have also had experience and know what it means.

I have been in the floor-scraping business nearly all my life, but only until the last few years have I willingly accepted the task of scraping old varnished floors. Even the work of scraping new floors by hand is

hard and wearisome toil, but when it comes to scraping old floors, it is punishment indeed.

Owing to the growing demand for resurfaced floors and the difficulty of doing this work in the old way, many readers will be glad to learn that the old "bug-bear" of scraping old varnished floors has at last been killed off—the work can now be done rapidly, and with comparative ease by machinery.

Ten years ago, hardwood floors were considered a luxury, enjoyed only by the well-to-do, but their popularity has steadily grown until now, even the "common folks" would not think of having anything but hardwood floors in their homes.

Today, the cost of hardwood floors is but very little more than that of common floors, but the additional service and satisfaction found in them is many-fold.

A great deal depends, however, on the way a hardwood floor is surfaced; to be enjoyed it must be smooth and even. It is a comparatively simple matter to surface a new floor so as to leave it free of edges, etc.; but the trouble is that most new hardwood floors do not stay smooth.

Even the most carefully laid and surfaced floor will warp and turn up edges during the first year, owing to the varying conditions of heat and cold, and it is only by resurfacing the floor after it has laid long enough to become thoroughly settled, that a permanent smooth surface can be obtained.

Country Life Exposition.

There is now being developed in the new Grand Central Terminal above the main waiting room and fronting on 42nd street a Country Life Permanent Exposition, the plan of which is to make this a point for all information in connection with country life. Among the features will be evolution of the country house; the department of house equipment and accessories, a model kitchen, a sportsman's booth; also a department of house wares. We understand that a number of booths have already been laid out to represent the various municipalities of Westchester County. A bureau of information will be installed in which it will be possible for information to be procured on any subject touching on the country.



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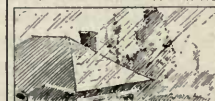
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Heating, Lighting and Plumbing

A Few Cures for Defective Chimney Flues

Examples of Some Trouble-Making Chimneys and Chimney Tops with a Description of a Remedy and a Successful Top

By C. T. Soden, in the Metal Worker

(EDITOR'S NOTE.—The following excellent article is of such vital interest to home-builders that we reproduce it almost entirely.)



ONE of the principal sources of trouble in connection with chimneys often occurs out of the differences of opinions as to how a perfect flue should be constructed. There are architects who will cramp a flue in order that the outline may not show on the inside walls, to break his idea of the wall line, or he will place offsets in it in order that a window may show at a certain place on the perspective, or that the top of a chimney may show at a certain place on the roof line. This may seem to be a strong indictment, but it is no fancy picture. I have seen flues built as crooked as a dog's hind leg and for no other reason than those quoted above.

Another factor for misfortune is found in the bricklayer, and it is an exasperating fact that no two of them agree as to the correct lines in a flue and none of these gentlemen will be found open to conviction on these points. Each is correct, and that is the end of it.

In general practice there are three methods of lining flues, as follows: Plaster, terra cotta and struck joints. The first two are the source of all flue trouble, when trouble exists only in construction and not with outside influences such as high buildings, trees in close proximity to the flue, etc.

A plastered flue may be all right for a time, but eventually the elements cause

the flue to take cold air from the outside, sometimes throughout its entire height. I will go farther; I doubt very much if a plastered flue ten years old can be found that does not leak more or less on its outside surface. I have repeatedly had to use ladders and scaffolding in order to stop these leaks. This style of lining should be condemned by all authorities, not only for its defects, but also for the fact that in it is found the chief origin of many destructive fires.

Then there is the terra cotta flue lining. My dear reader, have you ever stood on the scaffold and seen the average bricklayer place this kind of flue lining? I have. I have seen the most sloppy, slipshod work imaginable done in this line. I have seen the tile placed without mortar between its joints, have seen joints of tiling placed with large pieces broken out, have seen where there was a continuous air space between the lining and the brick almost the entire height of the chimney. I have seen so-called terra cotta flue lined chimneys leak at first use as badly as an old plastered flue, for the reason that there was no effort made to plaster brick joints inside. This condition, together with the defective lining, opens up the flue to all outside influences.

There is no doubt whatever that if this style of lining were placed honestly it would make a good and safe flue, but it is so susceptible to dishonest work that

Home Builders Should Read This

Keith's Magazine says, "You build a home but once—DO IT RIGHT!" That's a strong statement, but a true one. "The heart of the home" is the heating system. Make a mistake here and the result is *expensive discomfort* always. And so we say, "Go slow" on the heating problem. Over 25,000 home builders have chosen the *one* right way of heating—the *one* economical, clean, even and satisfactory way—the Underfeed way.

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Thousands of Underfeed users have written us such statements as, "Coal bill \$16.22 for 7 rooms;" "\$5.40 to heat 4 rooms;" "Reduced coal bills from \$109 to \$53;" "Underfeed reduces coal bill 60%;" "A great fuel saver;" "Have cut coal bills \$70 each winter for 9 years;" "Saved \$122 a season;" "Even temperature with no smoke or dirt." This is strong evidence—this you will admit. Now we'll clinch the verdict by sending you the names and addresses of over 2,000 Underfeed users—some right in your vicinity—who *know* by experience that clean, even, *economical* heat is obtainable *only* with the Underfeed.

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With the Underfeed, coal is fed from below. All the fire is on top. Smoke and gases are burned up, making more heat and securing perfect combustion. You can use cheapest slack soft coal or pea and buckwheat sizes of hard coal and secure same heat as highest priced coal with *no* smoke, soot, smell, dirt and clinkers, and very few ashes. The Underfeed soon pays for itself. Adds to renting and selling value of any building. Adapted to warm air, steam and hot water.

The U. S. Govt. and some of the country's leading architects and builders *specify* Underfeed heating. Now do you see why we say, "Go slow" with your heating problem?

50 Per Cent Saving in Coal Bills Guaranteed

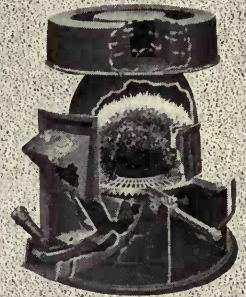
25 years' experience and thousands of users have enabled us to back up the Underfeed with the strongest guarantee ever put behind *any* heating system. Here it is. We absolutely guarantee a saving of at least 50 per cent in your present coal bills

with an Underfeed when properly installed and operated. This guarantee is backed by us—a \$750,000, 25-year-old corporation. So you take no chances. If the Underfeed doesn't make good, *we will*. Let us tell you more about our guarantee.

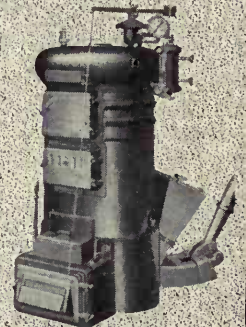
May We Send You the Facts?

We have a mass of convincing Underfeed evidence—facts startling and true. They point the way to cheaper heat and better heat. The U. S. Govt. and 25,000 others said "Show us." And we did! You say "Show me." And we'll do it. If you are going to build or want to cut down your present high cost of heating, send the coupon. Underfeeds have turned hundreds of "Barns" into homes and saved millions of dollars for coal buyers. Shall we send the evidence? The coupon is right handy. Fill it out *now*.

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it is often worse than the plastered flue and is just as prolific of fires.

One other grave fault exists in the use of terra cotta lining; it is the dishonest method of rating it. For example, a 9x13 inch terra cotta lined flue is specified. Does it measure up to specifications? Never. All of this lining is rated by the manufacturer at outside measurements. For example, a 9x13 inch lining measures only $7\frac{1}{2} \times 11\frac{1}{2}$ inches.

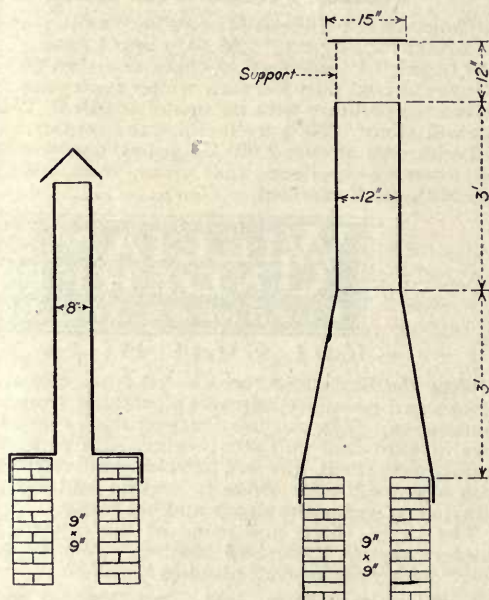
The specification calls for an area of 95 square inches, but in the $7\frac{1}{2} \times 11\frac{1}{2}$ inch lining there is only 70.88 square inches available; a difference of 24 square inches; a loss of flue power of 25 per cent. Again we see specified that all flues at floor intersections must be lined with terra cotta. Comment on this specification is wasted time, for the dullest intellect can readily understand that a flue to be a success must have a smooth, continuous lining its full length. The danger from fire is, by this style of work, augmented instead of being diminished.

This brings us to the "struck" joint flue lining. Here we have a flue that will be doing good work after all other styles have gone into ruin. If this flue is built with cement mortar there is absolutely no danger from fire and you may be assured it will not need repair in an ordinary lifetime.

Now we come to a condition that often puzzles the oldest of the craft. A flue may be perfect in every detail and yet its usefulness may be curtailed by outside influences such as tall buildings, trees, etc., which cause down currents in a flue to such extent as to shut off the draft. A number of devices have been used to correct this trouble; some a success but costly to place, such as cowls placed on pivots, spider shaped contrivances which in a manner allow air currents to pass through them on a horizontal line and out on the windward side. In some cases these do correct, but not always. Another feature is their capacity for soot.

Often in his effort to correct trouble in a chimney the operator resorts to the device as shown in Fig. 1 of the accompanying illustrations. Here he aggravates the trouble, rather than decreases it. He makes a flat cap with an eight-inch collar in the center and a drop flange to fit over

the capping of the brick chimney. To this he attaches a seven or eight-inch pipe often fifteen to twenty feet high. Sometimes this latter condition prevails where the pipe is run up the outside wall of an adjoining building. On the top of this pipe he places a cone secured to the top of the pipe by standards three or four inches in height. By this arrangement he reduces the outlet at least 50 per cent of the capacity of the pipe. The upward current in the brick flue is barred at the



(Fig. 1.)
Faulty Top.

(Fig. 2.)
Successful Top.

entrance to this pipe and again at its exit at the top of the pipe.

It is inconceivable why modern mechanics still cling to this impossible freak of the past ages. The area of a 9x9-inch flue is eighty-one square inches, while the area of an eight-inch pipe is fifty square inches, a loss of flue area of $37\frac{1}{2}$ per cent. It also illustrates the manner of obstruction at the top of pipes under a cone cap in which there is no allowance for expansion or layers of free carbon that will form on the inside of this pipe in a week's use. In so short time an eight-inch pipe will not measure up to seven inches in diameter and continued use will close it off entirely.

The height of the standards usually

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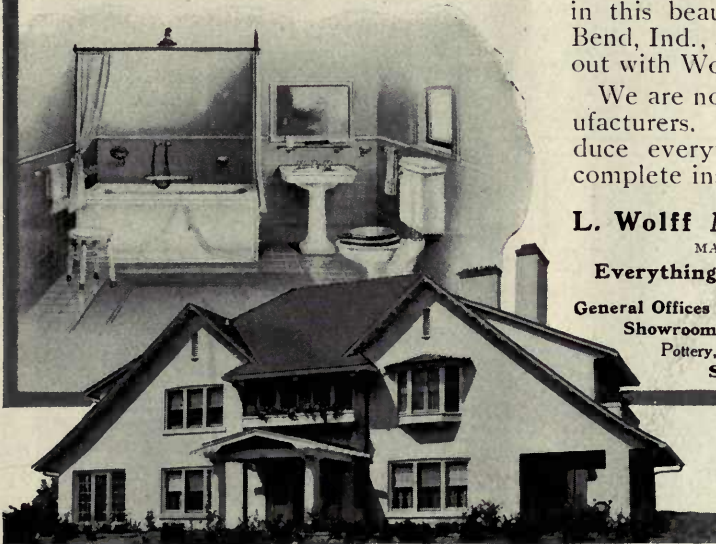
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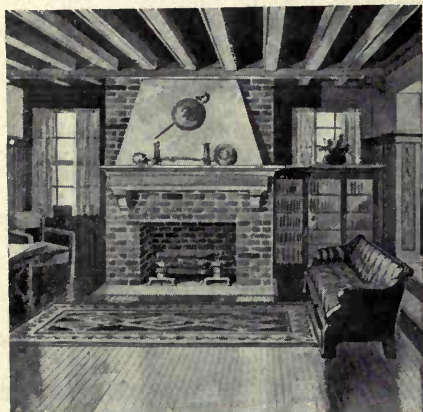
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used to fasten the cone to the top of the pipe on this style is three to four inches. When it is understood that the windward side of the opening provides all of the available outlet, when the wind blows through on the horizontal line, it is easy to see that this outlet in many cases is reduced 50 per cent, and over. The standards should have a height equal to the diameter of the pipe.



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A Method of Constructing Chimney Tops

A method of constructing chimney tops that I have used many years with never a failure, either by down current or filling by soot, is presented in Fig. 2 of the illustrations. A study of this construction speaks for itself. The lead lines at the entrance to this pipe at the top of the brick flue are perfect. The flat cover on the top of this pipe is placed on standards equal to the diameter of the pipe. The diameter of the cap is two to four inches wider than the diameter of the pipe, and more is better. There is not a single point of obstruction in its whole makeup. It matters not from which point of the compass the wind blows there is always a full escape.

These lines conform to all laws that govern the flow of heated currents of gases, etc. No air current short of a cyclone, or hurricane, can enter at the top. Have you considered the velocity of a rising current in a good unobstructed flue? No! Well then here is an opportunity to make an interesting experiment. Find the velocity of an up current per second in a perfect flue under a temperature of 150 degrees. From this result find the number of feet per hour and reduce to miles.



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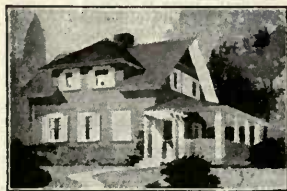
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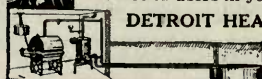
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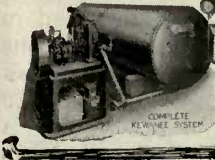


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SPLINTERS AND SHAVINGS

The Uses of Birch.



BIRCH is so popular for interior finish that our readers will doubtless appreciate an authentic statement of the properties and uses of this versatile wood. Fortunately, we are able to give them this information based upon a recent bulletin of the United States Forest Service.

Omitting those portions of the bulletin, which are of a more general nature, the excerpts which follow are of interest to homebuilders and home-makers.

Flooring and Finish.

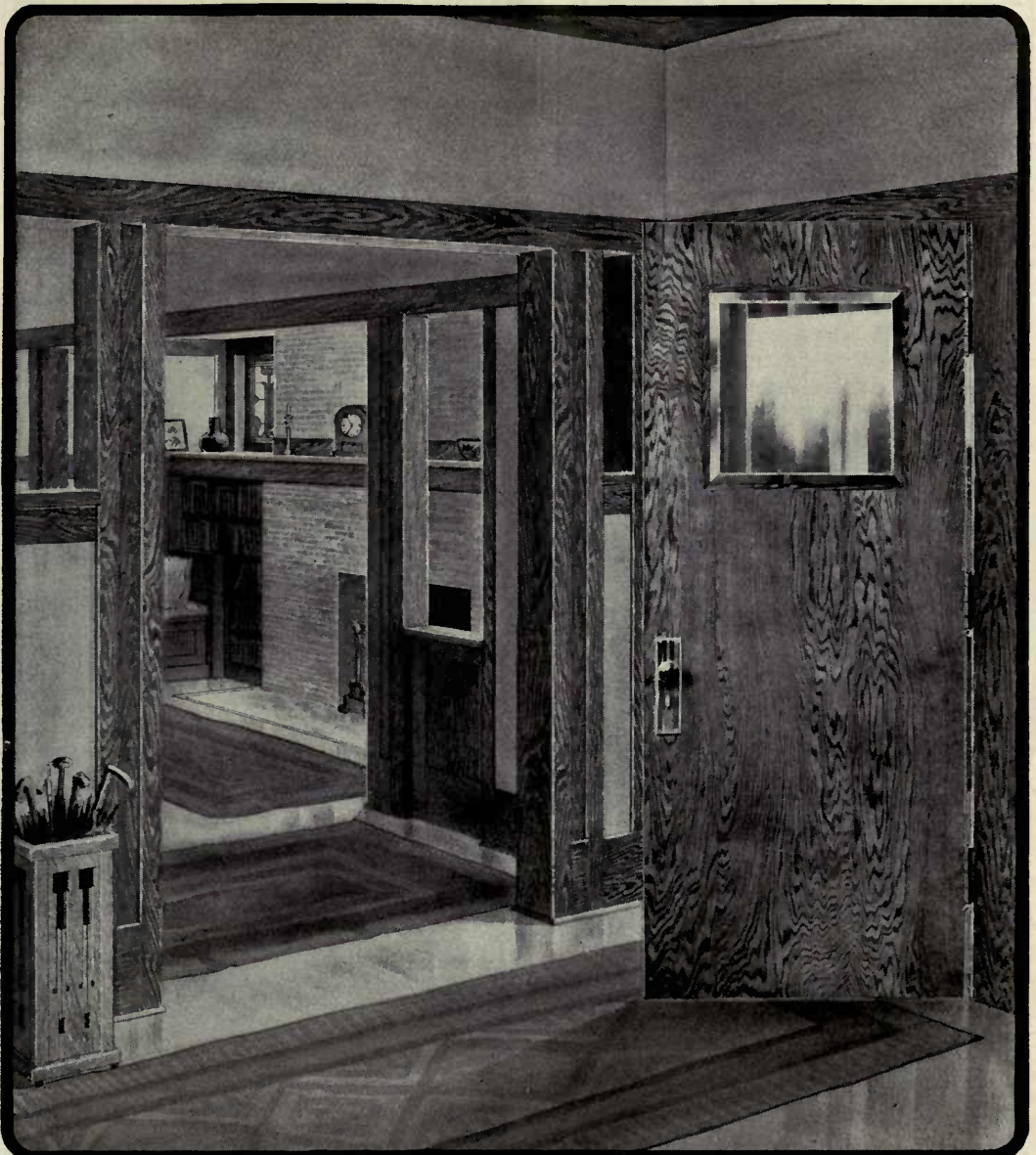
Sweet birch is a satisfactory wood for flooring, whether the purpose is ornament or long service or both. The wood is handsome, it stands well when thoroughly seasoned, and it lasts a long time. Large quantities of this flooring are made in the Lake States and it finds service in houses of the better class in practically all of the Eastern and some of the Western states. A smaller amount is manufactured into parquet floors and into wood carpet. The dark heartwood is much valued for the last-named commodities, because it forms pleasing contrasts with woods of lighter color.

Ornamental columns of sweet birch find place indoors. Newel posts of the same wood and the associated rails, spindles, and steps of stairways belong in the same class, along with brackets, capitals, chairboards, moldings, grills and mantels. Window frames, door frames, and blinds of birch are exquisite finish when a dark, rich effect is desired. Birch doors are a special article—that is, particular pains are taken to finish them in the most attractive style, after selecting choice material. Curly birch is often seen to best advantage in this class of work. The wavy grains and figures are matched in the panels, stiles, rails, and mullions. The curly wood is frequently cut into veneer for the double purpose of making it go farther and securing better seasoning. It is not uncommon to equip birch doors

with knobs of the same wood. Many birch knobs, however, are used elsewhere than on doors; furniture makers find many places for them. Ceiling is little less important than flooring in the quality of birch used. A considerable amount of the birch ceiling listed is intended for porches. The wood shows to good advantage in wainscoting, where the dark wood of the heart is sometimes alternated with a white wood such as maple. Floors and ceilings are often made in the same way.

Furniture.

Among the earliest recorded attempts to make high grade furniture of sweet birch were those successfully carried out at Boston. Hand-carved arms for chairs were turned out in attractive designs. The early hand processes expanded and developed into manufacturing as the term is now understood. Sweet birch, being a wood of high grade, has been prominent in furniture manufacture from the first successful attempts. It is physically equal to nearly any wood; it is heavy, dense, of good milling qualities, lends itself to stains and fillers, and holds finish well. There is probably no important line of furniture produced in this country which does not make use of some birch. The earliest furniture of this wood seems to have been chairs, and at this day chairs are of sufficient importance to claim first place. The range rises from the cheap camp chair or stool to the finest rocker. The entire article is not necessarily birch; in fact, it seldom is. This wood may supply only the back, the seat, the arms, the rockers, or some of the slats, rounds, or spindles. Birch does not nail readily, because of its tendency to split, and much of it is either dovetailed or glued. If it is glued the best results are attained only when sapwood is glued to sapwood and heartwood to heartwood. Birch appears in many kinds of desks, not only as an imitation of cherry or mahogany but on its own merit.



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Forest Products Exposition Bulletin, January 27, 1914.

With the approach of the Forest Products Exposition, which is to be given at the Coliseum, Chicago, April 30th to May 9th, and the Grand Central Palace, New York, May 21st to May 30th, indications point to one of the most important, popular, attractive and result-producing industrial expositions that has ever been held in America. Reports and reservations of space from every section of the country and branch of the industry bear out the report of the management, that every phase and part of the American wood industry will be well represented and forming the great shop window of the industry, which is the fundamental purpose and ambition of the undertaking.

"With the general attractiveness and pronounced interest and educational importance represented in the Forest Products Exposition," said Manager George S. Wood, on returning to Chicago from attendance at a number of important conventions of various branches of the wood industry, "the attendance at Chicago and New York will be of great result-producing value. The ultimate consumer is naturally the contingent aimed at in such an undertaking, and it is a matter of conjecture how this same ultimate consumer can escape the effectiveness and lasting impression of such a profoundly interesting and instructive exhibit. Our efforts to produce something that will demonstrate not only the well-known, but entirely new, details and elements of the advantages, value and permanency of wood as a commodity, are resulting in an arrangement and visualization that will tell a new story to those in the industry, while creating a lasting and convincing impression on the general public. There is no doubt of the great misunderstanding and misconception of many of the most important points in the use and possibilities of wood, and while the attendance of representatives of all branches of the industry and those whom they reach directly or indirectly, is assured, logical arguments are forthcoming to bring the layman to an intimate study of this great industrial lesson. Many are co-operating

with the high purpose of advancing the industry largely in mind, while the self-interest of many others determines the advantages and exceptional opportunity to display their wares and transact business as they could by no other means."

Who is Responsible for High Rents?

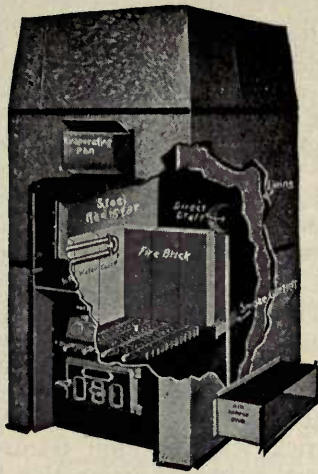
A Builder's Experience.

There is nothing in the living of the wage-earner that requires so much consideration as that of rent. He really has less influence over the cost of this than over that of any of his other necessities. And those of the builders' trades should know this.

"In our work there is no charge made between the workman and the tenant. We furnish capital as low as it can be had in any country in the world, and make no middleman's charge for our services, therefore with us the wage paid to the builders' trades goes direct to the tenant, a co-wage-earner. What we find discouraging is that neither the workman nor the tax assessor can understand this.

"Rents in England and Germany are forty to sixty cents per room per week, but there the builders' trades are paid less than one-third the wages paid in Cincinnati. In making a survey of our cheaper houses we find that the average wage of our negro tenants is \$11.05 per week and average rent \$1.88 per week. Of the whites, \$13.85 per week and rent \$2.37 per week. Now, is it fair to this man to have to pay the bricklayer 70 cents per hour for inefficient work? That is, in order to get an income of 5 per cent on the wages I pay the bricklayer, my tenement must pay 10 per cent.

"We are not now criticizing wages. Indeed, the economist encourages high wages for a high standard of work, nor does he object to short hours where efficiency is correspondingly increased, but we must admit that in our industries there are no wages comparatively so high as those of the builders' trades, and yet the co-wage-earner is the greatest sufferer. This power is carried to such an extent that when a material is found that can be handled by common labor, the builders' trades insist that he must be paid the price of the skilled workman, or



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The furnace burns any fuel, hard or soft coal, lignite, slack, coke, wood or gas. We do not offer our furnace through dealers, but sell **DIRECT FROM FACTORY TO CONSUMER.** We thus save considerably in the cost to the buyer, but what is even more important, we plan every equipment we sell, locating and indicating the size of every pipe and register. Then we **GUARANTEE** complete satisfaction, and we allow **free trial** for two winter months, before we are paid. The buyer risks nothing. **Send for our free 48-page book on furnace heating, and send us a sketch of your house and let us tell you how we would heat it, and what we would charge.** We can refer you, too, to someone near you who uses our heater. Don't miss it. It means money and comfort for you.

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he is not permitted to do the work. Unfortunately, our average legislator knows so little of economic laws that he upholds such action, not realizing that if we oppose the laws that come from above we do so at our peril.

"From my own experience I find that if we could get the builders' trades, even under present wages, to give us 100 per cent efficiency instead of approximately 60 per cent, as we are now getting, I am satisfied that we could get material and land at such prices as to enable us to rent a five-room apartment—that is, four rooms and a bath—for \$2 per week. This 50 cents per week that my tenant is paying his co-wage-earner on account of inefficiency, in many cases intentional, while it may appear as little, it will in twenty years pay for the home.

"Of the cost of our cheap buildings, about 40 per cent is in labor on the place. If we can get builders' trades to take an interest in the welfare of their co-wage-earners, we should here be able to make a saving of 15 per cent. The bricklaying and plastering together cost us 27 per cent. A considerable saving should be made on this by finding cheaper material, either in concrete or hollow blocks. In looking for such material we should have it so constructed as to save at least part of the plastering. The plumbing in one of our houses cost about 20 per cent of the whole. I doubt if such a statement as this will have any influence on our builders' trades, but I do want our tenants to know who is responsible for excessive rents."—*The Building Witness*.

Door and Window Frame Work.

Of late there have been some interesting points brought up and suggestions made in connection with window and door framework for machine woodworkers and of which carpenters and builders should also be taking note. Among them is the matter of adjustable door frames with adjustable jambs to facilitate fitting the doors and to enable the householder to adjust the doors without dressing off some of them afterward when the house settles a little or the door slightly sags. In connection with windows one of the live topics is that of devising frames and

sash which will enable the windows to be reversed for cleaning or to in some way eliminate the risky, burdensome job of getting outside to clean a window as it is hung in the regulation way. This is turning attention more than heretofore to casement and hinged windows and is arousing inventors and bringing out many new offerings in windows and window hangings that have a certain effect on the frames to contain them.

Another thing that is getting some attention, and needs it, too, relates to the trouble met with in putting window and door frames into brick walls or rather the building of brick walls around frames. The frames show a chronic disposition to buckle under the effect of being enclosed in brick walls and much of this trouble is attributed to moisture that is absorbed from the green walls. Part of it is due to that, but not all by any means, and the conclusion has been reached by some people that the main trouble comes from the settling of the walls in drying out so that they bring weight on the top of the frames, thus causing the sides to bow or tend to buckle. What will have to be devised to relieve this trouble is either a frame that will be adjustable to this settling of the walls or else a method of constructing walls and frames in conjunction so that room will be left for the settling without its doing injury to the window frame. This may not be a serious matter in some of the larger structures where strains are carefully looked after by architects, but in the building of ordinary homes and the more modest store buildings there is a much more general use today of brick and concrete for walls than formerly and it is in this work that the problem of framing in windows and doors so as to get an entirely satisfactory job is giving trouble. It is something to which carpenters and builders may well give a lot of attention and some spare time during the winter to experimenting with a view to devising either some means of constructing a frame or some method of uniting frames to walls in such a way that provision will be made for the settling of walls so that they may not put unnecessary strains on or disturb the frames in any way.—*The Building Age*.

FOR ROOF

FOR
SIDE
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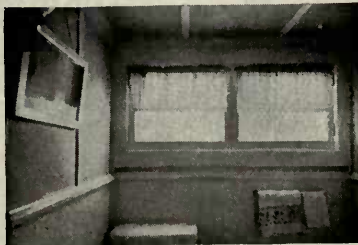
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THE Casement Hardware Co. have gotten out a new booklet, the *Casement Window Hand-book*, illustrating and describing their casement fixtures and also general improvements in these devices. The text matter of this hand-book is unusually interesting, as well known writers relate the progress that has been made in Americanizing the English casement with all its quaint, delightful charm, by means of these American devices which overcome all the old difficulties of the English casement. It is not too much to say that these fixtures for operating casements from the inside have produced a radical change in our domestic architecture. A price list accompanies the booklet.

* * *

The latest catalog and new edition of *How to Build*, issued by the Van Guilder Hollow Wall Co., is on our table and full of interest and instruction. Besides illuminating text it contains working drawings illustrating the machines with full directions for their use, together with tables of required materials for any given dimensions. The introduction of the *Partition Machine* adds greatly to the value of this method of construction.

* * *

In this connection we also mention the very attractive booklet of this Company, *Fireproof Construction to Compete With*

Wood, which is filled with illustrations of beautiful homes in different sections of the country in which this method of building has been used.

* * *

The Master Builders Co., Cleveland, O., have just issued in booklet form, Standard Specifications for mixing and applying their product—*Master Builder Method*—a method for making concrete floors wear-proof, waterproof and dustproof. This concrete hardener is a mineral substance to be used as a finish or "topping" for concrete floors, for which great efficiency is claimed.

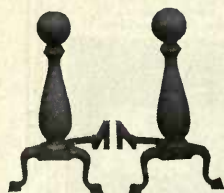
* * *

One would think the last word in stains and wood finishes had been reached, but the new Luxeberry Finishes, of Berry Bros., Detroit, Mich., show that the resources of the finish men are not exhausted. We have received wood samples from this firm, treated with their specialty—Lacklustre—a one-coat finish of all the principal color stains in use by builders. As a specimen of one-coat work the effects produced are certainly remarkable for color tone and satin smoothness of a dull finish. Specially attractive among the samples is the new shade called Filipino, which has the greyish tone much sought. The Luxeberry White Enamel is also a finish of high quality and artistic appearance.

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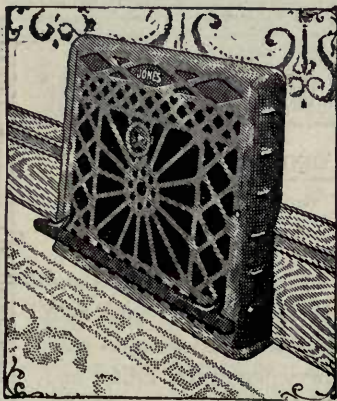
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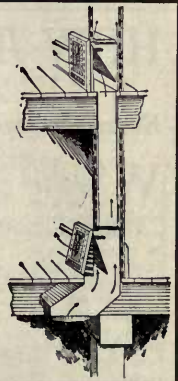
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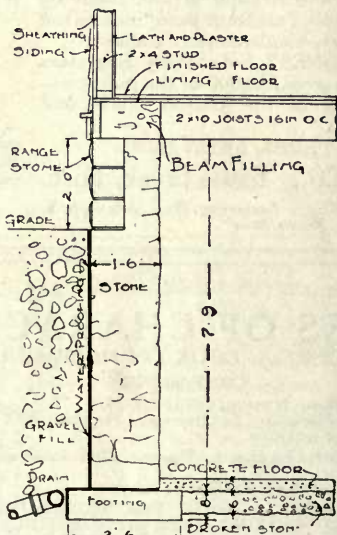
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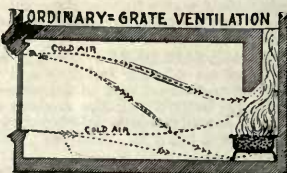
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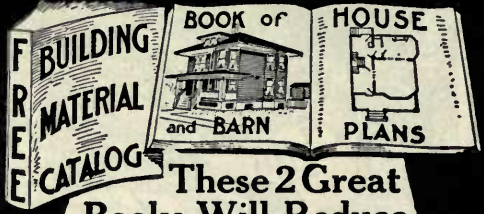
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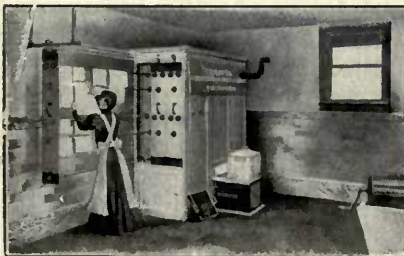
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The Beautiful Stained Glass Windows of the Music Room, Brought from the Owner's Old Home.—From "*A Woman's House.*"

KEITH'S MAGAZINE

VOL. XXXI

APRIL, 1914

No. 4

A Woman's House

By Louise Shrimpton



EARLY every woman has a house o'dreams — an ideal of the dwelling place that she would build if she could. For various reasons, however, it is not often that a woman is able to plan and to carry to successful completion the house that embodies her ideas of beauty and of comfort. Houses of individuality are rare, and especially rare is the house designed by a woman, in which every detail is worked out with reference to her needs and wishes.

A woman who has a practical acquaintance with building and decoration has recently built for herself and her family a house of considerable distinction and charm. It is in a suburb of one of our eastern cities on a tract of land lately opened to buyers. The lot is an ordinary city lot, but is wedge-shaped, narrowing to a point at the rear. A large hickory tree at one corner was its chief attraction.

The house is planned to give plenty of fresh air to its occupants. There are good-sized porches at the front and rear

and a small kitchen porch. On the second floor is an enclosed balcony for outdoor sleeping. Gables and dormer windows give the exterior a quaint and picturesque appearance, and the front doorway is an interesting bit of detail.

The foundation is of rough stone, plastered. The exterior walls and the roofs are covered with cedar shingles, stained a dark apple green. Gables, porches and



Detail of Front Entrance.

wood trim are painted grayish white. An outside chimney at the rear of the house is of light gray brick. Flower boxes at the dormer windows are stained green, and are filled with white and purple petunias. Long narrow beds of lilac bushes on each side of the front entrance will in time carry out the chosen color scheme of dark green, lavender and white. A privet hedge is started at the front and sides of the lot. At the rear is a tiny garage, green shingled and with white wood trim.

In planning the interior, the owner's tastes and needs, as well as those of her son, were taken into careful consideration. An amateur musician of talent, the owner is the friend and hostess of musicians of note. A music room was therefore a prime necessity for the practice of her art and for the entertainment of guests. The big room that is the result of much thoughtful planning is 31 ft. 6 in. long and 25 ft. wide. For the sake of good proportion as well as for the acoustic reasons the low ceiling, 8 ft. 6 in. high thought desirable for the other rooms on the ground floor was out of the question here, and this room was made 13 ft. 6 in. high. In its combined use as music and living room it is judged a success, and its acoustics are perfect. The front porch opening from the living room is fitted with removable window sash, so that it may be used as a sun parlor in winter. Entrance hall, dining room, butler's pantry and kitchen, with a man's room opening from the kitchen entrance, comprise the other rooms on the ground floor. As the maid's room has a separate staircase, and no communication with the rest of the house, the servants' quarters are practically isolated.

On the second floor is a good sized hall, with a group of three windows above the stairway. From the hall open a guest room and den. A flight of six steps leads to the rooms above the music room, com-

prising the owner's suite of sleeping room, dressing room and bath and her son's suite of sleeping room, bath with shower and sleeping balcony. There is an air space in the roof above these rooms, but no attic.

Several woods are used in the interior wood trim. In the music room chestnut stained a grayish green is employed for ceiling beams and other woodwork. The dining room woodwork, of whitewood, is a shimmering gray, obtained by an undertone of green, overlaid with gray stain. The chestnut woodwork of the small library is stained a warm brown. Whitewood painted a rich creamy white is used throughout the rest of the house. In the owner's suite the doors are of gumwood, stained walnut brown to harmonize with old walnut furniture. Other doors are of birch stained mahogany color, and all have glass knobs. The floors on the ground floor are of quarter sawed oak, and upstairs are of beech and maple.

A noteworthy feature of the house is the group of three large stained glass windows at one end of the music room. This group, executed some years ago, was brought by the owner from her old family mansion, recently torn down to make room for a modern building. Placed in a niche specially built for it, with a grand piano beneath it, is the focusing point of the whole room. Its color scheme is one of blues and greens with glowing notes of red, and the design represents the four seasons, typified by stately maidens. Other windows, placed in groups of three, make the house light and cheerful, and are not swathed in draperies, but have white window shades and curtains of white china silk or of other light material.

In the many ingenious cupboards with which the house is supplied it is evident that a woman has had her own way and has directed her carpenters to good pur-

pose. Two corner cupboards in the dining room are modeled after a colonial pattern, and are furnished with big panes of glass that permit one to see the French and Italian porcelain inside. The butler's pantry has a corner cupboard of plainer type, and in the kitchen, hallway and storeroom are as many shelves and cupboards as the most strenuous house-

be a boon in a woman's closet. In these cupboards everything is easily classified and kept in order. They are readily opened to the light of day, and every corner is accessible. They are much preferred by the owner of the house to the ordinary country house closet. In the owner's sleeping room the space beneath the group of three windows, which is



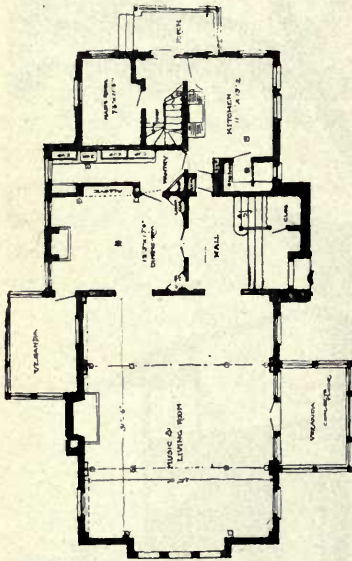
A Woman's House, and the Big Hickory Tree.

keeper could desire. On the second floor reference to the floor plans show the wardrobes in the owner's apartment and in her son's room which are cleverly arranged, with small compartments near the floor to hold boots and shoes, high cupboards for hats, and closets in the center of the wall spaces fitted with poles and hangers for suits. Especially convenient are the sliding trays of unfinished wood designed to hold shirts. A similar arrangement to hold shirt-waists would

be formed by the projection built for the stained glass windows in the music room, is utilized for three delightful little cupboards, used to hold magazines. Beside the fireplace in this room is a seat with cupboard space beneath. The large closets in this room, filling space under the eaves, are used as storerooms.

Partly through sentiment, partly because of an appreciation of their artistic possibilities, mantels and fireplaces from her old home were transferred by their

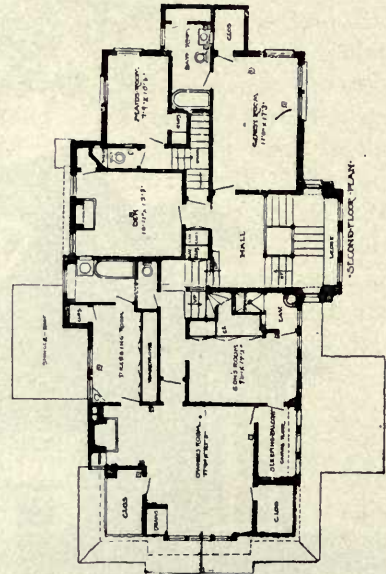
owner to the green-shingled house. Carefully studied as to their setting, they give a surprisingly distinctive quality to their new surroundings. The music room fireplace, from a drawing room decorated in the fifties, is of gray marble. It is simple in line, and harmonizes in dignified and unobtrusive fashion with the stately character of the room, and its gray green color scheme. The wooden mantel piece in the dining room was re-finished to harmonize with the gray



tones of the rest of the woodwork. The small fireplace in the den has a simple mantel piece stained brown. In the owner's sleeping room is a charming example of what can be done in the combination of old and new, the white marble mantel piece blending delightfully in tone with the creamy white woodwork. In every case the problem has been successfully solved, and the owner rejoices in the chance to weave new associations around old hearthstones.

Three or four years ago it was impossible to procure at the shops electric or gas fixtures of good design unless they were made to order. During the last year or so there has been a marked im-

provement in the style of fixtures, and though twisted and tortured atrocities are still to be found in shops as well as in many new houses, it is now possible to buy fixtures good in design and moderate in cost at any well equipped shop. The green-shingled house is fitted with inexpensive fixtures that are a delight to the eye. In the living room there is no large center light, but electric bulbs furnished with bell shaped globes of opalescent glass in tones of wine color, are connected



through brass chains, and are hung in groups of four from brass plates on the ceiling beams. Side fixtures of brass with glass shades supplement the hanging one.

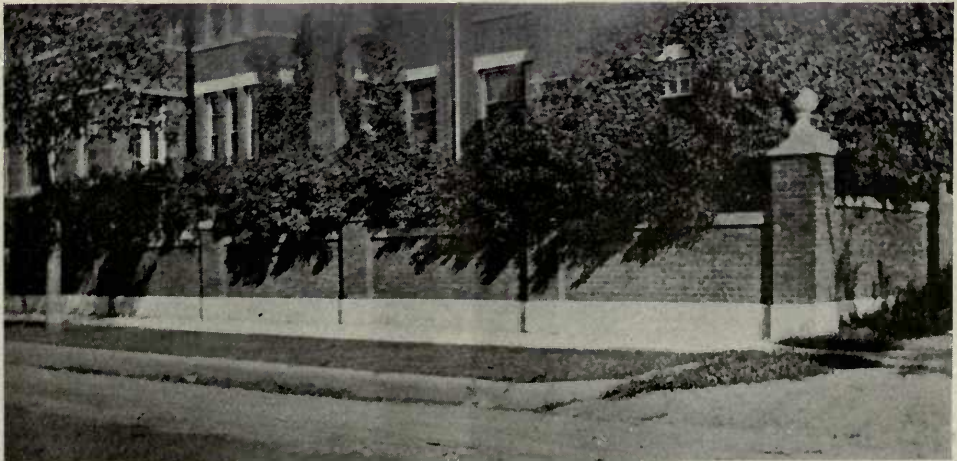
The walls throughout the house are painted in water color, applied directly upon the plaster. Prepared colors were used but were modified to suit different requirements. The entrance hall is a dull Pompeian red. The music room was given a coat or so of cool gray green that makes an appropriate background for the large landscapes in oil that decorate the walls. The dining room walls were treated to a greenish gray that is almost the color of the woodwork. In the den

are light brown walls. The owner's room is in fawn color, and in her son's room the walls are a light creamy yellow. The bath rooms are tiled to a height of three feet, and above are painted in light colors in oils.

In the music room much of the furniture, richly carved and inlaid, was accumulated in foreign travel or is a family inheritance. Upholstered pieces are newly done over in cool greens. For summer use, wicker chairs stained green, with thin cushions, supplement the heavier furniture. The fireplace is flanked by mahogany bookcases and a big davenport in front makes a cozy reading nook in that part of the room. The adjoining porch is furnished with hammocks and wicker seats and tables and like the rest of the house is heated by steam. In the little upstairs library or den, furnished for the use of her son, the owner has put Mission furniture of a good make. In her own sleeping room, with its cheerful group of windows, is walnut furniture, bought when San Domingo ma-

hogany was becoming scarce and cabinet makers were turning to walnut instead. Unlike much of the furniture of that period, usually heavy in type and overloaded with ornament, these old walnut pieces are simple and good in design. They were rubbed and polished, bringing out the beautiful grain of the wood, and were newly upholstered in dainty fashion. In the other sleeping rooms modern furniture of simple type is used.

As an expression of a thoroughly feminine personality and as an example of the skill of a woman who is a builder and decorator, the green-shingled house has interest for other women who are planning homes for themselves and their families. While the house contains rich furniture and objects of art collected in different parts of the world, these furnishings are not allowed to interfere with the severely simple character of the house. The exterior is quaint and pleasing and the architect has achieved interesting detail in gables and windows.



A Colonial Home in Southern California

By Margaret Craig—Myron Hunt, Architect

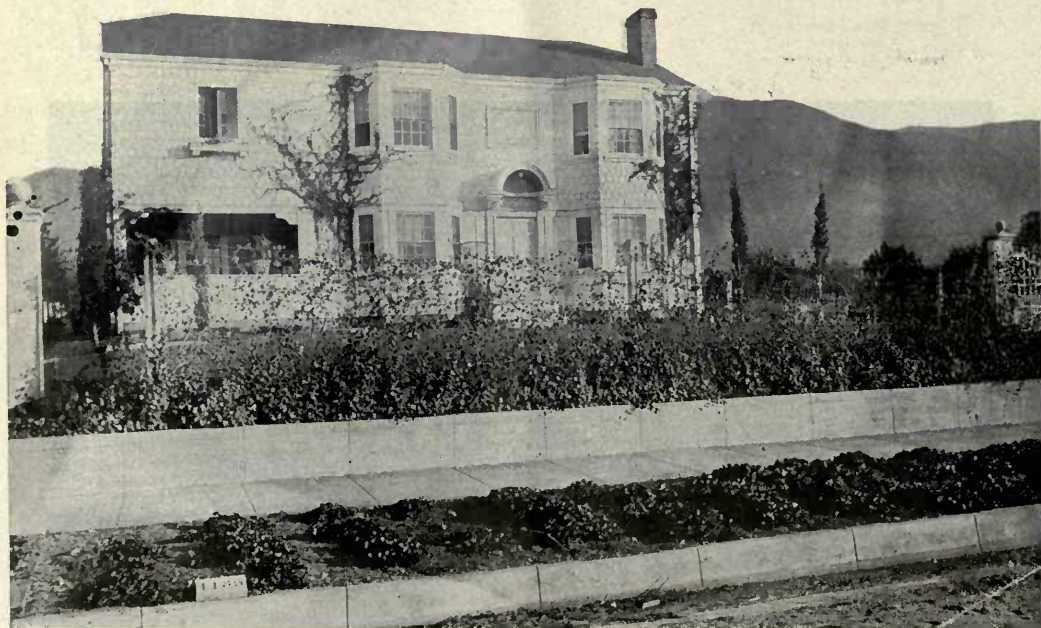
NONE of the most artistic and delightfully constructed homes east or west, is one built on lines of Dutch Colonial architecture, the home of Mrs. S. E. Edwards, in Altadena, California.

Halfway up the great sweep of land that rises gradually to the ever green, wooded foothills, with a background of superb mountains, and in view of the charmingly laid out city of Pasadena in the distance below, it has a setting that is quite wonderful.

The first impression on nearing the house is that of quaintness. Enclosing the well-kept lawn is an ivy covered wire fence, broken on either side of the front space by two tall well designed white gateways.

These gateways, although simple, are worthy of special notice, because they add a touch of domesticity without any accent of exclusiveness. Tall, straight cement pillars rise on either side of the swinging gates, composed of slender uprights, bound together by horizontal bars and by a graceful curved bar at the top that gives the required finishing touch. The smaller gateway opens to the curved brick path that leads across the lawn to the front door, and the other leads to the straight driveway that runs along the extreme east of the house.

The doorway, a most striking feature of the exterior, is very lovely, and with adaptation of colonial lines to modern styles is extremely effective. The two broad cement steps leading to the door-



An Ivory Covered Fence and a Mountain Background, form the Setting of This Beautiful Country Home.

way, the slender fan-like green trellises on either side, the semi-circular hood above, and finely paneled doorway, add their influences to the general success of the entrance. Above the door is inset a broad panel of plain plaster toned the same yellow that is used within the arched space of the hood.

The house is painted white and broad shingles are used for the second story finishing; white, substantial board and batten, are applied to the lower half of these outer walls. The shingles that form the lowest course extend over the board and batten so as to give quite a well defined string course around the house, showing where one floor ends and the other begins. This broad line accented by the shadow it throws binds the house together.

The roof, painted an olive green, is quite distinctive, in that it has no exaggerated overhang.

Two groups of Italian cypress are placed on the lawn and they carry out the rather formal New England style of house, and were purposely selected because they would never grow large enough to obstruct the view. Heliotrope and lavender Lantana are the flowers chosen to grow close to the house and



The Quaint, Colonial Charm of the Doorway.

they form an attractive tone relation to the white of the house and the yellow of the panel, hood and inner porch.

This porch is practically cut into the house on the southwest corner and forms a very agreeable shadow balancing the lovely shadow cast by the two bays which are built on either side of the doorway. The entrance leads into the spacious livingroom, which, including the porch on the west, extends the full width of the house. One is attracted immediately to the Cooper fireplace, which is built in the east wall and is of broad lines with red

brick tiling, mortared with white.

Above this hangs a striking copy of Michael Angelo's Lybaean Sybil. At the left is a white built-in bookcase and at the right a casement window purposely placed so that a person enjoying the comforts of the fireplace can have the joys of a distant view of country scenes.

Another interesting note of attractiveness in the rooms is the Colonial stair-

the prevalent shades of old blue in the Oriental rugs upon the floor. Japanese prints and copies of old masterpieces adorn the walls, and large brown wicker chairs give a feeling of comfort. Old ivory enamel is used for trim in the room, increasing the Colonial effect.

The out-of-door porch, which is truly a small out-of-door livingroom with lemon colored plastered walls and the old ivory



The Colonial Fireplace and Furniture.

way with white spindles and mahogany rail. The stairway is so placed in a recess of the room that it necessarily needed a beam to support the twenty-foot space of ceiling left. A pilaster is placed at either end of this, and a pillar in the center of the beam to complete the strengthening.

This structural necessity resulting from the location of the stairway gives a note of variety and contributes a Ruskinian effect of strength and beauty.

The coloring of the walls down stairs is a soft brown, which harmonizes with

woodwork that is found throughout the house, is a comfortable retreat. It is separated from the livingroom by French doors and having no other egress gives a seclusion that is found very desirable in a home of today.

At the west of the stairway is a door to a cosy little study, and at the right, near the east wall is the arched opening to the dining room. This room, placed well to the side, so that it is secluded from the living room is very simple and yet very pleasing with the round table, dull oaken sideboard and blue and yellow

Japanese prints upon the wall. The casement windows which have six segmented glasses in each, and are used in all of the rooms, frame the lavender flowering plants that rise from the window boxes without and also the lofty blue mountains that are never disappointing.

The entire cross wing at the rear of the house is devoted to the service quarter. This is by no means slightly treated as it not only has all of the conveniences but opens out upon a lovely vista. Built above the cement court that extends the width of the building and forms a floor, is a white pergola that will soon be covered with ever green flowering vines.

On the second story are four bedrooms and bath. Two of them are furnished with mahogany furniture and have dainty hangings of scrim at the windows.

The third room, which is on the sunny southeast corner, is devoted to the children, and in furniture and pictures has been consistently worked out. The walls are of a rough plaster, stained a foliage

green. On the floor is a lighter green rug, and at the windows are tan curtains of kindergarten chintz with a pattern of pots of formal pink roses, which adds a note of color.

Little furniture is used besides the two small beds, a white chest of drawers and little brown wicker chairs. Much discrimination has been used in the choice of the pictures on the walls. Here we observe Franz Hal's "Fisher-boy," Botticelli's "Madonna of the National Gallery," Rembrandt's "Carpenter's Family" and Reynold's "Duchess of Devonshire." Several of Jessie Wilcox Smith's colored pictures add a note of cheerfulness.

From all of the south windows a view extends for miles to the distant sea, and in the twilight countless lights twinkle from the far away cities. So the general impression of the house is one of charm and restfulness, due to the absence of vivid coloring and unnecessary ornament, and to the restrained decoration of walls and grounds.



An Interesting Example of Old-Time Architecture

Afternoon Tea in An Old Mansion

By Una Nixon Hopkins

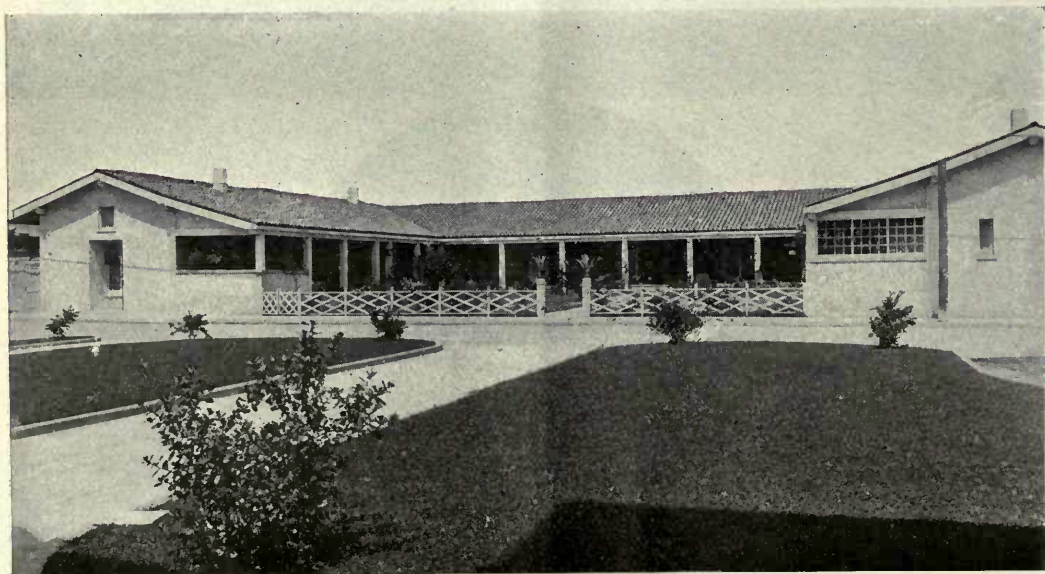
DURING the past few years innumerable tea rooms have sprung up all over the country, and though not indigenous to our soil, being an importation, they seem to thrive in it.

Many are fitted up with antiques and old blue china and some have none. But for the most part they are charming places, presided over, usually, by college girls who are trying new combinations in chintz and new problems in sandwiches on a world that thanks its lucky stars for pretty girls, afternoon tea—and pleasant places to drink it in.

"Over in Santa Barbara," as the town is referred to in other parts of California—

because Santa Barbara is surrounded by an amphitheater of hills—there is a tea room of unusual interest. The truth is, however, it is not a real room, but the end of a veranda, and the veranda is part of La de la Guerra mansion—one of the oldest and most celebrated on the Pacific coast. As a special favor to a clever young woman who is an authority on antiques, the de la Guerra family—now occupying the mansion—have allowed her to use two rooms in the left wing for antiques and part of the veranda for serving tea.

Here on a pleasant afternoon, within sound of the sea, one may sip tea flavored with orange blossoms—an old California



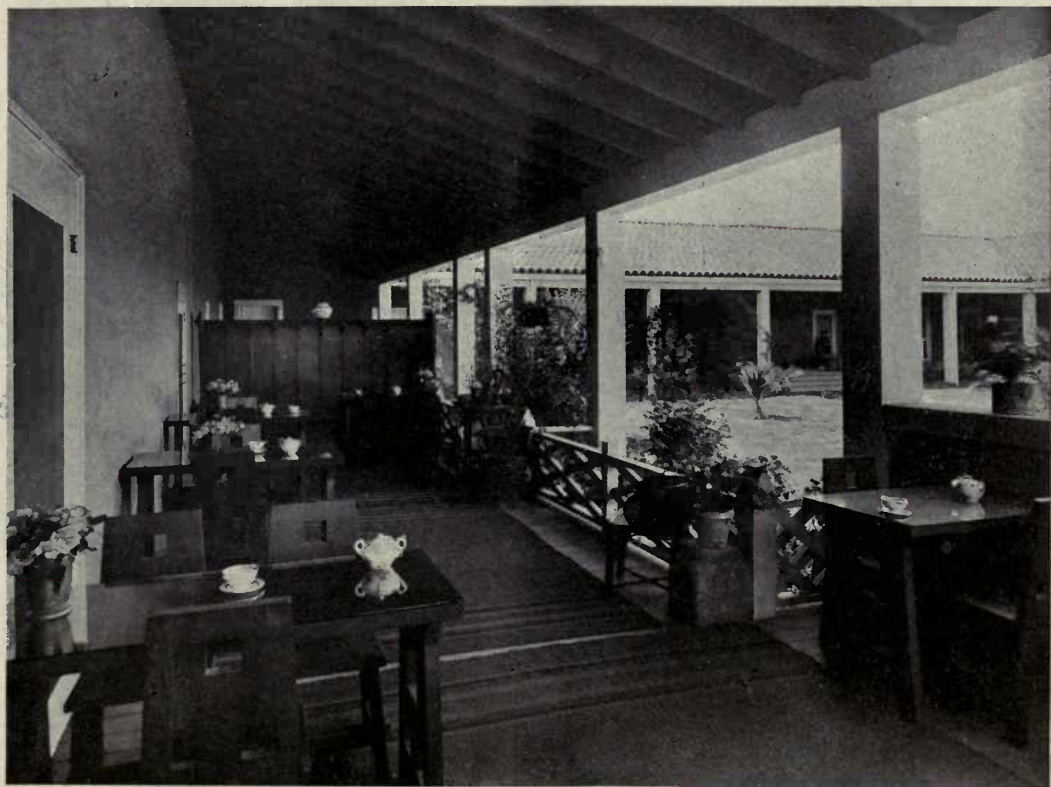
La de la Guerra Mansion—Over 100 Years Old.—In the Left-Hand Corner Is Located the Tea Room.

custom—and if lucky enough to have a well-informed neighbor, listen to wonderful tales of romance in which La de la Guerra mansion played the main part.

Sitting on the veranda looking into the courtyard, around three sides of which the house extends, one calls up the old frolics and customs of the place, and it is no great effort of the imagination to see

the chapel. Most of the things here were collected in Mexico, Central America and the South American countries by the young woman in charge, who does not hesitate to travel far into unknown lands in search of articles of value.

It seems in keeping that they mostly come from Spanish countries. And while you are looking at the beautiful things,



The Veranda Tea Room—Looking Into the Courtyard.

the gay dances or hear the gay jest and song of long ago. Though considerably over a hundred years old, the house looks as if it might have been built yesterday.

So interested do you become in its history your tea very likely gets cold before you have finished and it is necessary to begin all over again. Perhaps you even forget that one of the missions of your visit was to look at the rare antiques, embroideries and pictures that are displayed inside, in a room that once was

likely you will hear the twang of a guitar across the court yard. It has a mellow sound—like the house, it is a relic of the olden days.

Even if you are a traveler and have taken tea in many famed lands, here is an experience worthy to record in the page marked: "Memories of Pleasant Places." And perhaps, too, you will describe the pretty veranda arrangement to some girl of your acquaintance who is planning a tea room. For while the serving of tea



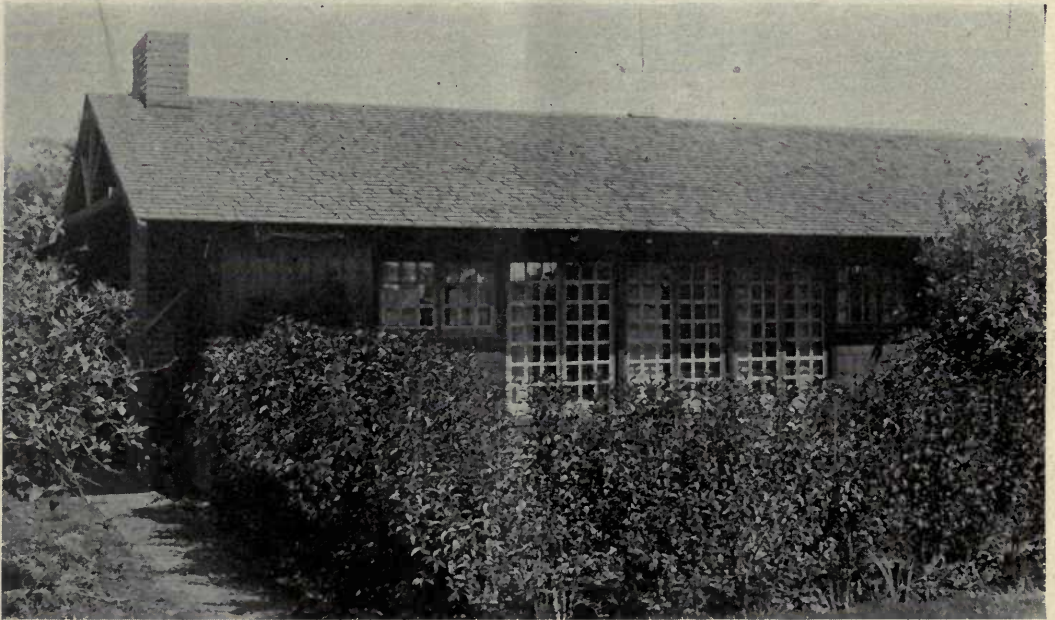
The Office—Opening Into the Veranda.—The Stairs Lead to a Gallery Above, Where the Main Display of Curios Is Arranged.

on a veranda would not be possible in a cold climate in winter, it would be practical in late spring, summer and early fall.

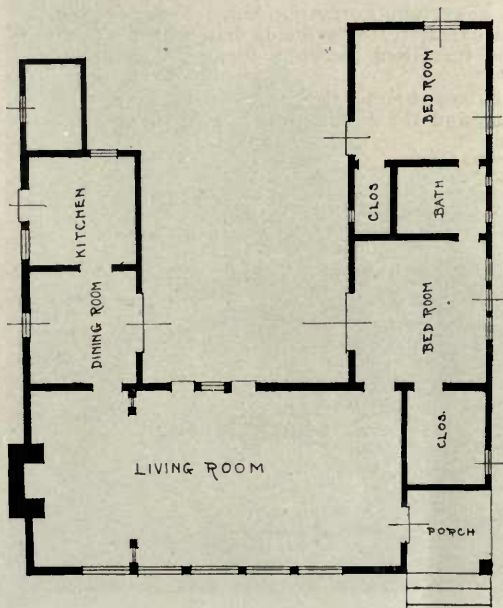
Here, a high seat, somewhat after the pattern of an old settle, screens the tea room from the remainder of the veranda. This seat, the tables and chairs were designed by the young hostess. Large rugs cover the floor, brown—with lines of yellow in the border. The furniture is brown

and touches of yellow are repeated in flowers for the tables and in the decoration of the china. It is all very simple, restful and in excellent taste. And as you gaze toward the sea—the mast of a ship rises above the horizon, and you wonder dreamily if it be not the "Alert" Dana commander—coming into port just in time, you like to fancy, for the great La de la Guerra ball.

Bungalow Ideas for 1914 Home Building



(No. 1). A Picturesque Bungalow on a Narrow Lot.



Floor Plan of No. 1.

No. 1.

Designed by H. B. Cody, Architect.



HIS picturesque bungalow, which is situated on a narrow lot, is so arranged that the living room has full benefit of the flower garden. There are glass doors along the front of the main room, and they open directly on to the garden which is screened from the street by a hedge. This green background for the bright flowers is very effective from within, in fact, the garden seems a part of the room proper.

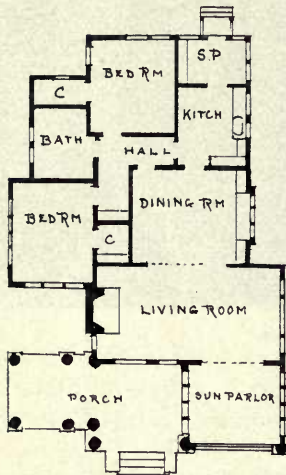
No trees were cut in the lot; the house was adapted to them.

The exterior of shakes is a light golden brown with a darker trim of the same color; the casings being white, adds a cheerful note.

The house as a whole includes the outside to a remarkable degree.



(No. 2.) A Charming Cottage in Rural New Jersey.



Floor Plan of No. 3.

No. 2.

Nowhere do we find more delightful examples of cottage architecture than in the rural districts of the East. This New Jersey home, with its shingles all turned a silvery gray from the ocean air, and its irregular roof outline, is full of quaint charm.

No. 3.

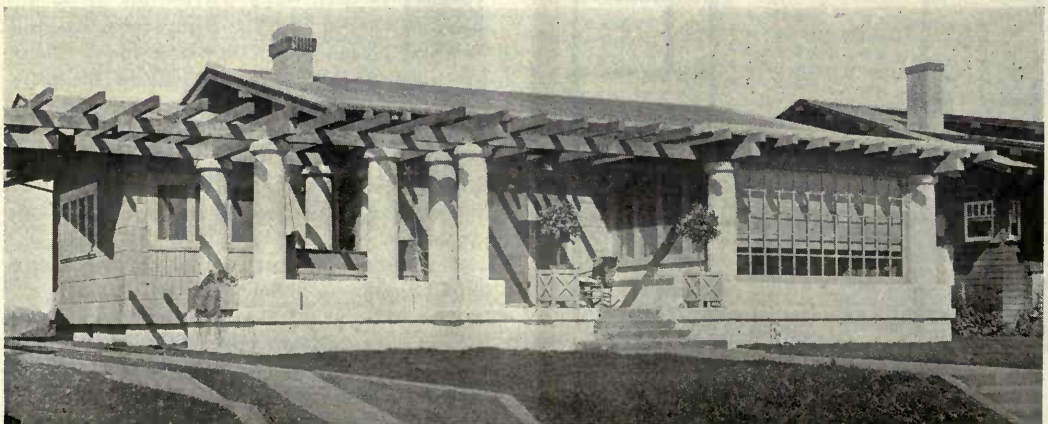
Light in color, and attractive in appearance, this bungalow is of unusual design. It stands high above the street and has an ample porch, supplemented by a cozy sun room, which opens into the living room. One end of the living room has a large fireplace and the other end is given up to windows.

The front bedroom is practically a sun room, and the one in the rear is well lighted.

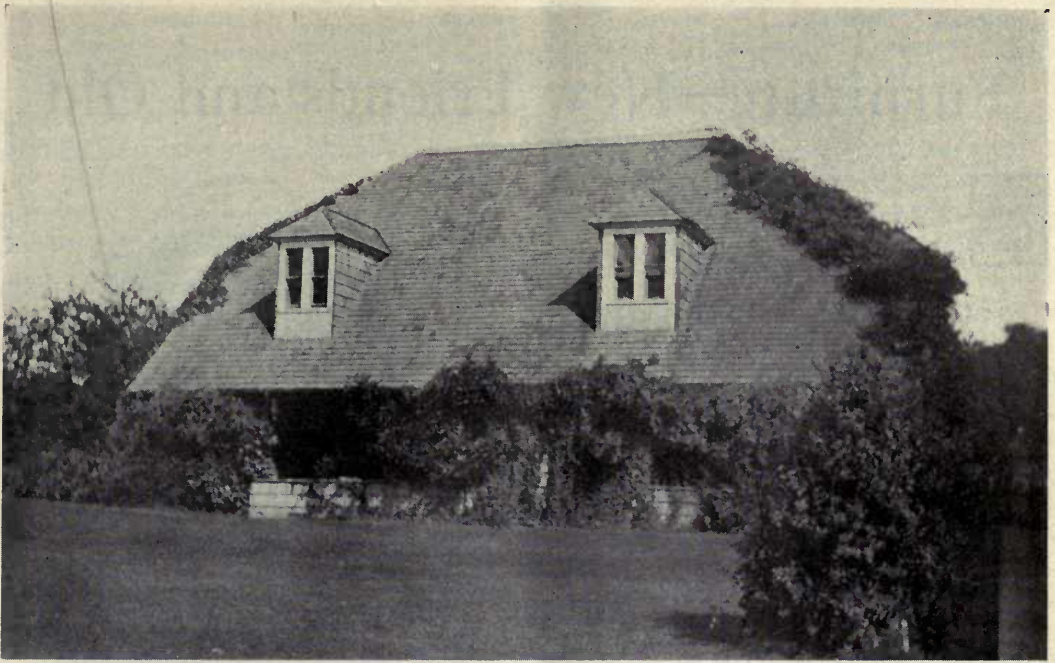
A small hall accomplishes a great deal here and gives privacy to so small a house.

There is a certain correspondence between the interior and exterior. The inside has white woodwork and is furnished in light furniture and airy hangings.

The pillars supporting the porch pergola are of white cement and the foundation is also of cement.



(No. 3.) A Bungalow of White Pillars and Sun Parlor.



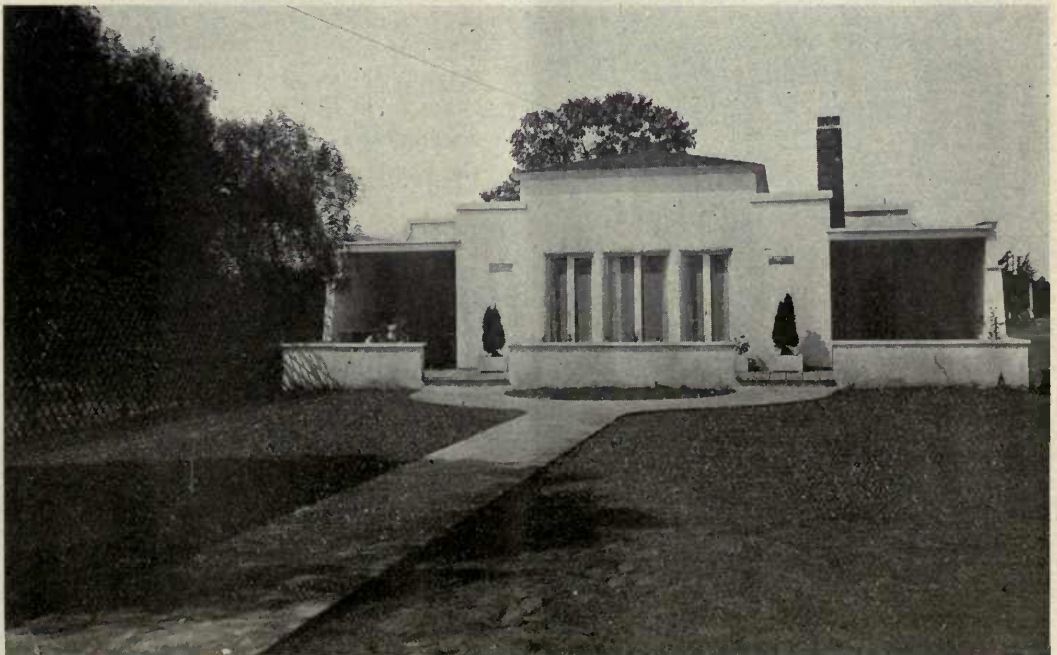
(No. 4). Like a Thatched Cottage in Ireland.

No. 4.

One might fancy himself jogging along through the green lanes of Cork County in an Irish dogcart when they come upon this delightful romantic cottage quite hidden under its enveloping roof so strangely reminiscent of the Irish thatched cottages.

No. 5.

In strong contrast is this Southern California bungalow of white stucco with its severe and almost classic lines, but with a sure charm in spite of its austerity. The living portion of the house is too deeply shaded by the enclosed court.



(No. 5). A Stucco Bungalow in Southern California.

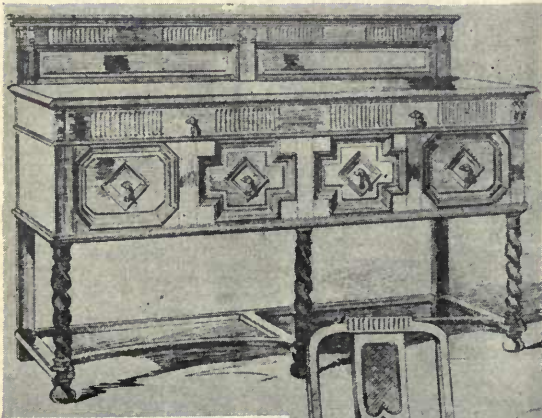
Furniture—New Friends and Old



CLEVER satire, entitled "Furnishings Up to Date," recently appeared in one of the leading household periodicals. It was so clever that after reading it one almost felt like a fool or a lunatic to even consider buying a new table or a chair. 'Tis true, and more's the pity, that the justification of such caustic wit is abundant, and that the average professional decorator and house furnisher, if not exactly a being with cloven hoofs and horns, is at least a person to be carefully shunned by innocent and inexperienced home makers. For, to quote the article, "the professional decorator has an active mind and sees to it that no kind of furniture ever be-

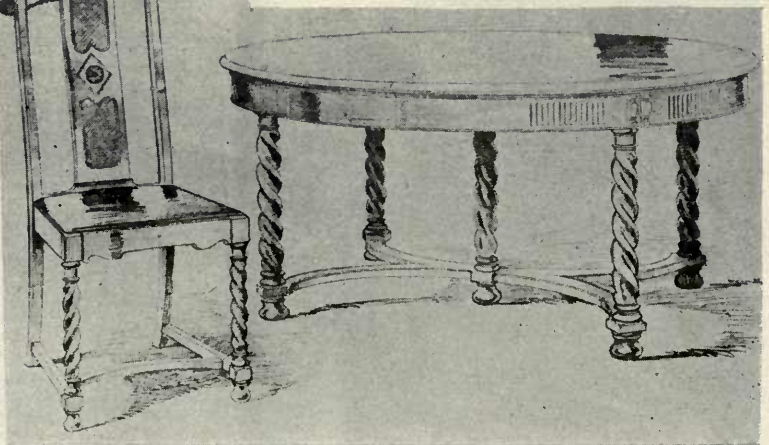


comes a confirmed habit." In fact, professional decorator can make lightning changes in his worship of this or that "period" or "style" that quite throw in the shade the performances of the poli-



THE
MARY STUART
SET

Sideboard, \$125.00
Table, - - 100.00
Side Chair, 16.50
Armchair, - 21.00

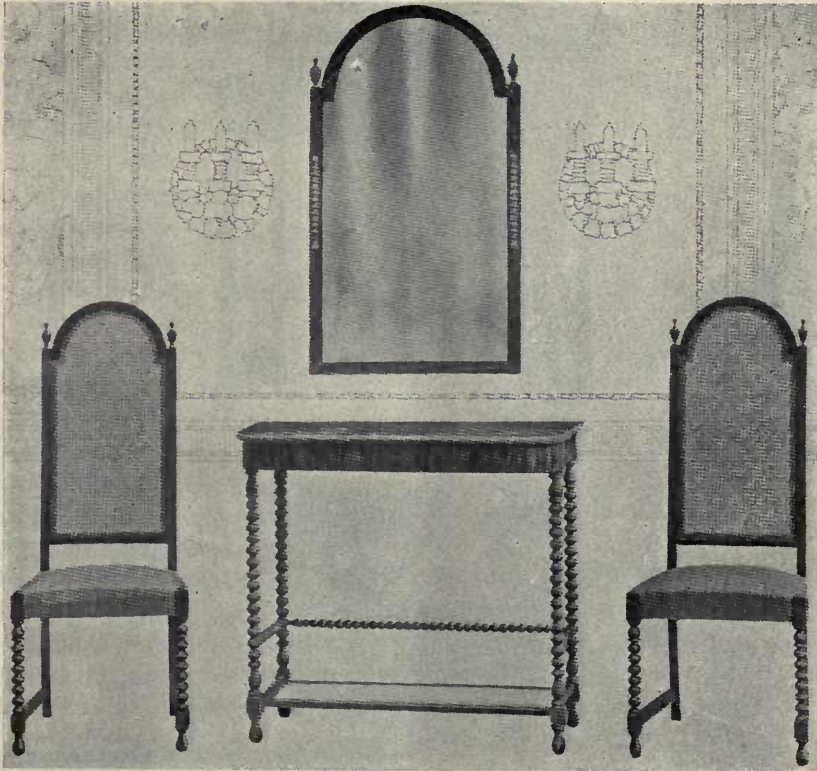


ticians in renouncing allegiance to embarrassing "platforms."

In spite of all this, furniture we must have; for not only are there fortunate beings who have *none*, and who are free to "harmonize" to their heart's content, but even furniture has a surprising facility for going to pieces and getting shabby and having to be renewed. Under such

make our rooms and their furnishings pleasing and attractive to the eye and comfortable to the users?

Go to, ye scoffers, we will still preach the beauty of fitness of things adapted to their uses and satisfying to the aesthetic sense; of relief in our everyday surroundings from dullness and commonness. Surely we have a right to distinction and



Console Set for Hall Furniture.
(Note arrangement of mirror and light brackets).

circumstances, shall we patronize the second hand shop or the department store, taking anything offered, or shall we "assemble" things beautiful and suitable according to our best judgment and the limit of the purse?

After all, why should it be a crime to improve the appearance of our furniture any more than our clothes? Who is content with shabby, ill-fitting, cheap-looking garments if they can contrive to get others? Is it not a laudable ambition to

refinement in the interiors of our homes as well as their exteriors. And first and foremost, right in the teeth of the satirist, we fling the beautiful and stately "Jacobian" furniture which suits so well the interiors of the English Half Timber houses or the Tudor brick that will never lose their popularity. We do not here deal with the more expensive forms of this style, pieces that must have a setting of costly paneling and carved ceilings, and of priceless tapestries. The

pieces illustrated are not beyond the quite moderate purse and are none too handsome for an eight or ten thousand dollar house. One cannot, in these days, find a really handsome dining room set for less money than the price of this beautiful Mary Stuart Suite, so named because modeled directly from the motifs of woodwork and furniture of Holyrood Palace, the home of the lovely and ill-



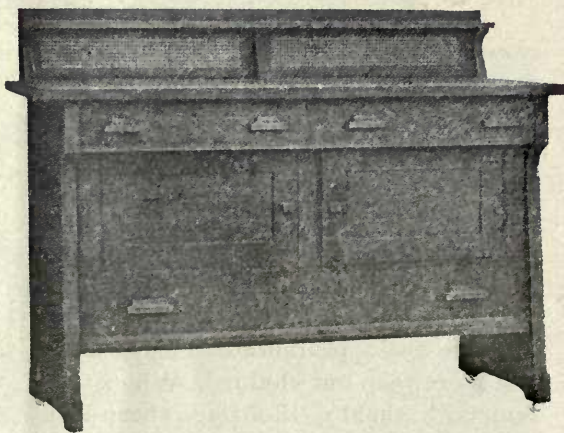
Prices of this Set Are \$60.00 for the Sideboard, \$55.00 for Round Table, \$20.00 for Buffet, \$8.00 for Side Chair.

fated queen. The beautiful and unusual twist legs of these pieces were reproduced exactly from the Stuart chair which still stands at the right of Queen Mary's bed. Such designing, with its feeling of romantic and historic interest, cannot fail to impart an atmosphere of individuality and distinction which is entirely absent in the ordinary dining room set. The special finish which has been invented for this furniture is neither Early English nor Circassian Walnut, but a sort of cross between the two and is in perfect harmony with the stately design. In such a dining room, a portrait of the lovely Stuart, would be the sole and sufficient picture upon the wall. In harmony with this dining room would be the Jacobean Console Set for hall furnishing, dainty of line with brown cane panels and characteristic ball turnings,

extremely refined and very moderate in price. The chairs, costing \$13.00 each, the console table \$21.00, the mirror \$17.00. Nor could anything less ostentatious or pretentious be devised.

Among the spring offerings that especially appeal to us at this season we find the new Bungalow and Cottage Furniture, presenting wonderful freshness and charm. The Swiss-Austrian Chalet Furniture illustrated is very desirable for cottage and bungalow furnishing and also is used with much success as a breakfast room set in any house. The finish is silver grey, which, of course would vary in tone with the wood upon which it was applied. In the set shown the wood is quartered oak and the tone of color a soft and indescribable fawn-grey, like the under

side of the silver-leaf maple. The lines are so simple yet refined and the prices so inexpensive, that we find this furniture a most acceptable offering for the places to which it is adapted. In a



Swiss Austrian Chalet Dining Room Set in Silver Grey with Cane Paneling.

different style, but equally interesting, is the English bungalow furniture, finished in Kaiser grey and very pretty for bed room use as well as for breakfast suites in the same finish. Time was when we had nothing for such places, but the manufacturers have been at work busily till now we have a bewildering variety of light cottage furniture. Much of this is imported direct from Austria, and some of it is manufactured here from Austrian motifs. A breakfast room is now included in the plans of most up-to-date houses, even those of the \$10,000 to \$12,000 class. Such rooms are smaller and of far lighter treatment than the formal dining room. One of the most unique of these is here photographed, and while expensive if carried out in its details as here described, furnishes suggestions for a much simpler but equally attractive room. This room is 15x17 ft. and a Dresden scheme of furnishing was employed by the architect, Dresden porcelain being used for the supports of the sideboard shelf, for the mirror frame, the table vase, etc. The upper walls and ceiling are the ivory color of Dresden china, with dainty panel and fringe decorations in the Dresden blues and pinks. All the wood work and the furniture is of bird's eye maple wrought by successive finishing processes up to an indefinite delicate blue, against which the China ivory and the Dresden porcelain are admirably relieved.

We have all become familiar during the past year or two with the delightful

enameled furniture for bed rooms and breakfast rooms, which in its various finishes of white, ivory or delicate colors is so charming and so popular. It may be had in very inexpensive sets, which are also, we fear, soon worn and defaced, and also with cane insets and a perfect



Breakfast Room and Cottage Furniture in Kaiser Grey.

tion of finish which brings it quite up to mahogany in price.

But what about mahogany? Do we hear from some anxious inquirer? Is the Colonial "out," and all my old mahogany? By no means, gentle reader, "till the moon grows old, and the sun wax cold," old mahogany, like Bedouin's love, will ever endure. In evidence whereof, we

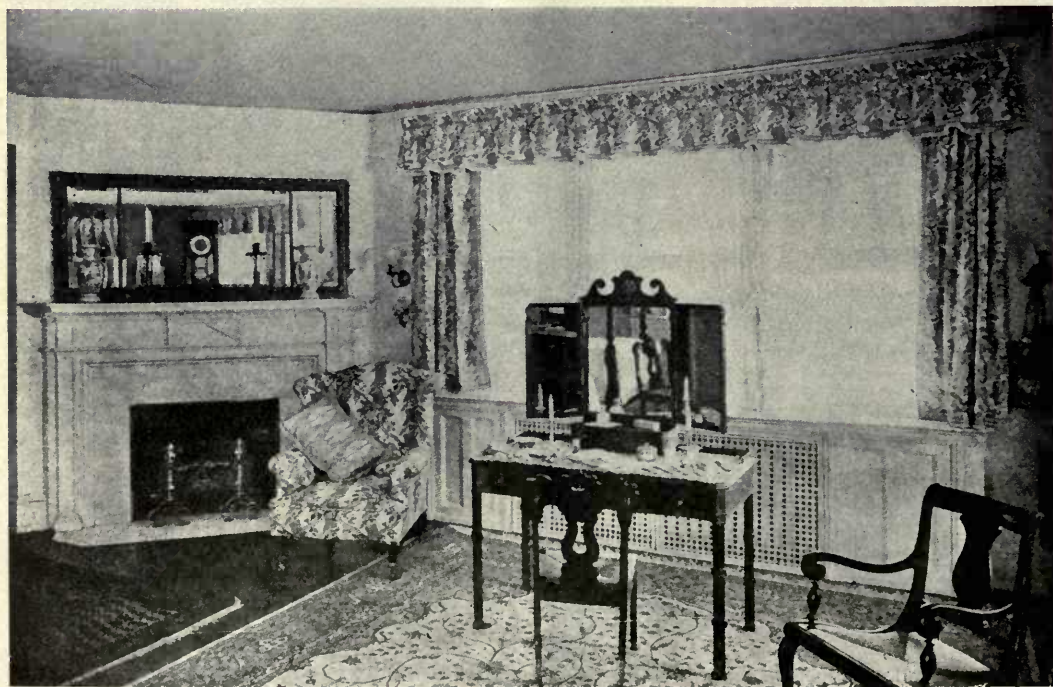


Breakfast Room with Dresden China Decoration.

show as our last illustration, and perhaps our best, one end of an old Colonial bedroom in a very modern house in Boston, the manner of concealing the radiator and

the cretonne furnishings being proof of our last assertion.

Can the lover of antique mahogany ask more?



Old Colonial Bedroom in a Modern Boston House.

EDITOR'S NOTE:—We are indebted to Moore & Scriver, House Furnishers, Minneapolis, for some of the illustrations presented here.



Home Grounds and Gardens

Suggestions for Shrubbery and Vine Planting

By M. Roberts Conover



HO of us would not rather personally decide the location of the shrubs and vines about our homes than adopt without variation a "ready-to-use" plan evolved by someone else? However, it is as unwise to follow entirely our own fancy as the unmodified plan of another. The latter course eliminates that vital quality of successful garden-planning—individuality, and the former is often dangerous to good effects for in our intense enthusiasm for lovely plants we may place them where they ultimately obstruct pleasant views, or are ineffective when they are full grown.

Where plants are grown close together there is a certain conformity which is difficult to describe but which adds greatly to their decorative value. The lavish use of dispersed plants lacks this subtle relation. It is this principle that makes the foliage masses of the swamp beautiful; its absence that mars the effect of some elaborate formal plantings. So it

seems that if we are to enjoy the finished result as much as we do the planning and planting and avoid the cutting out of so much good material, it is wiser to spend a little time in forecasting.

The shrubbery combinations here given are entirely practical and may be used under all ordinary conditions, but their chief value is in their suggestiveness. It is hoped they may prove practical in their application.

Group One comprises:

- 3 Japanese Plum,
- 5 Rose of Sharon (Crested Beauty), blooms in July,
- 2 Japanese Snowball, blooms in June,
- 4 Hydrangea Paniculata, blooms in late summer,
- 4 Golden Elder,
- 6 Spirae Van Houttei, blooms in May and early June,
- 2 Forsythia Viridissima, blooms in April,
- 3 Forsythia Suspensa, blooms in April.

The three specimens of Japanese plum are planted six feet apart at the rear of the group. Midway between are two



Viburnum Placatum, or Japanese Snowball, Used as a Hedge.

Japanese snowballs. Three feet in front of them are the five Rose of Sharon three feet apart, and at each end of both rows are planted the *Hydrangea Paniculata* three feet from the other shrubs.

Three feet in front of these are six shrubs opposite the spaces between the plants in the second row. These are placed three feet apart. The two at the outer extremities and the middle two are the *Spirae Van Houtei*. The other two—one next each end specimen are the *Forsythia Viridissima*.

Three feet in front of this, opposite the spaces in the other row, are planted five shrubs—the first, third and fifth in the row are the *Forsythia Suspensa*—a weeping form, and the second and fourth are the *Spirae Van Houtei*.

The front row consists of four specimens of the Golden Elder.

Group Two consists of:

- 12 *Weigela Alba*, blooms in May and June,
- 3 Japan Lilac, blooms in May and June,
- 8 *Forsythia Viridissima*, blooms in April,
- 2 Purple Lilac (common variety), blooms in May,

5 Snowball (*Viburnum Opiculus Stirlis*), blooms in June,

8 Hardy *Hydrangea* (Hills of Snow).

The mode of planting is: Four snowballs or viburnum six feet apart with three *Forsythia* midway between them in the rear row. Three feet in front of these is a row of nine shrubs, planted three feet apart. The outermost one on either end is a Hardy *Hydrangea*. The others are four White *Weigela* alternating with three Japan Lilac. In the next row are seven shrubs planted opposite the spaces in the preceding row. The Hardy *Hydrangea* at each end; next to each of these a specimen of the *Forsythia*. In the center a viburnum and on either side a purple lilac. In the next row are a Hardy *Hydrangea* on either end, next to these specimens of the *Weigela*—one on each side, two *Forsythia*—one on either side and a pair of specimens of the *Weigela* near the middle of the row. On the outermost ends of the front row are the *Hydrangeas*; in the center one of the *Forsythia*, the two spaces on either side of this being occupied with the *Weigela*.

This is a very satisfactory group furnishing bloom from April to early fall.

Group Three is beautiful with a background of trees. The necessary shrubs are:

4 Mock Orange, blooms in May,

feet in front alternating with these are the three purple lilac with a specimen of *Deutzia Lemornei* at either end. At either end of the second row is a specimen of the Mock Orange. The two near the middle



Rhododendron Maxinius, Among Tall Shrubby.

- 4 White Dogwood, blooms in May,
- 4 Purple Lilac (*Syringa Vulgaris*), blooms in May,
- 4 *Deutzia Gracilis*, blooms in May.
- 4 *Deutzia Lemoinei*, blooms in early June.

The group is arranged thus:

Four white dogwood six feet apart, four

of the row are *Deutzia Lemornei*. On either side is one of the *Deutzia Gracilis*. The front row consists of a *Deutzia G.* at either end, a purple lilac in the middle with a specimen of mock orange on either side.

Group Four is one of the finest. It is composed of:

- 4 Rhododendron Maxinius (pink), blooms in early June,
- 3 Japanese Storax (white), blooms in June,
- 4 Swamp Magnolia, blooms in June,
- 4 Bridal Wreath (*Prunifolia*) blooms in May,
- 2 Waxberry (*Symphoricarpus*), blooms in July and August,
- 2 Cut-Leaved Staghorn *Lumae*.

This group may be effectively arranged in elliptical form with the cut-leaved stag-horn sumac at either extremity of the ellipse, the Rhododendron on opposite sides three feet from its extremity, the Bridal Wreath, two on each side near its broadest part, the three Japanese Storax four feet apart along its greatest diameter and the swamp magnolia and waxberry at convenient places within the ellipse.

Group Five is composed of:

- 6 Rhododendron (June),
- 4 White Dogwood (May),
- 4 Red-flowered Dogwood, Florida Rubra (May),
- 4 Chionanthus Virginia (Fringi tree), (early spring),
- 2 Rhus Cotinus Smoke Bush (June),
- 4 Dwarf Deutzia Gracilis (May),
- 4 Hydrangea Paniculata Grandiflora (late summer).

In this group the Rhododendron, Hydrangea and Dwarf Deutzia should be in the foreground while the dogwood, fringe-tree and smoke bush should be planted back from the margin of the group.

The following list of shrubs are valuable in mass planting. Their characteristics are as follows:

April bloom:

- Akebia (vine), early spring, 8 to 10 feet.
- Corneliau Cherry (*Cornus Mascula*) yellow,
- Forsythia, *Viridumia*, upright, 6 feet.
- Forsythia, *Suspensa*, drooping, 6 feet.
- Kerria Japonica, golden blossoms (double), 4 to 5 feet.
- Lindira (*Spicewood*), 8 to 10 feet.
- Prunus *Pissardi*, purple-leaved plum.
- Jasmine (Vine), 7 to 8 feet.

May bloom:

- Halesia (Snowdrop Tree), 8 to 10 feet.
- Hawthorns.

Deutzia Gracilis.

Dogwoods.

Weigela

Azalea Mollis (yellow and crimson).

Spiraeas.

White Fringe.

Dogwood.

White Kerria (*Rhodotypus Kerrwides*).

Flowering Almond.

Lilac.

Mock Orange.

Ribes (Flowering Currant).

Barberries.

Tartarian Bush Honeysuckle.

Periwinkle (trailing vine).

Wistaria (vine).

Wichieriana (climber) Rose.

June bloom:

Rambler Roses (climbers).

Thousands Beauties (climbers).

Red-twigged Dogwood (*Cornus Alba*).

Deutzias Gracilis and Lemonei.

Rhododendron.

Laurel.

Magnolia.

Japanese Storax.

Itea Virginica (Virginian Willow), 4 to 5 feet.

Snowball (*Viburnum*).

Hypericum (St. John's Wort), 3 to 4 feet.

Sweet Pepper (Bush), 5 to 7 feet, blooms until August.

Azalea Lulea.

Azalea Amoena.

Zush Honeysuckle.

Smokebush (*Rhus Cotinus*).

Rose Acacia.

July bloom:

Hydrangea.

Stephanandra, 3 to 4 feet.

Dierrilla Sessifolia.

Dutchman's Pipe (flower curious rather than beautiful).

Trumpet Vine.

Clematis.

August bloom:

Tamarisk.

Hydrangea.

Clematis (vine).

Trumpet Vine.

Japanese Kudzu Vine.

September bloom:

Althea (*Hibiscus*).

Clematis.

Matrimony Vine (red berries).

All summer bloom:

Hall's Japanese Honeysuckle.



“Homes We Have Built” Series

EDITOR'S NOTE.—A fund of \$135.00 is to be divided among the best twelve contributions to this series received by April 1, 1914, as follows: \$20.00 for the best, \$15.00 for second best and \$10.00 each for the next ten articles accepted for publication. Let us hear from many. Address Editor for further particulars.

A Simple Bungalow and the Building of It

By Verona Gee Lucas



WHEN one has lived for twenty years in rented houses the habit is pretty strongly fixed; at least it seemed to be with father. Building was the one thing he was not going to do until he changed his mind.

With mother it was different, she had *her* head and her heart *set* on building, so father experienced a change of mind and bought a lot. Then the picture of a California bungalow was brought forth, and the ideas which had been accumulating



The South End and Porch.



The Front Entrance.

for a quarter of a century were let loose; there were so many of them that it was thought best for mother to draw the plans and submit them to an architect. Father felt that she might need further aid, so he subscribed for Keith's Magazine. From the first of January to the first of March little else was thought or talked of but plans. A new sketch was made about

once a week and every day mother realized how little she knew about architecture! One thing was certain, however, she *knew what she wanted*, and patiently worked and remodeled casting out many cherished ideas, and substituting more practical ones. At last one sketch was finished and given to the architect, and very soon the working drawings were ready. The shape of the house and style of windows were copied from the California bungalow before mentioned, the floor plans were worked out according to the needs of the family. One large chimney in the middle of the house serves for the fireplace, furnace, laundry stove and kitchen range—the bathroom is also ventilated by this same chimney. This system of ventilation is so perfectly satisfactory that new builders would do well to consider it.

There are six rooms, attic where two more may be made, and a basement complete in every way. The bathroom has



The Bokhara Brick Fireplace of Living Room.

tiled walls and floor. It is between the two chambers, a hall runs through the house, every room excepting the dining room opening into it. In this way the chambers and bathroom are entirely separated from the rest of the house.

Mother had a little book wherein she put "building notes," she had also copied these lines:

"Build it well whatever you do,
Build it straight and strong and true."

have entered the living room, twenty-four feet long and fifteen feet wide, a broad fireplace of Bokhara brick with a heavy oak mantel is one feature, another is a group of three windows extended twenty inches thus giving a broad sill. This window takes up most of the south end of the room and is a charming place to read or work. There is another window on the west side of the same size, so there is abundance of light and sunshine for



A Glimpse Into the Dining Porch.

Father had a motto, it was, "You build but once, do it right!"

To view this little house properly you should come to the front entrance, which is heavily timbered in Washington fir. There are two broad inviting seats, and please notice the bronze latch made especially for the door, a gift from a wholesale hardware house. You enter a vestibule and then a little hall, the wood is oak, very plain and heavy and stained rather dark brown; you may wonder how the walls are treated (most people do), so I will tell you—they are painted; three colors, golden brown, Japanese brown and olive lake were stippled together so the effect is rich brown with touches of green, shading lighter towards the ceiling. You

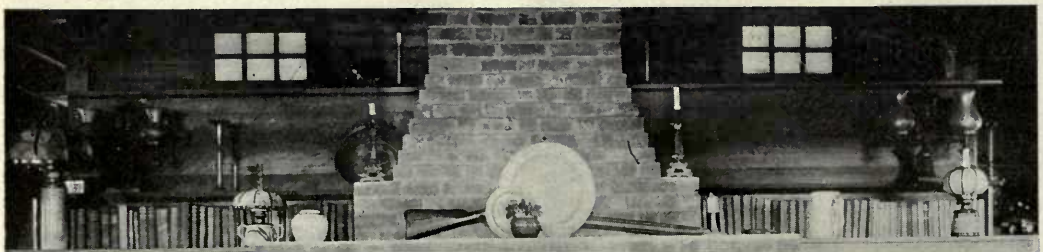
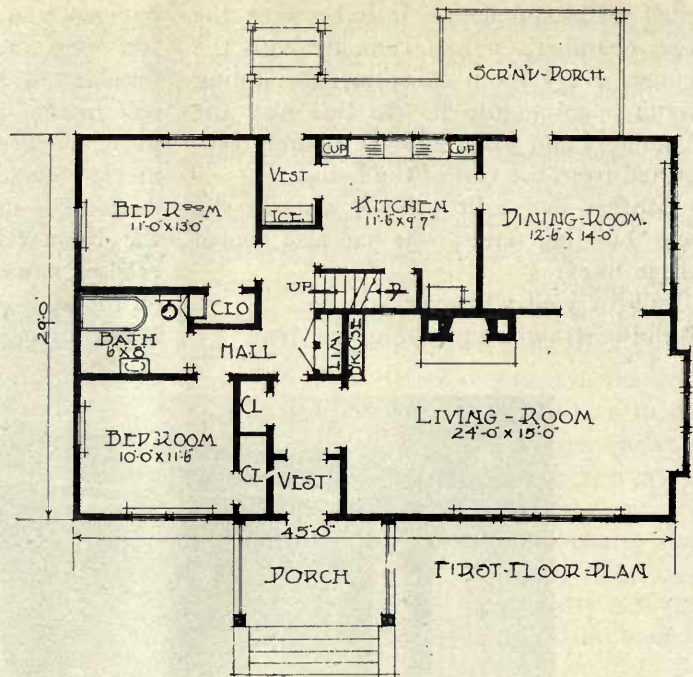
this large room. All of the windows are short and broad (with wide sills) in keeping with the lines of the house. The light fixtures are of hammered copper and the shades blend with the wall colors. The ceiling is ivory beamed with the dark oak, the floors are beech and not very satisfactory for they have "opened up" in places, they are stained dark brown, and because of the unsightly cracks are well covered with large Persian rugs; these tone in beautifully with the rich colors of the fireplace and walls. The diningroom is paneled in the dark oak and has about the same wall treatment. The picture does not show it to advantage but every one admires it, and so do the owners. A glass door leads to a dining porch which

is on the east and at the rear, affording perfect seclusion when desired.

The outside of the house is gray stucco, shingled in the gables, the shingles and timbers are stained brown. There are window boxes "built in," you will notice the substantial supports for them. Please observe the grand old trees only a few of which are shown in the picture and the shrubbery in the back-ground, then draw on your imagination for the vines that are to cling to the rough gray sides and the shrubs and plants that are to soften and fill in corners. The lot is 140 feet long and 110 feet wide, so there are generous spaces for lawn and gardens.

The house was rather expensive of course, built as it was according to those two mottoes! but what a comfort and pleasure it has been to carry out an ideal to see one's best thoughts of a home take tangible form. There was an added

charm about moving into the new house. Mother had been fortunate in disposing of rugs and furniture of assorted colors, and was free to buy just the right kind of furnishings for the different rooms and now her motto is "simplify your baggage" — "have nothing which is not useful or artistic." with apologies to Mr. Wagner and Mr. Morris.



Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 493 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 495 F. E. BREWSTER, Spokane, Wash.

Design No.

B 497 JOHN HENRY NEWSON, Cleveland, Ohio

B 499 BUNGALOWCRAFT CO., Los Angeles, Cal.

Design B 492.



SLIGHT English feeling in the roof treatment gives interest to this design. Plaster for the first story with shingle above was used in the present instance but a substitution of brick for the first story and cement plaster above at an additional cost of two or three hundred dollars would make a still more attractive exterior for this pleasing design. The entrance is in

the center under a bracketed hood that forms a shelter between the twin bays. The floor plan is ideal. A wide cased opening separates the dining and living room from the entrance hall. The living room has a large brick fire-place with French doors opening on the sun porch. In the rear of the living room is a good sized den, also reached from the main hall through a single door. The dining room is of good size with a pantry be-

Cost Estimates of Designs Shown in This Issue

	DESIGN NO.						
	B 492	B 493	B 494	B 495	B 496	B 497	B 498
Excavation @ 30c. per cu. yd.	\$72	\$72	\$60	\$50	\$56	\$76	\$87
Mason Work, to include							
Foundation Walls @ 20c. cu. ft.	250	215	190	300	212	275	410
Cement Floors @ 45c. sq. yd..	54	50	38	98	41	60	108
Hollow Tile Walls.....	.....	...	...	...	...	...	.....
Chimneys and Brickwork							
@ 65c. hr.....	265	150	65	425	185	2,160	375
Tile Work for Roof.....	.....	...	...	...	...	...	...
Tile Floors and Wainscot....	.....	...	...	90	...	40	...
Lumber.....	1,050	445	460	1,785	705	620	1,445
Millwork.....	1,210	420	515	1,650	790	760	1,200
Exterior Cement Plastering							
@ 90c. per sq. yd.....	130	115	120	...	185	...	...
Interior Plastering @ 26c.							
sq. yd.....	560	240	235	871	415	350	705
Painting.....	435	150	165	577	260	235	465
Carpenter Labor @ 45c. hr.							
Common labor @ 30c. hr... 1,115	425	475	1,825	740	575	1,275	
Hardware (Rough & Finish).. 330	180	185	375	292	250	430	
Electric Wiring..... 56	36	38	131	45	56	82	
Galv. Iron and Tinwork..... 142	60	67	210	91	140	173	
Heating, Air or Water..... 490	150	130	775	383	531	660	
Plumbing and Gas Fitting.... 415	250	240	650	265	360	390	
Miscellaneous..... 84	25	32	125	56	80	117	
Cost.....	6,658	2,983	3,015	9,937	4,721	6,568	7,922
Contractors' Profit, 10%.. 665	298	301	993	472	656	792	
Total Cost.....	\$7,323	\$3,281	\$3,316	\$10,930	\$5,193	\$7,224	\$8,714

This table is computed on the basis of prices of labor and material now prevailing in Minneapolis and vicinity.

tween it and the kitchen. The pantry has built-in cupboards, a work table and a small butler's sink for silver, etc. The rear stairway leads from the kitchen up to the main stairway landing. On the second floor are four well arranged, well lighted chambers, all with unusually large closets. The two front chambers have the use of the private bath in connection. The plan provides for a linen and broom closet and clothes chute. The large balcony over the first story sun porch could be carried up and made into an ideal sleeping porch, or a smaller one could be built on the rear over the small porch off of the kitchen. This has a balcony for airing bedding.

The basement provides for the usual arrangement of laundry, fuel and vegetable room with an additional toilet. A stairway over the main stairs leads to a large attic where two good chambers are finished off in each end of the main gable. The floors on the first floor are of oak with cypress trim, the kitchen floor of maple with pine trim finished natural. The floors throughout second floor are of beech with pine trim for white enamel work.

Design B 493.

Many of the bungalows that are built at the present time are too wide for the average city lot and look crowded when built on such a lot. A wide frontage doubtless gives an attractive appearance.

In this design we have studied to make an artistic exterior with a breadth of frontage that will be suitable for a city lot, the size is 26 feet 6 inches in width by 42 feet in depth exclusive of the sun porch which projects 4 feet 6 inches on the right hand side, giving a total width of 31 feet over the porch. There is a small portico entrance at the left side opening into a vestibule and thence into a recessed alcove at the end of living room. The living room across the front is 16 feet 6 inches by 13 feet and at the

right side is a wide French window opening on a glazed sun porch 8 by 17 feet. The dining room opens back on the right hand side with the kitchen in the rear. On the left side are two bed rooms with a bath room conveniently arranged between. The stairs to the attic extend up from this hallway landing in the center of the gable with basement stairs and grade entrance underneath.

The interior is finished with oak floor and plain casings of Washington fir, stained Mission. The attic story has a good floor laid but is not otherwise finished, has ample space for two rooms and is lighted with a dormer window on each side and gable window in each end. The exterior is treated with a low pitched gable roof extending from front to rear with side dormer windows and the walls are covered with wide drop siding up to the sills and above this point are cemented with a rough "pebble dash" finish. There is a good basement with concrete foundation, cement floor, laundry, etc. The casings, cornices and other outside woodwork are stained dark brown and all the window sash painted white and the roof shingles stained brown.

Design B 494.

Most people live in small houses, and to make them attractive is or should be, the study of the architect. This modest home is characterized by all the careful attention to line and proportion and refinement of detail of a ten thousand dollar house, and if given a harmonious setting of trees and shrubbery would be a gem of a home.

In the plan a good sized living room which is also intended to serve as a dining room is provided, with a good kitchen and pantry. The first floor chamber has a bath adjoining with a small conservatory in the corner which could be used as a dressing room if desired. The stairway leads conveniently to the second floor, with the basement stairs underneath.



DESIGN B 492

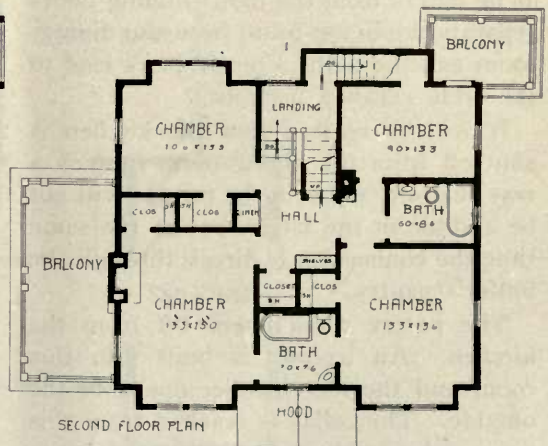
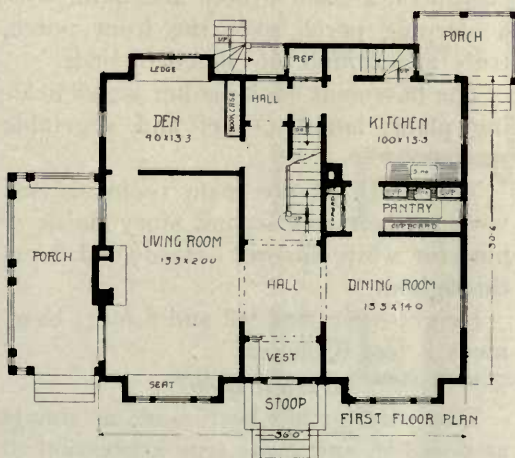
Interesting Gable Treatment

The second floor shows one large chamber with two good closets and a storage room. If an additional chamber were desired the large chamber could be divided so as to get a passage to the storage room. There is a full basement with laundry, fuel, vegetable and storage room, with hot air heat. The finish and floors

throughout are of birch. The exterior is of rough cast cement plaster for the first story with shingles in the gables, though plaster with half timbers would give a very pleasing effect.

Design B 495.

This building was designed originally for a plot of ground, on a side-hill, but



the design is also adapted to a level piece of ground.

The roof-lines harmonize with the sloping grade, making the structure a part of the surrounding landscape. The long roof covering the main part of the building ties the whole down, to the ground.

In taking up the interior it will be noticed that all service is kept at one end of the building away from the family portion. The main entrance is accessible from the rear or from the front. The rear approach is about a step from the pergola floor which forms an entrance porch.

A large door leads from the porch to a well-lighted vestibule, which in turn, leads to a stair-hall, spacious and of a Colonial design. Immediately to the left of the entrance there is a coat closet, near which there is a window seat below an elliptical arch similar to those springing from the column at the foot of the stairs.

The stairway is designed with a very easy rise and tread which is uniform from the first floor to the third floor, rise of $6\frac{5}{8}$ inches and a tread of 11 inches. The first landing is well lighted by a bay window, the second landing is lighted by a double window.

All the principal rooms are situated so as to get direct sunlight at some time of the day. A large fireplace welcomes one as he enters from the hall. Sliding doors separate the living-room from the dining-room and the hall. French doors lead to the wide veranda in front.

It will be noticed that the kitchen is shut off from the dining-room in such a way that any noise in the former will not be audible in the latter, but at the same time the connection is direct, through the butler's pantry.

The pastry room opens off from the kitchen. An ice-box is built into this room and the ice chamber opens to the outside. The cellar is reached from this room, where there is a laundry, furnace

room and space for three rooms for servants. It will be noticed that one door closes off the servant's portion of the house from the remaining part, on the first floor.

On the second floor there are four large bed-rooms, two of which are especially large, with fireplace in each, and dressing-room opening off from a sleeping porch over the front veranda. Three of these rooms get direct sunlight at some time of the day, and have good cross-ventilation. Service stairs lead to the linen hall from the rear hall.

The bath is placed so as to get good light and the best ventilation to be had.

On the third floor there are two medium sized bed-rooms with a bath. All bed-rooms have closets.

Design B 496.

A very striking cement exterior with some half timber treatment in the gables. The plan which is only 20x30 outside measurement, gives an impression of being a much larger exterior, while the large living room across the entire front with open fireplace and wide opening into dining room gives an air of spaciousness to the interior. There is no pantry but the kitchen cupboards are very complete. The little entry provides room for refrigerator. A combination stair leads to the second floor where there are three good chambers, a maid's room and bath, with a sleeping porch over the front porch, truly an example of "much in little."

The basement contains hot water heating plant, laundry, fuel and vegetable room.

The finish of the main rooms is oak with kitchen and second story finish of pine for white enamel. Hardwood floors throughout.

Height of stories, 9.2 and 8 foot; basement 7 feet 6 inches.

Design B 497.

This exterior has been made as simple as possible, and gives true expression to



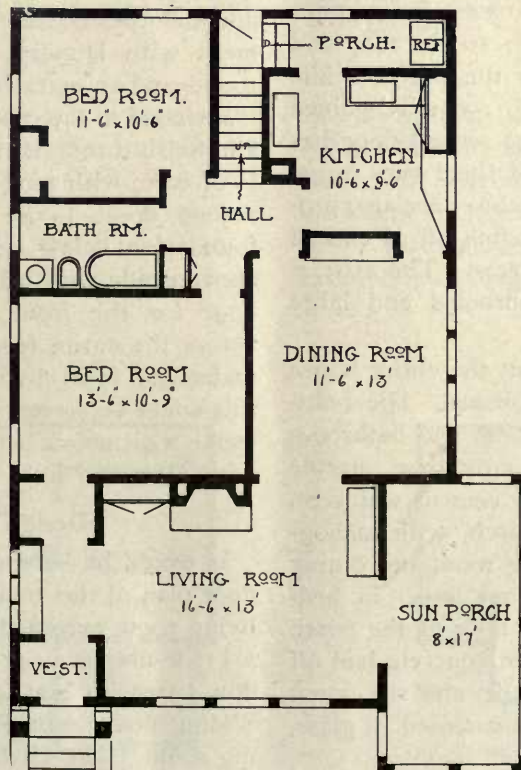
DESIGN B 493

Chas. S. Sedgwick, Architect.

A Bungalow for a City Lot

the interior. The windows surrounding the entrance are on the stairs and express a stairway going to the second floor.

The entrance is accented by a neatly executed hood over the doorway, while the grade landing door is nicely worked out



under the longer slope of the front roof. The building has been carried out in a red velvet brick with a wide raked joint, with shingle gables above the first story windows. These shingles are stained brown and the roof is covered with sea green slate. The exterior woodwork is stained brown and the sash painted white. The general effect is both artistic and novel, and possesses the dignity of a "Character Home."

The house is entered through a vestibule, off of which is a small toilet room and the hall connecting the living room, dining room and kitchen. The stairs ascend from the hall on the front of the house to the second floor. The living room occupies the right hand end with a large window and a fireplace at the front, balanced on the opposite end with French doors to the porch, part of which is covered, while that part extending across the bay in the living room is uncovered. The dining room is provided with a fireplace and a recess for a buffet and has three windows to the rear and also a door out onto the porch, while service to the dining room is gained through a pantry. The second floor has three bedrooms, one of them very large. A bathroom and linen closet are also provided and a sleeping porch off of two of the bedrooms on the rear. The attic is divided into three bedrooms and large storage closet.

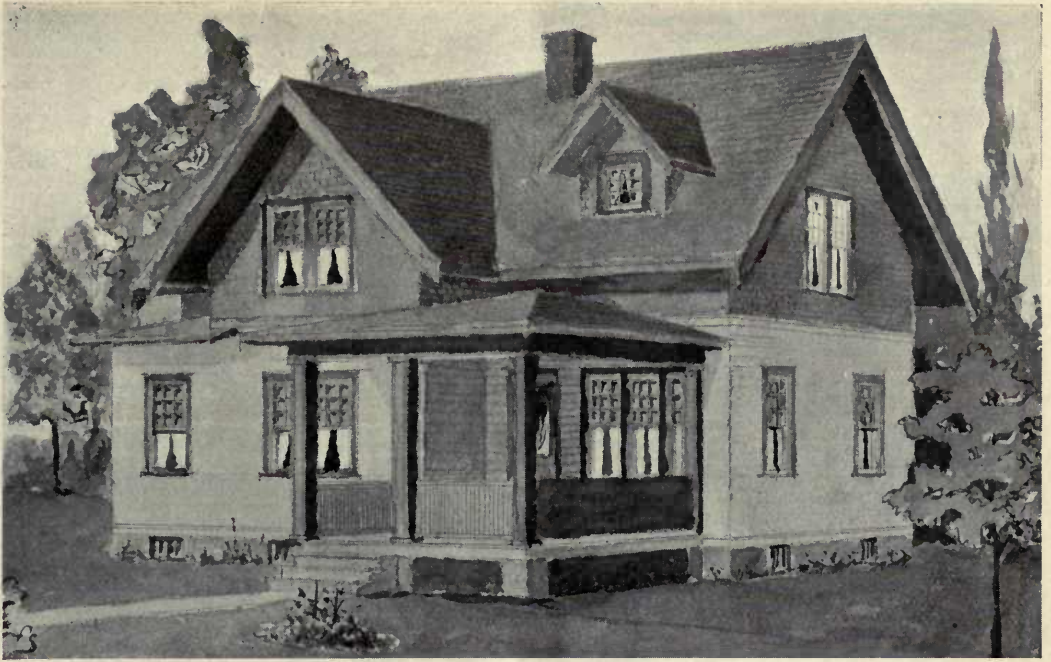
The floors throughout the entire house are oak, waxed and polished. The vestibule first floor toilet room and bathroom have tiled floors with cove base, marble thresholds and Keene's cement wainscot. The interior trim is birch, with mahogany stain in hall, living room and dining room, and white enamel finish in bedrooms and bath. The floor of the porch and terrace is reinforced concrete laid off in squares to imitate tile, and the porch and sleeping porch are enclosed in glass, which can be removed.

Design B 498.

In this design we have an inexpensive residence suitable for either city or small town where five bedrooms are required. The plan shows a large living and dining room on the left. The living room having a large brick fireplace with beam ceilings in the dining room and hall. The parlor shown could be used as a den or a library if preferred. The plan provides for a good sized kitchen and pantry with work table and cupboards with a passage to the side porch through the rear hall. Front and back stairs are provided for though the back stairs could be omitted if desired so as to enlarge the chambers on the second floor. The large front chamber has a fireplace with a dressing room adjoining which could be used as an additional bedroom. A good sleeping porch is provided over the rear porch. The bath is unusually large and contains a shower besides the regular fixtures, with a medicine cabinet over the lavatory and a clothes chute. There is a full basement with laundry, fuel and vegetable rooms and an extra toilet; hot water heat is included in the cost estimate. The floor and finish throughout the principal rooms is of oak; with pine for the kitchen and second floor, to be painted. Concrete foundation below grade, cement blocks above grade with brick piers and cement floor for the front porch. The porch across the entire front and on two sides makes an ideal living veranda, part of this could be screened and glazed for extreme weather. There is good attic space with plenty of light and ventilation.

Design B 499.

It would be hard to improve upon the floor plan of this bungalow with its large living room across the front, 23x12, with a brick fireplace on one end and a window bay with seat, on the opposite end. Sliding doors separate this and the dining room. The kitchen has built-in cup-



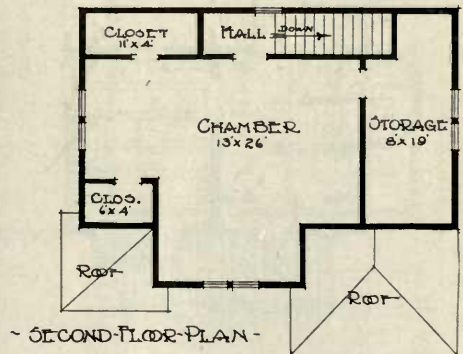
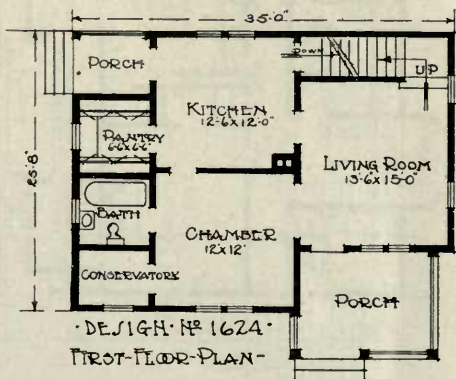
DESIGN B 494

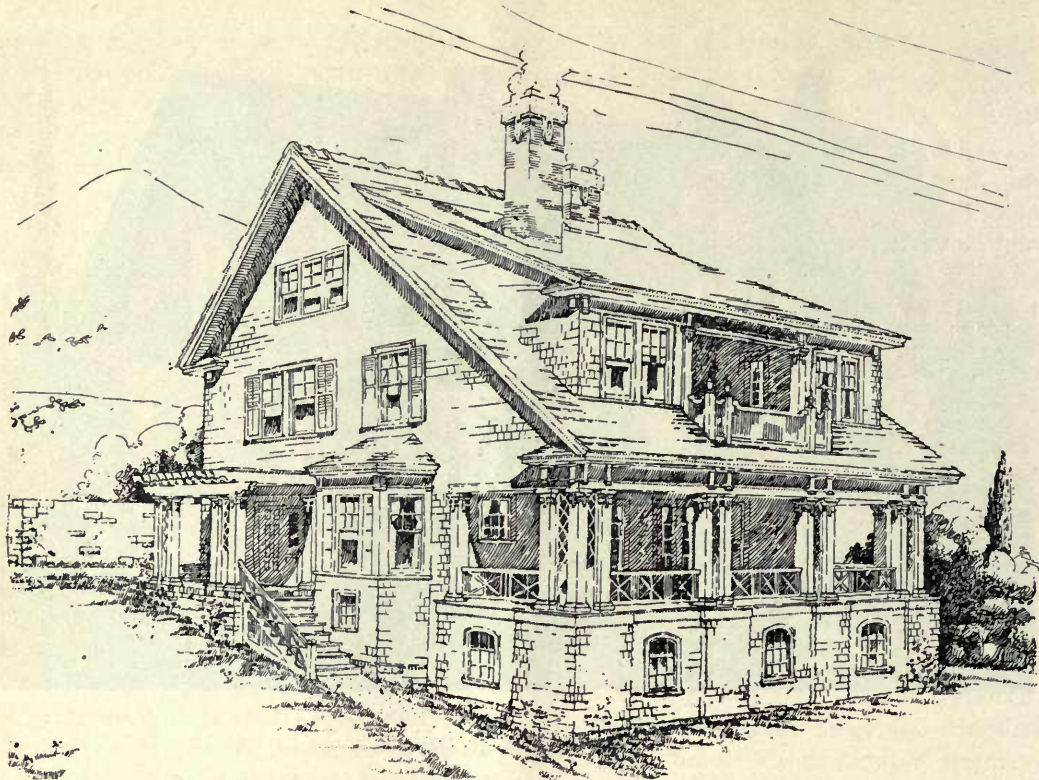
A Modest Little English Cottage

boards. On the rear is a screen porch with stationary wash tubs to take the place of the laundry in the basement. The two bedrooms are both good size, 10 feet 6 inches by 11 feet 6 inches each, having a large closet and a bath between

off a small rear hall.

No basement is included, it being intended to heat with fireplace and from the kitchen range in the rear. Hardwood floors throughout with fir finish. The exterior is of rough sawed drop siding.

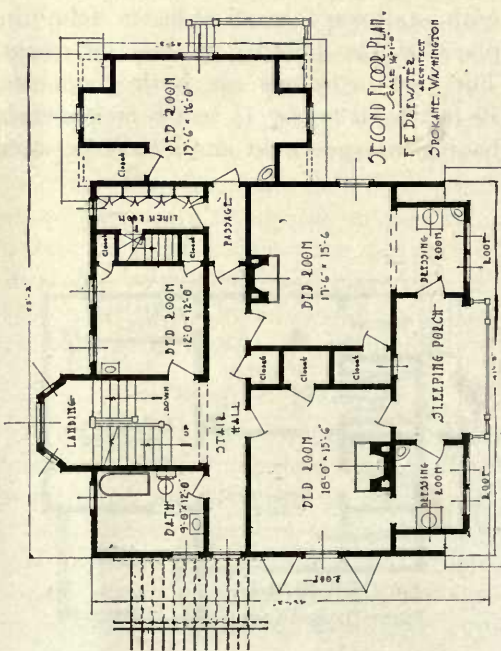
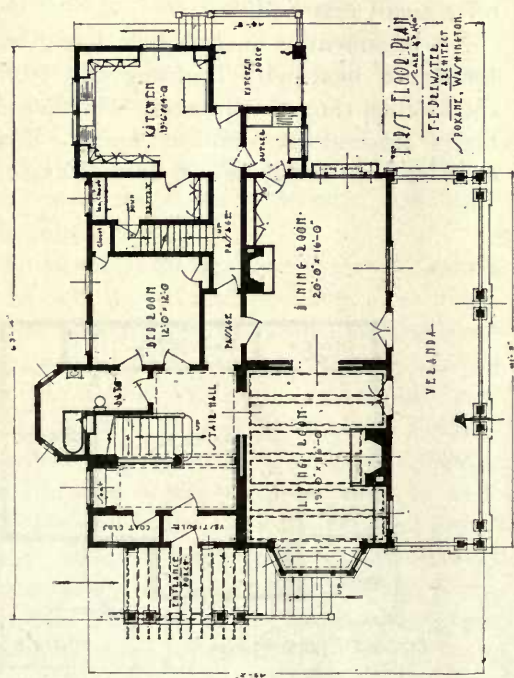




F. E. Brewster, Architect.

DESIGN B 495

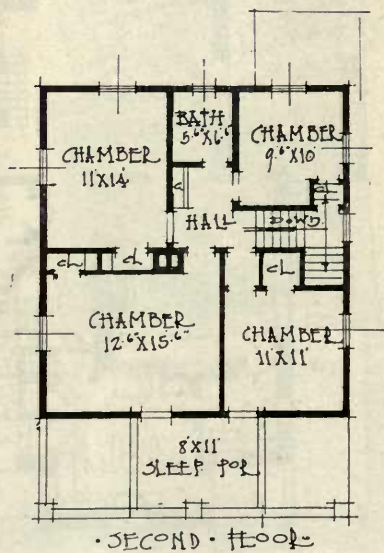
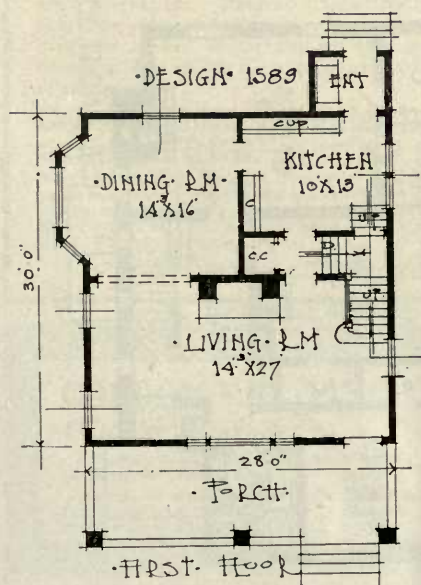
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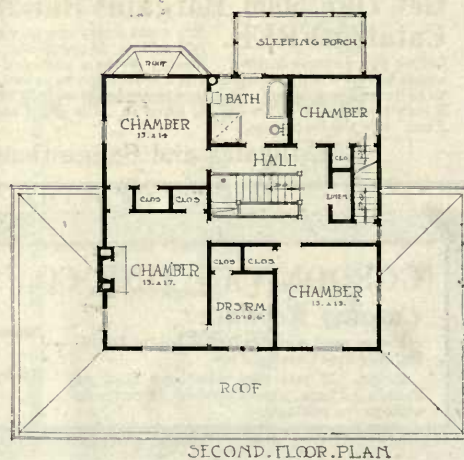
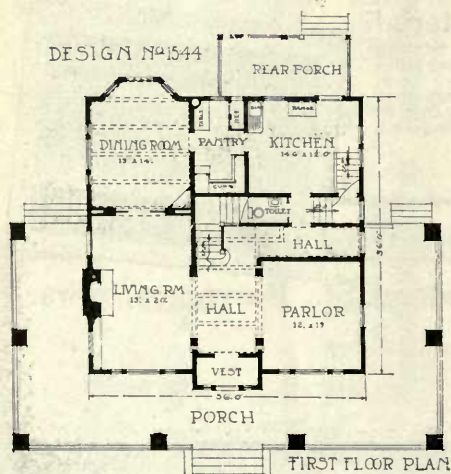
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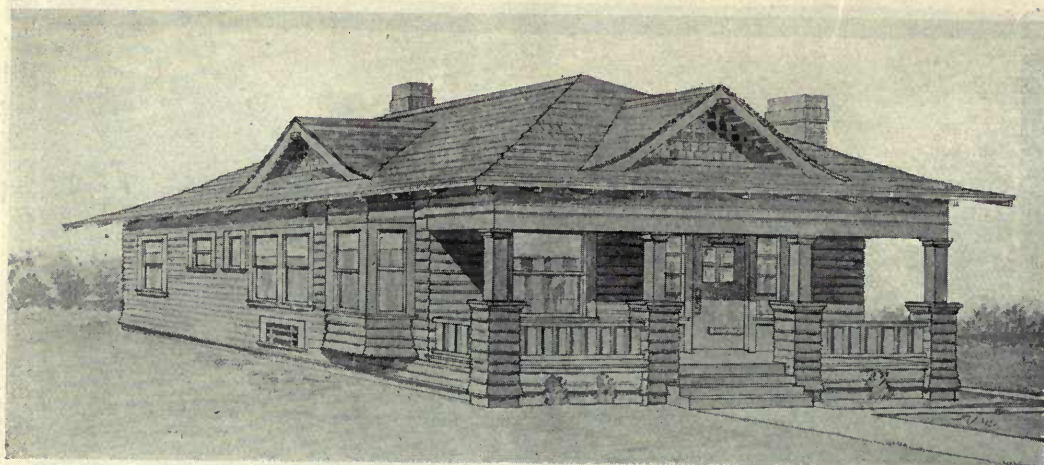
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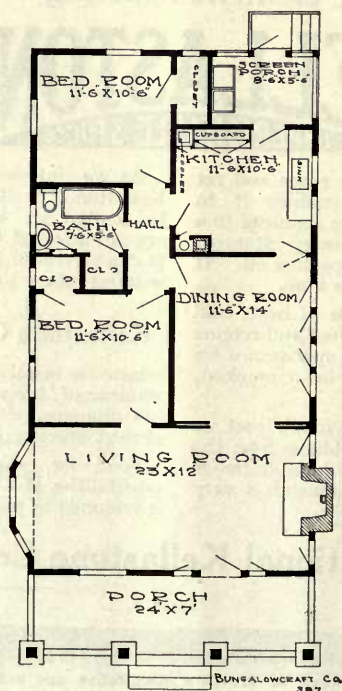
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Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

The Function of Light Blue.

IT may be mere chance but the decorator has run up against so many light blue wall papers lately that it seems as if the popular taste were turning in that direction. Those she has seen have been practically plain papers, with a design in a tone so little different from the ground that the suggestion of pattern was almost nil. Others have been delicately striped in blue and white.

Blue gray is a delicious wall color for certain rooms but these light blues, almost approximating to the "baby blue" of our childhood, are very nearly impossible from a decorative standpoint. But the color has a certain sentimental value, as the setting for a certain type of woman, and it is possible to do something with it. But not by itself, it needs the combination of a delicate, low toned green, hardly darker than itself with the light blue wall, paint the woodwork in this gray green, possibly tying the two colors together by a line of deeper blue in the groove of the mouldings. Already the blue wall will have gained character, a character which can be accentuated by the use of a still deeper green rug. The furniture for such a room should be light, not white enamel, either birdseye maple, or the warm tone of white mahogany, known in its cheaper qualities as *prima vera*, or else the same tone reproduced with stain on some cheaper wood.

Then for a finish have a good deal of chintz in a small pattern of blue flowers and gray green leaves on a white, or better cream ground. Use the chintz wherever possible and avoid white. A touch here and there of deeper green or blue, in the shape of a pottery jar, a potted

plant, or a bit of textile will help and it ought not to be difficult to find a picture or two in color which, framed in dull gold, will carry out the prevalent color notes. Such a scheme is naturally not adapted for the average room, but may be chosen for one of several bedrooms. Rather faded in strong sunlight it absorbs so little light that it would be useful in a room on the sunny side of the house under overhanging eaves.

The Room Used Only at Night.

English people laugh at the tendency of American women to sit in their bedrooms and it undoubtedly exists, as we have not incorporated in our domestic system the morning room of the English house of the better sort, except in city houses of a certain type. That being the case, it follows that the downstairs rooms are not used much in the day time, and it is desirable to consider one of them at least with special reference to its use by artificial light.

The first thing to be considered is the family taste in light. Is it for a dim room with oases of brilliant light, does it demand that the entire room shall be brilliantly lighted? If the former taste prevails a room with a dark color scheme is desirable and the red tones give an effect of cheer and comfort not attainable with any other color. Green is seldom very successful in artificial light, blue is apt to have a slaty tinge and it is a wonderfully well managed design of several colors which keeps their relative values at night. But red in its pure tones, or with a suggestion of yellow or orange, is always good, provided it has not too much blue in it. The objection that it makes a room seem smaller is not material in a room whose functions are apt to be cen-

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DECORATION AND FURNISHING—Continued

tralized, as the family gather about the evening lamp.

Most light colors are garish by artificial light which robs them of their depth of tone. The clear light yellow or delicate green which is charming in natural light is simply glaring when suffused by gas or electric light. Oil makes less havoc with it, but anything like a general illumination with oil is seldom attempted. Some greens, those with considerable yellow in them, are good by artificial light, but the choice of distinctly yellow tones is a better one. A deep buff, a strong, pure yellow, or a light golden brown are all excellent for the room used at night, and any one of these is a good background for the dark wood of the furniture. If the woodwork of the room is dark, brown, oak, or mahogany, deep yellow is the better choice, while the medium tones of brown, or white enamel are happy in association with golden brown and buff respectively.

While deep yellow is a delightful color, it is open to the objection of being a bit splendid for common use and is apt to contrast too strongly with the furnishings. You cannot well cover furniture with yellow and are rather restricted to low toned olive or yellowish brown, unless you happen to run across just the right thing in a cretonne or tapestry.

On the other hand, either buff or golden brown can be used with almost any color or combination of colors. Golden brown is at its best with blue, the strong blue with the very slightest suggestion of green, which does not change its tone at night, but it is also available with red, green or rose.

Buff, equally wide in its application, is successful with lighter tones of the same colors. All the pastel tones combine well with it. It is an excellent background for engravings, while pictures in brown tones are at home on a golden brown wall.

Domestic Scotch Rugs.

The imported Scotch rugs are immensely durable, but their appearance is hardly commensurate with their cost, which is about that of a Wilton of the second grade. The domestic Scotch rug is not

perceptibly different from the imported ones and costs much less, about \$17.50 for the 9x12 size. The best are in plain color with a patterned border in a lighter tone, or vice versa, the rugs being reversible. For a slight addition in price, any color or pattern will be made to order.

These rugs are heavy enough to keep their place on the floor and of sufficiently good appearance to harmonize with simply furnished living or sleeping rooms. The greens and browns are fairly good and the two-toned grays are admirable. With the present fancy for gray there is a great demand for gray rugs at a moderate price.

Splint Wood Baskets.

With the coming of spring, wood fires have their innings. A wood basket is always an effective adjunct, and five dollars has been about the lowest figure at which a wicker one could be had, with the grass ones at about the same price. There has, however, made its appearance lately a wooden one with a substantial stand, the basket part woven of broad splints, after the fashion of a market basket. In natural wood this costs only a dollar and a quarter, and is unfinished, so that it can be stained any desired color.

Above One's Writing Table.

It is rather a nice idea to make a specially intimate place where one's writing table stands. Choose a corner into which the table or desk will fit as exactly as possible and have a shelf for one's favorite books run around it a couple of feet above its top. Below this cover the wall with some fabric contrasting pleasantly with the color of the room, a small patterned brocaded silk, a mercerized armure, or even a seeded taffeta, and against this background hang the pictures of one's intimates, relations or friends, views of places of special associations, and some motto which appeals to one. Little things of this sort not only give pleasure to the person who arranges them but impart a touch of individuality to a room which is very delightful.

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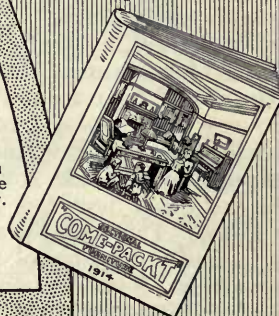
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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert. Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Harmonizing a Colonial Interior.

I. M. R. "We have moved from a Dutch Colonial house with a dainty reception room on one side of the hall and a library on the other, to another type of Colonial, and I wish to bring my pieces of furniture into closer relationship with the house. The hall is a big, square room, red brick fireplace, sanded walls, much heavy woodwork in chestnut stained dark brown, and opens into the library with an arch. In the library the ceiling beams are light oak, the fireplace of gray granite, with a stone seat at one side, crossed at the top with an old oak beam. The room is 17x18, with a large bay window at one side, five feet deep, and the fireplace takes up about four feet of the length of the room. The floor is covered with Wilton in oriental colors, deep reds, light blue, pale yellow and white. For furniture I have a dainty set of mahogany covers in a mossy green velour, also a small mahogany window chair. A big ebony, claw-footed sofa from the library in the other house is also covered with velour. Table, desk and bookcase are oak, and a big, upholstered chair awaits covering. The curtains are plain white net, well pushed back, as the room is not light. At one end the room opens into the dining room, which has a rose-pink wall, and the same ivory woodwork as the living room.

I thought of changing the wall from green back to gray, painting the rafters ivory white, putting cretonne portieres in the opening of the bay, with side curtains of the same cretonne at the windows, bordering the velour portieres with it and covering the large chair with it. Could I stain my oak pieces mahogany? Would you bring the mahogany davenport also covered with green velour in from the hall and put large ebony sofa in its place?

The ebony chairs are already in the hall. I should have mentioned that the reading lamp is wrought iron with a yellow porcelain bowl.

Ans.—It seems to me that the trouble with your room is that there is no connection between your green velour upholstery and portieres and the red and blue of your carpet. You will certainly gain nothing by introducing more color in the shape of a cretonne. By all means change the green wall back to gray. I should change the beams to the same old oak as that used at the top of the chimney-piece.

I judge that red is the dominant color of your carpet. Upholster your large chair with something in low tones of red and green. You may find that combination in a Morris or Liberty velvet, or in a petit point tapestry. Or you might find a printed linen, the ground of which would repeat the gray tone of the walls. If you can "tie together" your furnishings and your rugs in this way you can consider the other colors of the rug negligible, except as the yellow of your lamp repeats that of your rug.

A mahogany stain on some of the pieces might be fairly satisfactory. While light oak and mahogany are impossible together, oak in the deep, warm brown tone of old French walnut looks perfectly well in association with the other. But in the arrangement of the room keep the two woods by themselves as far as may be.

I should bring in the mahogany davenport from the hall, at the possible risk of losing the dignified corner you mention, and place it in the corner where the bookcase now stands, removing the latter to the other side of the room. The desk I should set in the bay window, either in the center with its back to the window, or in the sample place at right



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angles to the window, and I should group all the ferns at the south end of the bay window. As the room is so poorly lighted, I should content myself with the net curtains, as the overcurtains you suggest are sure to subtract a good deal of light.

A Semi-Colonial Interior.

"I am enclosing floor plan of our new house. It is stucco, dark gray, with white trimmings, 48 feet from street, and among trees.

Would you advise the use of white window shades or gray ones?

The hall is colonial and will be beautiful with staircase in birch, mahogany finish with white risers. I feel that these stairs should be protected by a carpet. Would you advise green or red? It seems to me the green with small green rugs on the floor would be very pretty. My idea is to have an old-fashioned paper for hall. The other rooms I want tinted. You may not approve such a decided difference in finish for rooms opening together, but I have seen this done with very good effect. I think they might be connected up some way in the matters of hangings, etc. In the living room I will consider anything but tan—that is too common here."

Ans.—Your own ideas in regard to your interior seem well considered and good. We agree with you in regard to use of old-fashioned paper for hall walls, and we have seen one in a sort of all over tapestry effect, blended blues, dull greens, dull reds, on a grayish ground, criss-crossed with fine black lines that we would like here. A stair runner of plain lichen green Saxony or Shawmut with rug below, one large, rather than two or three small, would make a beautiful hall. A long antique mahogany sofa against the stair wall, upholstered in tapestry the tones of the paper, is almost imperative, also a Console table beside the entrance.

We suppose the exigencies of furniture on hand decided the wood finish of living and dining rooms. Hangings between are certainly needed. For the living room walls we suggest a grayish green, and a soft, low-toned shade and ceiling of grayish white. We should use white window shades.

Neither of the gray samples you send for dining room wall would be at all in tune with the tan in rug and fumed oak. The gray we suggest is the color of putty. Your tan sample is much too warm for a southwest room. There are, however, grayer tans, that might be better even than the putty-gray wall. Of course, if you could dispose of the terra cotta rug, then you could carry a scheme of dull blues and greens right through these rooms that would be very delightful. Not a delft blue, however, such a blue will not tone in with green at all, but a solid old blue, medium light, with the same blue in darker tones for rug. In this case we would suggest mixed blues and greens for hall carpet and rug with a lovely foliage tapestry in dull blues, green and grays, on the wall. Pale gray ceiling, running up on second floor hall walls. Then the lichen or reseda green rug for living room, not a dark green, with a light grayish green wall. Such shades of blue and green harmonize beautifully, but not the strong, primary colors. In rugs they come in the Rosslyn or Shawmut weaves, but rarely in others.

The reed chairs in living room could be upholstered in blue and green cretonne and relieve the heavy furniture. We should have only ivory voile with an edging at windows. Such a scheme would admit of using reseda green hangings in the arched openings, and the whole effect be one of refinement and harmony, if you get the right blues and greens. All depends on that.

We know nothing better for the side lights and door in hall than one of the lace nets in a colonial design.

Then your only help is in a soft, gray wall with gray hangings at doors and windows, with glass curtains of thin, frosty lace. Some dull red along with dull greens could be introduced into a foilage with here and there little pink in countenance.

The bedroom with handsome mahogany would be almost too glaring, done entirely in ivory and cream for a southwest exposure, though this would be beautiful in a north room. Nor should we like pink. We once saw a handsome four-poster with spread of white dimity sides beautifully embroidered, and a back-

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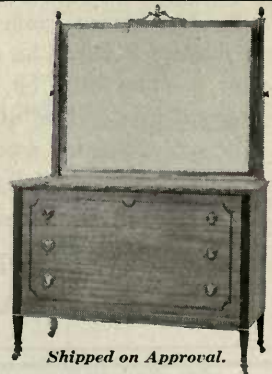
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ground of grayish wall paper with cheerful little nose-gays of old-fashioned flowers sprinkled over it. Two other papers suggest themselves, one with soft shadowy gray branches and garlands of foliage with here and there little pink blossoms, just tipping the ends of the gray sprays; one a sort of all over design of upright stems, gray leaves, pink and blue blossoms on a cream-gray ground.

General Suggestions.

"As a subscriber to the Keith Magazine I wish to take advantage of your offer in the way of decorative suggestions.

Tan walls with cream ceilings. Fireplace in reddish brown brick. Rug, tan and green colors. Furniture, waxed oak and wicker. Please suggest proper curtain material. Do I need side draperies to match curtains for French doors? Dining room, woodwork oak finished dark to match weathered oak furniture. Suggest color scheme for walls, this has panel sides and beamed ceiling. Give curtains and draperies to go with same. I want

something not too expensive in curtains and draperies, etc."

Ans. First, as to curtains for living room, we cannot do better than refer you to the June issue of Keith's Magazine which contains a very helpful article on curtains. The ecru batiste with border, there illustrated, would be just the thing for your living room. The photograph does not show the pattern of border very well, as it is merely a design woven in same shade as body of curtain. There is a lovely material in casement rep, at \$1.50 a yard, in just the tan shade for your room, that would be excellent for side draperies. We should not use side hangings at French doors. Read article mentioned, on treatment of French doors.

In this northeast dining room we would use a decorative paper above the wainscot. There is paper in a tapestry design of dull pink roses and foliage on a golden tan ground which would be ideal, with ceiling between beams old gold. There is a sun-fast material at \$1.00 a yard for windows and French doors in either old gold or dull reddish pink. We should not use any inside curtains here, just a valance across top of the group of windows and draperies at the outer sides only. To complete this lovely room there should be a rug of deep dull pinkish red. The Shawmutt rugs come in just the shade. A 9x12 costs \$50.00. The border is in three shades, darker than centers.

We cannot give details for so many bed rooms in this free service, but are glad to give suggestions for bedroom No. 1, with birdseye maple, which is a northeast room. We would paint woodwork a deep ivory. Tint the walls a deep cream, but relieving them with a paper banding in old pink and dull green which would run around room at top and above baseboard and down both sides of the four corners. Then use chintz draperies and furnishings in the same old pink, dull green and golden brown. For the circassian walnut we would use a fumed oak stain on woodwork, tint walls a soft grey and use a French cretonne in old pinks and blues for furnishings. We should think ordinary white woodwork best for balance of second floor.

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KEITH'S MAGAZINE

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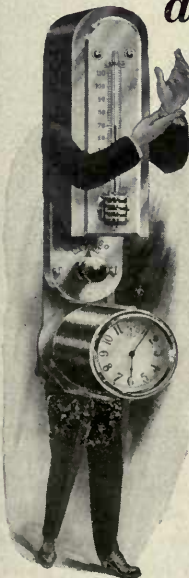
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Just Plain Mutton.

BEEF, the economists say, will never be cheap again, and even the new tariff has afforded no relief, since the South American cattle have been corralled by the beef trust. But at least we can fall back upon mutton, which has been comparatively free from the fluctuations which have affected beef and pork.

We say mutton, but comparatively little reaches the market. The American taste is opposed to much fat and good mutton is always fat. Heavy Canada mutton is always fat and is almost as good as beef, but the average butcher refuses to carry it, and a large part of his stock consists of well grown lamb, reasonable in price and not too wasteful in its proportion of fat and bone. Of this a very large proportion is sold in the form of chops, a form of food which is extremely expensive, but is the unfailing refuge of the incompetent housewife. The average chop is not only expensive, but it misses of excellence by being cut too thin.

Mutton or lamb has one advantage over beef that the whole creature is more uniformly good than is the case with beef. Again the smaller size of the animal makes it possible to buy as much as whole quarter at a cheap rate with the possibility of using it while it is good manifestly out of the question, with beef. The forequarters will supply a roast for Sunday, chops for Tuesday and a stew for Thursday, with a possible soup for Saturday for an average family without too great a strain on the appetite or a complaisant butcher will keep part of it in cold storage till another week and the same thing

can be done with the hindquarter, roasting the leg and serving the chops later. In this respect the family which eats meat twice or even three times daily has the advantage.

The Choice of Cuts.

It is worth while going against the traditional roasted leg of mutton. As a matter of fact the forequarter is a far better roast and neither is comparable to the little used saddle piece taken out of the center of the back without splitting the backbone. Or equally good is the long strip of rib chops roasted like the loin of pork. When the leg of lamb can be bought advantageously as part of the whole hindquarter, it is at its best boiled, with a caper or other acid sauce, the pot liquor making a good vegetable soup. The adjoining loin can be boned, stuffed and roasted as the quality of the meat is excellent, far more juicy and tender than the lean leg.

The forequarter of reasonably heavy lamb sold without the rib chops at a low price, is an excellent roast. The shoulder blade should be removed and it may or may not be stuffed. The neck and other trimmings can be used for soup stock and two or three very good chops cut off *across* the foreleg. The breast, though very good in a young and not very fat lamb, is rather hopeless in an older creature, though the lean part can be used for croquettes or hash. The family which eats much mutton should make its own soap, as there is much more fat than can be disposed of at the table and it is useless for drippings.

In this connection it should be noted that the goodness of lamb or mutton



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Architects see Sweet's Index, Pages 1004 and 1005.

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chops depend very much upon their thickness. The average butcher cuts chops thin, on the principle that the customer thinks he is getting more for his money when his chops cover a large area on the platter. A chop should be at least an inch thick, even if it is liked very well done. A thinner chop will be dry and hard. The average chop will be much more appetizing if it could be realized that it takes an accomplished cook to broil a chop successfully. The average woman turns it out much scorched as to bone and fat and with a distinctly burnt taste. If you haven't the skill, the materials or the patience to broil your chops, chef fashion, in buttered paper and over a charcoal-fire, either bake them in a very hot oven or sauté them in a hot, dry frying pan, keeping it closely covered after the chops are well browned on both sides.

Another essential in the cooking of lamb of any cut is the removal of the thin membrane inclosing the outside fat. In this resides the peculiar and disagreeable "woolly" flavor which so often prejudices people against lamb or mutton.

Some Variations of Roast or Broiled.

The boiled leg of mutton has been mentioned already and if cooked slowly in plenty of water is good and economical as there is absolutely no waste, while it is equally good cold or warmed up in a number of ways. Another possibility with the leg is as a browned pot roast treating it exactly as you would beef, but removing nearly all the outside fat.

The same thing can be done with the forequarter, having the blade removed and filling the cavity with a highly seasoned dressing. Parsley, onion, pepper and salt and butter should season this dressing rather than the herbs used for poultry and if the chopped onion is browned in butter so much the better.

The breast of young lamb, not too fat, can be boned, spread with stuffing, rolled and roasted, a far better mode than the stewing, usual with that piece. Older lamb is too fat for this treatment. Potatoes and thick slices of cooked white turnip browned in the gravy are a pleasant addition.

In warming up cold lamb or mutton, curry powder is invaluable. The quantity used is a matter of taste but the merest trifle of it redeems the meat and gravy from incipidity. Tomato sauce is another valuable adjunct. A very good one can be improvised from canned tomato soup seasoning it highly. A dash of Worcestershire sauce is palatable and so is an addition of Chili sauce or of curry powder.

Perhaps the most satisfactory way of disposing of cold lamb is as a pie, with alternate layers of lean meat, thinly sliced cold boiled potatoes and shredded onions, the whole moistened with gravy and covered with a good crust. For some reason lamb does not lend itself well to cooking in a casserole. The slow heat too often brings out an unpleasant flavor.

Turnips and currant jelly are the time honored accompaniments of lamb or mutton. To them may be added young cabbage, creamed celery and spaghetti cooked with cheese as well as the inevitable rice of curry. Apple pie or apple dumpling is also traditional but is perhaps too substantial for the modern taste.

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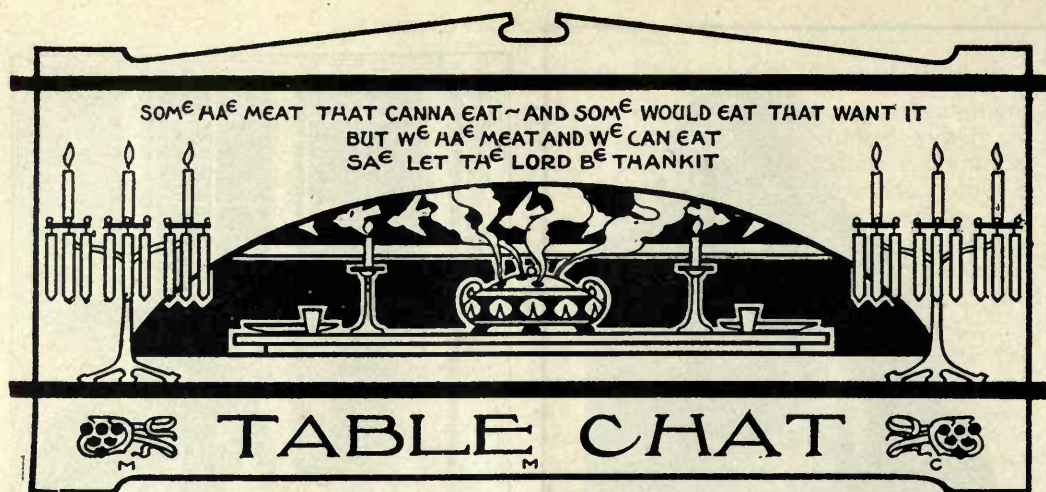
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The Serving of Tea

AFTERNOON tea is a comprehensive term for a custom which happily is coming more and more into favor. The tea may have an alternative of cocoa for the nervous, and the occasion may even be stretched to cover the service of coffee. It is a pleasant rite and one that makes next to no demands upon the most impecunious household.

The function originated in England and there the custom is to make it quite substantial; toast, scones, or muffins hot

and liberally buttered, being the rule. It is a way station between a luncheon and an extremely late dinner, or else, in middle class homes, between the early dinner and the late supper. A substantial provision of this sort implies competent service in the kitchen, toasting or baking in relays.

But for most of us, who dine at six or half-past, afternoon tea is merely a pleasant interlude, not a matter of nutritive values. Tea or cocoa with bread and butter sandwiches or some sort of wafers, is quite sufficient. The one essential is good service. The tea must be hot, the sandwiches or wafers of the best.

The Equipage.

The tea table, with its burden of china, always in evidence and gathering dust, has ceased to be a part of the drawing room furniture. The table is still there, unless, indeed, a tea wagon is used and kept out of sight when not in commission, but it is generally of the folding sort and stands in a corner when not in use. One very good kind has shelves that can be pulled out when needed. Tea tables of this sort have been an extremely popular wedding present of late years and can be diverted from their original use to several others.

The tea tray is used either with or without a special table and can be had in great variety. The oval mahogany trays,



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TABLE CHAT—Continued

antique or reproduced, have a great deal of distinction and are more easily handled than the equally desirable and far more expensive ones of Sheffield plate. The fad of the hour is the glass bottomed, cretonne lined tray, with an edge of polished wood, and these can be made up specially with a lining of the upholstery fabric used in the room. Serviceable, low priced trays have wooden bottoms with sides and handles of wicker, either natural or stained, and the circular bamboo trays in various sizes are light and strong.

ration in similar tone. The same general effect is gained with Wedgwood in some of its many colors, deep blue, sage green, gray blue, dark green or light brown. Any one of these is at home with white and gold china. For an out of doors tea table the Italian lettuce ware in plain apple green is quaint and charming and can be had in cups and plates as well as in the larger pieces.

Tea Cloths.

If a tea table is used the tea cloth may be as elaborate as you please or merely a



Afternoon Tea Cakes.

The very newest tea table consists of two of these trays fitted, one above the other in a frame of dark wood.

The fancy for odd cups which persisted so long has passed away. So too has the use of very tiny cups. The sensible thing is a service of cups and saucers and plates in moderately thin china, of fair size and in the prevalent color of the room, or at least not conflicting violently with it. One would not deliberately choose blue china for use in a red room or yellow for a pink one. The Japanese shops are a great resource in the choice of the tea service, as you are sure of thin china at a modest price. Strong rivals of the silver service are their tea sets in plain color, deep green, dark or gray blue, with cups of the same ware or white cups with a deco-

square of hemstitched linen or table damask. You can make a very good looking tea cloth from a yard of handsome table linen, choosing a pattern which shows little of the ground, hemstitching it all round with a two-inch hem, embroidering a monogram or initials in the middle of one side. The strips of border cut off at either side can be hemstitched and utilized for guest towels. For a tray you will need a fitted cover, except for those with cretonne bottoms and plain linen with an edge and insets of heavy linen lace is as good as anything, unless the tray is rectangular, in which case hemstitched linen is in order.

Napkins are not strictly essential with afternoon tea, and the custom is more honored in the breach than the observ-



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LIGHTING FIXTURES

TABLE CHAT—Continued

ance. For an occasion of any formality a fringed napkin may be used. Napkins of medium size, hemstitched and embroidered to match the tea cloth are the most elegant thing and a tea cloth and napkin set is a very nice wedding present.

The Art of Thin Bread and Butter.

Nothing is "better form" for afternoon tea than thin bread and butter, well cut and delicately spread, and nothing is bet-



ter liked, especially if plain white bread is varied with brown, Graham or whole wheat, but its preparation is something of an art. The sandwich bread mixed with milk and twenty-four hours old, is the best for the purpose. Cream the butter partially before spreading. Trim off the top crust of the loaf and the end crust and spread the cut end liberally, holding the loaf upside down. Cut off the slice and at the same time cut another very thin slice for a cover for it, pressing the two together. Continue the process till you have enough, pile all the sandwiches one above the other and trim off the remaining crust with a very sharp knife. Then cut the pile once or twice diagonally, so as to make triangles. A rather large loaf cuts to better advantage than a small one. Plan for a bread and fruit pudding the next day to use up the trimmings.

Afternoon Tea Cakes.

Afternoon teas which are today so fashionable demand an infinite variety of little fancy cakes. One of these which has been tested is illustrated. These have a filling of 3 hard boiled eggs sprinkled with grated cheese. Make a mayonnaise of thin cream. This is made of the yolk of one egg into which is stirred slowly enough thin cream to make it thick. Add little salt, cayenne pepper, and vinegar to thin to proper consistency. Spread this when it has been stirred into the egg and cheese on a cookie and cover with a second. For the top make a findant and spread on it. Around the edge put half English walnut meats and top with a marshmallow crowned with a nut meat. This is a delicious relish for afternoon tea and unusual.

Sandwich Plates and Muffin Stands.

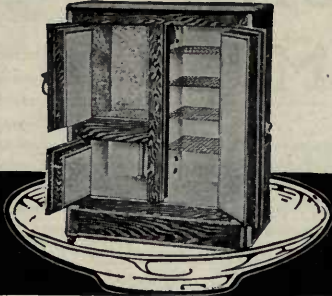
In silver plate and silver deposit there is a variety of sandwich plates, some of them with pierced borders. Less pretentious are the china sandwich plates, in boldly decorated peasant wares, fitted with swinging wicker handles, which are as cheap as seventy-five cents each. The familiar wicker muffin stand or "curate's assistant" is to be had with its shelves fitted with these same peasant plates. Delightful, shallow baskets of bleached and finely woven rushes of foreign make, are the favorites of the hour for handing about sandwiches.

For An Invitation Afternoon Tea.

Bon bons, hard candies, peppermint wafers and olives are in order. So is ginger marmalade which is easily and economically made by cooking evaporated pears and crystallized ginger very slowly for a good many hours. A delicate sweet is made with green grapes stoned and simmered slowly in strained honey.

Parisian sweets are made from dates, figs and raisins finely chopped, made into little balls and rolled in powdered sugar. Figs can be steamed, opened and stuffed with a paste of icing and chopped walnut meats and large French prunes can be stoned and filled with a paste of bitter chocolate boiled with sugar and a little water.

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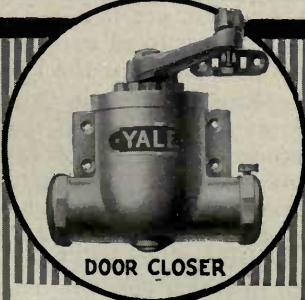
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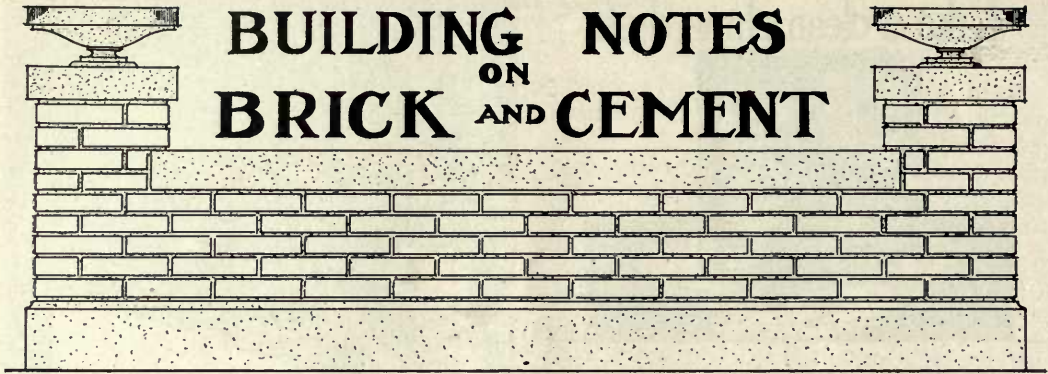


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EDITOR'S NOTE: This is coming to be of such general public interest that we extract quite freely from a recent pamphlet on the subject, showing some illustrations.



O BUILD today without considering the inexpensive methods of fire protection that have been developed in recent years not only denies you this safeguard, but exposes you to the danger of serious financial loss.

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The cost to America of fire, fire insurance and fire fighting is greater than the net

earnings of all the railroads in the country.

The fire loss alone would pay all national pension claims, the interest on our national debt and leave a surplus of one dollar for every man, woman and child in the United States.

If we spent as much for good roads as we lose on account of our present style of construction, we could build over 50,000 miles of the best roads each year.

While we fully realize the impossibility of adopting, in their entirety, European standards of construction in a country where development is as fast and extensive as it is in America, yet it is possible with a very small proportional expense to save a very large proportion of the loss.

Insurance experts estimate that 27% or \$67,000,000 of the fire loss of the country comes from fires that extend beyond the buildings in which they originate and an equal amount is undoubtedly due to the spread of incipient interior fires that could by proper construction have been confined to the room in which they originated.

Such fires can be prevented with the means at hand and without undue hardship upon the builder, by the use of metal lath and plaster for ceilings, sidewalks and partitions. That this would effectually confine any fire to the room in which it originated has been proven beyond doubt by tests of partitions by fire and water made by noted experts.

Two methods of construction were tried, one metal lath on wooden studding, the only change from regular construction be-

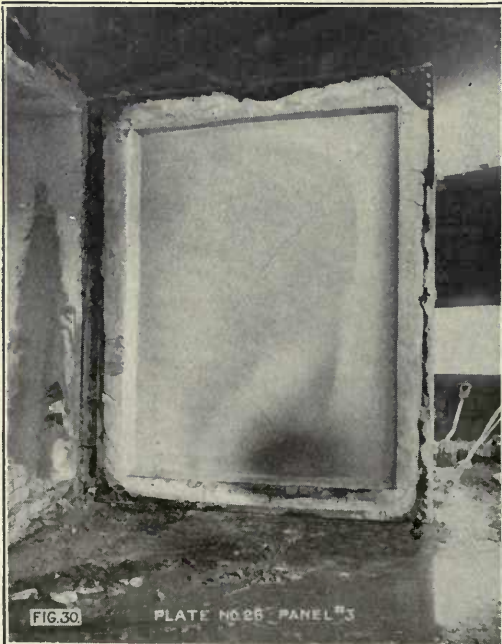


FIG.30.

PLATE NO.25 PANEL "3"

Metal Lath on Metal Stud after Opening Door and Before Water, Showing Good Condition of Plaster.



“Father built this house!”

Your children—when they grow up—will they be proud of the “House that Father built”? Twenty years from now, will it be a modern, soundly built, valuable property?

The next generation won't tolerate inflammable houses. The next generation will laugh at a house that has to be constantly repaired. For the house of the future will be a permanent, dependable house. Almost as cheaply as with wood you can build that sort of a house *now*. Stucco houses are no longer luxuries.

Herringbone Metal Lath is the reason

why you can have a dependable Stucco house if you want to. It provides the best method of construction.

Build with your eyes open. Let us

Herringbone Metal Lath

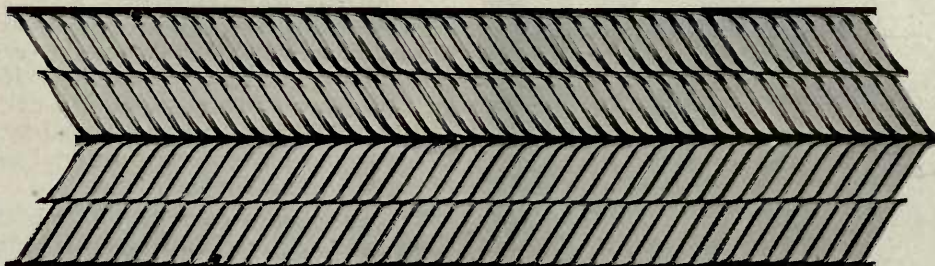
explain to you this whole fireproof construction problem. It will be an immense help to your architect if

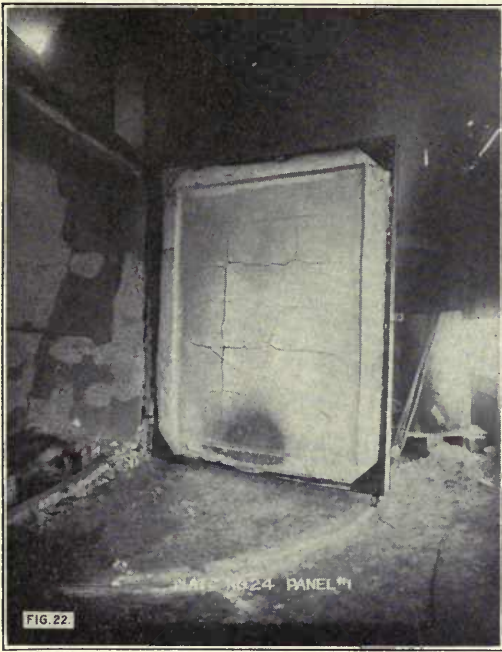
you know what *he* is talking about. Tell us what sort of a building you are planning and we will mail invaluable books on the subject and give you any special help needed.

Also mention architect's name so we can co-operate through him.

THE GENERAL FIREPROOFING CO., 904 Logan Ave., Youngstown, Ohio

Also makers of Self-Sentering, the expanded metal that makes reinforced concrete without forms.





Metal Lath on Wood Stud after Fire and Before Water.

ing the substitution of metal lath for wood, and the other metal lath on $\frac{3}{4}$ " steel channels, plastered both sides, making a 2-inch

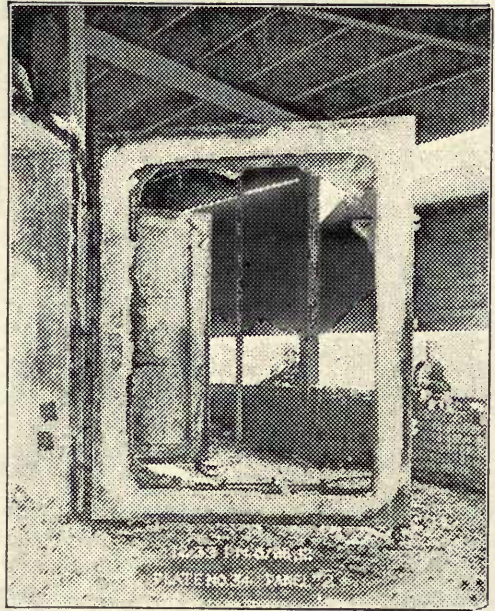


Metal Lath on Wood Stud after Water.

solid wall; both were subjected to the same test—fire up to 1,700 degrees Fahrenheit for two hours and water at 20 pounds pressure from $1\frac{1}{8}$ " ring nozzle thrown from a distance of 20 feet.

The cost will vary with the different house plans, location, cost of labor and plastering material, but a general rule can be given that will arrive at approximate figures.

If the plans you select show 800 square yards of plastering surface on side walls, ceilings and partitions, the average cost that you would incur for lathing and plastering,

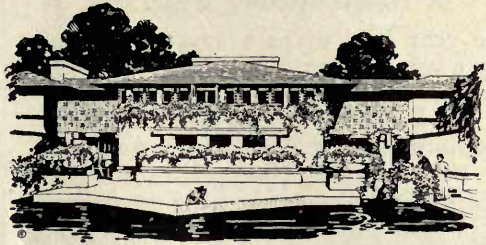


Wood Lath on Wood Stud after Test of Fire and Water.

using wood lath, would be about \$240.00. If with metal lath on wooden studdings, \$400.00; if with expanded metal lath, \$480.00—the extra cost as shown by the second figures is \$160.00, but this can be reduced by spacing the studdings 16" to 20" on centers instead of the usual 12", which can be done with perfect safety, and which would make a very material saving in lumber and labor in framing.

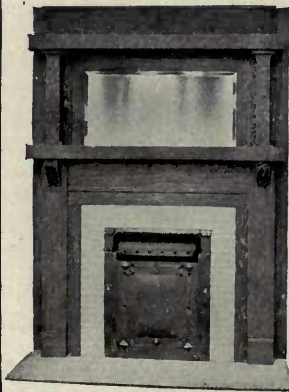
The question of cost, therefore, is an insignificant one, certainly not of sufficient weight to counter-balance the questions of permanent value, personal safety and good progressive citizenship.

Spare Yourself



worry after your home is built by making sure during the building that none but materials of the first grade are used.

How to make sure? Investigate such materials as Atlas-White non-staining Portland Cement. We'll gladly tell you all about it—of its successful use in building of every kind, from skyscrapers to garden decoration, and in many homes like the attractive one illustrated. Just write today to



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Price includes our "Queen" Coal Grate with

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A flowing stream of clean, freshly heated water of any temperature and always ready for bathroom or kitchen is given by the

Ohio Water Heater



Safe—no dangerous flue or condensation pipes. Water and gas attachments only are necessary. Can be set in any place. Light heater; hot water flows instantly. Saves time, heat and expense. Always ready for all requirements. Used alone or auxiliary to storage tank. Easily installed. Write for Catalog A and full particulars.

The Ohio

"M" for artificial or natural gas **\$29**
"A" for acetylene gas **\$32**
The Dayton "C" for gasoline **\$38**

All f. o. b. Dayton.

**McCORMICK
MANUFACTURING
COMPANY**

448 E. 1st St., Dayton, Ohio

A Home Building Year.

The year 1914 gives every promise of being a great year for home building. There are many influences at work which make for a greater era of home building of the right kind than we ever known before. For one thing the agricultural section is more prosperous, good roads are taking the home idea out into the country and making for greater improvement and there are many other influences. This country is primarily the greatest country for homes in the world, and as the country grows older and more settled the disposition is to build better and more permanent homes. During the past two or three years there has been a steady and per-

sistent agitation on the subject of community development. Part of this started primarily to help check what is termed mail order competition, and to help the local merchants, but it has finally resulted in a bigger and broader idea than that, the idea of building homes and of general civic improvement. This idea is now bearing fruit and promises to aid materially the promotion of home building. Another idea along the same line that has received attention is that of rural credits and of providing ways and means to finance individuals and communities in the making of desired improvements. This has resulted in the organization in the past year of many building and loan associations to finance the home builder, and the outcome of all this will be many thousands and perhaps millions of dollars more available in the present year for home building. These are but a few of the things that point toward a great era of home building in 1914. There seems no question but what the country is ripe for home building. It is disposed to do more home building than ever before and is in better shape to do it. The question for the brick manufacturer is that of what kind of homes, of what material will enter into this home building. It should not only be the greatest year on record in home building, but it should include the greatest percentage of brick and clay products ever used in home building in the country. It will include more than heretofore, naturally, but just how much it may be made to include depends somewhat on the brick men themselves.—*The Clay Worker.*



EVERY MAN owes it to his city to have his home present the best possible appearance. My business is helping people make their grounds attractive. By my method I prepare plans for out-of-town parties at moderate expense. Write for my booklet today. It describes my methods and gives prices and description of trees, shrubs and plants I use, grown in my own nursery.

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LANDSCAPE GARDENER
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Protect the House from Careless Coal Men. They Are Burglar-Proof—Unlock Only from the Inside.

Being made of cast iron, are not affected by the weather. Wire glass in door furnishes light to cellar. When door is open, the glass is protected by heavy steel, which operates automatically. The watertable at the top of chute protects the inside of foundation from moisture. Doors are extra heavy with three hinges at top and are made with a beaded edge which extends over the border opening, making a tight joint. Are made to fit any depth wall. Drop us a postal, giving your dealer's name, and we will quote prices.

THE WATERLOO REGISTER CO.

Waterloo, Iowa



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Many pretty one-story Bungalows and Cottages. Church Portfolio 50c. If you want the BEST RESULTS, consult a man of experience and reputation for GOOD WORK. If you want a small ECONOMICAL HOME, don't fail to send for these books.

CHAS. S. SEDGWICK, 1135-K Lumber Exchange, Minneapolis, Minn.

This Temperature Protects Food Against Germs

Bacteriological statistics show that the ordinary "ice box" is a breeding ground for millions of germs, due to the dampness of melting ice and to the fact that the temperature runs from 50 to 70 degrees Fahrenheit.

You can eliminate the possibility of disease germs breeding in your refrigerators by installing the



AUDIFFREN-SINGRUN Refrigerating Machine

Refrigerators cooled with this machine can be maintained at a temperature of about 40 degrees. The breeding of disease germs is checked by this low temperature and by the absence of dirty, unsanitary ice.

The "Audiffren-Singrun" is totally different from the ammonia type machine. No dangerous fumes. No high pressure to cause explosion. And no complicated parts to leak and give trouble. Just turn the switch on or off to start or stop it. The "Audiffren-Singrun" Refrigerating Machine not only cools the refrigerator, but also makes ice.

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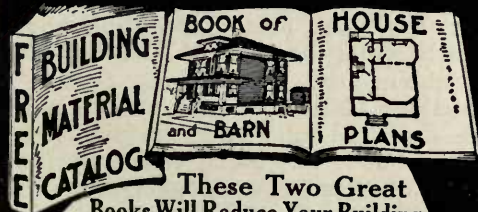
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AMERICA'S GREATEST SASH AND DOOR HOUSE

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Phenix Combined Screen and Awning



A FULL-LENGTH window screen—and an awning that can be raised or lowered from the inside of the room without disturbing the screen!

Screen covers entire window—making possible ideal ventilation. (Note top view.) Both awning and screen can be put up or taken down from inside of room—with one easy operation—and can be stored in small space.

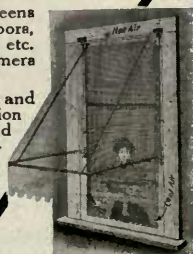
Workmanship and material strictly high-class. Ask your architect about PHENIX QUALITY.

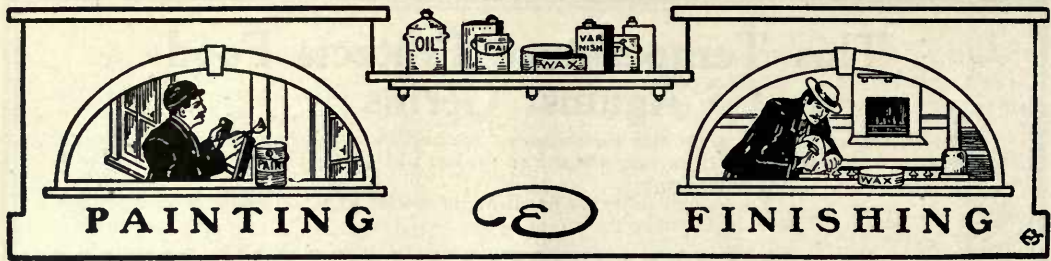
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We make built-to-order Screens of exceptional quality for Doors, Windows, Sleeping Porches, etc. Can refer you to satisfied customers in every part of the country.

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PHENIX MFG. CO.
048 Center St., Milwaukee






Hardwood Flooring and the Floor Layer

How Trouble with Floors Come

By W. L. Claffey

 **H**ARDWOOD floor layers may be divided into two classes—the good and the bad.

Owners, architects and contractors nowadays know the value of first class work when it pertains to hardwood flooring. Even after the floor is finished, the appearance at some time sooner or later, if improperly laid, will develop the result of bad workmanship.

In Detroit about a year ago, 2,450 feet of oak flooring was laid by an incompetent floor layer, parallel with the sub-floor. The sub-floor in the course of ten days started to contract, with the result that it made crevices in the floor every six inches, which was the exact width of the sub-floor. The owner made the complaint to the dealer, and I was called upon to look into the case. A glance at the floor immediately showed the flooring was laid parallel to the sub-floor. The floor layer was called upon to explain why he laid the oak flooring over the sub-floor in this fashion. He had no good excuse to offer other than he thought it was the proper way. It brought out the fact that he was a novice in floor laying. Every bit of this oak flooring had to be taken up and replaced by new oak flooring and of course this time it was laid properly at right angles to the sub-floor.

Another case in Kansas City a short time ago; 2,000 feet of oak flooring was laid in a very fine residence immediately after being delivered from the retail yard. At the retail yard it was given improper housing, where it absorbed considerable moisture, resulting in many pieces swell-

ing to the extent of $\frac{1}{16}$ -inch from the original manufacture. The period was during the winter season. The result was that unsightly crevices appeared very numerous after the house was heated. This floor also had to be ripped up and replaced by new stock at a big expense, which was borne by the dealer and the floor layer. It might be well to say that they tried to place the blame upon the manufacturer but after careful investigation, revealed the aforesaid conditions.

At Ithaca, N. Y., a few years ago, an 8-inch brick wall was bulged out to the extent of 3 inches and after investigation it was found it was done by the flooring, which was oak, being badly abused by too much water being used and left on in scrubbing the floor, which caused the swelling. Usually in a case of this kind, the floor will bulge up in the middle of the room, but it was found in this particular case that nails were generously used through to the oak sub-floor.

In another case in St. Louis where the flooring showed crevices throughout the floor, the fact was revealed that the sub-floor was green stock and the carpenters left no space whatever for contraction. A few months after the flooring was laid these boards contracted anywhere from $\frac{1}{4}$ -inch to $\frac{3}{8}$ -inch, and while the flooring was laid diagonally, it made very bad crevices.

Booklets have been printed at enormous expense by the hardwood flooring manufacturers that can be had free for the asking; beautiful and instructive booklets on all the features of laying and finishing,



Unexpected!

"Why, John, you said it was an *old* house!"

"And so it is. But the painter has been at work. That's the difference."

A house is only as old as it looks. A house painted in colors tastefully selected and with paint mixed of

Dutch Boy White Lead

and Dutch Boy linseed oil looks new, and long retains that look of freshness. Such paint wears long and smoothly, without cracking and scaling. Consult your painter as John did his. Make your house new. No other improvement so satisfactory can be made for the same money.

Write for our Paint Adviser No. 283—a group of helps, Free

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(John T. Lewis & Bros. Co., Philadelphia)

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PAINTING AND FINISHING—Continued



Which of these houses would you choose for your home?

You'd choose the one at the left, of course! The lawn and yard are neat and trim. The house is well painted. The whole property shows good care.

You will always take best possible care of your property if you paint or decorate with

Lowe Brothers
High Standard
LIQUID PAINT

It is scientifically made from selected materials that the test of service has proven best. It withstands the weather for years, keeps its color splendidly, leaves a good surface for repainting.

For the inside walls and ceilings, the ideal finish is "Mellotone." Fadeless, washable and many rich hues.

Valuable books—Free

"Homes Attractive" is full of ideas for beautifying home inside and out, including lawn and yard. With it we'll send portfolio of eighteen houses in harmonious color combinations. When you write, ask for local dealer's name, if you don't know him.

The Lowe Brothers Co.

465 E. Third St. Dayton, Ohio

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Lowe Brothers, Ltd., Toronto, Can.

that should be in the hands of every floor layer or carpenter.

A first class hardwood flooring job does not only mean the proper laying process, the right kind of nails, scraping, etc., but it means that the floor layer should exercise some judgment in keeping discolored pieces and other bad appearing pieces from prominent places in the room. Very often when entering a room you see a bad looking piece that is not covered by the rug, which should have been placed in some obscure corner or closet. The most successful floor layers employ an assistant to pick out bad looking strips and see that they are not laid in prominent places. A floor layer should have a thorough knowledge of the different kinds of hardwood flooring before entering into this field.

In oak flooring there are five grades: Clear, Sap Clear, Select, No. 1 Common and Factory. Each grade has its uses.

Changing Weathered Oak to Mahogany.

The trim of a fine residence was oak which was to be treated with a weathered oak stain and rubbed to a dull finish. The furniture which was purchased for the house was mahogany and when installed the contrast was anything but pleasing to the young couple for whom the house had just been erected. The owner, therefore, decided to tear out the oak finishing, casings, doors, etc., and replace with birch. Just at this time, however, it occurred to one of the men employed by the painter having the contract for the work that much trouble might be saved by treating the woodwork to a mahogany oil stain. He, therefore, rubbed down a portion of the oak and applied the mahogany stain to it with such pleasing results that the entire woodwork was gone over, after sanding down, with mahogany stain and varnished.

The effect was a mahogany finish somewhat darker than usual, but nevertheless a very satisfactory job.

"How to Build It"

A Practical Handbook on Construction Details, \$1.

M. L. KEITH, McKnight Building, MINNEAPOLIS

WALL AND CEILING HINTS
from Experienced Users

No. 16. A Contractor Endorses Beaver Board
Mr. Henry Belden's magnificent new bungalow on Washington Avenue, Clifton, N. J., is Beaver Boarded throughout—ten rooms and bath room. Mr. Belden writes: "There is no house where Beaver Board has been used that will give your product a better boom than this of mine. This may sound like conceit but wait till you see the pictures. "The magnificent new type of building and the use of Beaver Board throughout speaks well for its adoption in my locality."

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Booklet "Beaver Board and its Uses" and painted sample sent free.

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A great Beaver Board success—Read owner's letter above.

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Con-ser-tex is a scientifically treated roofing canvass made so well that it outwears the porch and roof, costs so little that to invest in other roofing would be a blunder and a waste.

It deadens the noise of the rain—the rattle of the wind—and will not mildew.

It's easy to lay—hugs the porch tight, and is neat and artistic in appearance.

Write for sample and see how it looks. Try it and see how it wears. Satisfaction guaranteed.

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Liquid Granite is a floor varnish of unusual beauty, toughness, and elasticity. Washing with soap and water has no harmful effect. It stands the hardest wear.

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LIQUID GRANITE

Heating, Lighting and Plumbing

Heating Your House

Which Form of Furnace Is Best for the Farm?

A. A. Porter in "The Country Gentlemen"

EDITOR'S NOTE: In our March issue, an article by one of our contributors expressed views very strongly endorsing the hot water system of heating. As it is far from our wish to advocate with partiality or give undue preference to any heating system, we are in the present issue presenting the views and experiences of those who favor the direct hot air heating system.



HERE are three methods used in heating modern houses and small buildings—hot air, hot water and steam. In all these systems some fuel like coal, wood, oil or gas is burned with air in some form of furnace.

The heating by hot air is the simplest and cheapest. In this system cold air is passed over surfaces within the furnace, is heated, becomes lighter than the cold air outside and rises in pipes or ducts to the various rooms. This system has the additional advantage over the other two systems in that the heating process is also a method of ventilation and responds more readily to sudden temperature changes. The greatest objection to the hot-air system is the difficulty of heating rooms located on the windward side of a building. This difficulty is due to the fact that the natural draft of the furnace being not very strong, the registers on the windward side become cold-air ducts, the heavier pressure forcing the air to take the path of least resistance. Some have difficulty with the furnace gases vitiating the air in the house. This, however, is due to poor workmanship in installation, and can be reduced to a minimum in any case by a good, strong chimney draft, which, being greater than that in the hot-air ducts, will pull the air inward through leaks, preventing the contamination of the air supply to rooms.

The air to be heated may be brought into the furnace from the outside or may come from some part of the house. The cost of operation is greater when outside air is used, and in the houses having but few occupants there is little necessity for

an outside air supply. It is, however, well to provide a small cold-air duct connected with the outside, besides the main inside air duct. The outside air duct should be controlled by a damper, so as to enable the operator to so mix the cold air as to produce good ventilation.

The hot-air furnace of today is a vastly different article from those in use several years ago. The hot-air men have made vital improvements in this system, and the modern direct heating plant is an extremely satisfactory proposition.

Much depends on proper installation and care of operation, equally true of other systems. Some practical suggestions on this head follow:

A good hot-air furnace should be provided with a brick-lined cylindrical fire pot and with some form of shaking and dumping grate to facilitate the breaking up of clinkers and the removal of ashes. The ash pit should be large enough to hold several days' ashes, but not too large as with a given height of furnace a large ash pit means too small a combustion chamber. In any case the combustion chamber should be not less than twice the size of the fire pot. A water pan should be provided with every furnace. The water pan must be galvanized or enameled inside to prevent rusting.

The furnace should be located near the exposed or coldest part of the house and as centrally as possible, so as to have the hot-air pipes leading from the furnace, and called leader pipes, short and of uniform length. All the leader pipes should start at an even height and as close to the top of

Did the U. S. Government Make a Mistake?

When the U. S. Government *specified* Williamson Underfeed furnaces for Dam Keepers' houses along the Ohio River, did it err? The Government put the Underfeed through the hardest possible tests and *proved* that such statements as, "Coal bill \$16.22 for 7 rooms;" "\$5.40 to heat 4 rooms;" "Reduced coal bills from \$109 to \$53;" "Underfeed reduces coal bill 60%;" "A great fuel saver;" "Have cut coal bill \$70 each winter for 9 years;" "Saved \$122 a season;" "I have divided my coal bill by five;" "Even temperature with no smoke or dirt;" *were absolutely true.* What's best for Uncle Sam is best for you.

25,000 Underfeed Users

For over twelve years Underfeed furnaces and boilers have been cutting coal bills $\frac{1}{2}$ to $\frac{2}{3}$, thereby saving millions of dollars for coal buyers. Why not save *your* share? The economy and efficiency of Underfeed heating has startled the world.

Cheap slack soft coal or pea and buck-wheat hard coal yield in the Underfeed *more* heat, *cleaner* heat and *evener* heat than the most expensive coal burned in other heaters. And 25,000 Underfeed users have *proved* it!



Cut Coal Bills $\frac{1}{2}$ to $\frac{2}{3}$

With the Underfeed coal is fed from below. All the fire is on top. Smoke and gases are burned up, making more heat with *no* smoke, soot, clinkers, smell and dirt and but few ashes. No other furnace or boiler does this. The Underfeed principle is the greatest improvement ever made on *any* heating system. Soon pays for itself in any home, store, church, hall and other buildings. Adds to renting and selling value of any building. Adapted to warm air, steam and hot water.

50% Saving in Coal Bills Guaranteed

With every Underfeed furnace or boiler, when properly installed and operated, we guarantee a saving of at least 50% in your coal bills. This guarantee is backed by a \$750,000 corporation. You take no chances. The burden of proof is on the Underfeed. It has made good for thousands—it will make good for you. Let us send you the names and addresses of over 2,000 Underfeed users—some right in your neighborhood—who *know* that an Underfeed in the basement means

Clean, Even, Economical Heat

in the home. If you are going to build; if your furnace or boiler is unsatisfactory; if you use stoves or grates; if you want to reduce your high heating costs, then send in the coupon. We'll send you a big budget of money-saving heating facts that will surprise you. Stop making rich coal barons richer by sending the coupon today—NOW.

The
Peck-WILLIAMSON CO.

54 Fifth Street Cincinnati, Ohio

Mail This Coupon and Learn How to Cut YOUR Coal Bills $\frac{1}{2}$ to $\frac{2}{3}$!

The Peck-WILLIAMSON COMPANY (5)
54 Fifth Street, Cincinnati, Ohio

I would like to know *how* to cut my coal bills from $\frac{1}{2}$ to $\frac{2}{3}$ with an Underfeed.

Warm Air _____ Steam or Hot Water _____
(Mark an X after System interested in)

NAME _____

ADDRESS _____

My Dealer's Name is _____

the hood as possible. To be able to give the leader pipes the maximum upward slope, the cellar should be deep or the furnace should be set in a pit. In such cases the pit should be cemented and provided for drainage if the cellar is not dry.

The area of the cold-air ducts should be equal to the combined areas of all the hot leader pipes and should lead to a pit under the furnace. In some cases galvanized iron boxes are used instead of pits. These should never be located higher than the ash pit, and should extend round the casing far enough to secure the full capacity of the pipe leading to them. When the cold air is taken from the inside the cold-air duct should be placed in the front hall and near the door. Outside cold-air ducts should be located on the windward side of the house.

Vertical pipes which carry the hot air from the leader pipes to the rooms are called stacks. These should be run on inside partition walls, and for best results should be circular in cross section. All stacks should be well insulated and should clear woodwork by at least one-quarter of an inch.

Floor registers offer a more direct path for the hot gases and should be used when possible on the first floor. Upper floors may be provided with wall registers, since rooms on upper floors are more easily heated on account of the greater height of the column of hot air.

In general a man of ordinary intelligence when following the above directions should experience no trouble in working a heating plant in his home at a high rate of efficiency, provided care has been taken in the selection and installation.

In line with these ideas, we append the experience of one of our correspondents with hot-air heat, and also an extract bearing on hot-air heating from a recent discussion of different heating systems before the American Society of Heating and Ventilating.

Discussion.

"The session was then turned over to the committee having charge of the evening's topic. In support of the hot blast method were S. R. Lewis, J. E. Miller and J. H. Kassa, and in support of direct steam heating were J. K. Lees, George H. Getschow and R. Widdecombe.

"Some of the arguments advanced in be-

half of hot blast heating were its adaptability for supplying air at varying temperatures, absence of leakage, fewer valves, delivery of pure air, and the possibilities of its use in summer for cooling purposes by running cold water through the coils. The direct heating advocates urged the low cost of installation and maintenance."

An Experience.

"For the last fifteen years I have had a hot water heating plant in my house, but recently when moving into another property, decided to buy one of your heaters, which had been highly recommended to me. I have never been sorry I made the change, and like it so well that I would not exchange it for hot water. I find it very easy to hold fire, although I burn nothing but fine slack coal, and my fire hasn't been out since it was built last fall until warm weather came this spring. It heats the house in a very short time and I have found it satisfactory in every respect."

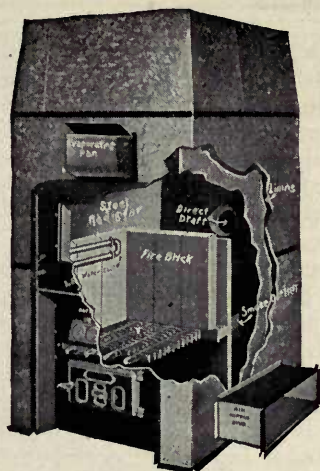
Causes of Leaky Roofs.

Often roofs become leaky by reason of the timbers of the roof settling, or by insufficiency of strength to support the roof covering and workmen at times of repair or the additional weight of snow, at other times. In such cases the roof should be strengthened by strutting or furring it up.

The use of narrow strips of slate held, often, in position by one nail (two being impossible in the width) instead of using slate and a half or double slates is a cause of leaks in roofs, the small strips frequently getting displaced.

The careless or wilful holing of lead-work in hips and valleys may lead to drops of water entering the roof, as also the use of slates holed incorrectly and reversed end for end.

On zinc or lead flats rain often drives or is drawn by capillary attraction over badly constructed rolls. The cloak of the lead covering of a roll should always be on the opposite side to that of the prevailing winds or rains. If flats are liable to be much walked on battens should be placed on them after the manner of snow gratings, and the same precaution should be adopted in slated roofs by providing cat or duck-ladders for access to the various parts of the roofs.



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Thus we insure your satisfaction and assume all the risk of success.

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Other Causes of Dampness.

Other causes of dampness are leaky or choked-up gutters. Both defects are heralded by falling or running water, and there is no excuse for gutters remaining in their bad condition long enough to cause real dampness to the walls. In searching lead gutters for defects, it is necessary to wipe the inside surface dry to find the crack, which will generally be noticed by water oozing from it.

Other items in a building requiring periodical inspection to avoid dampness entering are skylights, the timbers and putty of which rot with time unless prop-

erly coated with paint at regular intervals; and, lastly, it is necessary to keep all drains in good and clean working order.

Lack of proper maintenance forms the sixth cause of dampness in buildings and is unhappily the most common of all. The ways in which slates or tiles get cracked or broken are countless. Workmen repairing or renewing glass in skylights, cleaning out gutters, telephone linesmen, are all responsible for such breakages.

It is not, however, only by cracked or broken slates that rain water is let into the most vulnerable part of a building—the roof; it is sometimes caused by an absence of proper lap in the slating in the first place. The insufficiency of lap may not be all over the surface of the roof, and even if it is it may not be necessary to strip the lot, but rather, as a trial, it would be best to strip a patch about 4 feet super. around where the water is penetrating and to give an extra lap to the tiles or slates if able to do so, or pieces of zinc can be inserted between the slates, pushed up as far as the nails will allow, but not showing below the edge of the slate.

—The Builders Age.

HOW TO BUILD IT

*A Handbook
Every Home-Builder Should Have*

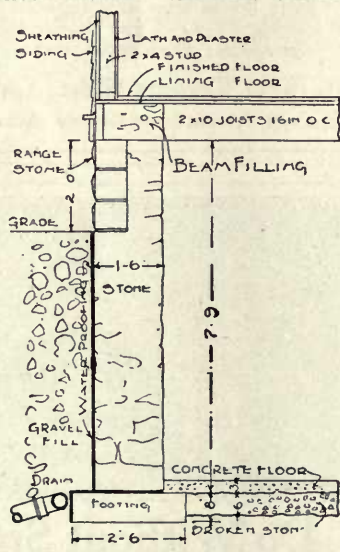
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(Fig. 6)
SECTION THROUGH BASEMENT WALL

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IF ALL classes of craftsmen who will visit the Panama-Pacific International Exposition in 1915, there will be none whose delight will be keener or whose interest more general than the architect and the architectural engineer.

The exposition itself will be a huge and superb exhibit of the genius of architects. From the Palace of Machinery, which is the largest wooden structure in the world, to the Palace of Fine Arts, which will be constructed to conform with every modern demand for "class A" fireproof structures, the grounds will be a constant challenge to the attention and interest of the architect. The reclamation of the exposition site will be likely to engross the attention of the architectural engineer who is acquainted even superficially with the problems of pre-exposition preparation when much of the 635 acres of exposition domain was marsh or tide land, submerged in the waters of San Francisco Bay, or the abode of the long-legged water bird and the clam.

But supplementing the architectural display represented by the exposition itself, there will be found in the Palace of Liberal Arts, a splendidly comprehensive exhibit of data, drawings, models, and

photographs related to architecture; there will also be an equally comprehensive display in the exhibit of architectural engineering. Here will be shown the models and working plans of public and commercial buildings, large and small dwelling houses, flats, apartment houses, models, detail drawings and specifications for foundation walls, partitions, floors, roofs, stairways and wood and metal framing, while there will be great interest in the safety contrivances provided against the terrors of panic and danger by fire, as well as in novel means of convenience provided by such media as moving stairways, elevators, etc.

The display of drawings and models of public buildings will be particularly effective and comprehensive, showing to what extent the various needs of complicated metropolitan life have been cared for by the designer of modern structures, hospital buildings, court houses, hotels, bank buildings, libraries, boathouses, tennis courts, gymnasiums, riding academies, stables, lodge buildings, churches, and finally, most important perhaps of all, homes.

These models and designs of ideal homes will range through all degrees of elegance, and will not only include dwellings in their entirety, but special designs of particular rooms, such as dining and bedrooms, library and drawing rooms, model kitchens and even model pantries.

Architects who have specialized in various lines of their splendid profession will here provide the world with a view of the latest developments of their art and there will not be a problem which the builder encounters but what will be covered by the displays which the greatest architects of the world will disclose in the Palace of Liberal Arts. The assurance of the complete character of the exhibit is direct from the host of proposed participants themselves and from those whose earnest inquiries indicate their intended participation.



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It seems to be the general impression in many uninformed places that an architect makes a few sketches, taking a few days of his time, and for this work receives an enormous fee.



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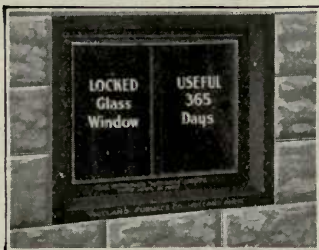
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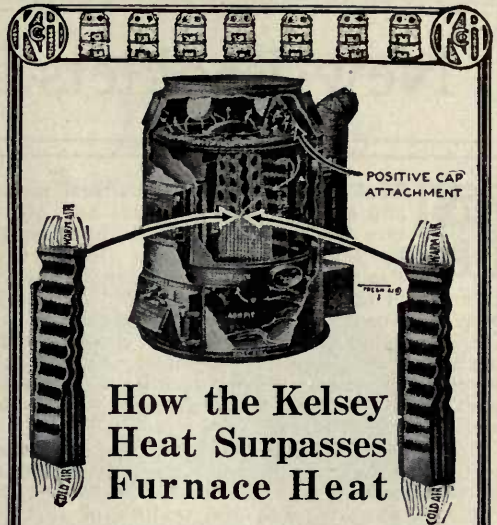
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New Booklets and Trade Notes



TRADE publication of unusual merit and artistic form is *Bonds and Mortars in the Wall of Brick*, just issued by the Hydraulic Press Brick Co. Page, paper, press work, and illustration are of the most finished order. The very beautiful frontispiece alone, a reproduction of the Hotel Cujas, Bourges, France, is well worth a study, being one of the finest possible examples of artistic effects secured by skillful bonding, interesting pattern and felicitous color and texture blending.

The pamphlet very freely and clearly illustrates the different "bonds," gives suggestions as to pattern design and treats the subject of color in mortars used and texture in a style quite above the ordinary and common trade booklet. Any one contemplating a good and handsome house should have this pamphlet, which is as interesting to the home builder as to the architect.

* * *

Modern Sanitation for February contains two articles of special interest: The leading article, "Water Conservation in the West," will interest every reader, adding greatly to his store of information on this subject both by text and the fine illustrations. If every one could follow the gospel preached in the article, "Sanitation in the Kitchen," the world would be a heavenly place.

* * *

We have on our table the booklet of the Vapor-Vacuum Heating Co., Philadelphia, setting forth the advantages of that system of heating. The manufacturers will be pleased to send you this booklet on request.

* * *

The Denison Interlocking Tile Co., Cleveland, Ohio, issue a live little monthly called "The Interlocker," which is devoted to "information and current topics of immediate interest to architects, builders, and contractors." From its very attractive cover in green and



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white, to the list of its representatives on the final page, it is a "live wire"—as it claims to be.

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The new catalog of The Kees Manufacturing Company, hardware specialties, shows a number of interesting devices. Among them we note especially the Kees Metal Building Corners, a small invention but a great money and time saver. The corners are made of galvanized iron shaped to fit the beveled corner formed by the siding or shingle, and pierced with nail holes. A perfect mitre is secured at a great saving of labor. Another specialty we mention is the Kees Heat Regulator, for hot-air furnaces, a simple device which automatically opens and closes the drafts and maintains an even temperature. There are a number of small specialties which will interest farmers in particular.

* * *

The new catalog of The McCray Refrigerator Company will prove quite irresistible to the up-to-date housekeeper. One of their strong points is the equipment with an end ice door, opening on the back porch, which eliminates all the mud tracks and "muss" so annoying when the ice man has to come inside. The principles on which this refrigerator is built insure a perfect circulation of cold air through the food compartments. At the same time it is so dry that even salt will not gather dampness. The company is also prepared to furnish built to order refrigerators from specially prepared plans. The catalog is freely sent on request.

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Spot Cord is for sale by most hardware dealers. If your dealer cannot supply you, order of us direct, giving his name. Send for samples and our illustrated booklet No. 4.

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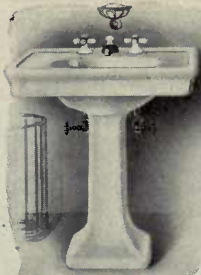
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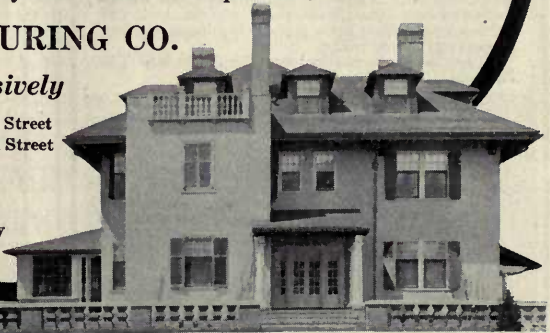
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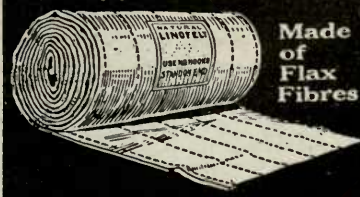
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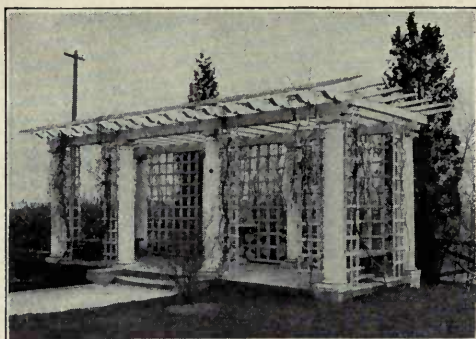
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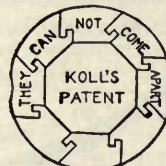
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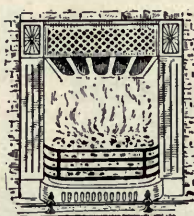
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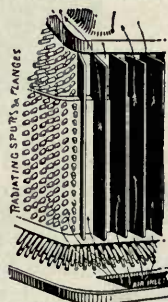
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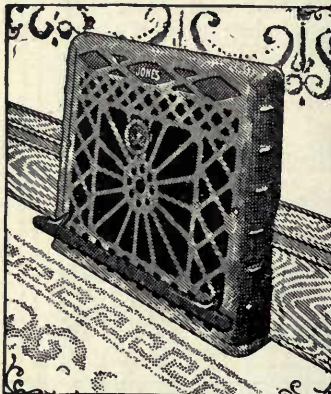
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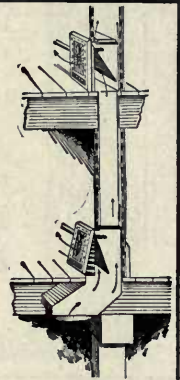
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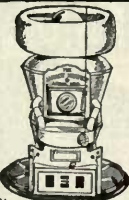
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Model Factory Building Edition.

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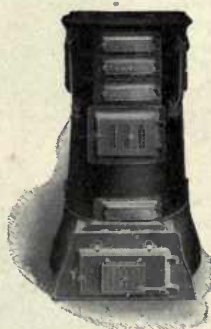
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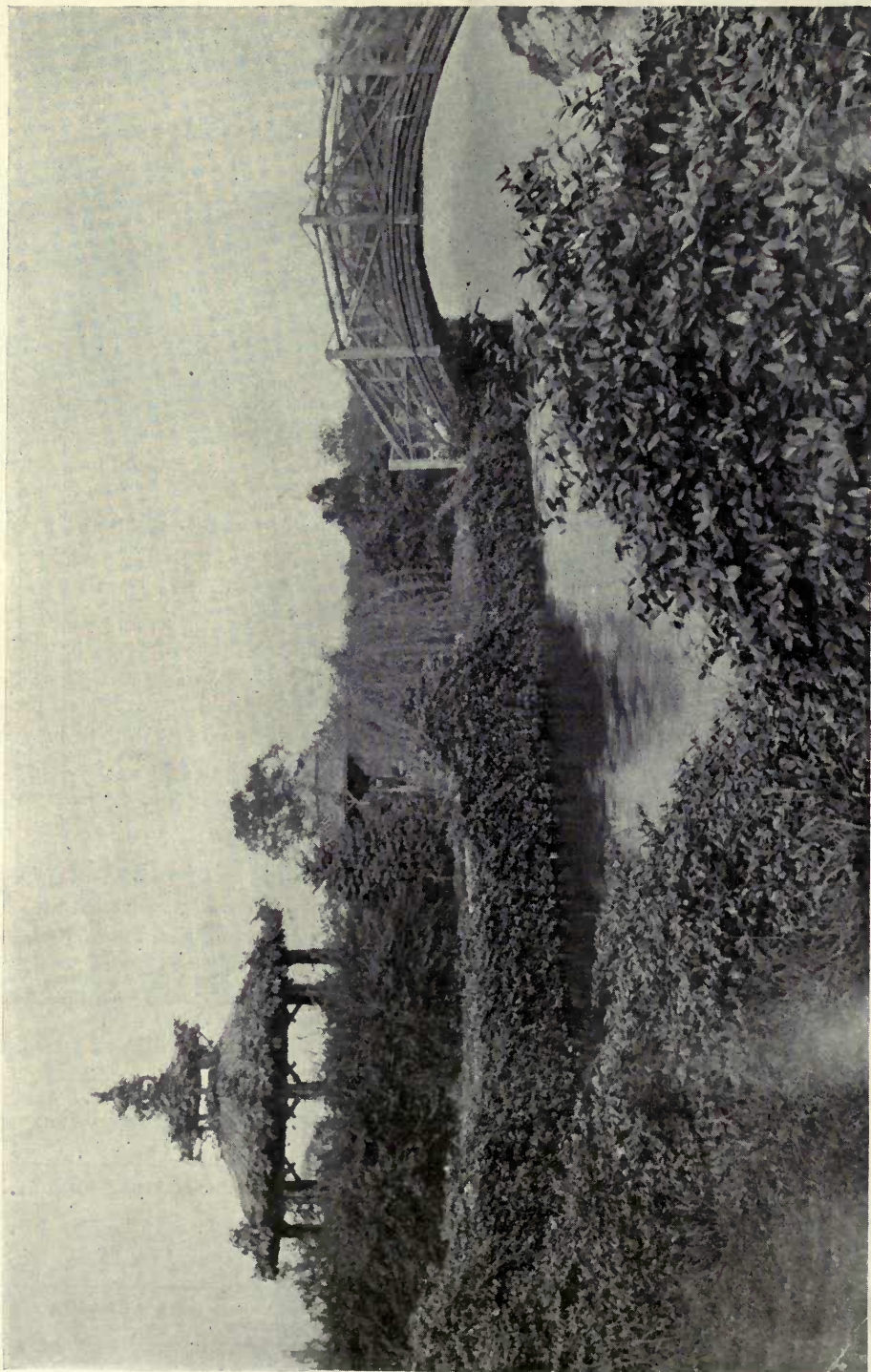
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Summer House in Beautiful Setting of Shrubbery, Ivy and Honeyuckle.

KEITH'S MAGAZINE

VOL. XXXI

MAY, 1914

No. 5



A Delightful Example of the Thatched Roof and the Many Paned Window. The House Hugs the Ground in Cottage Style. The Trim Is White and the Wide Eaves Plastered on Under Side. The Chimney Is Inlaid in Red Brick in a Very Decorative Pattern.

Some Modern Roofs

Kate Randall

ONE of the newest departures—one which goes back into the old—is the modern version of the thatched roof.

These roofs have a soft mattressy look that is unusual but pleasing.

There is nothing new in the way of material in their construction, just the usual white cedar shingles, but these are boiled, or steamed, before using, and while still warm and damp they are split and bent, scalloped and curved in a most extraordinary manner, and when finished, resemble a weather-worn old straw thatch. Our illustrations show some of

the newest houses with roofs so shingled. Both of these houses are plastered on the exterior, and are tinted a warm gray. One has white trimmings, and the other light brown. The concrete chimneys are inlaid with a pattern in red brick, which does not show well in the illustration, but is very decorative. The copings, balustrades, walks, steps, and floors of the porches are all made of the same hard-burned red brick.

The eaves of both the houses are very wide, four feet at least, and are plastered on the underside like the side walls. Both houses are set very low, barely two



A Different But Equally Charming Rendering of the Thatched Roof. Here Casements and Decorative Lattice Are Worked Out Delightfully.

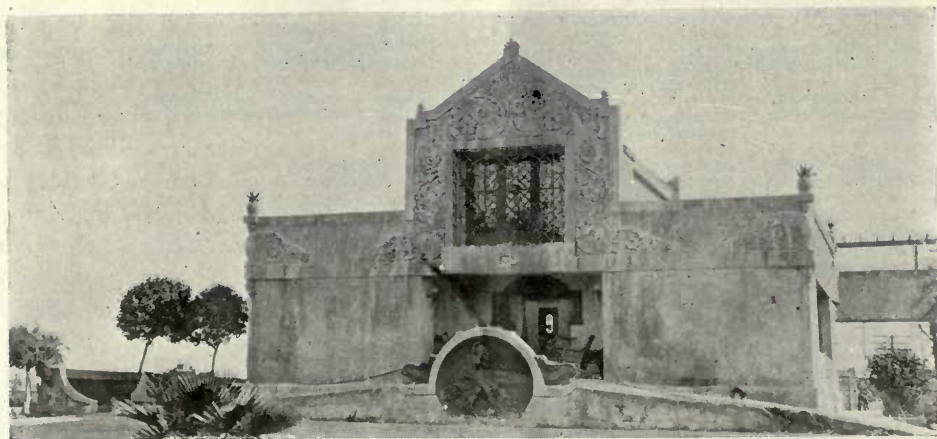
steps from the ground. Many houses are still lower, almost flush with the walks. Casement windows, with very small panes, seem to prevail. Some of these small panes are long and narrow, four or five inches wide—about three such panes are used in a window with a mullion the same width. Certainly, Dame Fashion must be blind, for neither light nor view can penetrate to the rooms behind such windows. Yet they are fashionable.

The entrance porches are small, practically no protection, but at the back of each house, overlooking lovely gardens,

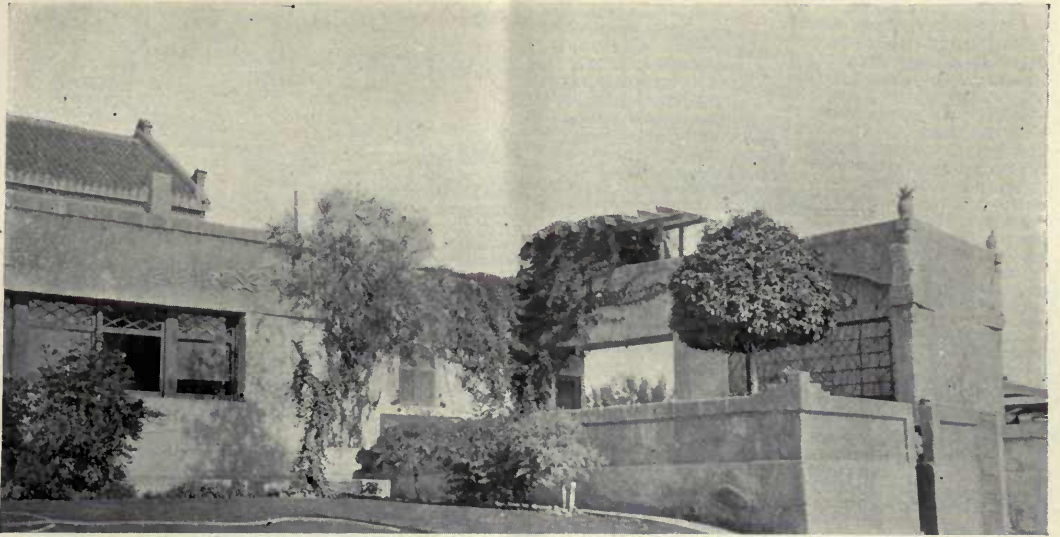
there are large living porches and terraces. The roofs of the other houses illustrated, while not thatched, seem to offer some new ideas both in roof treatment and general style.

The exterior of the Modified Italian house is of rough plaster left in the soft natural gray; the relief work in the same material. The very good grill work is in wrought iron and the bas relief bronze. The house is very unique in having no windows on the first floor except at the sides.

The interior is almost too unique to be



An Americanized Italian Villa in Harmony with Its Situation. The Relief Decoration of the Front Facade and Frieze Is Delicate and Beautiful.



Another View of the Italian Villa, Showing Part of the Court, the Roof Garden and the Wrought Iron Tracery on the Wall.

practical. The rooms are small and the floors of concrete, yet some of the builder's fanciful ideas are very decorative. He has used the beautiful Abalona shells in many ingenious ways. These great half-shells, as large as a coffee saucer, show the most beautiful rainbow tints when they are polished, and he has set them into the casings of doors and windows, and back of them has arranged electric lights which illuminate them and show their beautiful colors. He has also used them as electric light fixtures, combined with bronze grill work. He has fashioned

them into lillies and tulips which are really beautiful. Another idea is a fireplace. This is a square of concrete placed in the center of the room, with the flues under the floor. It has two or three open faces, and each one of the family can sit by his own fireside. The house is built around a court, and it would be an easy matter to arrange the interior more in accord with American ideas, and make a most charming home. If it were possible in such a short article we would illustrate the interiors, but, really, the large porches are becoming more and



The Exterior of This Modified Italian House Is of Rough Plaster in the Soft Natural Gray.
The Relief Work in the Same Material.



The Thatch on the Dutch Gambrel Roof Type of Design.

more the living and dining rooms, too, for the California climate is tempered to porches and terraces as well as to "shorn lambs," and interiors are merely incidents after all. Life would be richer in every way if more of us could realize this, and spend more of our time out of doors.

In the third thatched roof illustration the Dutch gambrel has been used as the type of design, but the proportions

and general outline are not pleasing. Here, too, the many-paned window is used with exaggerated effect and without regard to the balance of the design.

The last illustration, while presenting fewer unusual features, is one of the newer houses in this section, and presents a most harmonious treatment of roof, surface, and window arrangement.



The Roof Has the Charm of An Intimate, Personal Friendship.

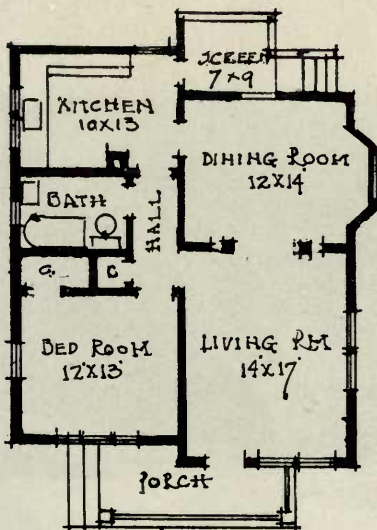
The Latest Word in Bungalows

*"The Majority of People Live in Small Houses
Why Not Make Them More Attractive?"*

Una Nixon Hopkins



(No. 1.) The Soft Shading of the Front Door by Roof Projection in Awning Effect.



Description of Bungalow No. 1.

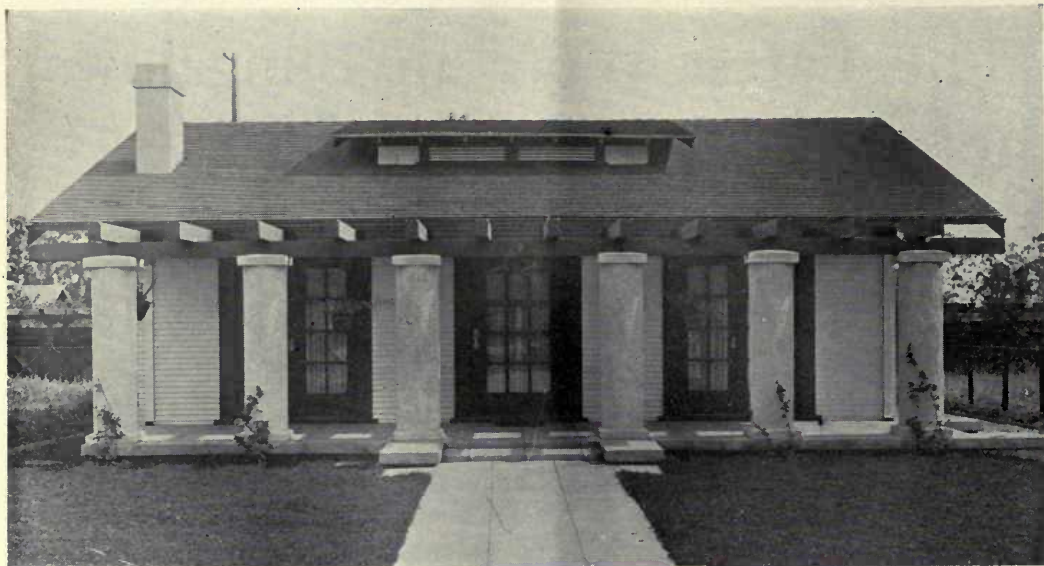


THIS is on details that the small house must depend in order to be attractive. This little house, while extremely simple, is characterized by excellent detail, to which is added a pretty garden. A garden with a small house is especially desirable since it lends a picturesque quality which little houses need, and, besides, large stretches of lawn are here impossible.

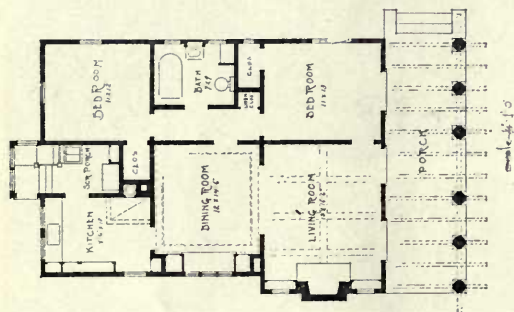
The front porch is shaded by a roof projection which is almost like an awning in effect.

A glass door, divided into small panes, opens directly into the living room, and affords a view from this room into the garden.

The interior woodwork is finished in white enamel, and all of the walls are buff.



(No. 2.) Glass Doors Extend All Across the Front.



Floor Plan of No. 2.

Description of Bungalow No. 2.

There is no one thing that apparently extends the size of a small house like a vista.

In this house there are glass doors all along the front, which command a pretty view beyond the lawn.

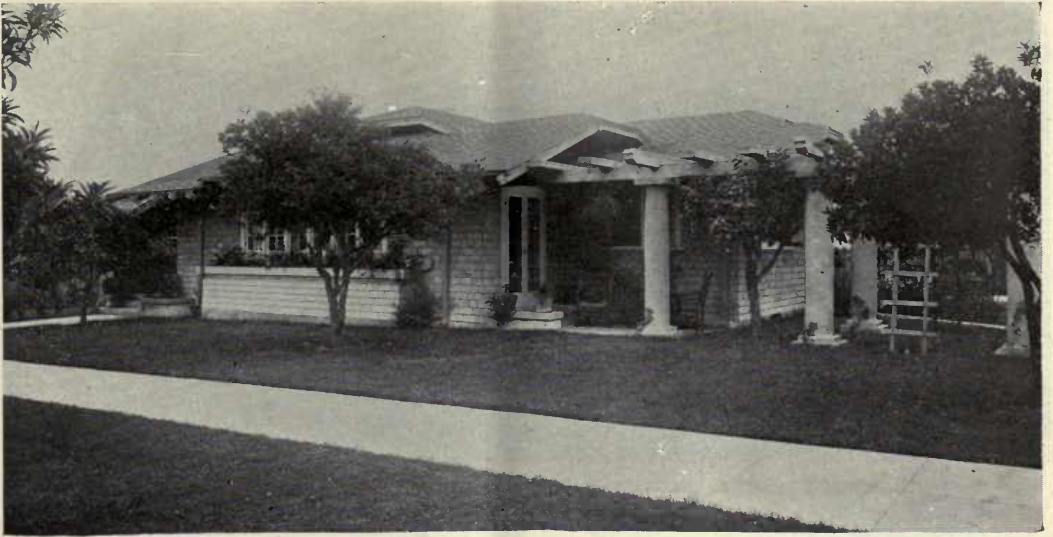
The exterior is white with plaster pillars, and the trim is a rich, deep green, with a green roof.

Inside the same color scheme has been followed; the woodwork is white throughout and green is the prevailing color, including the tone used in rugs, hangings and general furnishings.

The house is very light, cheerful and compact.



(No. 3.) Street Side of Eastover Cottage.



(No. 3.) Garden Side of Eastover Cottage.

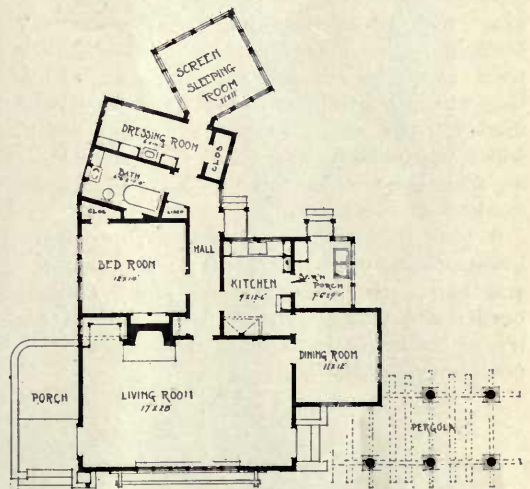
Description of Bungalow No. 3.

This house was designed for a family of two and for people who especially desire light and air.

The guest chamber is situated just back of living room, and the bath, dressing room and sleeping porch were thrown out at an angle.

The sleeping porch was constructed with the idea of getting the air from all directions—of making it a real outdoor room.

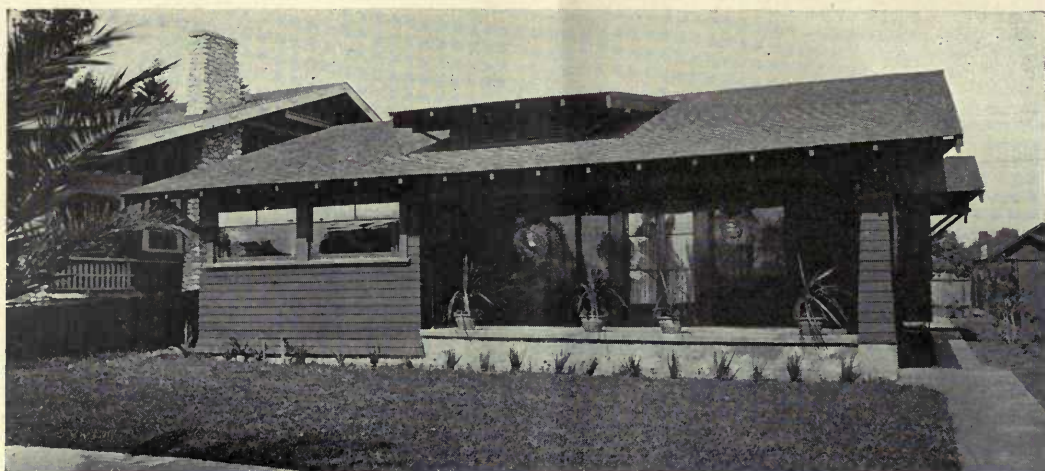
From the rear of the hall it is possible to go directly into the garden. The kitchen and screened porch are conveniently arranged to save labor.



Floor Plan of No. 3.



(No. 4.) Green Shakes, Pinkish Brick and Pink Roses Make This Fetching Exterior.

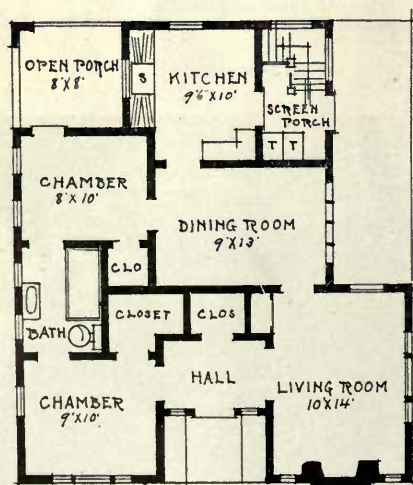


(No. 6.) The Ventilating Dormer Breaking the Long Roof Line.

Description of Bungalow No. 4.

The exterior is of sawed stakes, stained light gray, with white trimmings. While crimson brick have been used for the chimney, they were carefully selected and are pink rather than red in general tone. Brick also have been used for the floor of the little front porch, which is flanked by two seats. The steps leading from the street and the walk are of cement, marked off in squares.

A pink rose is trained on the front of the house, pink hollyhocks grow at the entrance and beside the chimney, and pink gladiolas border the walks. To the right and to the left of the house are beds of flowers with pink flowers predominating.



Floor Plan of No. 4.

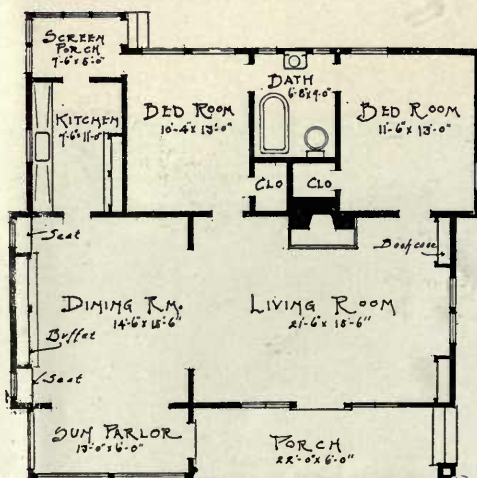
Description of Bungalow No. 5.

Because the house is situated near the street, the windows of the sun room were placed high.

The living room and dining room, together with the sun room, occupy the whole front of the house, with the bedrooms, bath and kitchen just behind.

The features of the living room are built-in bookcases and a fireplace. In the dining room there is a built-in buffet, with small windows at either end.

French doors have been used on the porch for both the entrance into the sun room and into the living room, the latter being flanked by windows on either side.



Floor Plan of No. 5.

Spring Wall Decorations

Henrietta P. Keith

*"In the spring the young man's fancy
Lightly turns to thoughts of love."*

Runs the old rhyme; but in the spring the housewife's fancy turns to new wall decorations as surely as the needle to the pole. For a time, even the spring styles in clothes have second place in her hopes and aspirations, and the windows of the

a stroll through some of these seductive establishments and see what temptations beset the modern Eve in the spring o' the year, for as surely as the sap surges up through the awakening tree tops do longings for fresh paint and new walls permeate all her being.

There are, of course, those who want to



Dining Room Furnished in Ivory Enamel with Woodwork, Apple Green Sidewalls, Moss Green Rug and Hangings in Rose and Green.

decorating shops pull mightily. How fascinating they are, too, and how carefully studied are the arrangements of wall, drapery, and furniture combinations. We always wonder why Eve succumbed to that miserable apple for which she cared nothing. Now if the arch tempter had shown her something new in wall decorations or millinery there would be some excuse for her fall. Let us take

"do over" the old walls and those who have the pleasing task of decorating the new home. For the latter, the problem is somewhat simpler, for usually there are fewer limitations of present possessions to consider. Then there are the relative merits, the pros and cons of paints or tints as a choice instead of paper or other textile decorations.

We will simply present the new and,



Madras Lace Undercurtains Trimmed with Ball Fringe and Rose Cretonne Over Draperies with Red Rose Pattern.

interesting offerings in both lines, as far as possible, in such limited space. There should be no iron clad rule of division or elimination of either plan of wall treatment. Some rooms are eminently adapted to the simpler, more sanitary—if you will—painted or tinted walls, while others gain in interest by the use of fabrics. Often the two forms of treatment may be combined to advantage in one dwelling or even in one room; as for instance, some of the soft and beautifully blended paper borders may be applied on a painted or tinted surface, and are sometimes easier to manage than stencil decorations. Miss Elsie de Wolfe—noted New York woman decorator—has given a notable instance of the employment of both forms of decoration in her treatment of the Villa Trianon at Versailles, the white cottage where the little daughters of

Louis XV came for cakes and tea. Miss de Wolfe purchased the cottage, all neglected and fallen into decay, from the French government, and has restored it. In doing this, she has hung the wall of her own salon with an old Italian damask striped in salmon pink and green, while the dining room is a fine example of simplicity in decoration. The paneled walls are painted a soft old blue. The rug is blue and cream and on it stands a simple table of wood painted cream having a glass top over old Venetian lace.

By the addition of secondary colors to the main color, it is possible to secure these blended or shaded effects, thus graying a blue tone by the admixture of a dull red, or a yellow tone through the addition of a dull blue.

Take for example, the dining room as shown. Here the rather unusual type of

furniture and the wishes of the owner for a comparatively plain though rich looking wall finish, and the preference for highly colored hangings led the decorator to select a gray-greenish-blue, matching up as nearly as possible the rug tone without producing a heavy solid effect, or showing a tone too dark for the enamel furniture. Fortunately this color was not inappro-

ture of delicate design, such as the Sheraton mahogany or the Adam style in gray enamel. The rugs, hangings, etc., in a deeper shade of the old pink, will give the color warmth needed. The woodwork may be either white or the gray of the wall, with white ceiling. Apropos of ceilings, it is noticeable that there is a general return to the old-time white ceil-



Living Room with Drift-Grey Woodwork, Grasscloth Walls and Cretonne Furnishings.

priate with the southeast exposure of the room.

The color formulas to carry out this room are furnished by the manufacturers. Especially desirable is this form of wall treatment for sleeping rooms, which of all places should be fresh and sanitary. We illustrate a bedroom done in a warm gray and rose, which is an admirable selection for a room with a westerly or northwest exposure. This combination is especially good with furni-

ing, so dear to the heart of Robt. Morris. The day of dark, sombre rooms is passed, and light and sunshiny effects reign in their stead. Long may it last!

We note with satisfaction the continued offering of plain effects, for we have all learned the pleasure of wide spaces unfretted by repeating pattern. Of course these plain walls must be relieved by color and variety in furnishings or a house would seem like a prison. Wonderful skill is shown by the paper mak-

ers in relieving this tendency, by a vibration of surface through a variety of weaves without introducing design; also there is a large class of papers which are covered with figures that are not visible at a distance, yet leave an impression of vibration. Among these are the grass cloths which are as popular as ever, the imitations almost surpassing the real thing, so perfectly is the texture reproduced.

The real grass cloth is photographed, and in some of them when printed, is enlivened with a dash or silver or gold. We illustrate a living room which shows a broken stripe effect almost obliterated by the grass cloth weave.

The woodwork of this living room

oak in driftwood gray finish and the furniture is in the same finish. The walls of the room are covered with a madras-weave paper in a rich old gold and brown which contrasts with the color of the woodwork. There is a dignified, conventional cut-out top decoration next to the cornice with narrow panel banding to match.

The design of this decoration is repeated in the border of the madras drape-

ry. A window nook opening off this room affords an opportunity of showing the desirability of using matched fabric and draperies for the treatment of rooms having bow windows, for these draperies carry the color of the side-wall and the pattern of the wall decoration.

The ceiling is tinted old ivory, and

while the garland decoration is an addition, it could be omitted. Either the frieze or the paneling could be used alone, if less decoration were desired. Such a living room treatment is a great relief from the stereotyped mission and craftsman styles so long prevalent.

There is no falling off in the demand for grey in its many forms. For Colonial



Dining Room with Foliage Decoration in Dull Blues and Greens, with Branches in Soft Reddish Brown.

interiors there is nothing like grey, either paper or paint, though the plain wall belongs more strictly to the stucco house. Some of the old Colonial landscape papers are reproduced in the softest greys on a white ground with rose glinting through and are beautiful for halls or dining rooms. They are especially good for doing over an old house, where the ceilings are apt to be high and the plaster in poor condition.



One of the Dimity Designs.

We illustrate a dining room with a foliage decoration in dull blues and greens with branches in soft reddish brown, on a pale grey ground, with ivory woodwork, plain dull blue painted panels in wainscot and Sheraton mahogany. The door hanging matches the frieze and we get a glimpse of the hall done in a landscape design, all shaded, misty greys with rose glinting through, on a white ground.

Then there are papers having an infinitude of little narrow, self-toned stripes that give the impression of a plain wall in the softest tones of color. These are admirable for bedrooms and are relieved by charming narrow borders. Among these is a design done in white on a blue ground, the motif plainly tak-

en from a vase of blue "Wedgewood." Others come in varying shades of grey or tan, though they may be had in all the colors. Those in mauve or heliotrope are dear and charming—"like Europe's violets faintly sweet." Formerly one could get nothing in these shades but strong crude colors. We illustrate a bedroom done in one of these narrow stripes with panel decoration. The wall is a delicate tan and the furniture Circassian Walnut with cane panels the same color.

The little "dimity" designs in color are extremely dainty for bedrooms. The one illustrated is like a delicate vine clinging to the wall—the leaves in olive green and blue with brownish orange blossom.

A new fabric effect is called the Munich Fibre, and has a surface like fuzzy cloth. It comes in rich, strong colorings mottled dull reds, greens and browns, with borders to match, and is well adapted for den or library use. It is strong and durable but expensive, \$1.50 a roll. About the same cost but very beautiful, are hand printed effects that give the appearance of rich brocade in soft neutral tones of champagne, grey and ivory, in Adam design. These hangings are especially suited for a parlor or formal room with



Bedroom Walls Painted in Rose and Gray, with Sheraton Furniture.

mahogany furnishings.

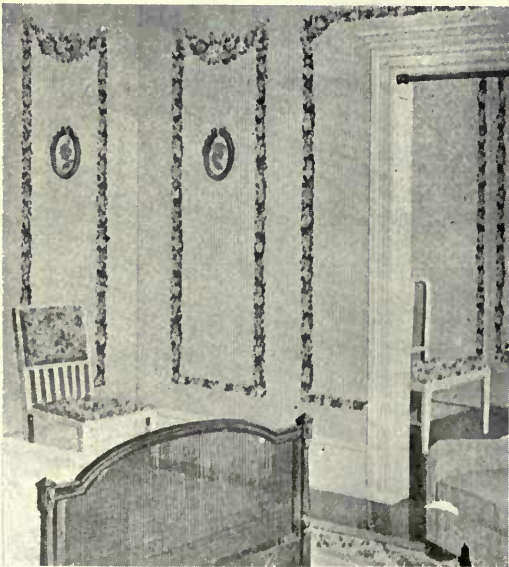
The soft blending of colors in the background papers has never been so artistic as now. Old rose and a neutral green with grey is delightful, and one sees a design worked up in light tones of plum or mulberry on a darker ground, which is rich and refined.

Another blended paper has a fascinating variation of color difficult to describe. In browns and yellows it looks like old parchment in greys, like drifting fog; in greens, like forest foliage. It has the restfulness of a plain background, yet



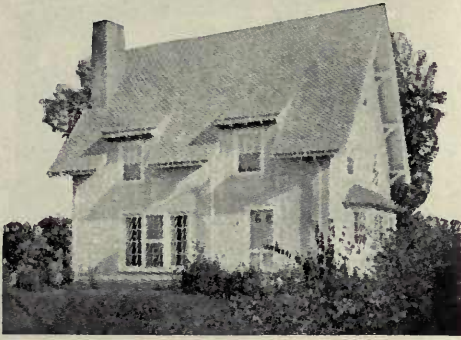
Blended Effect in Rich Orange and Brown on Side Walls.

Courtesy of Lowe Bros. Co.



Infinitude of Narrow Strips, Relieved by Narrow Border in Colors.

without the severity of a solid color. If it were desired to obtain this blended color effect with paint, there is a process of stripping or blending which produces it as illustrated in the small panel where a subdued strong combination of green and orange, a cold and a warm color, is used. The decoration repeats the wall colors, in fact, only the dark outlines with a little touching of the fruit portions and accentuation through the shadows and highlight is necessary to give the effect shown. The wall tone is dark so that the colors in the border must likewise be dark, but is a very rich decoration for suitable wall spaces, as the panels of a dining room which has plenty of sunlight.



“Homes We Have Built” Series

EDITOR'S NOTE:—Contributions to this series desired. Address Editor for further particulars.

Building a Home in Cedar Rapids

F. V. Bremmer



HE house here illustrated was built in Cedar Rapids, Iowa, in the summer of 1913. It can be duplicated under conditions similar to those now prevailing in this city for about \$5,500, including heating and plumbing.

As may be seen from the photograph, the foundation wall extends but a few

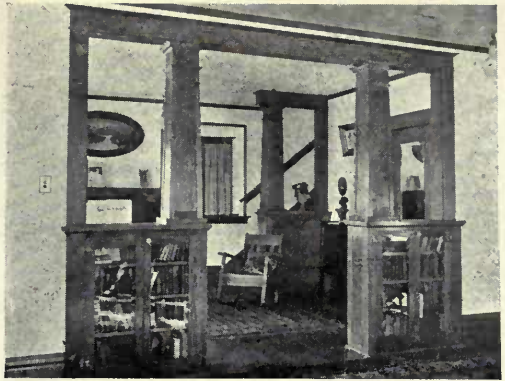
inches above the grade line. This wall was built eight inches larger each way than the house measurements at the first floor line, thus providing for the outward curve shown at the base, which, to me, looks well on all houses of this type. And in fact it gives an air of solidity that few other devices impart, it being one of Nature's ways of building.



Residence of F. V. Bremmer, Cedar Rapids, Iowa.

This type of house is a very good style for those living in the colder climates, such as Iowa and Minnesota, and yet who want some of the California or southern bungalow lines; for while the house looks low it is, to all practical purposes, a two-story structure. All bedrooms on second floor have full sized ceilings and cross ventilation; that is, windows on two sides. There is also considerable air space above these rooms, though not enough for a good attic. There is, however, a very good store room above the porch, which is floored above the ceiling, access being gained to it through a doorway leading from a closet as indicated on the second floor plan. This arrangement not only saves the space required for an attic stair, together with the expense of installing same, but it also makes it unnecessary to climb another flight of stairs, which to many is very tiresome.

As may be seen from the floor plans, the interior of this home is not unlike many others in most respects; there being few, if any, special or unusual features. It is plain, airy, light, and convenient. The



View from Living Room Into Reception Hall.

reader will note that the windows are somewhat after the style of the old cottage windows, the check-rail being above the center, thus allowing the shades to be raised much higher without exposing to view the woodwork of the upper sash. While there is one objection to this style of window in that it does not permit of such large openings for ventilation, yet it has many things in its favor. The bottom sash at least should be glazed with plate glass. This extra cost will be an investment rather than an expense.

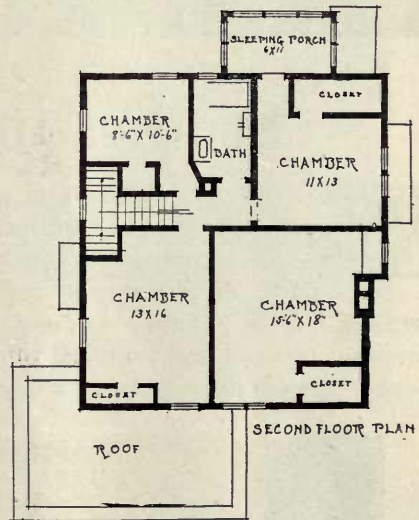
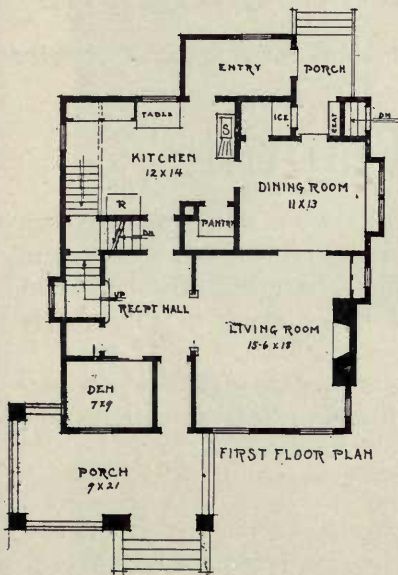


A Book, the Evening Lamp and a Cheerful Blaze.

There is a basement 32' x 35' under the main part of the house, ceiling height of which is seven feet, six inches. It is well supplied with windows, well drained, and contains toilet room, tight coal bin, vegetable room, and well installed furnace. Warm air furnaces can be installed in most medium size houses in a way that will give good and about equal heat to all rooms, even on windy days. Ask your architect. And right here allow me to say what cannot be too deeply impressed

other seemingly small matters that to have known and to have been guarded against, we would willingly have paid many times an architect's fee.

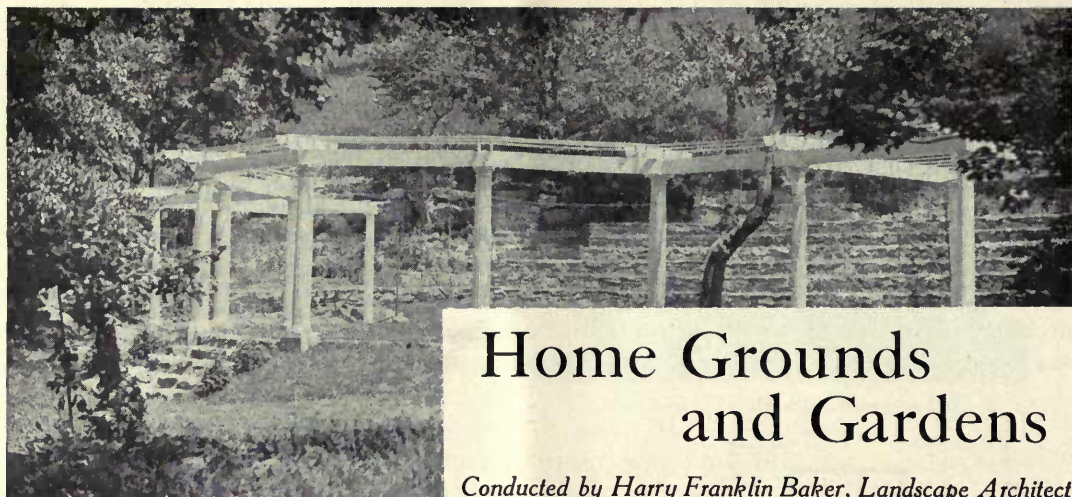
"But," I hear someone say, "I thought this was to tell, 'How We Built Our Home.'" Well, we are firm believers in the old saying about the "ounce of prevention," and as you will no doubt infer from the above, we used those ounces unsparingly at the beginning, thus preventing much of the "grief" encountered by



upon those who contemplate building a home—not merely a house—always ask your architect. Experimental homebuilding is costly experience. I can see one now from my window; a low bungalow placed in a hole far below the grade line of the nearby street. They are filling the lot now, while the house stands vacant covered with real estate cards, a monument to "buried" hopes. It is needless to tell most people that such a building should have a high lot for its site; yet those who do know this, and a great many other things about building a home, may never know until too late about some

so many homebuilders. In fact, we had no troubles to record. In imagination, we had seen and lived in all parts of the house before the blue prints were made; therefore there were no changes to dispute over with our contractor, who is a reliable one and who had figured according to carefully drawn specifications.

Even the Hon. Jupiter P. Luvius must have been away on his summer vacation at the time, for we experienced a beautiful (to us) drouth during July and August while the outside work on the building was rushed to completion.



Home Grounds and Gardens

Conducted by Harry Franklin Baker, Landscape Architect

Studies in Shrub Planting

ANYONE who has a home without a garden does not realize what they are missing. A garden is a source of pleasure to the entire family from the youngest member up. If properly planned and arranged the members of the family will spend a large por-

tion of their leisure time in it and children when they grow up will carry with them through life the memory of the pleasant times they had playing in their home garden.

Some of the essential features of a garden are privacy, a shady place furnished

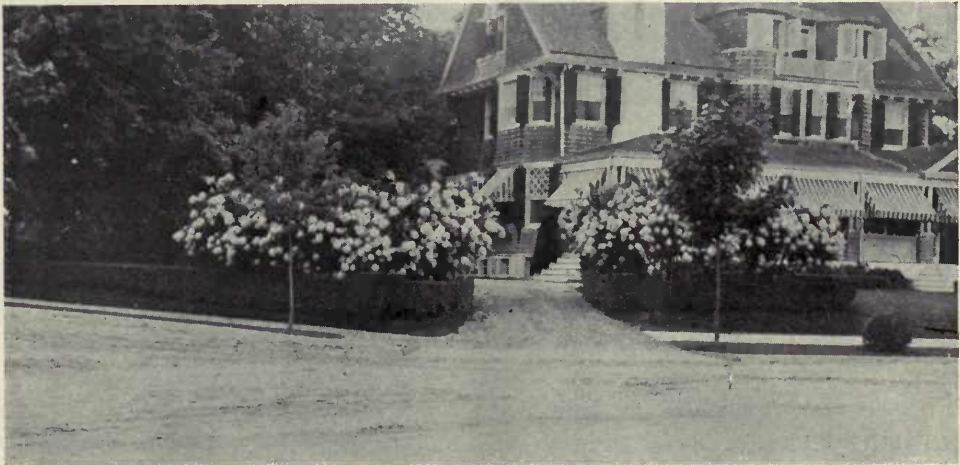


Ivy Used to Soften Outlines of Dwelling.

with some sort of a seat, which may be a simple seat, built about a tree, a pergola or a hammock. It is always well to plan the garden in such a way that it is closely connected with the house. If possible, it should furnish an outdoor living room. It is well to open any vistas that will disclose a pleasing view of the distant landscape and also furnish passers by with a glimpse of the garden from the outside.

Sometimes the arrangement of a garden may be so managed that only part of

folks among the green things growing. Besides a hedge of elderberry is beautiful in early spring with its clean, feathery green, a snowdrift of great white bunches of fragrant bloom in June, and glorious with its heavy heads of purple berries in August. Even in winter, the brave, staunch, silvery grey-green canes are a protection and an inspiration, for they seem to enjoy being hung with snow wreaths. The elderberry will make a growth of from one to two feet in one sea-



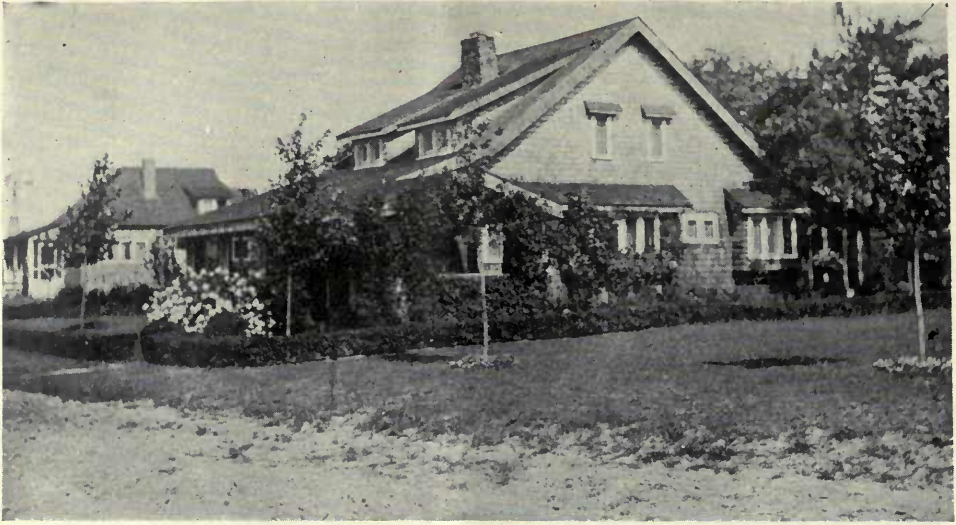
Hydrangea Paniculata Grandiflora. Close Pruning Insures Heavier Bloom.

it may be seen at once which will add greatly to its interest and charm.

A hedge is one of the simplest, most economical, and satisfactory ways of securing this desired privacy. It is more beautiful than a stone or cement wall or a wire fence. To be sure a wall of richly variegated brick with vines clinging to it and plants topping it is a joy forever, but it takes a fat pocketbook. An easily-obtained, quick-growing hedge can be made from the common box elder which grows wild in most sections of our northern climates. The southern folk can have rose hedges, hydrangeas, and dense thickets of ivy. But even if we can cover them up so they will live through the winter we get no pleasure or benefit from them, and it is far better to use our own

son even when set from small canes, and in two years they attain a height of five or six feet. Then, of course, there must be pretty steady use of the pruning shears to keep the luxuriant growth within the metes and bounds of a hedge, but to offset this trouble, they require no fertilizing, no spraying, no covering in winter.

Another easy hedge is the Red Siberian Dogwood, with very similar characteristics and indeed a distant cousin of the elderberry. The dogwood hasn't the large showy bunches of bloom of the elder, its flower clusters being small and greenish, not a clear white; but its bright crimson coming along in February and March, atone for this and are a goodly and cheerful sight in the general dreariness of that season.



House with Shrubby Plantings.

Foods for Flowers

The Daily Express of London has a "Saturday in My Garden" department, in which monthly prizes are offered for papers on garden subjects. A recent one was, "How I feed and stimulate my roses, sweet peas, and chrysanthemums," for which prizes of five pounds and two pounds were offered. The winner of the first prize wrote that in the autumn he gave his roses a surface dressing of basic

slag, half a pound to each plant, hoeing it in; in March a liberal dressing of cow manure, digging it in. When buds are forming he waters with liquid fertilizer—one ounce of nitrate of potash and one ounce of phosphate of potash to each gallon of water—repeating this three or four times during the flowering season, soaking the soil where dry with clean water. A dressing of lime once in three years improves the result. For sweet peas,



Weeping Mulberry at Right.

farmyard manure and basic slag are used in autumn when the ground is being prepared; in the spring a top-dressing of a quarter of a pound of superphosphate is made to a clump of eight plants; during the flowering season liquid fertilizer is applied weekly, one ounce of phosphate of potash to one gallon of water.

The winner of the second prize puts a heavy mulch of well-rotted manure about his rosebushes; in January a dressing of lime, sixty ounces to a square yard; in April scatters a mixture of one part sul-

phate of ammonia, four parts superphosphate, twenty ounces to the square yard, well watered in. When the first crop of blooms is over he gives a thorough soaking of soot water. For sweet peas in trenches from eight to twelve inches deep he places a six-inch layer of manure and dressing of basic slag, twenty ounces to the square yard; after plants have started he dresses with superphosphate, half an ounce to the square yard; later he waters twice a week with sulphate of ammonia, one ounce to a gallon of water, and occasionally with soot water.

Garden Calendar for April-May Work



AS soon as the frost is out of the ground, spade a good lot of manure into the garden.

Plant sweet peas as soon as frost is out of the ground. Make trench eighteen inches deep with good fresh rich loam to which has been added a small quantity of bone meal and about one-fifth of well rotted manure.

If any shrubs are to be planted order them so that they may be delivered as early as they can be planted.

If hydrangeas have not been pruned, cut back about one-half of last year's growth.

As soon as roses begin to show signs of growth the covering must be removed. Spade some manure into the beds and prune the bushes, cutting out any weak shoots and branches headed towards the center and cut the stronger shoots of the hybrid perpetuals back to eighteen or twenty-four inches according to the strength of the plant. When they begin to show signs of life, spray with whale oil soap.

Where there is no hotbed, cannas and dahlia roots may be started in boxes in the basement.

After the frost is completely out of the ground all beds must be uncovered. Look the lawn over and sow a little grass seed in any bare spots.

Now is a good time to increase perennial plants by division. Take them up, divide them and reset before they have made much of any growth. This does not apply to peonies which had better be divided in September.

Remove any dead wood from shrubs especially that which has been winter killed. In pruning shrubs remember that you will lose the bloom if you cut off live wood from plants which bloom early.

When the trees begin to leaf out it is safe to sow seeds of most annual plants.

Do not be in a hurry to move plants from the hotbeds. These plants are tender and should be kept under glass until all danger of frost is past.

Don't forget to cover the hotbeds after warm days as frost often develops through the night.

As soon as ground is dried out sufficiently to be worked nicely, plant the onion seed and sets, spinach, radishes, lettuce, beets and other vegetable seed.

Keeping Household Electric Bells in Order

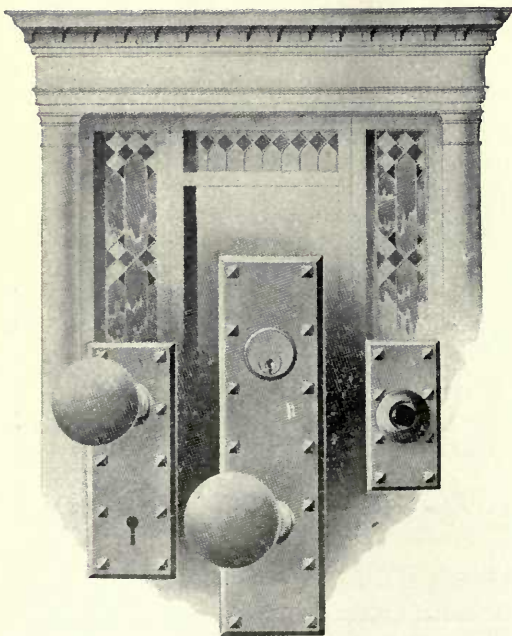
Chas. K. Farrington



ONE of the most annoying things a householder has to contend with is a broken down electric bell system. This article will state in non-technical language what to do when the bell refuses to ring.

If the bell stops suddenly, go to the cellar and note if the wires are disconnected from the battery binding posts. It is well to give all such wires a gentle pull to see if they are securely fastened. Remember that to secure a good path for the electric current to pass upon every joint must be tight, and in addition, free from dirt or corrosion, and in order to economize upon battery power the entire path must be in good order, a single loose or imperfect joint will make the whole bell

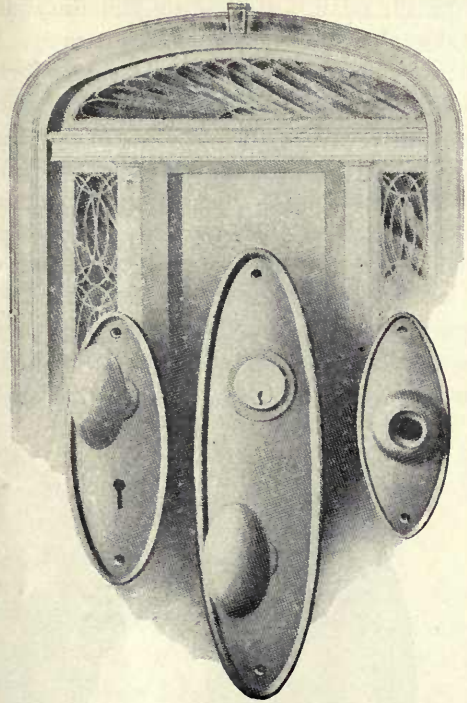
system work poorly. If the joints at the battery are in good order examine those at the electric bell, then those at the "push button" where the bell is rung from. Remember that even in the simplest circuit (a push button, one battery and an electric bell) there are **six** joints where a loose contact may stop the bell from ringing. Note whether the wire is corroded where it fastens underneath any contact point, sometimes the cellar air is so damp that the battery binding posts will become covered with verdigris. If you find this has happened unscrew the binding post cap, take out the wire, clean it and the cap and base with a bit of sand paper or an old knife blade, and replace the cap, fastening it tightly on the base once more. If all is found to be in good repair at these places turn the button of the push button around a few times and see if the bell will ring well after doing so. If not, purchase new batteries. "Dry" batteries are largely used these days for bell work. They are very easy to set up, there is no acid or chemical solution to make, they are ready to work when the wires of the circuit are connected to them. But be sure they are "fresh," that is, that they are new. If they have been standing upon the dealer's store shelves for some time they will not give the satisfaction that new batteries, fresh from the factory, will give. Inquire how long the batteries have been in stock; the writer always places an order when new batteries are required for any work he attends to. Then it is possible to obtain good ones. However you can obtain a good idea of any battery by having the salesman use it to ring an electric bell.



A Refined Design which May Be Applied to Any Dwelling.
Electric Bell Push-Plate on Right.

If the bell rings very briskly, with good power, it is likely to be in fine condition. As a rule two batteries will ring the average bell circuit, but it is poor economy to use too little battery power. The writer has often seen a circuit where one battery is expected to ring the bell and while it may do so at the beginning, in a remarkably short time it will be exhausted and the bell will ring improperly. A good rule to follow is to use two batteries if one will ring the bell at the start, if two ring it well at the beginning use three for economy, etc. The cost of an additional battery will soon be made up in the length of time the system will operate. Do not allow any but batteries suitable for "bell work" to be sold you. It is not economical to purchase those suitable for automobile ignition and to use them for bell work. Never allow whitewash, which is so often used in the cellar, to touch electric bell wires. The alkali will eat through the copper wire causing it to break. Many electric bell wires have to be renewed simply because whitewash has destroyed them. Insist also that paraffined wax wire shall be used for all electric bell wires. Then the covering will withstand better the damp air which so often is found in the average cellar. In extreme cases rubber covered wire can be used to advantage. Remember the cost of the wire is not much, it is the running of the wires that makes the money outlay, so be sure and specify the right kind when making repairs or installing new work.

Great attention is now given to the hardware finish of a house, both exterior and interior. The push-plate for the entrance bell now comes to match the door knob, and it is such details that give quality to a dwelling. Even where the electric bell is installed for practical convenience, it is often supplemented by the more distinctive and dignified door knocker, especially with Colonial design, and this one touch gives the old-time feeling



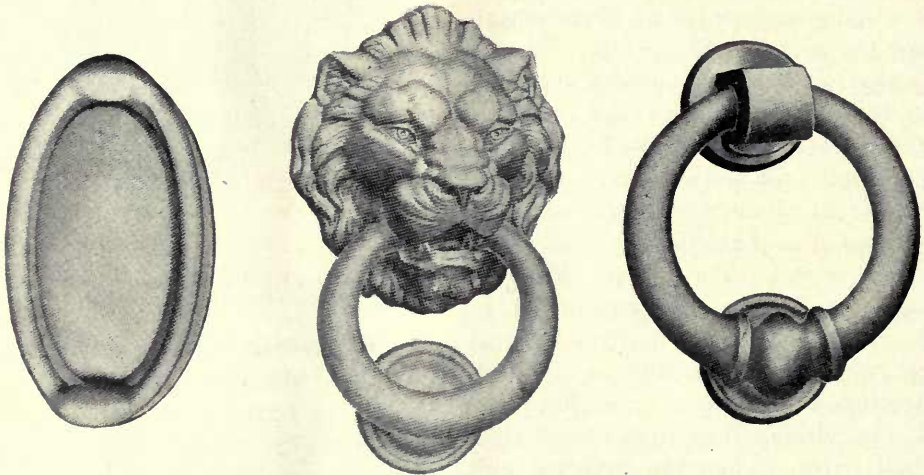
Colonial Doorway Fitted with Hardware in the Pilgrim Design.
The Push-Plate for Electric Bell is on Right.

so carefully sought. One or two extremely chaste designs are shown of door knobs and push-plates matching the exterior trim.

To obtain the maximum of ringing power from any bell see that it is tightly screwed upon a suitable base. For example, the door trim, if the screws of the bell can pass through to the solid wood backing behind, will make a splendid place to fasten a bell. Too often a bell is placed against a plaster wall, and it will not give nearly so powerful a ring with the **same** battery power as one will which is fastened as mentioned above. Never allow a bell to be loosely fastened. It will destroy to a large measure its ringing qualities. The housewife desires a bell to ring so that it can be readily heard. As your batteries grow less powerful (as they always do from use) it may be necessary to adjust the bell adjustments. A screw driver is the only necessary tool. The best way is to have someone ring the bell

from the push button while you stand and make the best possible adjustment by turning the "contact screw" back or forth. Any person can easily do this. When setting up a bell system this is always done to obtain the greatest power from both battery and bell. Do not purchase a too small a bell, a small bell has a very limited range of sound carrying power, even if an excessive battery power is provided, and batteries are articles which must be renewed from time to time. The difference in the cost of the different sized bells

one was larger, consequently she often made a mistake in answering a call. I simply bent back the "hammer" which struck the bell and made the noise, so that when the bell was rung the hammer would not strike the metal. It turned the bell into what is called a "buzzer," and saved purchasing a real "buzzer," and also the cost of installing. I did this on the bell which the dining room push button rang. The maid was always in the kitchen at meal times and so could readily hear the noise the "buzzer" made. I left



A Group of Door Knockers. Any of These May Be Used Above the Door Handle in Addition to Electric Bell.

is small. The "annunciator," a device which allows small pieces of metal to fall when a push button is pressed to indicate graphically where the bell is rung from, as "front door," or "dining room" for example, is not necessary for the average home where a bell is rung from the front door and also from the dining room table floor push button. They are expensive, and while they have their place in large homes where bells are rung from many parts of the house, for the average home they are unnecessary. I came across a home lately where two ordinary electric bells were located in the kitchen, one ringing from the front door, the other from the dining room. The maid had difficulty in distinguishing between them, although

the front door bell as it was because that bell was needed to be heard in other rooms than the kitchen. After your batteries have weakened so that they will no longer allow the bell to be adjusted so that they will still ring it, secure new ones.

In conclusion the writer would say that this article was written for the amateur who takes a pride in doing as much as possible about the house. That there is an ever increasing number of such people we know from the interest which is taken both by women as well as men in the home in such matters. No technical knowledge is necessary to make the improvements or repairs mentioned in this article.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 501 GEO. H. KEITH, Spokane, Wash.

B 502 BUNGALOWCRAFT CO., Los Angeles, Cal.

Design No.

B 504 H. C. WHITEHOUSE, Spokane, Wash.

B 506 CHAS. S. SEDGWICK, Minneapolis, Minn.

Design B 500.



HE liking for broad, flaring roof lines is well carried out in this excellent design. The wide eaves and cornice are the relief needed for the square lines of the house, which are softened by the friendly shadows cast. The house has a strong, substantial look, and the floor plan is eminently practical. The exterior here shown is of cement, with brick for the porch; but the whole exterior could be treated with brick at a moderate additional cost, making a handsome dwelling. There is a wonderful living room 30 ft. in length with centered fireplace. The arched openings are so arranged as to give splendid space for entertainments.

The detail of the design is simple, thus

lessening expense, though the broken lights of the upper sash on all windows are a pleasing detail.

Full hot water heating system is provided with the usual plumbing. A second bath could be arranged on the second floor.

Design B 501.

A simple colonial exterior in shingles is the subject of this design. The dwelling has a beautiful setting among the pines on the banks of Spokane river, affording fine views of the river and Spokane valley.

The shingles are laid ten inches to the weather and each course doubled, thus giving the effect of shakes or hand split cedar shingles; these are stained a soft woody brown. The trimmings are

Cost Estimates of Designs Shown in This Issue

MATERIALS AND LABOR	DESIGN NUMBER						
	B 500	B 501	B 503	B 504	B 505	B 506	B 507
Excavation at 30c per cu. yd.	\$64	\$115	\$60	\$87	\$60	\$50	\$64
Mason Work, to include Foundation Walls, at 20c per cu. ft.	213	400	190	245	209	175	200
Cement Floors at 45c per sq. yd.	98	90	45	65	75	50	48
Hollow Tile Walls							
Chimneys and Brickwork at 65c per hour	450	300	45	175	425	225	160
Tile Work for Roof							
Tile Floors and Wainscot	25	85					
Lumber	935	1,850	640	525	275	445	685
Millwork	900	1,500	575	480	560	470	750
Exterior Cement Plastering at 90c per sq. yd.	306				235	200	
Interior Plastering at 26c per sq. yd.	560	915	350	267	285	280	340
Painting	380	600	385	174	175	125	235
Carpenter Labor at 45c per hour, Common Labor at 30c per hour	875	1,625	640	475	525	425	725
Hardware (Rough and Finish)	380	425	185	190	175	185	200
Electric Wiring	90	135	50	42	45	40	60
Galvanized Iron and Tin Work	145	190	75	68	70	60	80
Heating (Air or Water)	580	850	375	370	140	140	160
Plumbing and Gas Fitting	300	550	250	255	250	250	265
Miscellaneous	115	250	90	32	45	35	100
Cost	\$6,416	\$9,880	\$3,955	\$3,450	\$3,549	\$3,135	\$4,072
Contractor's Profit, 10 per cent.	641	988	395	345	354	313	407
Total Cost	\$7,057	\$10,868	\$4,350	\$3,795	\$3,993	\$3,448	\$4,479

This table is computed on the basis of prices of labor and material now prevailing in Minneapolis and vicinity.

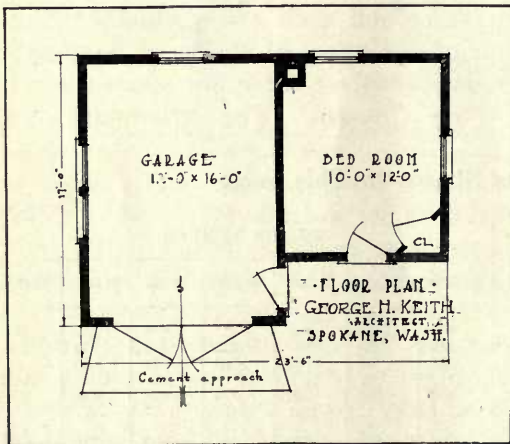
painted ivory color and the shingled roof is stained green.

The detail of the house has been followed in the garage. From the roof is a weather vane, the wind guide of an automobile enthusiast.



Garage of Design B 501.

In the basement, which extends under the entire house, are laundry, servants' toilet, store room, heater room for the hot water heating plant and large fuel



Floor Plan of Garage.

room. The foundation is of large boulder stone of many hues and colors with natural surfaces, laid with mortar raked back from the surface.

The interior finish is all of pine enameled ivory color. Stair rail of mahogany; floors are of quartered oak.

The living room, hall and dining room have ceiling cornices. The alcove off the living room is a bright, cheery place and breaks the lines of the living room in a pleasing manner. Bookcases are built into the rear of the room.

French doors lead from the dining room to the porch. This porch is so detailed that it may be easily screened. Directly above this porch is a large screened sleeping balcony.

On the second floor are four fine bedrooms with a fireplace provided in large owner's room, two baths and ample closets. The smaller chamber with connecting door to the family room is an ideal arrangement where there are small children; or could be used as sewing room. The baths have tile floors and best of plumbing.

In the attic are two bedrooms and store room.

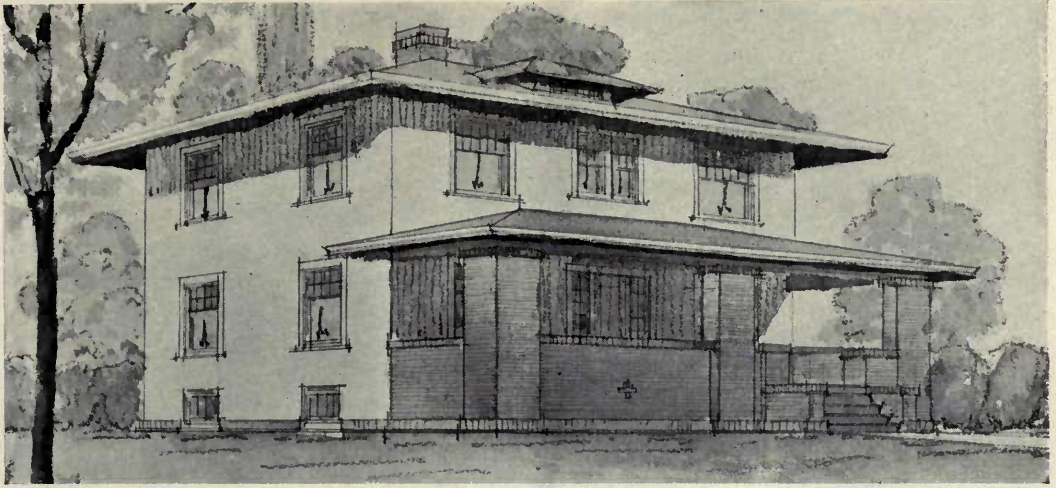
The cost to build was about \$11,000, including the garage.

Design B 502.

This very complete little house has just been erected in Los Angeles at a cost of \$2,200. For a colder climate with a cellar, heating plant and built with warmer construction it will probably cost \$2,800, and be well worth the money.

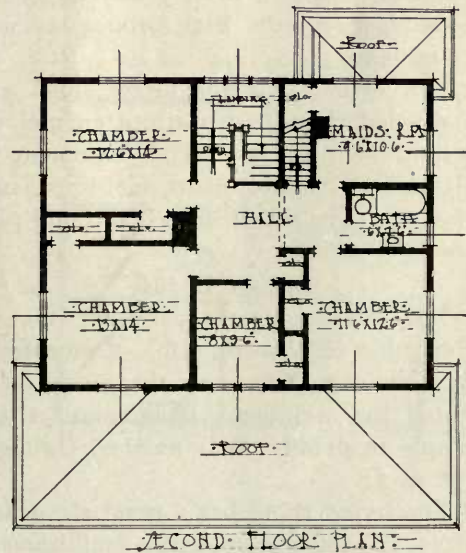
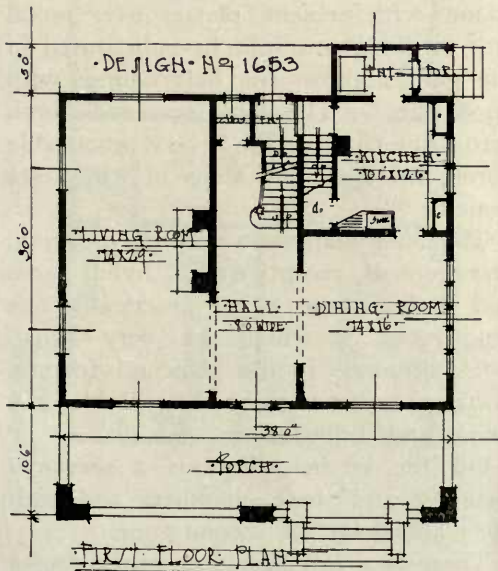
The exterior is covered with shingles and the porch and chimney work are of dark red brick pointed with dark gray mortar. The roof is of cedar shingles stained a moss green. The shingles on the exterior walls are stained a dark weathered oak and the outside rim is painted a very dark red.

The floor plan is so clear that it requires little explanation. There is a pressed brick mantel and fireplace in the living room; a handsome built-in buffet in the dining room; the kitchen is equipped in full buffet style with cupboards and closets conveniently located; the bath room is well arranged and ample in size and the large linen closet open-



DESIGN B 500

Plain Lines and a Broad Low Roof



ing from it is well appreciated. There are plenty of closets and all of generous size. The breakfast room is lighted on three sides and the dining room opens by French windows onto the terrace.

As originally built one end of the porch has glass sashes which slide side-wise for protection against wind. The living room, dining room and den have hardwood floors and the inside trim is all of fir stained in the principal rooms, enameled in the bedrooms and bath room and painted in the kitchen.

Design B 503.

This is a thoroughly livable home, without frills but with everything desirable for comfort of living. The exterior is adapted to either cement or siding and shingle, the cement construction increasing but slightly the cost. The roof is adapted either to cedar shingle stained or to the asphalt and asbestos shingle. The house faces us with a friendly, hospitable air, which is further emphasized by the wide, connecting arched openings within. The pantry is conveniently located between kitchen and dining room, with a basement stair opening from it. There is a little private hall to the bath on the second floor in which the toilet could be placed if preferred, thus giving more space in the bath proper, as well as privacy.

The estimate is for birch finish and hardwood floors, with white enamel for second floor rooms. The basement is planned for heating plant, fuel bins, laundry, etc. The dimensions of ground plan are 34' 6"x28' 6".

Design B 504.

This residence was designed for an orchardist in Washington. Convenience was the demand when the owner consulted the architect. It is compact and simple in detail. It is finished throughout in fir.

The living room has a good sized fireplace, and built-in book case and drawers.

The dining room has a good sized China closet and buffet. The china closet opens also into the kitchen for convenience. The kitchen is of the buffet type, with ample cupboards, drawers and bins. The sink is close to the cupboards for convenience in placing dishes after washing. A dumb waiter is located in the corner which descends into the store room off the basement. Leading from the kitchen is a rear porch, screened in, where space is provided for a refrigerator. The bedroom of the first story connects with the hall as well as the bath room and is provided with a large closet. The bath room has the three usual fixtures, also a medicine cabinet. In the hall is a coat closet, also linen and broom closet.

The second floor has three bedrooms of good size, all provided with large closets.

The house is heated with a hot water system.

The exterior of the house is of shingles and siding, and the foundation is of stone. The cost of the house was \$3,500.

Design B 505.

A simple little modern cottage with the first story walls of brick covered with cement plaster, the second story of frame with cement plaster over metal lath or shingles might be substituted in the gables above the belt course with good effect. The long screened porch across the front makes a very practicable porch, the floor and steps of which are cement.

The floor plan shows a very informal arrangement, reception hall, living room and dining room being practically one long room, in which the very broad brick fireplace is the principal feature. A heavy beam at the ceiling divides the living and dining room.

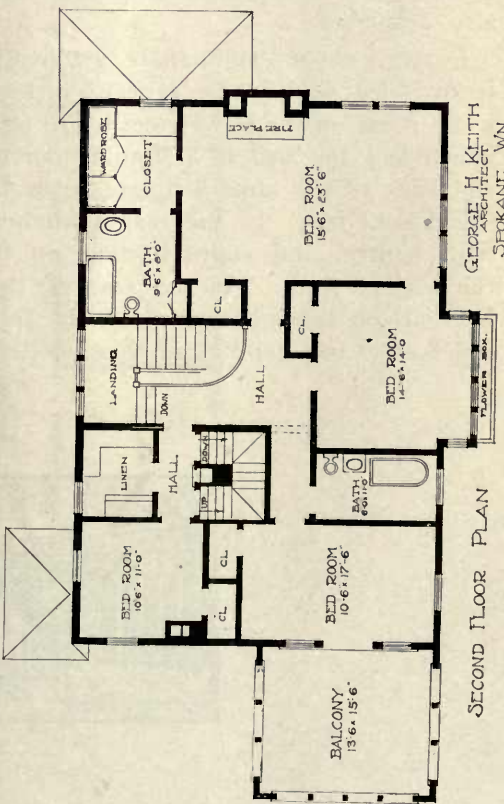
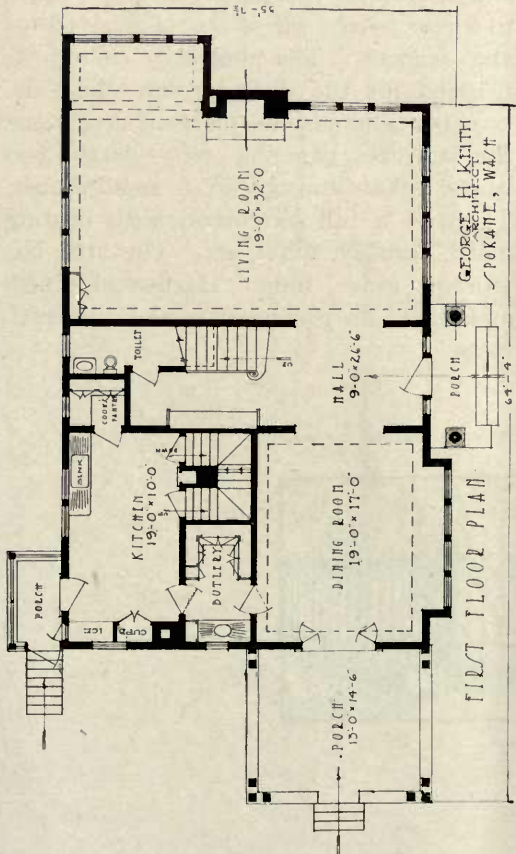
Off the kitchen there is a servants' chamber and three chambers and bath are planned for the second floor.

There is a full basement containing a



George H. Keith, Architect.

DESIGN B 501
A Colonial Design in Shingles



large laundry which can be used as a dry room, hot air furnace and fuel rooms. The plan provides for an outside entrance.

The floors and finish throughout are yellow pine. Second story rooms all full height.

Design B 506.

The size of the bungalow that we are illustrating is 25 feet in width by 30 feet in depth, exclusive of the front piazza and rear porch. The piazza is designed to extend across the front with steps at each end, built with solid concrete foundation and floor of same material, troweled smooth. The large piers to be built of boulder stone and the piers and walls capped with hard brick. The exterior of the bungalow is cemented on metal lath with rough pebble dash finish. The outside trimmings as shown in the design are painted white with the roof stained green or red. The underside soffits of the wide projected cornices are also cemented.

Entering on the right there is a living room 14 feet 6 inches by 14 feet 6 inches, a sun room on the left 11 feet by 10 feet which may be used as a sleeping porch, and back of the same a dining room 13 feet by 10 feet. In the rear a kitchen with pantry, and stairs leading up to the second floor. At the rear of the living room is a bedroom. On the second floor is one good sized chamber and

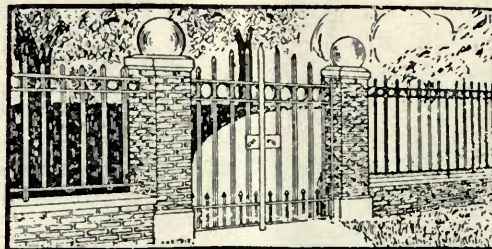
two small ones, with a bath room over the kitchen.

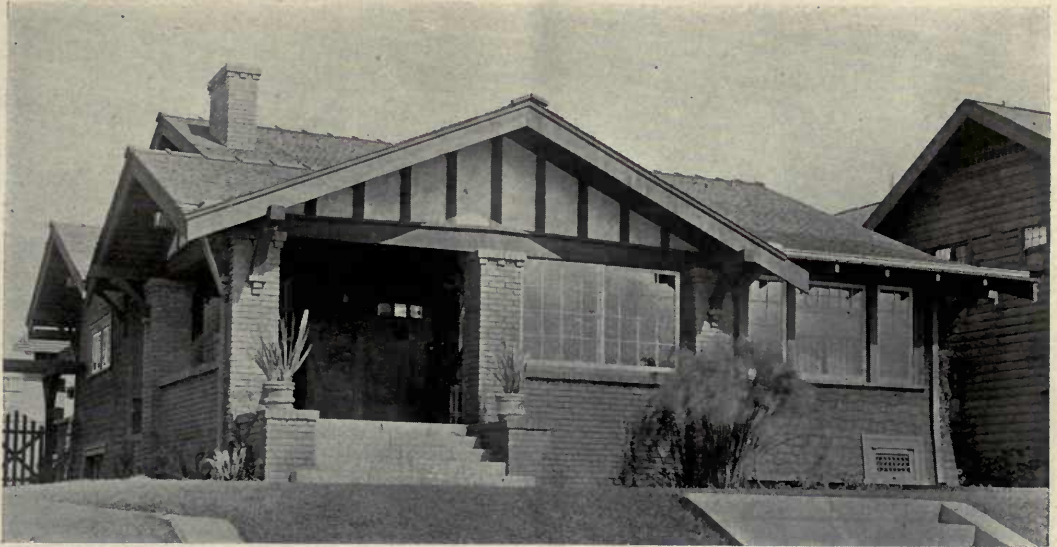
It is estimated to build this bungalow for \$2,500 and not exceeding \$3,000 exclusive of heating and plumbing. The finish throughout is in Washington fir, stained and the wall plastered, the floors also of fir. There is a good basement with cemented floor.

Design B 507.

A design where much is contained in little. In a floor space 30x32 feet is secured a generous living room 20 feet long with bay thrown out in front and inglenook recessed in rear. These two features making great addition to the space. The room also opens thru columned arch into a pretty reception hall with attractive oriol window thrown out at the landing turn.

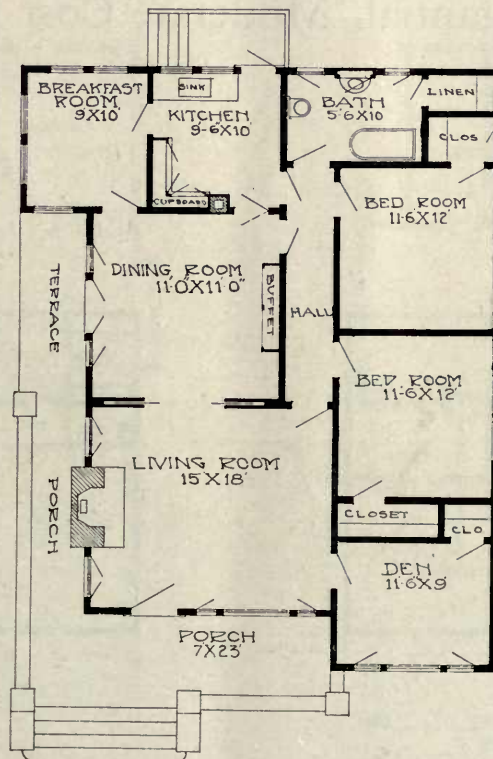
The photograph, though taken in winter, gives a pleasing impression. The small kitchen is reinforced by a generous and convenient pan-pantry and opens also to a rear porch, where access is given for the iceman. The beamed ceiling is planned for the dining room, the side-board is a handsome piece of detail and the staircase paneling rich—detail features rather unusual in a small house. There is a full basement, with heating plant, laundry, toilet, etc. The attic has storage space only. Hardwood finish and floors are included in the cost estimate.

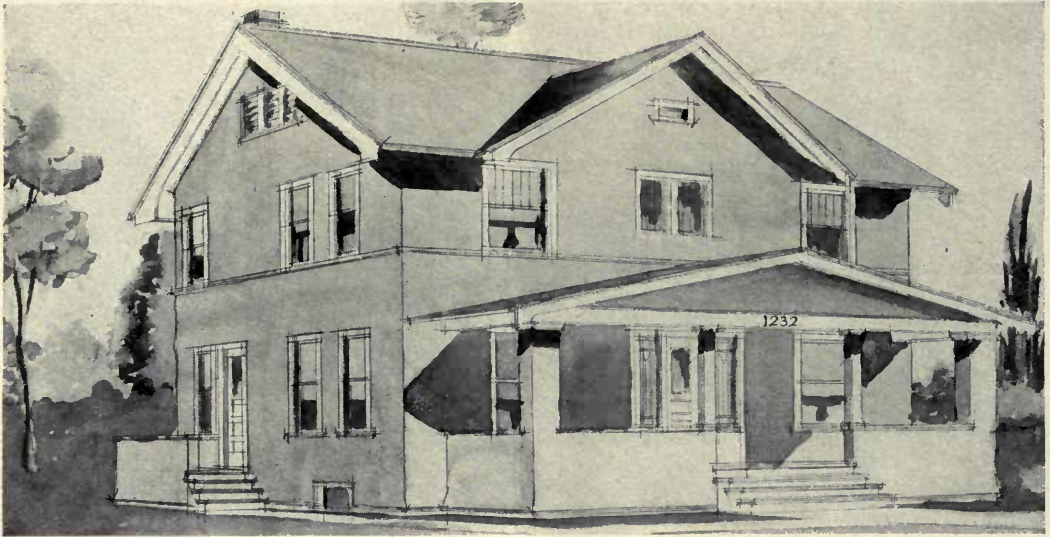


*Bungalowcraft Co., Architects.*

DESIGN B 502

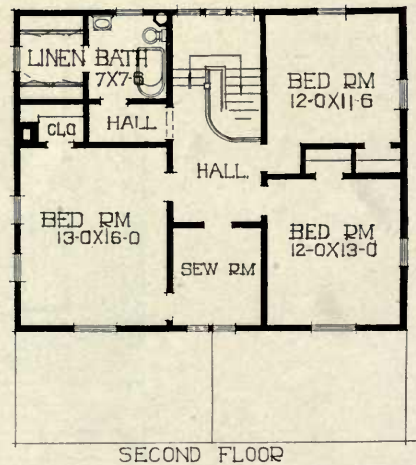
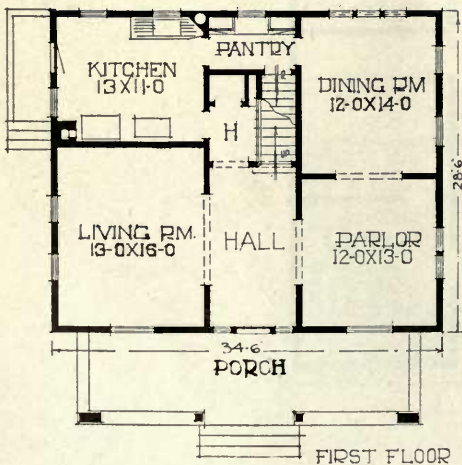
A Pretty California Bungalow

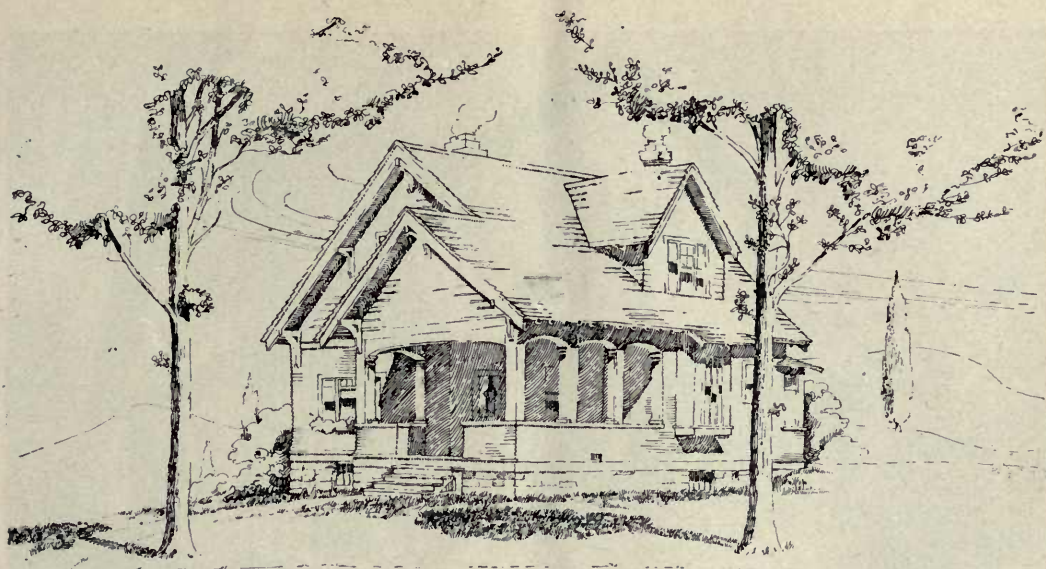




DESIGN B 503

A Substantial, Moderate Cost Home

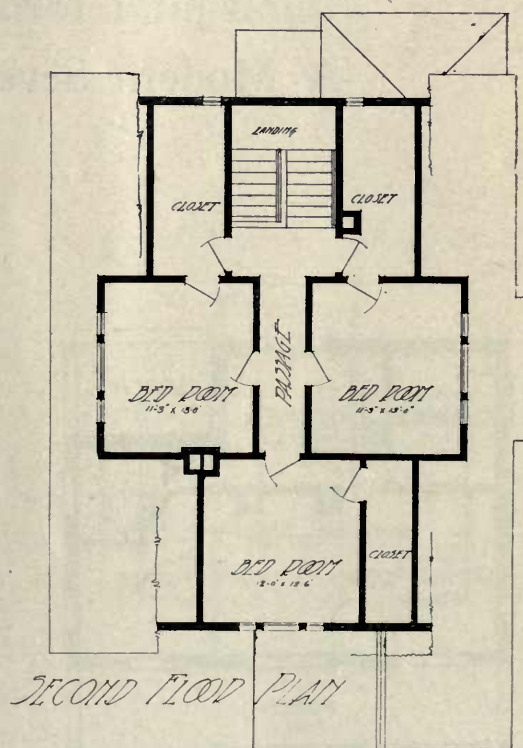
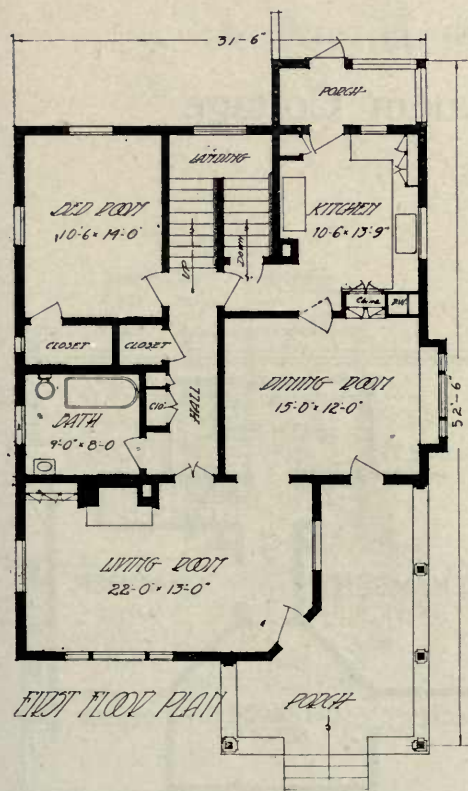


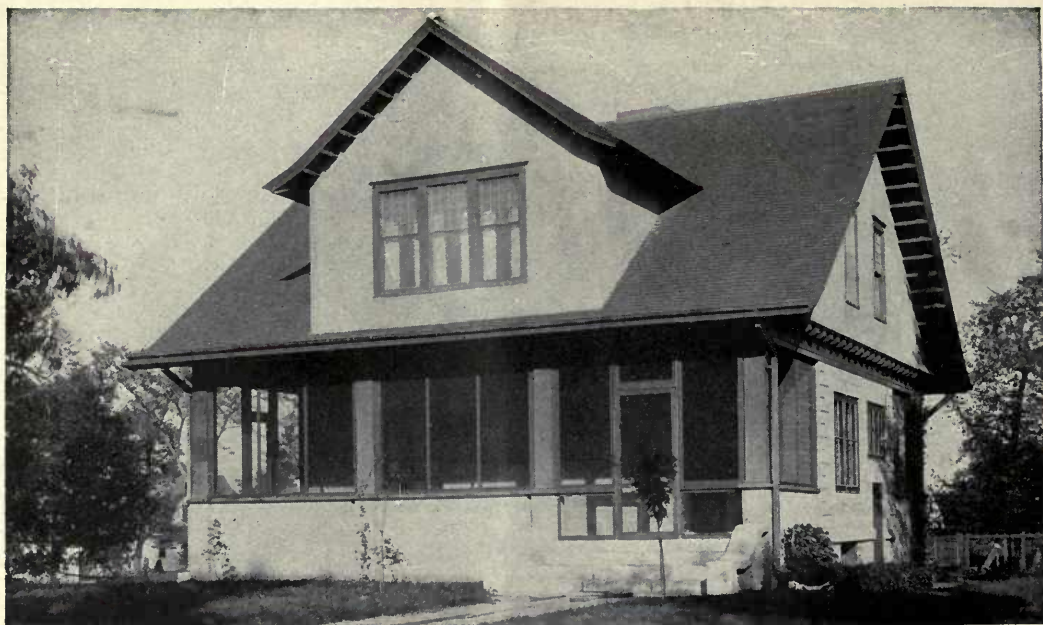


DESIGN B 504

Harold C. Whitehouse, Architect.

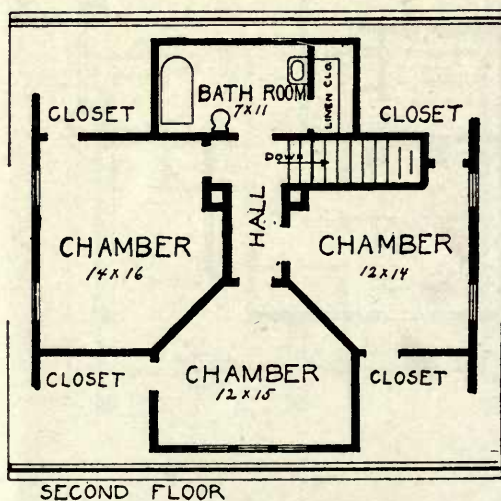
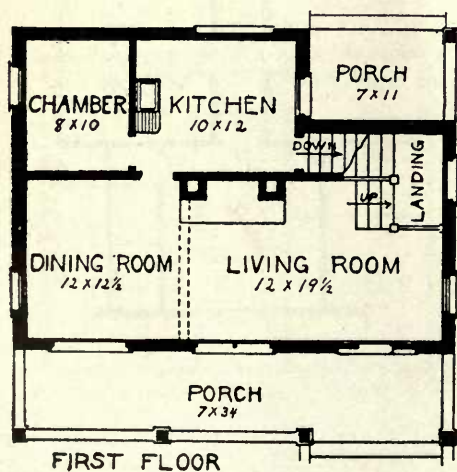
A Small House in An Orchard Setting

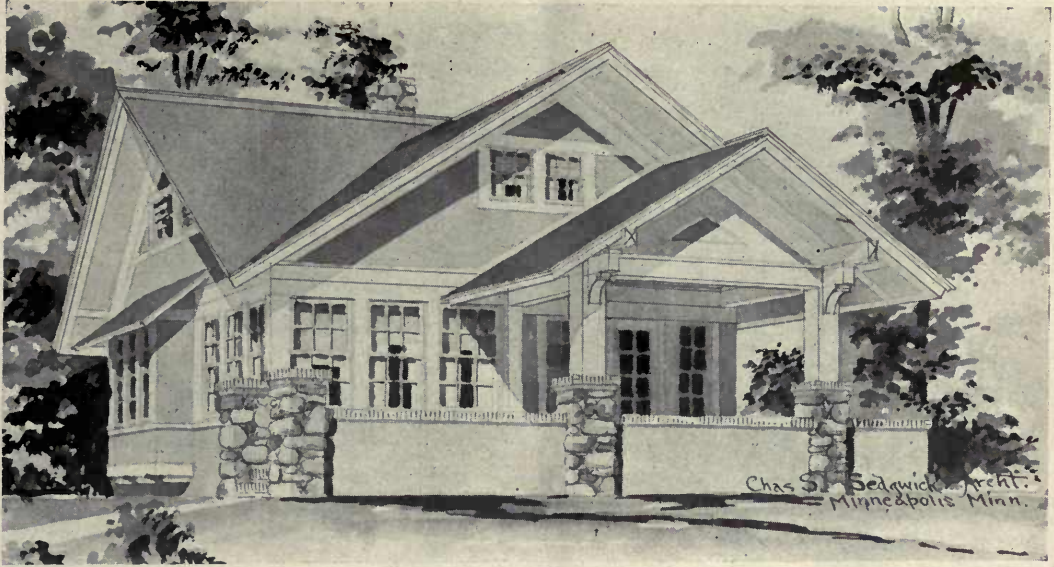




DESIGN B 505

A Modern Seven-Room Cottage

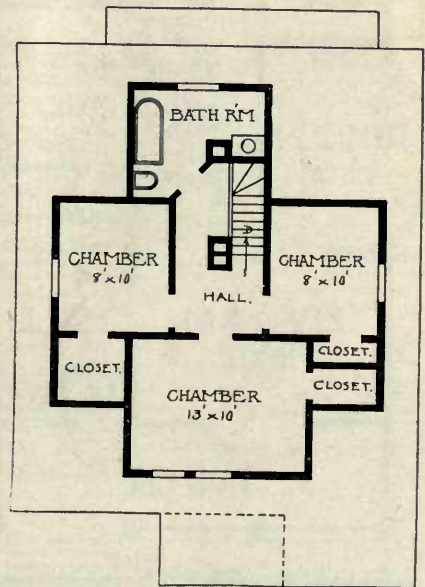
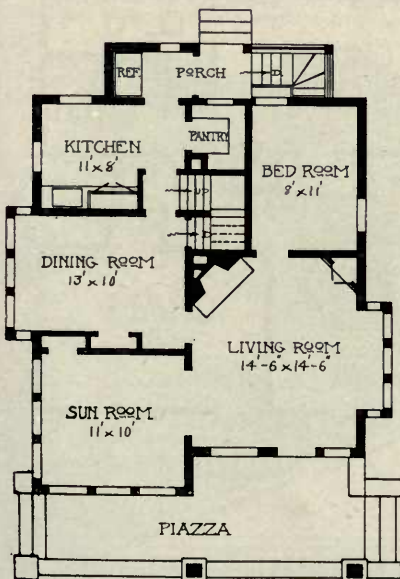




Chas. S. Sedgwick, Architect.

DESIGN B 506

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Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

A Common Difficulty.

A LARGE number of the inquiries which come to any one who is supposed to be an authority upon matters of this sort are concerned with the harmonizing of furniture of different sorts of wood. And by far the greater number of such inquiries are in reference to the disposition of golden oak in rooms partially furnished in mahogany. Not that golden oak, of a good tone and without too much grain is objectionable but that it does not accommodate itself to the finer wood, either in color, in quality, or in style.

It is usually possible to segregate the two sorts of furniture. As a general thing it is advisable to put the few pieces of the finer wood in a small reception room or formal parlor and wait for better times for the entire furnishing of the large room. Or the golden oak can be used for a library, which can be papered and painted so as to give it a harmonious setting.

Even in one large room it is possible to group your furniture in such a way that the two woods shall not come in contact. Sometimes a long room has been divided by a large couch at right angles to the fireplace, the oak furniture arranged at one end, the mahogany at the other, unless all your oak pieces are chairs and all your mahogany ones tables. Nor is it probable that the wall color will be as good for the one wood as the other. At the very best this is a makeshift.

Refinishing Furniture.

One is too apt to think of the finish of furniture as being permanent, possibly renewed from time to time by a fresh coat of varnish, but other wise unchangeable. In this, as in so many other things, it is the first stroke that counts. Nor, in the

case of oak is it necessary as with mahogany, to scrape off the varnish. It will yield to any one of a number of preparations, which cannot be used on mahogany, because the potash which they contain changes the natural color of the wood, giving it a purple tone. Any amateur can do this part of the work and also the rubbing with the very finest sandpaper which is necessary to a perfectly smooth surface. After that, it is in order to inquire for a man who has worked for a cabinet maker and understands the staining and finishing of wood, and who will be willing to work at your own house, though many amateurs achieve excellent results by the use of ready prepared stains and finishes. We have, indeed, seen very choice old mahogany, beautifully refinished by complete novices in that line.

The color at which to aim in refinishing is generally a tone like that of old French walnut. Every maker of wood dyes has a different name for this tone, but the little bits of finished wood which they send out as samples are very helpful and can be compared with the walnut pieces which you can see in an antique shop. The tone must be distinctly brown, not the grayed tone of fumed oak.

Silver Gray Oak.

You may do something a little more radical, if your oak happens to be of specially fine quality, and this is a good thing for the figured golden oak just alluded to. When the original finish has been removed down to the wood, stain it the fashionable silver gray and have it given a rubbed finish. Then it will go charmingly with your mahogany and be very beautiful in itself, while the exaggeration of the grain of which I have spoken will be less noticeable. A room

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K. E. 5.

with one of the shadowy gray tapestry papers with white woodwork, furniture partly mahogany, partly gray oak and rose tones in rugs and furnishings is a very charming place.

Weathered Green.

In a room whose furnishings are green, the oak which must associate with mahogany may very well be stained the dull tone which is known as either weathered or Flemish green, which is very effective, and is not objectionable in connection with white woodwork. Refinishing in green is perhaps the best disposition to be made of the cheaper qualities of oak furniture, some of which is not oak at all but ash, and a very charming blue and green scheme can be worked out with it as a basis.

The Last Resort.

When refinishing furniture seems utterly out of the question, either from the expense or from the difficulty of getting the work properly done, it can be brought into harmony with its surroundings by the use of black enamel paint. Not that one would care for a great deal of bright black anywhere, but a few pieces are effective and a capital foil to the other contents of the room. If the black can be used somewhere else in the room so much the better, and here comes in the utility of the black grounded cretonnes, many of which are so bewilderingly lovely, and yet seem so impracticable. They are admirable for long curtains, over thin net ones, and the floral patterns of French origin are much to be preferred to those of Chinese design which come from England. This black painted furniture is appropriate in association with mahogany because so much use was made of black paint in Colonial times and must often have been found cheek by jowl with mahogany. Moreover some of the very latest offerings are reproductions of this dull black furniture with painted decorations in colors.

Blue Ribbons and Roses.

A suggestion given in an English magazine is worth repeating for the benefit of someone who may be struggling with a room which has a chair rail and a dado

of lincrusta or similar material below it. The inquirer was advised to paint the woodwork, including the chair rail in old ivory, or vellum, enamel, the lincrusta in the same tone, but flat color, and to cover the walls above with a cream colored paper in a small pattern, such a paper as is sold for ceilings. A narrow border of pink roses and knotted blue ribbons was to be carried around each wall space, below the ceiling, down the corners and above the chair rail, while the over mantel space was to be surrounded in the same way and an oval mirror in a gilt frame to be hung in it.

The Disposition of Old China.

Whether inherited or collected a good many people have stores of old china. It may be the cherished blue Staffordshire, the pretty, but less valued pink Staffordshire, the brownish purple mulberry ware, pink or copper lustre, or the mysterious Lowestoft with its tiny roses. But whatever it is it ought to be so arranged as to have its full decorative value.

Blue china must be kept by itself. It does not mix except with pewter or silver lustre. And it needs a special background, white if the room is furnished in mahogany, golden brown or tan for oak, although there is a certain shade of green which brings it out beautifully. The ideal place in which to keep it is in the quaint corner cupboards, painted white and with latticed doors, which our great grandmothers called beaufets. When one of these seems out of the question, nothing is better than a set of corner shelves with solid ends, or rather sides, absolutely plain, except that the front edges of the shelves may be slightly rounded. Or if one happens to have some specially tall piece the second shelf can be hollowed out semi-circularly to accommodate it.

The pink Staffordshire, which is much less expensive and less desired than the blue, yet has a charm of its own, looks best in a room whose general tone is tan or brown. It may very well be mixed with bits of Lowestoft or with some of the other pink flowered wares.

The largest collection of mulberry ware in this country is arranged on oak hanging cupboards in a dining room with yellow walls. This ware does not ap-



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proximate at all to the dark rose shade known to decorators as mulberry, but is rather of a purplish brown and is interesting not only for the beauty of its coloring but because it is unusual.

The fancy for the antique should not lead the collector into perpetrating the incongruity of enshrining these various stonewares in too elaborate a setting. In their own time they were distinctly middle class and it is as inappropriate to associate them with Chippendale and Sheraton as it would be to use a modern English willow dinner service on a mahogany table. The people who could afford fine mahogany furniture, either in England or her colonies, ate off Canton, Wedgwood or Derby.

The Arrangement of a Cabinet.

There is one elementary principle to be observed in arranging china in a cupboard, on shelves, or in cabinets. That is to put the biggest pieces at the bottom, although a set of corner shelves may be appropriately crowned by a single tureen or a large platter. Almost any book on

china collecting gives illustrations of actual arrangements which will be more helpful than any abstract directions can be, but if such are not available the principle is easy enough of application. It is a mistake, I think, to mix up pewter and china. Good pewter is worth a special background, and nothing brings it out so well as a dull blue, the tone called Louis Quinze, preferably in a piled material, velour, cotton velvet, or velveteen, with which the shelves holding it can be lined.

Gray Crash and Nasturtiums.

At a recent exhibition of the work of various interior decorators there was shown a charming little room with brownish gray walls, a grayish brown rug and delicately fashioned fumed oak furniture. For curtains, table runners and cushion cover the gray crash woven by hand in the Russian prisons was used in combination with a cretonne with a pattern of orange and yellow nasturtiums and brownish foliage. The arrangement of the design made it possible to use the cretonne as a border in the fashion of a wall paper "cut out." The appliqué, fastened down with long buttonhole stitches of coarse silk, bordered the curtains, made a valance across the top of the windows and outlined the ends of runners for the tables and cushions for the settle. The note of vivid color was carried out still further by a shade of dull orange silk on a tall bronze lamp.

Many of the imported cottons and linens in narrow widths lend themselves to this sort of appliqué, which is richer in effect than stencilling and does not involve very much work.



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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Brick for Mantels.

H. C. Y. "We are called upon to select at once the brick for fireplaces in livingroom and library, and would like some suggestions from you as to color schemes and the proper brick (color and texture) for mantels.

The house on the outside is built of tapestry brick (several different colors woven in the wall) with chocolate mortar joint $\frac{5}{8}$ -inch wide and raked out $\frac{1}{2}$ -inch deep.

The reason we give you this information is this: Some people advise that we should use a smooth brick, light in color, inside of the house, others, who presume to know, say that only a brick of rough texture should be used inside.

The living room is to be finished in birch mahogany, library in oak, floor in both rooms oak. Mahogany furniture in living room and oak in library.

Please suggest colors of rugs and walls for these rooms. Also, what use could be made of a silk oriental rug, 5x9, rose shades predominating, which was purchased for hall but which we do not care to use there.

Grey cement is used in second and attic stories on outside. Taking this into consideration and other outside description given above, what color window shades would you suggest?"

Ans. As to merits of matt or smooth brick, either are correct inside or outside. We advise a smooth finish, dark brownish roman red brick to go with the mahoganyed birch in living room, and a matt brick in library.

We have just used the Navajo Matt in such a fireplace, and are much pleased with it. The colorings are extremely varied, olive green, soft dull rose, red, tan, and hints of blue, laid up in deep cream mortar with wide, raked out joints.

The grey Roman brick laid close in bronze green mortar suggested for library would be in harmony with a soft tan wall, and soft old rose red in furnishings, and these would suit the oak trim and north-west exposure.

The living room with its abundance of light would take admirably a bronze green wall and there is a beautifully designed paper all self tones, in a silk tapestry effect, in that coloring. Unless the rug described is too delicate to be serviceable, we think the hall the place for it, and there is a rose and olive green almost golden tapestry paper, that would be admirable in that hall, which must not have a dark wall.

Window shades in a russet color will go well with your exterior, but should be duplex with ivory on inside for living room.

Painting Old Furniture.

"I have been reading your interesting book on 'Practical House Decoration,' sent us with our renewal to 'Keith's,' and come to you for help. I have a bedroom furnished in birdseye maple. The pieces are massive and have splendid lines, but are very old, badly discolored with age, and marred with moving from place to place. I wish to 'do it over' in green—a silver green, if I can get that shade—but do not want to tackle it without having some advice.

"1. Must it be sandpapered, or will a good scrubbing with ammonia answer as well? 2. I want a dull surface, like one sees on the mission furniture. 3. Will you give me a good shade of green (not a dark shade), with a silver cast if possible?"

Ans.—As to "doing over" of furniture, it seems almost a pity to paint birdseye maple, the grain is so pretty. We sup-



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pose you mean to enamel it, as you could not get a "silver green" in a stain. Staining it would mean taking off every bit of the original finish down to the bare wood, a great job. The nicest way is to sand-paper till you get a surface rough enough to hold the paint. It will require three coats to make a good job. We doubt if you can get a silver-green in any prepared paint.

Our advice to you, if the furniture is only scratched, is to take off the old varnish and refinish the same, getting your silver green coloring in the walls and furnishings of the room. If, however, it is too much discolored, then we would use an enamel finish, which is more easily kept clean.

More Refinishing of Furniture.

"As a subscriber of your helpful magazine, I desire to take advantage of your department for advice relative to remodeling two bedrooms and a hall. Bedroom No. 1 is 14x14 feet. The woodwork is painted white. It is furnished with odds and ends of furniture. The bed is walnut and the other pieces are dark oak. I desire to use green, old blue or white paper on the walls, and to retouch the woodwork. I have thought of leaving the bed as it is, staining one chair walnut and staining the other pieces a bog green or enameling them white. What do you think of each of these plans? What shade should the floor be stained? Bedroom No. 2 is to be our guest chamber. It has a northern and western exposure. We desire to furnish this in birdseye maple. The woodwork is pine, stained natural. Should this be enameled white or given the birdseye maple finish? If the latter, how should I proceed? We intend doing all the work except the papering. I would like to make this a green and yellow room."

Ans.—First, as to refinishing the furniture, we should not advise such a mixed effect as painting any of the pieces either white or green. You must remove the old finish from the oak pieces. The quickest and easiest way to do this is to take them out in the yard and scrub them with an old broom dipped in a pail of water in which you have dissolved a can of concentrated lye. Then stain with a walnut

stain and finish. If the dark oak pieces do not look very badly or very unlike the walnut bed, we would not change them.

In hall and guest room, the woodwork best be ivory and not pure white. Certainly the doors in the hall must be painted to look like remaining woodwork. White woodwork will look better with the walnut furniture, but cream will look better with the birdseye maple. The floors should have a nut brown stain.

We would use a figured paper in rather deep but soft blues, with the walnut furniture and dark blue—mostly blue—and white rag rugs. White ceiling. You can have a pretty green and yellow room with the birdseye maple. Cream woodwork and ceiling. Use a paper having a narrow green stripe alternating with a yellow vine, on a cream ground. Rug plain green or nearly plain. Curtains cream scrim with floral border in green and yellow.

Window shades of a medium green will be best. Yes, the barn is usually painted to match the house. In the East the barns on farms are sometimes painted dark red, but that would not be suitable for you.

Colonnades and Color Schemes.

"As a subscriber to and a reader of your magazine, I have been intensely interested in the very helpful suggestions given for building, remodeling, furnishing, color schemes, etc., hence I come to you for like help.

"Our floors are to be of hard wood, walls plastered, smooth finish. All interior trim is to be finished in lusterless white. Hand rail and stair treads mahogany. Our rugs for reception hall and living rooms are Whittalls Anglo-Persian, Bokhara design. Dining room rug is a Wilton Bagdad. Furniture for living room, reception hall and dining room is mahogany. We are buying nothing new save draperies, etc. Now will you kindly send me one of your helpful color schemes?"

Ans.—Your choice of white woodwork with the Oriental rugs and mahogany furniture we think is good, only we would prefer ivory to a dead white. It is almost the only thing you could have with the dark red of the Bokhara rugs and the mahogany furniture.

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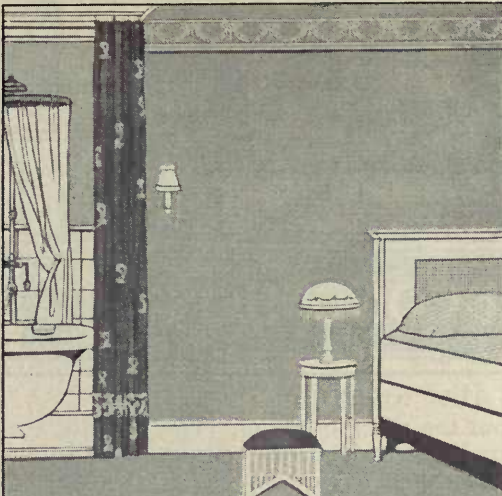
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Now your living room with its southwest exposure must have a cool wall, and grey is the best harmonizer and background for the mahogany and dark red rugs. The Wilton Bagdad of dining room undoubtedly has much old rose, but it probably carries a good deal of dull green and old ivory also. The rose tone should not be the dominant color note in a south dining room. We should make the dining room wall a grey-green with mingled notes of rose and greyish green in accessories.

Considering the red of the Bokhara rug and the mahogany furniture, the only harmonizing medium for the wall would be some tone of grey. The dining room in darker grey and rose will open beautifully from it, and both are delightful with ivory woodwork. The curtains should introduce green and rose to go with the rug and the paper. The light fixture here should be the lovely rose and green Tiffany shades in a shower of four. It will be difficult to overcome a stiff and severe character to the living room without some upholstery or drapery somewhere. We advise a couch or davenport in wicker, with cushion of cretonne, also a wicker chair. You could then put chair and table of the solid mahogany in the reception hall. Of course the paper and window treatment suggested for living room should be used in the hall also, as it is practically one room. Then if you would get one of the pretty wicker reading lamps—the shade lined with cretonne—for the table, it would be most attractive.

In regard to the colonnade opening, this department has many times gone on record against such openings between dining and living rooms. It should always be possible to shut off the dining room, either with sliding doors, glass French doors or portieres. A plain six-foot arch with portieres gives an opportunity of introducing color effect and softening outlines which is rather necessary with white woodwork. Between living room and reception hall, however, the case is different and there the colonnade will increase the effect of space and also afford pretty places to stand a jar of pottery or plant in the open spaces above the paneled base. We would have this paneling about 2½ feet from floor.



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The Extra Half Hour.

THE writer knows of a family which is always behindhand, always in a desperate hurry, never under any circumstances catches up. Yet its members are more than ordinarily efficient and the standard of living is unusually high. She knows another family where much the same conditions prevail, a family in which a servant is kept and in which the mistress works much harder than the maid. In both cases it is an easy matter to find the weak link in the chain, which is, that breakfast is at least half an hour too late, half past eight in one family, eight in the other. Both families keep rather unusually early hours, so that the hour of the morning meal is not dictated by the necessity of rounding out the requisite number of hours of sleep.

Undoubtedly it is a pleasant thing to lie abed in the morning, deferring the inevitable plunge into the activities of the day as long as possible. But equally it is very disagreeable to be behindhand and overworked, with the balance in favor of the latter condition.

It takes courage to get out of bed in the dim light of a winter morning, but it takes more to tackle an accumulation of petty disagreeables later in the morning. And with the effort of the will there is apt to come an agreeable sense of stimulation which makes the day's work seem distinctly worth while. Nor need one feel that there is any special loss in dispensing with the additional sleep. Children may and do need nine hours' sleep, but a healthy adult is very well off with seven, especially if that amount be dreamless and taken in a well-ventilated room, with-

out too much clothing. The habit of normal and restful sleep can be formed like any other. The latest psychological theory is that dreams are the index to a morbid mental state, which can be diagnosed by their study as readily as a physical disease can be by the phenomena of temperature.

Aside from the mere saving of time by beginning the day's work as early as may be, is what may be called its cultural value for the children of the family. The habit of promptness is invaluable in all the activities of life and is best learned in extreme youth. The difficulties of the entrance upon business or professional life are immensely increased if, along with the adaptation to new conditions, goes the necessity of the formation of essential habits. Anxious mothers in their desire to take the best possible care of their children often encourage them in a sort of valetudinarianism which is a horrible handicap later on. The girl who has always spent Saturday morning in bed is going to find any routine occupation a great tax upon her energies, or else she will spend a large share of her leisure in rest rather than in recreation. Too few people realize that change is just as recuperative as repose.

The Maid's Paradise.

It is in these belated households that the one maid does the least for her very liberal pay. If the conditions of the family are such that lunch or dinner comes at noon, or a little after, her working hours are reduced to the minimum. There is a tradition in her class that no work of importance should be undertaken after the noon meal has been cleared up. But if



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PERFECT HEAT AT TEA KETTLE PRESSURE

the morning hours are abridged by a delayed breakfast, not more than two are available for the general work of the house, except on washing and ironing days, when the mistress is expected to fill in by washing the breakfast dishes and getting the noon meal, in addition to her own regular tasks.

The problem of domestic service in the smaller places, in which the demand for maids is always far in excess of the supply, will never be solved until the hygienic and satisfying habit of dining at night is adopted. While there is a good deal to be said for children coming home from school for the noon meal, it is not an unmixed blessing. Far better sandwiches and fruit eaten at leisure in school than a home meal to which the child hurries and from which he bolts, only half fed, in his haste to get back to his playmates. Eliminate the children's meal which must be exactly on time and the morning work can round itself out to a comfortable conclusion without interruption.

Varying the Table.

By the end of the winter months proper, the average table has settled down to the dead level of monotony. In a family of any size it is possible to ring the changes on all the sorts of meat in a single week, and there is a general recourse to those vegetables which are to be had in cans, and rice and bread puddings, apple and custard pies acquire a tiresome familiarity.

During Lent fish might very well be served twice a week, some sort of fresh fish on Wednesday, a chowder, an oyster pie, or croquettes on Friday. With a soup and a salad, one of the more substantial omelettes makes an extremely good and sufficiently substantial dinner, the more desirable if the family are not

in the habit of eating eggs at breakfast. For this purpose the sort of omelette which is made much like a batter pudding, started on top of the range and finished in the oven, is preferable to one made entirely of eggs, and if a little baking powder is used is sure to be light and puffy. One of the very best of these savory omelettes is made with bacon or salt pork, cut in dice and tried out in the pan before the egg mixture is poured in. Most of the fat should be drained off as soon as the omelette begins to set. Or one may make a plain omelette and serve it with some sort of a highly seasoned sauce poured around it. The odds and ends of a roast and the carcass of a chicken will supply enough stock for the foundation of one of these sauces, which may be varied in half a dozen ways.

The common vegetables are susceptible of a good many variations. Cabbage may be finished with a cream sauce, or boiled in a cloth so that it keeps its shape and stuffed with a savory force meat. Brussels sprouts may appear at one time liberally buttered, at another floating in a cheese sauce, a third time cold with a mayonnaise. Dried Lima beans or lentils are extremely good with a tomato sauce, or with a brown sauce highly flavored with onion, while the beans make an uncommonly good salad dressed with oil and vinegar. Winter beets are seldom very good, and if gas is the fuel used it does not pay to cook them, but those which come in cans are tender and well flavored and make a delightful salad, either alone with lettuce or with peas and carrots.

Celery, boiled and creamed, is agreeable, if not specially nutritious, and the celery root which is sometimes called celeriac does not differ greatly from oyster plant and is much cheaper.



"CHICAGO" CLOTHES DRYERS And Laundry Room Equipments

consisting of *Electric Washing Machines; Ironing Machines; Ironing Boards; etc.*, especially adapted for use in the laundry room of *Residences, Apartment Buildings* and moderate sized *Hotels, Hospitals, Sanitariums* and similar Institutions. Can furnish individual machines or complete outfits. Our appliances are the best that can be had—there are none better.

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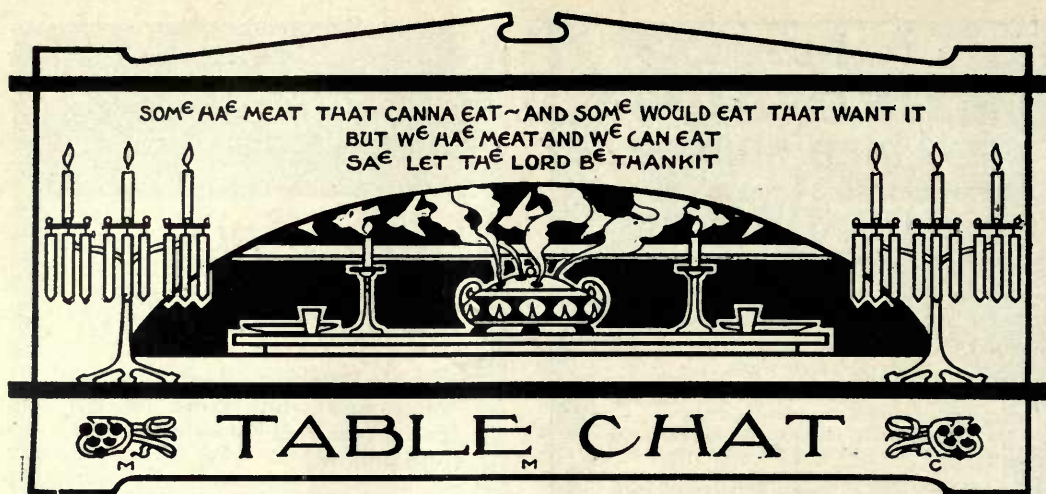
Simple little thing, isn't it? Just black and white there on the paper (the real colors are black and yellow.)

But do you know it stands for the romance of business—it appeared on every one of the twenty-four million bags of Atlas Portland Cement that built the Panama Canal.

It stands for the greatest cement manufacturing capacity in America—seventy-two million bags a year. Do you see why every pound of Atlas *must* be worthy of trademark? Any other course would be fatal.

Isn't that the kind of cement you want to use when *you* build?



Strawberry Shortcake in the Ascendant.

IN our northern markets really sweet, luscious strawberries seldom make their appearance before the first week in May. The April fruit is sour and has generally traveled so far that it has lost much of its flavor, and as only the very best berries are good enough for shortcake, it follows that we must postpone the making of that delicacy till May.

There are three sorts of shortcake, so called, made respectively with biscuit dough, with pastry and with cake, but only the first is the real thing, and the dough should be of the utmost tenderness, shortened with butter, while cream is none too good to mix it with, if you can get it.

Often a shortcake made of the best materials is poor because the dough has too much flour in it, yet it is difficult to manipulate a very soft dough. Here is a short cut which gives you a very tender cake and obviates any working of the dough. Take any rule for short biscuits and double the quantity of shortening given. Mix it with milk or cream, making it no stiffer than ordinary cake dough. Bake the cake in a well buttered tin with straight sides, two inches high. Pour half the mixture into the tin, melt a teaspoonful of butter and run it over the surface and above it lay a circle of waxed paper just the size of the cake. Pour in the other half of the dough and bake in a quick oven. The two layers will separate easily. Peel off the paper and if the cake

is to be served warm, butter the two layers liberally before putting in the berries. This way of making a shortcake is applicable to any sort of fruit and is very easy indeed.

While the pastry shortcake is not quite the real thing it is very good indeed and may be planned for, when one is making pies, by laying a piece of paste away on the ice to be rolled out and cut a day or two later. Paste will keep several days and, as it is as easy to make a large quantity as enough for a single pie, some should always be put aside on baking day.

The pastry shortcake is best when made in individual sizes, circles or triangles of paste, delicately browned and put together with crushed and sweetened berries. The pastry shortcake should be served cold and is much improved by a layer of whipped cream on top, although this does not make it any more digestible.

Our German bakers make turnovers of puff paste, whose filling of apple or raspberry jam is negligible and can be scooped out and leave no trace. When it has been replaced by a mixture of crushed and sweetened berries and whipped cream the result is delicious, if the paste is light and flaky.

The shortcake is one only by courtesy, and is perhaps better when served by itself in the evening than as a part of a regular meal. If the layers are made at home a white cake mixture flavored with bitter almond is very good to taste and much prettier than a yellow cake. A very nice variation is made by cooking the straw-

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I save time and fuel—not a little but a lot. I am good for a lifetime of continual service.

For nearly a third of a century my name

The "MINNEAPOLIS" HEAT REGULATOR

"THE HEART OF THE HEATING PLANT"

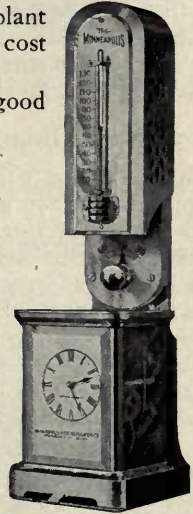
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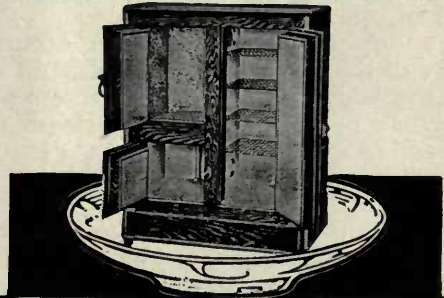
WHY TABLES AND DRESSERS SHOULD HAVE PLATE GLASS TOPS



HIGHLY polished wood surfaces are easily marred beyond repair. One scratch frequently ruins a costly piece of furniture. Plate Glass Tops on Tables, Desks and Dressers eliminate danger of damage. They beautify as well as protect—make home or office far more attractive. Easily cleaned. Absolutely sanitary—afford no lodging place for dust or germs. The first cost is the only cost—they last a life-time and pay for themselves many times by saving tedious polishing and preserving the original finish of the furniture they protect. Made from 1/4 in. French Plate. Edges ground and polished to prevent cutting. Write for prices, giving size of glass desired.

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Don't confuse this wonderful sanitary lining with paint or enamel. I will mail you—free—a sample of Leonard Porcelain that will quickly show you the difference. You can't scratch it even with a knife. It's everlasting—easily kept beautifully sweet and clean. You'll never be satisfied with anything else. Can be arranged for outside icing and water cooler. Style shown is No. 4, in polished oak case. Size, 35x21x45 . . . **\$35.00**

50 Styles—\$15 up—Freight Paid

To Ohio and Mississippi Rivers. I take the risk; send for catalog today. Money returned if you are not perfectly satisfied. Ask for sample of porcelain and I'll mail my booklet "Care of Refrigerators." Every woman should have a copy of this valuable book.

C. H. LEONARD, President, Grand Rapids Refrigerator Co.
138 Clyde Park Ave., Grand Rapids, Mich.

TABLE CHAT—Continued

berries exactly as you would for preserves, adding a sufficient quantity of gelatine to the syrup while boiling hot, and letting syrup and berries set in a pan of the same size as the layers, putting the whole together just before serving. This is very rich and delicious and can be made as well in winter as in summer, using preserved fruit instead of fresh.

Interesting Table Linens.

The declining vogue of the round table is apparent in the arrangement of the designs on table linens of the better sort, which are quite free from the suggestion of a circular wreath carried about the edge of the table. The circular tablecloth seems to have disappeared except as a combination of lace and embroidery to be used at a formal luncheon or tea. In damask it was always beyond the facilities of the home laundress, and who is willing to intrust one's fine linen to professionals as a regular thing?

The new designs are all rather large and extremely elaborate, conventionalized floral forms of a rather unusual sort, the snowdrop, the forget-me-not and the daisy being conspicuously absent, and most of them show a good deal of plain surface, though the borders are very wide. One very unusual cloth shows an accurate copy of the famous Portland Vase in the centre, while the border is intersected at intervals by panels containing classic figures.

Colored Breakfast Sets.

Table linens of pronounced color, green and white, blue and white, pink and white and yellow and white, carry us back a

good many years. Some of them are woven in a mixture of silk and linen, and the colors are very beautiful. One set of cloth and napkins is priced at \$15.00 and is in a brilliant American Beauty red, the design one of roses. These cloths and the medium sized napkins accompanying them are intended for breakfast use, and it is to be presumed that the colors are fast.

Japanese Toweling Table Sets.

There is quite a fancy for luncheon sets of blue and white Japanese towelling, the narrow widths faggoted together and the edges hemstitched. They are quaint and rather effective, but seem better adapted to out of door use than to the house, though they look very well for a tea table in a den or a college study. They are appropriate also to the small luncheon party in the summer cottage. Similar sets, but of a rather more finished appearance can be made from the Japanese cotton crepe which comes by the yard, edging the doilies and centerpiece with a narrow gimp in white and dark blue. Other colors are available, some of which wash and some do not, so it is well to experiment with a small piece of the goods before purchasing. Such sets are in line with those of cretonne suggested in a recent article on children's parties.

Table Embroideries.

Among the great variety of ornamental linens shown, nothing is any more serviceable than those pieces which combine eyelet embroidery and the species of cut work called Richelieu, in which open spaces are outlined with fine buttonholing and crossed by buttonholed bars. Unlike solid work, this is easy of execution and it is very durable. In undertaking such pieces, it is best to buy the linen and have it stamped, or use a transfer pattern, as the pieces sold already stamped are apt to be of very light and coarse quality. An edge of narrow linen lace looks extremely well and is much less work than the usual scallop. It never pays to hemstitch linen in common use, unless you have the patience to make a double hemstitch, twisting a thread around each group of threads.



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RECEIVER
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Combined.**

contains a galvanized garbage can below the ground, keeping it free from frost in the winter and from the hot sun in summer.

Cannot be entered by flies, dogs or rats. Operated by the foot.

Write for catalog, prices and name of your local dealer.

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MAY BE OPENED
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FOR LIGHT

Better Than Window Shades

Burlington Venetian Blinds

can be adjusted to *let in* light and air, yet *keep out* the sun and the gaze of outsiders. They make your sunny rooms cool and restful, and your porch a shady, airy and secluded haven of comfort.

Also order Burlington Window Screens (inside or outside) and Screen Doors with Rust-proof wire cloth—they have the quality. Instead of old-fashioned *folding* blinds insist on Burlington Patent Inside *Sliding* Blinds. Look for the name "Burlington"; best for cottage or mansion.

Write for **FREE Book** picturing interesting story and styles.

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Company
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AT THE BOTTOM
FOR PRIVACY

High-Grade Gas and Electric Fixtures

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INDIRECT Lighting
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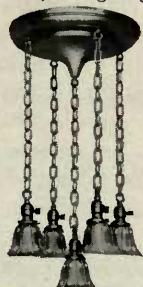
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designs for the modern home—at bed-rock prices!
Satisfaction guaranteed. Money back immediately
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If you need one fixture only—or complete lighting
equipment for your home, club,
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our handsome new Portfolio of
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light \$4.50. 3-light, \$3.75.

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McCray Refrigerators are built in a great variety of styles and sizes for every requirement and may be arranged with outside icing door, to be iced from the rear porch—ice water cooler, special racks for bottled beverages, and other conveniences not found in the ordinary refrigerator. They can also be arranged for either ice or mechanical refrigeration.

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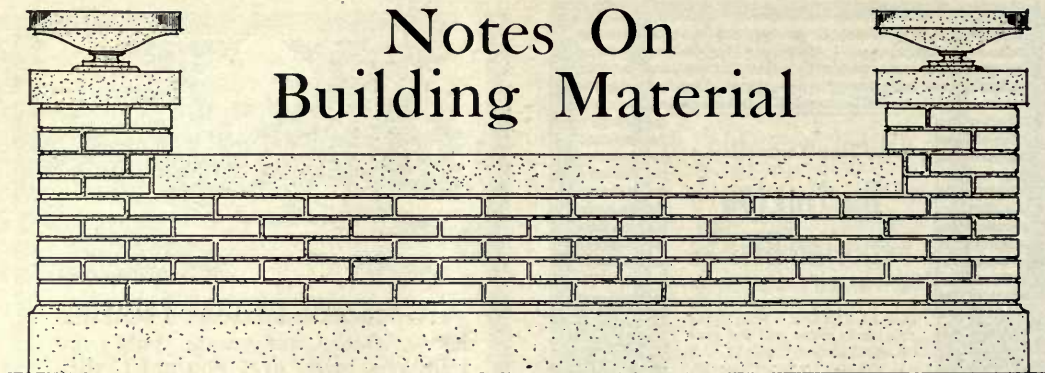
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For branch salesrooms in other cities, see your local
telephone directory.



Notes On Building Material



Fire Insurance and Chimneys.

"Is there a specific ruling by the insurance underwriters to the effect that houses with concrete chimneys and terra cotta flue linings are a greater risk and therefore call for a higher rate of insurance on the house in which they are?"

A RECENT personal experience brought out the fact that this kind of construction in a house, two stories of which were of solid concrete and the third story of stucco, necessitated a rate of 25c per \$100 higher than if the chimney had been of brick. I can understand the reasonableness of the objection to a concrete and terra cotta chimney, due to the probable uneven expansion and contraction of the materials, but I will thank you to tell me if you know of any reason why concrete alone should not be accepted on equal terms with brick for chimneys. My own personal judgment would much prefer it to the latter, even to the extent of paying a higher premium, in that when it is cast and once up, the possibilities of any cracks or openings occurring are very remote, while in brick chimneys I consider that it is almost a probability that eventually there will some defect appear whereby the danger of fire will be increased, due to the many joints in laying the brick.

Discussed by Ira H. Woolson, Consulting Engineer.

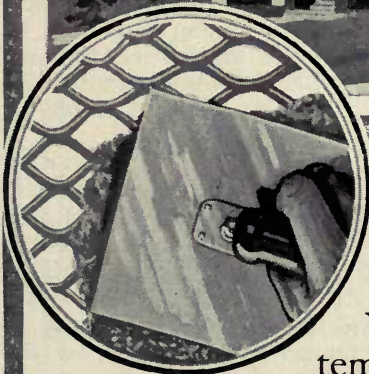
Discussing the above question, I would say that I have been unable to learn that the insurance companies in this vicinity make any rate discrimination as between concrete and brick chimney construction of equal thickness and lined with terra cotta or fire clay flue lining.

Your correspondent, however, is mistaken in his assumption that concrete chimneys, because a monolith in construction, do not crack. I have had considerable experience with such chimneys in high temperatures, and know that they almost invariably crack, and I am informed by insurance inspectors that they have frequently considered it necessary to require the repair of concrete chimneys which they have found to be cracked. The tendency of such cracking would undoubtedly be less in a dwelling house chimney than in a chimney for a factory or similar installation where hot fires were likely to be continuously used. However, there is always the danger of an occasionally sudden, though perhaps temporary, rise of temperature in a dwelling house chimney, and that is the condition which would produce the crack.

For this reason we believe it to be quite necessary that dwelling house chimneys should be lined with terra cotta or fire clay flue lining, and that the outside walls of such chimneys should be not less than 4 inches thick.

There is a tendency in some parts of the country to use bricks on edge and other methods of construction which give a thin chimney wall. These we believe to be very dangerous and we are unalterably opposed to such construction. We also believe that when chimneys are made of concrete they ought to be reinforced in some manner. The additional cost is very slight indeed, and the advantages to be gained are substantial and apparent.

—Concrete and Cement Age.



Your Walls Must Be Right

You can tear out a faulty heating system. You can re-lay poor floors. But the construction of your walls must be right in the first place. The permanence and beauty of inside plaster and outside stucco depend upon the wall base. The base that is absolutely reliable under all sorts of conditions is

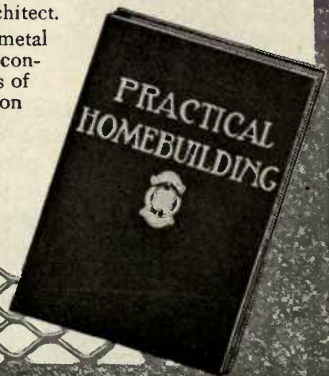
Kno-Burn *Expanded Metal Lath*

Plasterers do good work and quick work over "Kno-Burn" because it is rigid and offers a smooth surface to the trowel. It expands and contracts with the plaster when the temperature changes suddenly. This prevents cracks. It will never rot away because it is a *metal* lath. It compares favorably in cost with other plaster bases. Ask your architect.

Perhaps you are not thoroughly familiar with the superiority of metal lath. Then send for our new book, "Practical Homebuilding." It contains house plans, cost estimates, comparative costs of different forms of construction, numerous photographs and the best of general advice on home-building.

Send ten cents to cover cost of mailing and ask for Booklet 659

North Western Expanded Metal Company
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You will find "Keith's" Advertisers perfectly responsible.

A Plea for Wood.

A correspondent proposing to presently build a number of bungalows asks for information touching the comparative virtues in the premises of lumber and brick. The query is timely and calls for a perfectly ingenuous, perfectly dependable answer. Such an answer now follows:

While brick are fairly entitled to the highest distinction so universally accorded them as a material for certain heavy construction, that of bungalows or other dwellings or any structures of a kindred character certainly cannot be included. In other words, brick—except those of a low and hence undesirable grade—are not only at a comparative and prohibitive disadvantage because of higher relative cost, but possibly in even a larger measure certain other equally obvious objections. Wood is of a natural physical construction, consisting of cellular formations that, speaking untechnically, spontaneously afford a quick as well as self-ventilating and peculiarly sanitary escape for all forms of absorptive effects. Brick, because of more massive qualities, absorb and retain various foreign conditions naturally creative of not only discomfort, as heat and cold, but other effects more or less unsanitary. Wood construction, on the other hand, in which the ordinary modern air spaces are provided, affords a maximum of attainable immunity from all of these very serious objections by means of the self-ventilating and more health-giving characteristics already referred to. That wood is, then, not only in these important particulars decidedly preferable, but, also, cheaper than brick of a desirable quality, may be demonstrated by a little investigation and comparison.

The life of an average detached frame dwelling house or other kindred structure is, of course, largely contingent upon the means from time to time provided for its protection against the elements. A house properly painted very naturally is much more lasting as well as sightly than if left naked. In the light of the transparently self-evident facts, the writer was amazed to find that many of the houses investigated, which in this regard had more or less been neglected, were after

fifty or more years continued occupancy still sheltering in moderate comfort the second and in exceptional instances, the third generation. Those homes equally aged and which in the meantime had been occupied by the same family and kept properly painted and in general repair, were in perfect condition and in all respects yet lasting objects of those domestic traditions that throughout a succession of generations of the same family profoundly hallow such ancestral seats. The query under consideration is peculiarly fascinating because of the preeminently commanding and the all-pervading scope of its human interest. It, in an immeasurable way, is coextensive with and a vital concomitant of all civilization.

—*The National Builder.*

The Cost of Brick Houses.

The claim has been made by a writer in one of the trade papers devoted to the manufacture of clay products that the high cost of constructing brick buildings is due mainly to the bricklayer. He states that brick, while comparing favorably as to cost of material laid down on the ground with that of any other material, costs more in the building. In other words, it is not the material that makes brick houses cost more but the labor that puts it in place.

Further investigation showed these facts: That bricklayers receive \$6 a day of eight hours with a helper to each bricklayer who receives \$4 a day and with a limit of 1,000 brick per day's work.

"It is the bricklaying that is at the bottom of the entire problem," said one dealer when approached to offer some solution. "The manufacturer has minimized the cost of making his product by the installation of modern methods, but has overlooked the fellow who puts his product into the walls.

"There is a scarcity of bricklayers now, but if we could turn them out like trade schools turn out printers, carpenters and others, there would be a different story. Look at the electricians. Why, a few years ago it was almost impossible to get a competent electrician at a reasonable price. Today, however, it is different. They are still getting good wages, but they are doing more and better work."

Consult Your Lumber Dealer

LUMBER is holding its own in the regard of the builder despite the general onslaughts of substitute materials, manufacturers of which have learned "*They can't fool all the people even a part of the time.*"

Good lumber—*Arkansas Soft Pine*—gives the builder maximum returns on the money he invests.

Here is the opinion of a man who knows, the unsolicited statement from a contractor who has built homes for hundreds:

"Your *Arkansas Soft Pine* is all you claim and more. I will take it in preference to most soft pine and use it whenever I can get it. I have always wished there was more in the market."

Your local lumber dealer can furnish you *All the Arkansas Soft Pine* you need, whether you want one piece or One Million Feet.

Make your preference known, ask for *Arkansas Soft Pine* and get full value for the money you invest.

We have literature of value to the architect, the contractor, the owner. It is sent free upon request.

If in doubt regarding what to use, consult us.

Arkansas Soft Pine Bureau

1738 Transportation Bldg.

Chicago, Illinois



Residence of W. T. Hyde, Cooperstown, N. Y., covered with J-M Asbestos Stucco. Frank P. Whiting, Architect, New York.

The Only Stucco That Dries a Permanent, Artistic Uniform Color

J-M Asbestos Stucco is the only stucco which dries with that permanent, uniform color effect so desirable for artistic homes. This is because it is positively the only stucco that contains **no** sand.

The base of most other stuccos is sand. Due to the iron and other foreign substances in the sand, such stuccos are liable to become stained and spotted.

JM ASBESTOS STUCCO

is composed of tough asbestos fibres and finely ground asbestos rock. The fibres take the place of hair used in other stuccos, and the ground asbestos rock takes the place of sand. This, when combined with Portland Cement, produces a stucco that can be applied in a large variety of finishes and texture effects.

J-M Asbestos Stucco is lighter in weight than most stuccos and covers a greater area per ton.

To insure satisfactory results, we are prepared to apply J-M Asbestos Stucco.

Furnished in white and various shades of gray and buff.

Write our nearest Branch for illustrated, descriptive booklet.

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THE CANADIAN H. W. JOHNS-MANVILLE CO., LTD.
Toronto, Montreal, Winnipeg, Vancouver 1776

NOTES ON BUILDING MATERIAL—Continued

It was suggested that the union bricklayer argued he was not getting more than a living wage.

"Let him have his \$6 a day," replied the manufacturer. "I don't begrudge him his wages. What I do kick about is the output. He limits himself to 1,000 brick a day, and yet it is a poor bricklayer who cannot put 3,000 brick in a wall every day in the week. That makes quite a difference, doesn't it, when you begin to figure the construction cost? Take, for instance, common brick in Chicago. You can get them laid down on the job at \$6 per 1,000. Yet you've got to pay \$10 to have them laid in the wall—or \$4 per 1,000 more than they cost to manufacture.

"We want the restrictions taken off the amount of labor a man can do in a day. If he can lay 2,000 brick or more, let him do it. Then, too, there is the question of helper. By the rules of the union every bricklayer must have a hod carrier, who must be paid \$4 a day, yet where there are a dozen bricklayers on the job one or two would be sufficient."

—*Record and Guide.*

The No. 11 R-W XXX House Door Hanger Has Noiseless, Brass Bushed Bearings

Saves Wear on Doors

R-W hung sliding doors last longer than swinging doors. The weight is suspended from the proper place—the top—not the side. They do not damage themselves or the furniture or walls when open. They are noiseless, aid home arrangement,—popular all over the world.

No. 11 is designed for the average homes, but we have "a hanger for any door that slides."

Will you write for details?

Richards-Wilcox Mfg. Co.

Aurora, Illinois

Build with Your Eyes Open

This is what Herringbone Lath means to you, the prospective builder.

It means that at last you can build, almost as cheaply as with wood, an imperishable stucco house with walls that will never need painting or repairs.

It means that plastered partitions and ceilings will never fall, crack nor discolor—no ruined wall paper and decorations.



Herringbone Metal Lath

Above all—and let this sink in—it means *fire protection*. No more partitions that are flues lined with dry-as-tinder, inflammable wooden laths which spread a fire with the flash of burning gasoline; no more shingled and clapboarded sides.

You want to build wisely—then you have got to forget a lot of old-fashioned ideas and learn the new way, just as your architect and builder are learning it. Let us tell you all about fireproof construction—imperishable construction. We will gladly send you invaluable books and advice concerning special problems. Please tell us the names of your architect and builder and state what kind of a building you are planning.

A house that will be old-fashioned in twenty years is old-fashioned now.

The General Fireproofing Co.

905 Logan Ave., Youngstown, Ohio

Makers of Self-Sentering, the expanded metal that makes reinforced concrete without forms.



Trade Mark
Reg. U. S. Pat. Off.

Reynolds Asphalt Shingles

Guaranteed for 10 Years—Will Last
Many Years Longer

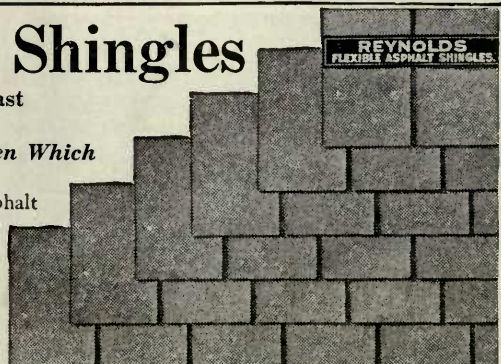
*Natural Colors of Garnet, Red, Gray and Green Which
Never Fade*

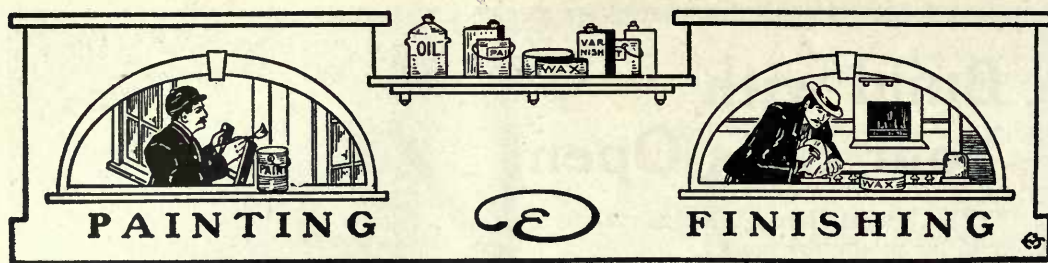
We are the ORIGINAL MAKERS of Flexible Asphalt Shingles and tested our product for ten years before putting it on the market. Let us send you a booklet.

Endorsed by Leading Architects

H. M. Reynolds Asphalt Shingle Co.

West Grant St., Grand Rapids, Mich. Established 1868.





Hints on Fixing Up in the Spring.

DON'T forget, in varnishing or staining a floor to start on the side farthest from the door, and work yourself out of the room, or you will find yourself obliged to track over the wet floor to get out.

In looking over the furniture that is to back into the finished room, scarcely a piece will be found that could not be improved by either stains, oil, or varnish. A whole set of weathered- or fumed-oak furniture may be had by the application of a little paint- and varnish-remover. This is non-poisonous, and does the work quickly. Follow it with stain of the desired color, and a wax finish, if that is liked. Stains are just the reverse of enamels; they can be applied only to raw surfaces of wood, so that the pores of the wood will soak them up. No trained skill is necessary for work of this kind. Any woman who can drive a tack straight need not hesitate, either, to renew any upholstery that may be on old chairs or sofas. Sometimes a complete change of color scheme, together with carefully gone over woodwork, will freshen the entire aspect of a room that seemed almost hopeless. To make the most of what we have, rather than to grow discontented longing for things beyond our reach—here is the greatest help we get from our labor of housecleaning.

The most difficult room in the house to improve, except perhaps the kitchen, is the bath room. If you have an old-fashioned bath-tub, you can, however, give it occasional coats of bathtub enamel that will stand hot water and considerable wear; you can go over the floor with a hard waterproof varnish that will permit daily mopping, and, for the walls and woodwork a Holland enamel may be bought that closely resembles a tiled surface, and is of course most sanitary

and easily washable. Paper for the bath room walls has to be renewed oftener than once a year, if it is to be even surface clean.

The least progressive housekeeper has the kitchen walls painted frequently, owing to the smoke and stains of cooking. It may be a new idea to her to do them herself. The last time I employed a professional painter for my kitchen, I noticed that he sat in idleness for long stretches at a time on the top of his ladder.

"Do you have to wait for parts to get dry?" I inquired.

"Nope," he replied laconically. "The union won't let us finish up more than the other fellows do in the same time." Perhaps he forgot whom he was talking to. At any rate, I remembered that it was my time he was spending on the ladder, whether he used it to paint my walls or not. And the thing that most determined me to try painting my own walls was not alone this costly idleness, but the actual inconvenience of waiting upon the pleasure of such workmen before I could get into my own kitchen again.

To Repair Cracked Walls.

Larger cracks may be repaired by cutting them out so as to form a key; that is, by making the inside of the crack larger or wider than the outside, so that when the plaster is applied, it will fill the inside space and be held there. To do this use a small trowel, fill the crack quite full. A very large crack or break should be only partially filled at first, allowing the filling to become nearly or quite dry, then adding enough to fill up level full. If too much plaster be applied at once, in a large opening, it is apt to fall out by reason of its weight. A sand-finished wall crack may be repaired with a mixture of plaster and sand, equal parts, and some lime putty or thick slaked lime.

THE beauty of paint is dependent on its durability. Paint that comes off in ugly splotches takes the beauty with it. When you paint have your painter follow the old, reliable, lead and oil prescription:

Dutch Boy White Lead

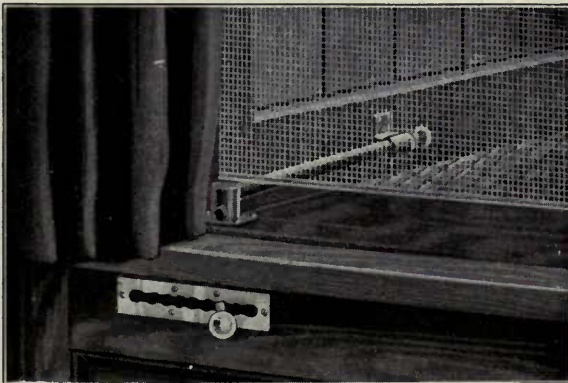
and Dutch Boy linseed oil, mixed to suit conditions. Paint made of these materials stays put—neither cracks nor scales—and makes beauty as permanent as the paint.

White in the keg, any color you want it have it on the house. For inside as well as outside. Any texture and finish, too.

It pays to know the "ain't" in pure paint. Our 48-page text book tells what pure paint is and what is not pure paint. Ask for "Paint Pack 28K."

NATIONAL LEAD COMPANY

New York Boston Buffalo Chicago Cincinnati
Cleveland St. Louis San Francisco
(John T. Lewis & Bros. Co., Philadelphia)
(National Lead & Oil Co., Pittsburgh)



This Casement Is a Summer Comfort!

When open it's all window; not half a window. And there's no ugly joint in the middle to spoil the view and prohibit artistic glazing. To open and close it with this **HOLDFAST ADJUSTER** of ours is a positive pleasure, for you don't have to open the screen to operate it.

Don't build without our Handbook.

CASEMENT HARDWARE CO.

516 -- 9 South Clinton Street
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Twenty-five Years of Proof

"I built a house 25 years ago and the same shingles on today. Rebuilt another 5 years ago, and in each case Cabot's Creosote Stain in good shape. Candidly, I'm afraid to build without using it."

EDWIN F. GARMAN, Bellefonte, Pa.

Cabot's Creosote Stains

saved him the expense of re-shingling and re-staining. They preserve the wood and lastingly beautify it. You protect yourself from tawdry, fading colors and rotting shingles by being sure that Cabot's are used.

You can get Cabot's Stains all over the country. Send for samples on wood and name of nearest agent.

SAMUEL CABOT, Inc., Mfg. Chemist, Boston, Mass.

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Residence of Thomas Shields Clark, Esq., Lenox. Stained with Cabot's Shingle Stains and lined with Cabot's Sheathing Quilt for warmth. Wilson Eyre, Architect, Philadelphia.

"On the back page of your catalogue I find a picture of my house in Lenox, Mass., which I built in 1902 and used your Stains and Quilt—both satisfactory." (Signed)
New York, May 9, 1910. **THOMAS SHIELDS CLARKE.**



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This Offer Comprises:

- No. 1.**—One year's subscription to KEITH'S MAGAZINE.
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\$4. A Complete Offer **\$4.**
for the
HOMEBUILDER

Send Bank Draft or Money Order.

M. L. KEITH, 426 McKnight Building
Minneapolis, Minn.

PAINTING AND FINISHING—Continued

Fill the opening with this, and rub it over with a float or block, to give it a rough appearance, like the rest of the wall. Some use Brussels carpet over the block, and some use it over a trowel. Wet the part now and then as you rub it with the float, and if you do the job right it will be hard to tell just where the repair was made.

A good mixture or putty for filling cracks in a wall may be made of plaster of Paris, four parts, and one part of whiting, adding glue size to form into a putty. First wet the crack. This putty will not set too soon, yet will in time become hard enough. It is best to dry the plaster before using, as it will give a stronger cement if dry. Place it in an oven, or in a pan on the stove.

Very small cracks may be filled by first applying a coat of glue size, to stop suction, and when dry rub in some of the plaster putty.

Where breaks occur, or large cracks, whereby the edges of same are above the rest of the surface, it will be necessary to remove the projecting parts and fill in with plaster. The proper preparation of the wall surface is just as important and worthy of care as the calcimining, and unless it is done you will not get a nice job.

In using lime with the plaster be careful to not get too much in, its object being to retard the setting of the plaster of Paris. After the plaster is dry, shellac it. Never sandpaper the plastered crack, but trowel it down smooth and hard. To fill up sunken parts, use a mixture of whiting and glue size, thickened to a putty with plaster of Paris, to which add a little varnish. This should be left to harden and dry. It will become very hard, and can be spread out quite thin.

Plaster of Paris mixed in vinegar containing some table salt will give a good filler for cracks, and it does not set too quickly, while the salt makes it very hard when dry.

When mixing plaster filling do not pour the water on to the plaster, but scatter the plaster into the water as you stir the mass.

—Paint and Oil Dealer.



Would you like to add a delightful Sleeping porch, Sewing, Reading or Breakfast room to your house at a Very Small Cost? You can do this easily and quickly with

AEROLUX

No-Whip Porch Shades

A newer and better Shade of Slat fabric. These Shades provide all the privacy of a bed chamber and light and air at the same time.

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Send for
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LUXEBERRY WHITE ENAMEL

To the woman of taste the white enameled room makes a strong appeal. She delights in its atmosphere of cheery, dainty brightness. Not only in her boudoir, bedrooms and bathroom, but in the living rooms as well.

Luxeberry White Enamel produces a rich, deep, snow white effect unequaled by any other finish. A Luxeberry surface is smooth, satiny and durable, and may be left either a soft dull, or brilliant as the finest porcelain.

Luxeberry White Enamel won't turn yellow, chip or crack and cleans in a jiffy with soap and water.

In snow white rooms the natural wood floors should be protected and beautified by the finest floor varnish. Liquid Granite has all the toughness its name implies. It brings out the beauty of the wood, multiplying its attractiveness. Liquid Granite floors have a durable elastic surface that withstands the wear of grown-up feet and the romp of playing children—a surface you can wash without fear of turning it white—even boiling water has no harmful effect.

Berry Brothers' Varnishes have been the first choice of home owners, architects and decorators for over fifty years. Ask your dealer about them or write us direct for varnish information of special interest to home owners.

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(INCORPORATED)
World's Largest Varnish Makers

ESTABLISHED 1858

Factories—Detroit, Mich., Walkerville,
Ont., San Francisco, Cal.
Branches in principal cities of the world.

**LIQUID
GRANITE**



Heating, Lighting and Plumbing

Unique System of Heating a Bungalow.



N Oregon real estate firm, operating where the conditions made it impossible to dig cellars or basements in which a heating apparatus could be located, solved their problem in a very unique way as shown in the accompanying plan.

It will be seen that a hall is arranged in the center of the bungalow and at one end there is a room which was provided with a thick cement floor and lined with asbestos boards to make it entirely fireproof. In this room there was located as shown a warm-air furnace which has a fire-pot 20 inches in diameter and a grate 19

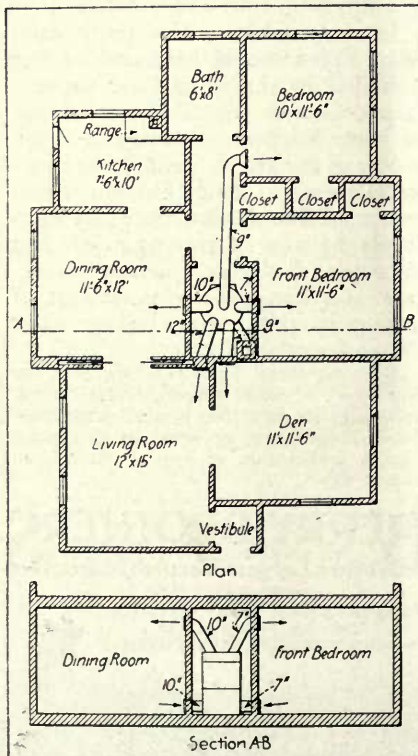
inches in diameter. The casing is 40 inches in diameter and the furnace is rated to have a capacity to warm a dwelling containing 20,000 cubic feet of space.

This furnace was placed directly on the floor, as shown in the sectional elevation on a level with the other rooms in the bungalow. The warm-air pipes were taken out of the top of the furnace in the usual manner and carried to registers placed near the ceiling in the side walls of the various rooms located close to it. The cold-air supply for the furnace was secured by returning air from the rooms through pipes connected with the bottom through casing which led from registers located in the side walls of the various rooms near the floor level.

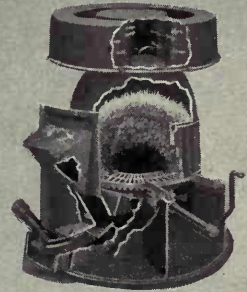
To one room, a bedroom in the rear, a pipe was run to a register placed in the wall just above the door. No attempt was made to return the air from this particular room direct, space being provided beneath the door so that air could flow into the hall and thus allow a continual inflow of warm air. This location of the furnace necessitates some care in taking up the ashes from the furnace and in keeping the room perfectly clean.

The builder of the bungalow has stated that "the furnace heating installation is fine and is very pleasing to all who have come in to look at the great novelty which a furnace placed on the same level with the work it has to do has proved to be."

He writes, "Within a very few minutes after the fire is started, the heat pours out of the hot-air registers and everything works fine. Everyone is delighted with the way it works and the man who put it in says it works better than if it were put in the basement. It has proved a delightful success in every way, and the pipe running along in the back hall is no objection whatever. This setting of the fur-



Plan Showing Position of Furnace and Registers.



Cut-Out View
Underfeed Furnace

Coal Bill Cut From \$90 to \$17⁵⁰ With An Underfeed

H. C. Laird, Norfolk, Va., says: "I am using your Underfeed in my residence of thirteen rooms, and two bath rooms, and my total coal bill will be about \$17.50 per winter. I have divided my coal bill by five, and can not recommend your Underfeed system too highly. I spent \$90.00 last winter heating a house one-half the size of above." This is strong money-saving Underfeed evidence, isn't it?

Government Uses Underfeeds

The United States Government put the Underfeed through the hardest possible tests and *proved* that the following statements *were absolutely true*: "Coal bill \$16.22 for 7 rooms;" "\$5.50 to heat 4 rooms;" "Reduced coal bills from \$109 to \$53;" "Underfeed reduces coal bill 60 per cent;" "Have cut coal bill \$70 each winter for 9 years;" "Saved \$122 a season;" "Even temperature with no smoke or dirt."

Now the Government *specifies* Williamson Underfeeds wherever possible. There are over 25,000 Underfeeds in successful use. May we send you the names and addresses of over 2,000 Underfeed users—some right in your neighborhood—who *know* by experience that *clean, even, economical* heat is obtainable *only* with the Underfeed?

The Underfeed Is Different

The Underfeed system of heating is *different* from all other systems—it's better. With the Underfeed coal is fed from below. All the fire is on top, causing perfect combustion. Smoke and gases are burned up, making more heat with *no* smoke, smell, clinkers and very little ashes. You can use cheap slack soft coal or pea and buckwheat hard coal and secure same heat as highest priced coal. The Underfeed is adapted to warm air, steam and hot-water systems in homes, stores, churches, schools, halls and other buildings.

**WILLIAMSON
UNDERFEED**
Furnaces and Boilers

Cut Coal Bills $\frac{1}{2}$ to $\frac{2}{3}$

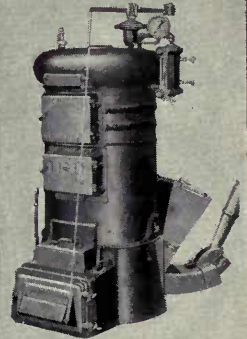
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Every Underfeed Furnace or Boiler, when properly installed and operated, is guaranteed to effect a saving of 50 per cent in coal bills. This is backed by a \$1,000,000 corporation. The strongest guarantee ever put behind *any* heating system is behind the Underfeed. If you are going to build or want more heat at less cost, send the coupon for full particulars. It will pay you well.

THE WILLIAMSON HEATER COMPANY

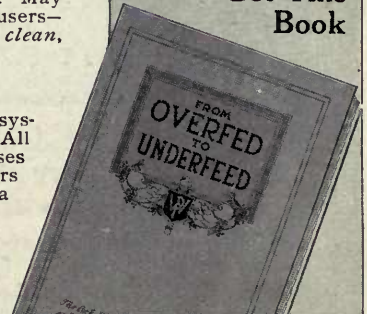
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Underfeed Boiler

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The Coupon Brings All The Facts

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Warm Air.....Steam or Hot Water.....
(Mark an X after system interested in.)

Name

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BUY A FURNACE BUILT TO LAST

GOOD SERVICE for years without trouble and without repair expense is what you get if you choose a warm air furnace carefully.

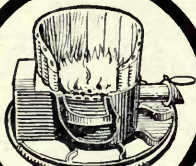
XXth Century THE TROUBLELESS FURNACE

has a long-lived firepot and circulating air chamber ash pit which economizes fuel and gives more heat because all soot and gas is thoroughly consumed.

Over 40,000 of these famous furnaces in use—many of them in your neighborhood. If you want to heat your home in the most economical and healthful way get the facts about XXth Century Furnaces. Send rough sketch or state size and number

of rooms and we will suggest the best type and size of furnace for your needs. Write today for catalog No. 53.

**The XXth Century
Heating &
Ventilating Co.
Akron, Ohio**



HEATING, LIGHTING AND PLUMBING—Continued

nace has solved the problem of hot-air heating where a basement is not possible."

It is pointed out that one reason why the job works so satisfactorily is that the furnace is amply large enough to work. The temperature in the town where the furnace is installed seldom falls lower than 10 deg. F.

This furnace heating system was shipped complete from an eastern city, and the pipes were made of the various sizes both to suit the work and so that they would nest, as the shipment was a long one and rather expensive.

Consequently, the pipes are no larger than would be ordinarily used in warm-air heating, although they are generous in size according to the opinion of furnace heating contractors in a mild climate. The generous size of the pipe has the advantage of affording little restriction to the flow of air where there is so little head to facilitate the movement and it is certainly one of the helps in making this heating system satisfactory in every way.

—Reprinted from the *Building Age*.

Screen With PEARL Wire Cloth for More Wear and Less Expense—

There is no up-keep expense connected with the use of Gilbert & Bennett PEARL Wire Cloth.

"PEARL" is as rust-proof as metal can be made and far outwears the best painted screen in existence.

And as for appearance—well—you'll have to see samples of PEARL Wire Cloth to realize its beauty.

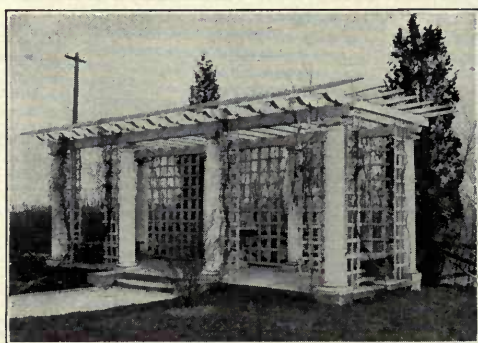
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Georgetown, Conn. Kansas City, Mo.

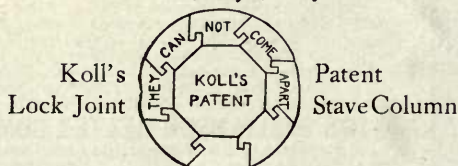


We have issued a Very Interesting Catalogue on "PERGOLAS" and Garden Accessories

showing a series of new designs, can be had free on request. Catalogue "G-28" for Pergolas and Pergola Columns. Catalogue "G-40" for Exterior and Interior Wood Columns.

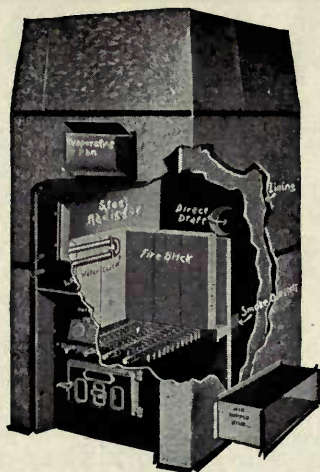
HARTMANN-SANDERS CO.

Exclusive Manufacturers of



Suitable for Pergolas, Porches or Interior Use.

MAIN OFFICE and FACTORY: Elston & Webster Ave., Chicago, Ill.
Eastern Office: 6 E. 39th St., New York City, N. Y.
Pacific Coast Factory: A. J. Koll Planing Mill Co., Los Angeles, Cal.



A Furnace Is a Furnace,

most people think, and many people think, when they hear of a furnace that is dusty and dirty, or that will not heat all the rooms properly at all times, or that takes too much coal, that those things are common to *all* furnaces, and therefore, that furnaces are faulty, insufficient things, with nothing to recommend them but a favorable price.

You Couldn't Make a Greater Mistake

The *Hess Steel Furnace* has *welded seams*. Where the plates join they are *melted together*, like one piece of metal, and leakage of gas and dust is absolutely and forever impossible.

The *Hess Furnace* is not a "made-for-the-trade" furnace, sold to dealers and then to the consumer, without the maker's guarantee and responsibility.

We are selling *direct to consumers* and not through middlemen, and this direct selling heads off the unequal heating fault, and the excessive fuel fault, because these are the result of improper location and arrangement of pipes, registers, air supply, etc.

We plan the arrangement and we guarantee that you will be satisfied; that your house will be properly heated; that you will be satisfied with the fuel bill; the freedom from leakage; the ease of operation; the comfort, and everything else, and *we let you test the outfit* during two months of cold weather before we are paid. ¶ We couldn't possibly make this kind of a deal through a dealer, so we come direct to you with it, and we save you the dealer's profit. ¶ Now, while you think of it, just send us a little sketch of your house and let us make a plan and an estimate and a heating proposal, all of which are absolutely without charge, and with no obligation on you. We'll take a chance of interesting you, and if we cannot we'll thank you for the opportunity and try someone else. Free booklet and lots of references.

HESS WARMING & VENTILATING CO., 1217 Tacoma Bldg., Chicago, Ill.

If you are a contractor ask us about our Profit Sharing arrangement for contractors.

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FIFTY-EIGHT YEARS OF QUALITY

THE BATHROOM,

Kitchen, Pantry and Laundry in this beautiful home at South Bend, Ind., are equipped throughout with Wolff Plumbing.

We are not assemblers but manufacturers. Our own factories produce everything necessary for a complete installation.

L. Wolff Manufacturing Co.

MANUFACTURERS OF

Everything in the Plumbing Line

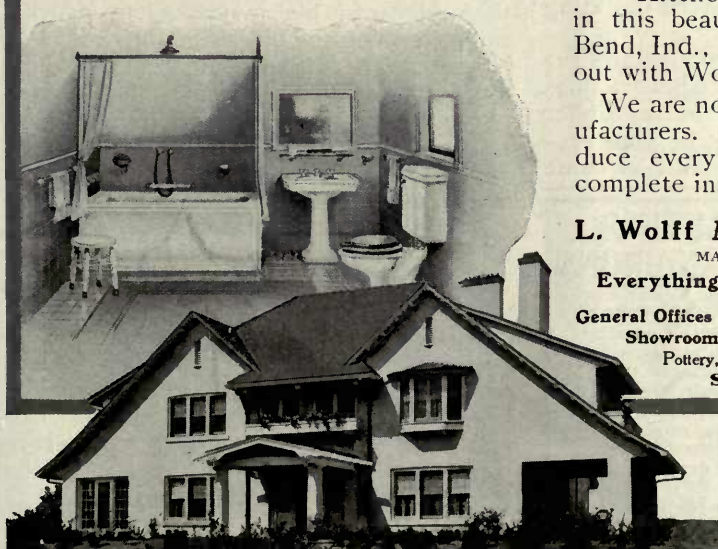
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SEND FOR BOOKLET



E. R. Austin, Architect

N. R. Shambleau, Assoc. Arch.

Chas. M. Oberlin & Co., Plumbers

SPLINTERS AND SHAVINGS

A Co-operative Failure.



THE Home Club, 11-15 East 45th St., New York, backed by social and financial leaders, failed after the expenditure of more than \$1,000,000. It was a co-operative apartment club, the idea being to meet the requirements of home life without the responsibility of housekeeping nor the cramped conditions of an apartment hotel. The two lower floors of the nine-story building were provided with all the appointments of a first-class club. There was a large dining-room sufficient to accommodate all the families of the house. Each apartment also had a dining-room, but no kitchen, and the residents could dine either publicly or privately. Despite all the comforts offered, the scheme collapsed. It is always difficult to make a co-operative project measure up to expectations.

A New Idea.

"Here is a new thing in metal roofing, a new idea to me, at least, and I think it is quite a good one." He turned the sheet of metal roofing over, at this, and showed the under side, on which was tightly cemented a sheet of rosin-sized building paper, and said:

"This is called protected roofing and the idea is that metal roofing when it does suffer and rust, does so from the under side. On the outside it can be kept protected by fresh coats of paint as time

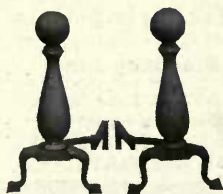
passes, but the under side can not be gotten at after it is once laid, and if laid on bare sheeting some moisture will get through and it sweats a little, and finally sets up rust. One way to guard against this is to put a layer of building paper on the sheeting before laying the metal; but here is an idea that saves time and trouble and is better than that. The paper is cemented to the metal itself and thus protects the inside from rusting. It may cost a little more, but it adds more to the quality than it costs, and is an excellent talking point."

A restrictive building covenant in a deed, requiring twenty feet open space between houses on adjoining lots, is violated by maintenance of a bay window projecting about fifteen inches over the line, but slight projections will not be enjoined by the courts, where the general purpose of the restriction to give each owner sufficient light and air is not violated. (*New Jersey Court of Chancery, 87 Atlantic Reporter 158.*)

Business and Legislation.

President Wilson recently expressed surprise that business men did not avail themselves of his invitation to express their views on the proposed anti-trust legislation. The attitude of mind in which legislators and public officers regard business men is sufficient explanation of their reluctance to express opinions which would likely go unheeded. The Congressional attitude indicates that the impression prevails that all men engaged in industry—the life-blood of the nation—are, because of their occupation, in a perpetual conspiracy against the common welfare. Congress puts aside important international questions, which are in the proper field of government, in order to frame legislation designed to show these malefactors who supply the peoples' necessities that their nefarious purposes will be thwarted at every turn.

Not content with the powers vested in it by the constitution, Congress must concern itself with matters of corporate ad-



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and many other articles
of attractive, dependable

Hearth Furniture

Basket Grates, Fenders,
Spark Guards, Gas Logs,
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We also furnish tile for
mantels and hearths.

SPECIAL: No. 9191, Height 18½ in.

Design
No. 9191
as shown

In Art-Black

In Solid Brass

Per
Pair
Brush
Finish

\$5.75

16.50

FREIGHT
PREPAID
to Your
Station.

FOR SAME DESIGN, 24½ in. high, quotation on request.

SUNDERLAND BROS. CO., 323 So. 17 St., Omaha, Neb.



Better Protection for a Longer Time

Every essential ingredient in S W P (Sherwin-Williams Paint Prepared) is a Sherwin-Williams Product. Pure lead, pure zinc, and pure linseed oil are made by us in order to safeguard the paint for your house. We put into S W P what experience has proved will produce the best paint. Our formula is the result of nearly fifty years' testing.

A good painter and S W P mean better protection for a longer time than ever before.

Write for our Portfolio of Suggestions for Painting and Decorating. It is free.

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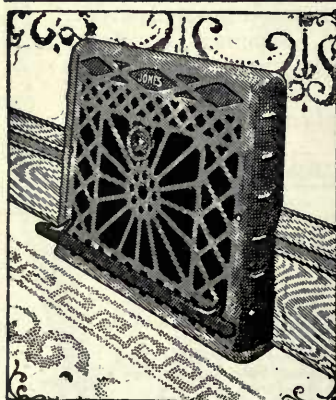
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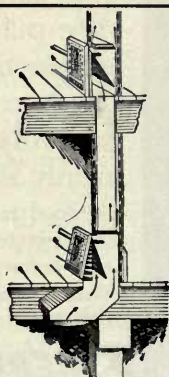
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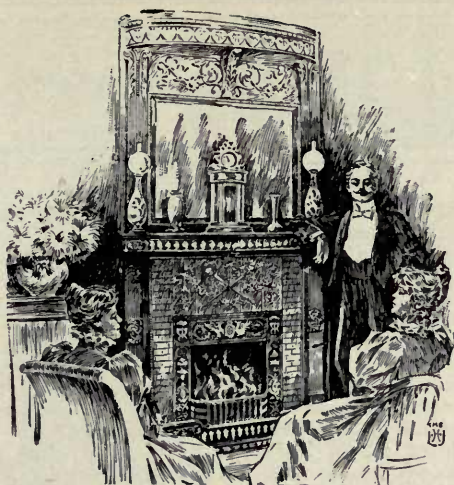
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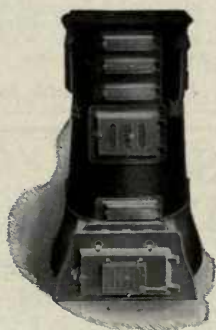
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* * *

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"Varnish and Varnishing" is a new publication of the Lowe Bros. Co., Dayton, O., containing a fund of information and practical suggestions about the finish of the home. Reams of text on wood finishing are published broadcast, but not often do we encounter advice so really helpful as these pages contain. The merest tyro can hardly go astray if he be willing to learn. As a companion piece the more decorative booklet of this company, *Common Sense About Interiors*, goes hand in hand. Most attractively illustrated by colored plates, it is full of pleasing ideas for amateur use as well as the professional. Both booklets are furnished on request.

* * *

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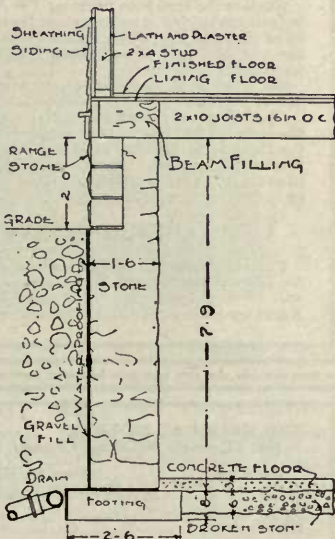
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(FIG. 6)
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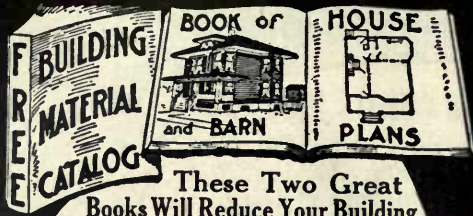
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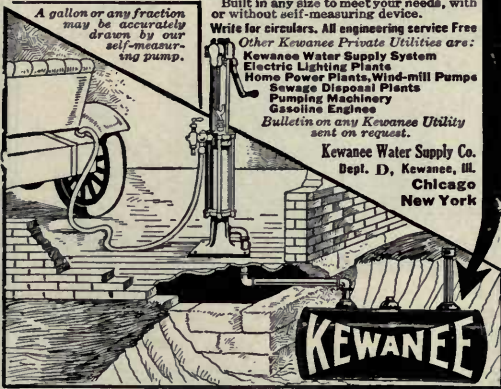
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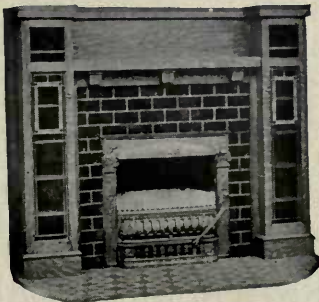
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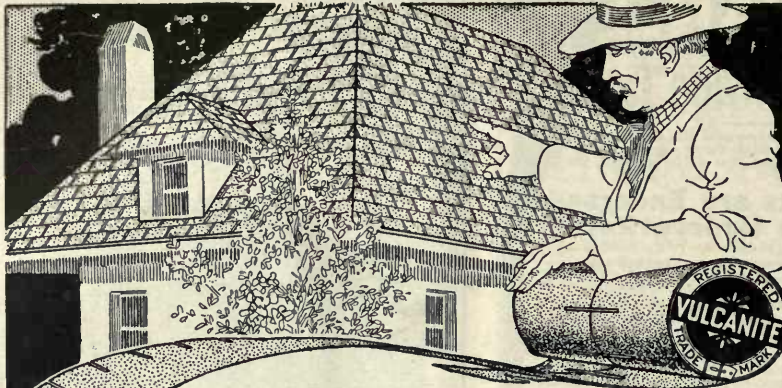
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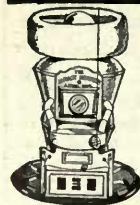


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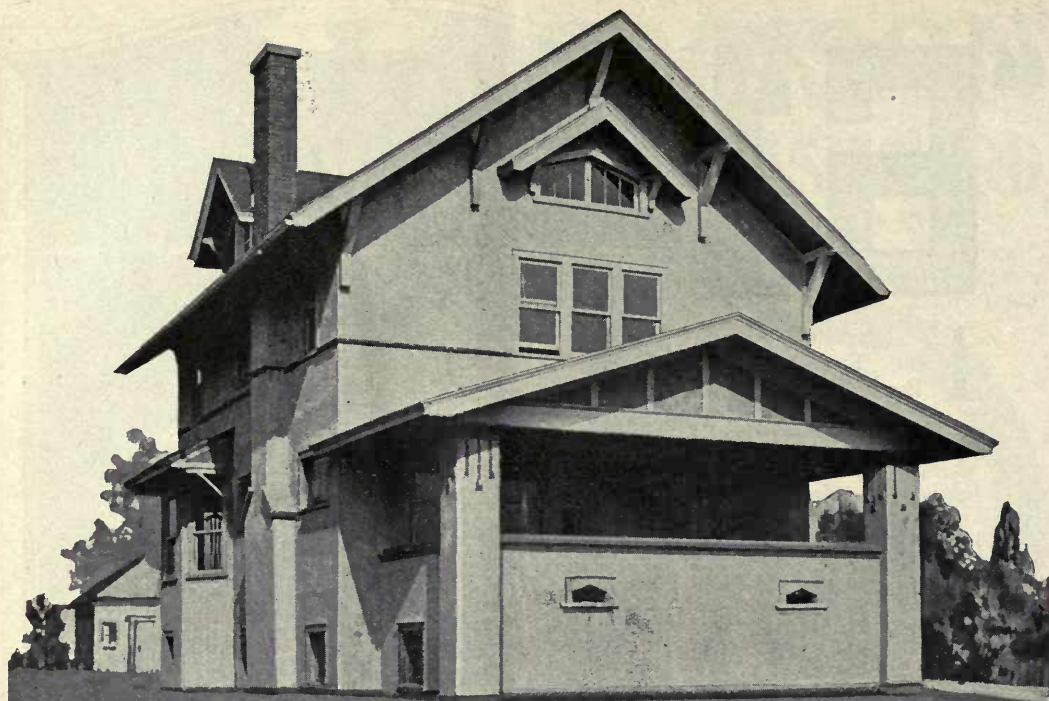
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KEITH'S MAGAZINE

ON HOME BUILDING

WITH WHICH IS CONSOLIDATED

THE JOURNAL OF MODERN CONSTRUCTION AND IDEAL HOMES MAGAZINE

M. L. KEITH, PUBLISHER, 426 McKNIGHT BUILDING, MINNEAPOLIS, MINN.

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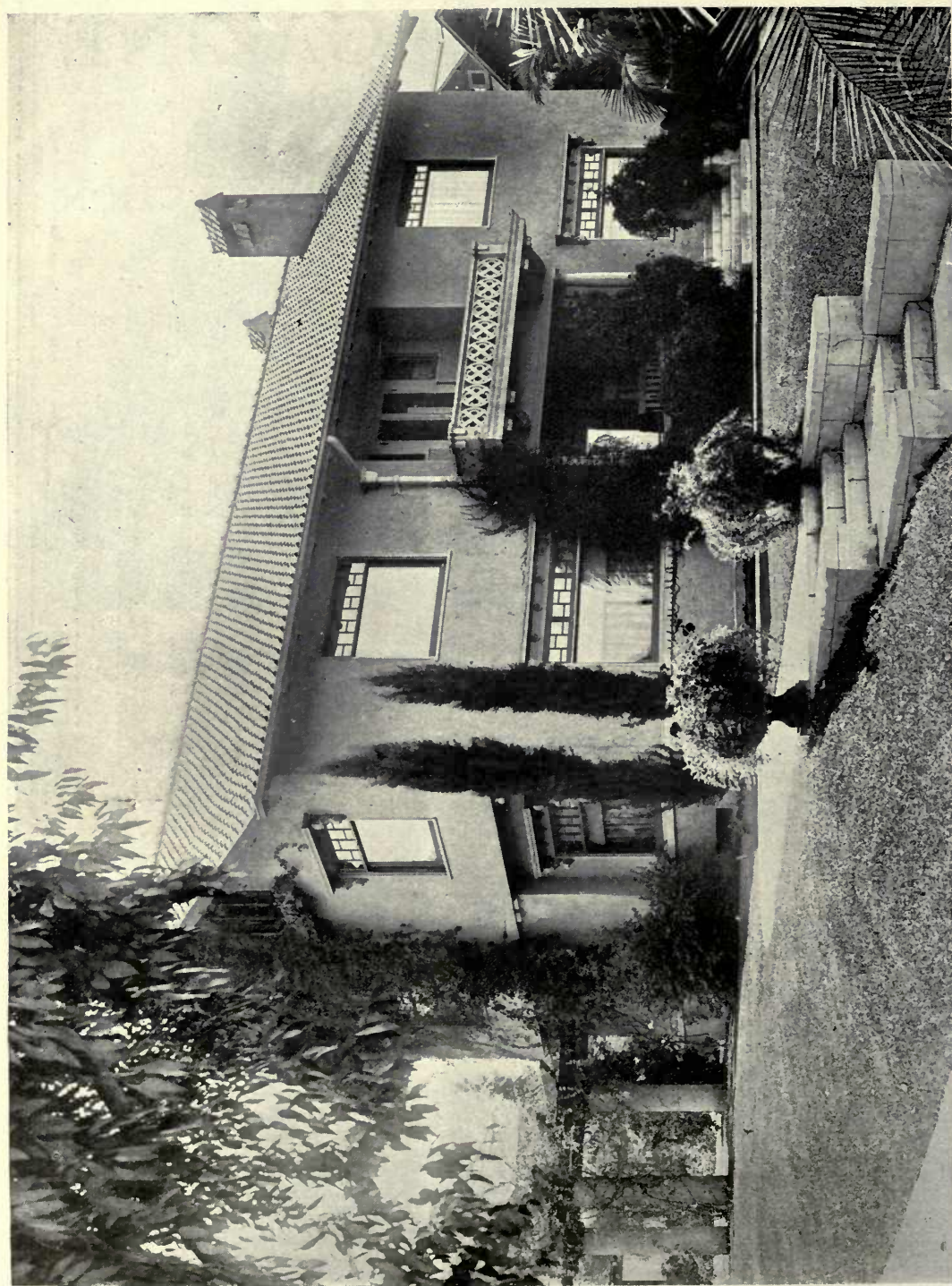
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A Plaster House of Much Charm Which Is Greatly Enhanced by the Training of the "Ficus Ripans" in Front, While a Wealth of Ivy Graces the South End of the Dwelling.

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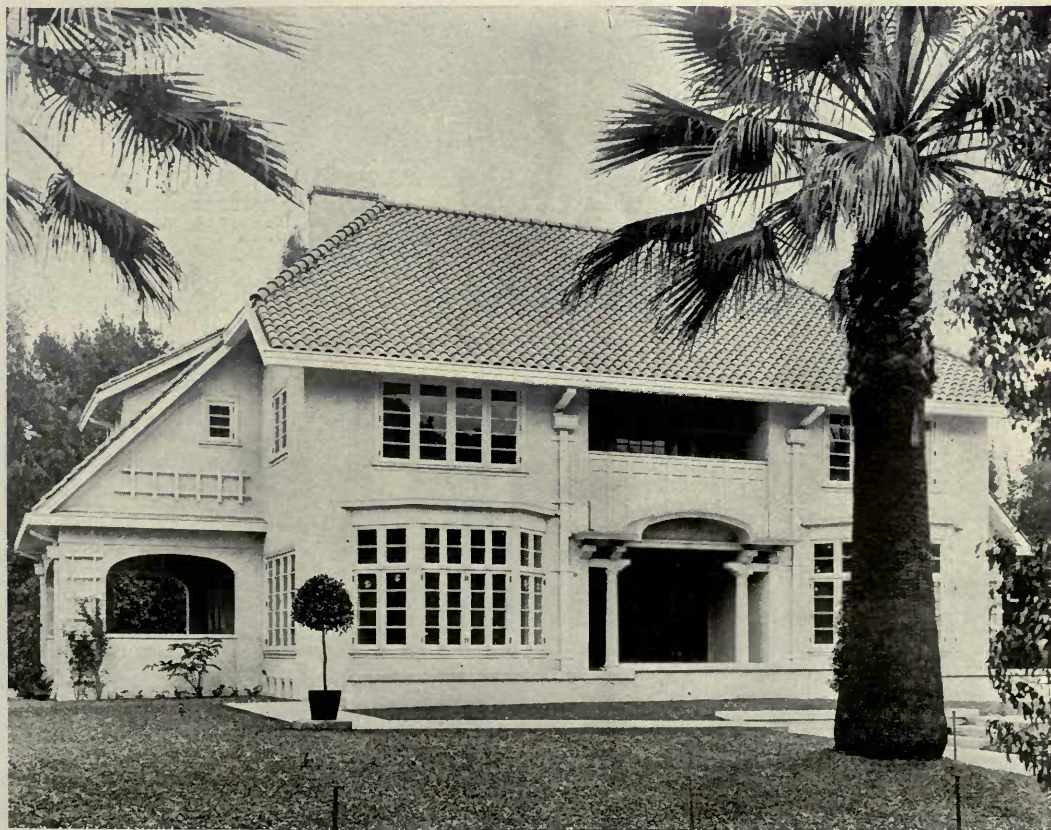
New Designs in Plaster Houses

Una Nixon Hopkins

IT IS only a few years, comparatively, since cement was first introduced in this country as a material altogether suitable for the construction of our domestic architecture. At this moment it is very popular, and while the first houses built of it were largely copies of foreign models, original designs in endless number are now to be seen throughout the land.

There are large and stately houses, those of moderate size, as well as small ones of the cottage and bungalow type. Many, even the majority, perhaps, of the small ones are rather more dignified in appearance than are houses of the same size constructed of brick or wood.

This material is called cement, plaster—or concrete, in turn, according to the mixture. And together with wood is of-



An Unusual Design in Which Steeply Slanting Roofs Cover the End Wings.

ten quite as effective as when used alone. It frequently, too, is a very good relief to brick construction which is apt to be monotonous and heavy. There is in cement construction almost as great an opportunity for varied detail as in that of other material, when once one becomes master of the vehicle.

The treatment of the roofs, too, offers considerable variety. They are of tile in

This model is excellently built of cement for when entirely of wood or brick it is difficult to make attractive. It may have one kind of a roof or another—be relieved by pergolas, porches and balconies, or have none—but in the end it will be almost sure to have a certain distinction when built of cement.

The placing of windows and doors is very important in the plaster house of



A Study in Plain Surfaces and Grey and White Tones.

different colors, slate, shingles or the patent roofings so much in vogue.

And whether they be steep roofs or low roofs, or roofs of moderate pitch—or flat roofs—depends on the style of house they cover.

There is a type of house known by the general term of “a square house”—not always exactly square—but a house with regular angles, sometimes much longer than it is wide—providing generous rooms on the first and second floors—with frequently a third. A house that furnishes more room for the money than those that are “cut up.”

plain exterior, because they, to an extent, are its ornaments. Here, too, is an opportunity for the ornamental awnings, which of late have become so much of a decorative feature on plaster houses.

So rarely, nowadays, do we see a modern house of moderate size with an attic that one high enough to contain an attic is really a welcome sight even though a certain picturesqueness may be lost as in the house shown in the frontispiece.

The whole impression gained here, however, is that the house provides a great amount of comfort. It stands on a rise of ground with cement steps leading



Where Effective Use Has Been Made of Simple Relief Paneling. Awnings Are Used with Taste and Discretion.

up to it, and all the windows are large with recessed casings and are for the most part protected by overhanging hoods on brackets above them. A pergola at the back and side ends in a roomy porch where the family may enjoy the open in retirement. Here the exterior of rough plaster is natural in color.

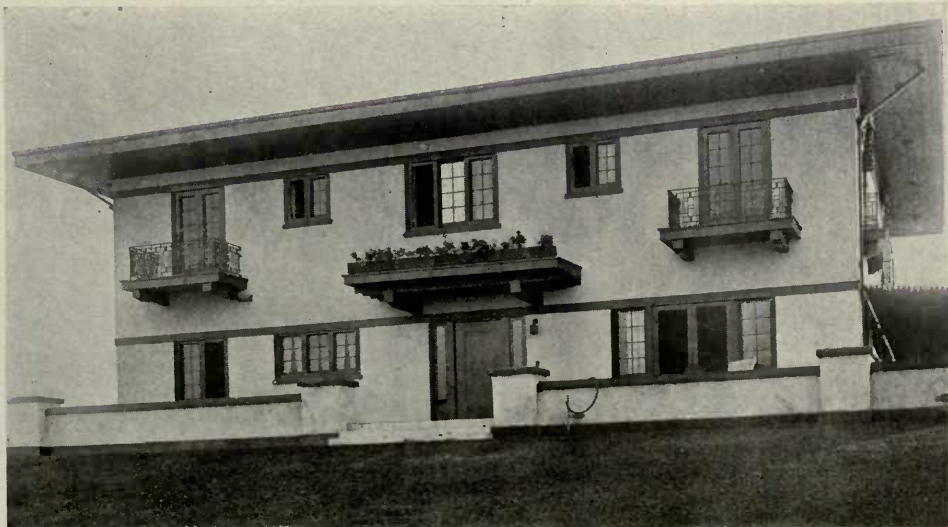
The next illustration shows a house quite unusual in design. The entrance is recessed, with the balcony above supported by two pillars, and at either end

of the house there are semi-enclosed porches with slant roofs in the center of which are little dormers.

Two large bay windows in front make an interesting exterior and provide an abundance of sunshine for the interior.

Trellises for vines add a pleasing bit of decoration here and there, and the red tile roof gives color to the perfectly white exterior.

The third picture shows how the outside front wall is divided into three large

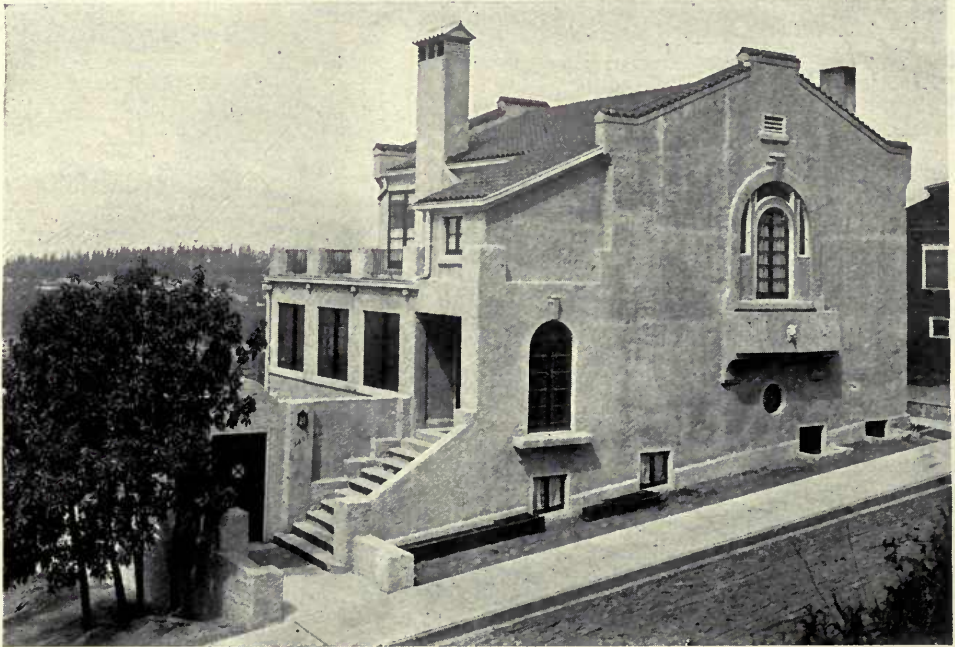


In Which Use Is Made of Wrought Iron Balconies.

spaces by pilaster reliefs enclosing panels. Those on either side of the entrance porch being narrower than at each end of the facade. In the exact center between these paneled spaces the windows and doors are situated with pleasing effect. Though only a small part of the porch is covered the terrace floor extends across the entire front of the house, protected by

pictures. They are highly ornamental, and altogether consistent with the cement construction. In these houses, too, there are the long French windows, which make delightful interiors opening into balconies, and in each instance the design of the iron work is suited to the particular house for which it is used.

The last picture shows a little house



A Quaint Seaside House.

a low wall that meets the pergola extensions of both ends of the house.

In the third illustration there is practically no ornamentation evident, except that provided by the chimney and the tile roof, but the house is so well proportioned and the windows are so well placed, the house in nowise seems plain or uninteresting. The exterior walls here are gray and the roof is white with window casings painted white.

Wrought iron balconies are the especial features that attract attention in the next

designed for a steep hillside near the sea shore, and is very interesting because it is most original. Though very like a doll house in appearance it is in fact quite adequate for three people.

The two pocket-like porches enclosed on three sides were so designed in order to protect them from the wind.

The quaint roof is graduated and broken by the brick-topped chimney, and the front windows are flanked by boxes made of cement holding cypress trees.

Warm Weather Furnishings

E. I. Farrington



IT IS a happy coincidence that the kind of furniture which is best adapted to summer use is also among the least expensive. Note that we say "among," for while it is quite true that very attractive summer furniture is plentiful at moderate prices, it is also true that there is a class of wicker which costs as much as mahogany. Wonderful refinements have been brought out in the high grade wicker of this season and they cost (some pieces are illustrated on another page); the whole set costs \$100.00, and was sold inside an hour after being displayed in the show window.

Willow, rattan, and grass are light, cool and comfortable. In southern countries one sees practically no heavy furniture at any season. Chairs, couches, and even beds, through which the air circulates freely, are chosen as a matter of course. So in our climate, furniture of this type is the natural kind to select for warm weather purposes. It not only is cool, but looks cool. It is also a cause of satisfaction that the sort of furniture most desirable for summer is not only inexpensive but artistic. As a matter of fact many willow and cane pieces are found in the best homes the year around, for the



White Enamel Furniture Mixed with Wicker Pieces Is Popular for Summer Homes.

presence of an odd chair or two of this light material gives a piquant touch which is highly pleasing.

In summer an entire room or even an entire house may be furnished with willow, grass, or pieces of similar material and be a delight to all, though the living room, bedrooms and porch are the places where they are most commonly found. There are chairs in almost endless variety and nearly all of them good. There has

workmen of remarkable dexterity weave the various pieces by hand, working with great rapidity, yet making every movement count and being perfectly sure of themselves. The work is specialized to a large extent, each man devoting himself to a few patterns, with which he is thoroughly familiar. In that way his deft fingers come to move almost automatically, and chairs, tables, and other pieces are turned out with incredible swiftness.



Showing the Canton or Hour-Glass Chair with Stand to Match.

been a wonderful improvement in styles as well as in workmanship.

Much of the willow used is raised in this country and much more is imported. Uncle Sam is encouraging farmers to grow willow as a commercial venture and has gone so far as to distribute cuttings without charge. Natural willow has a soft sheen which is very pleasing to the eye and the material is so pliant that chairs and couches are restful to the body.

Willow for furniture is commonly cut in the spring, tied in bundles and placed in pits of running water until the sap runs, when it may be easily peeled. Trained

Although willow furniture is often preferred in the natural color because of the cheerful tone it imparts to a room, it may be stained to harmonize with any definite color scheme. The staining can be done at home if deemed desirable. It is always preferable to have the color applied by hand, although some manufacturers dip their goods, thus saving time but securing a somewhat less satisfactory result from an æsthetic standpoint.

Most chairs of this material are made with arms, some of them broad enough to hold a writing pad. Often a basket is attached to one arm and is used for books,

magazines, or sewing articles. Many chairs have high backs, some with wings like the delightful fireside chairs of olden days. There are Morris chairs and rockers, swing seats and stools. Also, there are divans, davenport, tables, desks, baby baskets, muffin stands, book cases, dressers and hall trees. Tables and dressers may have a hardwood top or a glass top with cretonne under it.

Reed is sometimes made up into beds, bureaux, and even tall clocks. These articles however are proportionately more expensive than the designs more commonly seen. Enamelled rattan also finds favor, especially among people who own costly summer homes. Various colors are used in addition to white—pearl, buff and blue. The enamel is so hard that it may be washed freely, which is considered a sanitary advantage. This enamelled furniture is not so well suited to the average home as the willow in its natural color or stained, but in a rather pretentious house may be employed most effectively.

Even in the most modest summer home a place may be found for one or more of the Canton chairs offered for our comfort by the far East. These delightful and interesting pieces are sometimes called hour-glass chairs because of their



A Wicker Desk and Chair or Could Be Used as Small Dressing Table.

characteristic shape, but whatever the name given them, they are wholly delightful. Somehow, they seem to fit in anywhere, but are especially well suited to the porch or the sun parlor. They cost but little, the smaller sizes being sold by some of the importers for as low as five and six dollars. These chairs are to be found in all large cities and may also be ordered by mail.

As a rule, cushions will be wanted for all these summer pieces, and frequently the cushions are covered with cretonne or chintz to match the hangings of a room or the coverlet of a bed. Quite naturally, the more delicate colors are best confined to the house, leaving the strong hues for the porch and the sun parlor.

The porch is an important feature of most summer homes and as it commonly serves as an actual outdoor living room, the matter of furnishing it requires considerable thought. Porch furniture should be light, so that it may be moved without difficulty, and it should not be injured by sun or rain. When the porch is very large or partly enclosed, any sort of furniture may be made use of, but as



Excellent for Porch or Indoors.

a rule the elements must be considered. Willow pieces are not injured by a wetting; on the contrary, an occasional bath seems to do them good. Some people, I understand, actually set out their willow chairs to be rained on when occasion offers.

If the location is an exposed one, the common beach chair becomes almost a

cally replaced the sag-in-the-middle hammock of other days. These hammocks come in many different styles and at prices covering a wide range. It hardly pays to buy one which is listed at less than ten dollars. Those with springs under the mattress are a little heavier than the kind fitted with ropes, but are more comfortable, provided the spring is really



Bed Coverings and Draperies of the Same Material. The Chaise-Longue Breathes Comfort.

necessity. When it is placed with its back towards the sweeping winds, one may sit in secluded comfort, reading or luxuriating in a sun bath and quite untroubled by the tempestuous breezes. Another piece of porch furniture having much to recommend it is an interesting adaptation of the steamer chair, but is made of willow or reed and has an arm on only one side. For reading or for enjoyment of an after-dinner siesta it is ideal.

In passing, mention should be made of the couch hammock, which has practi-

a good one. Portable standards are sometimes used instead of suspending the hammock from ceiling hooks. In summer houses having large living rooms these couch hammocks are often hung before the fireplace.

It is a pleasant and popular practice to eat some of the meals on the porch when weather conditions are suitable, for which reason a light wheel tray may well be added to the furniture list. This tray may be loaded in the kitchen and easily wheeled to the porch, thus saving many steps for maid or mistress. There is also



The Brick Walls of the Porch and the Brown Wicker Furniture Are in Excellent Harmony. Al Fresco Arches and the Open Fire Are a Fetching Combination.

a porch tray with a handle which serves the purpose well, although not quite so convenient as the tray on wheels. The latter, it may be said, may be used as a table when tea is served in the open air. The light willow muffin stands are also worth while on occasions of this sort.

There is another plan which is well worth the attention of people who have a country house or beach cottage to furnish, but who wish to avoid the expenditure of much money. Let them use painted furniture combined with a few willow or wicker pieces. Painted furni-

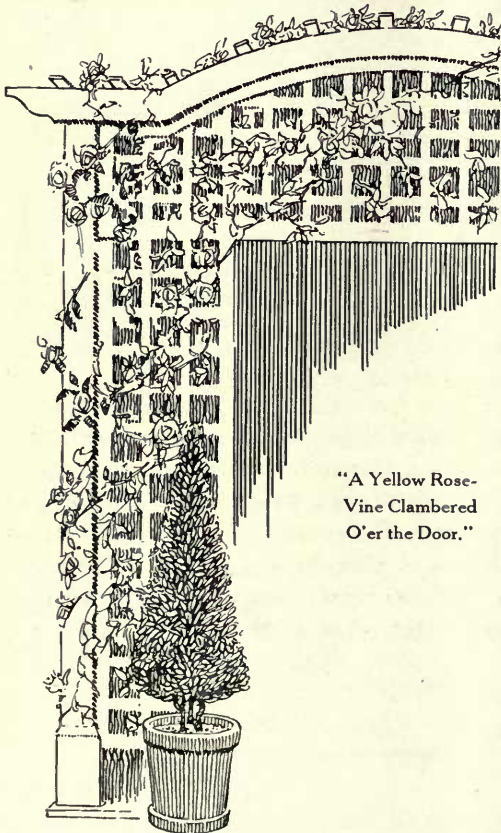
ture can be made very attractive and most of the work may be done at home. It is an easy matter to find many excellent pieces in second hand stores or in storage, which, while presenting a most disreputable appearance, really require only to be cleaned up, repaired a little and given a few coats of good furniture paint in order to become very presentable. The cost in such cases is but a trifle, and if quiet colors such as gray, and certain shades of blue, brown and green are employed the results are likely to be all that one could reasonably wish for.

A June Bride's Bungalow and How She Furnished It

*"Can she make a cherry pie, Billy Boy, Billy Boy,
Can she make a cherry pie, charming Billy?"*

—Old Song.

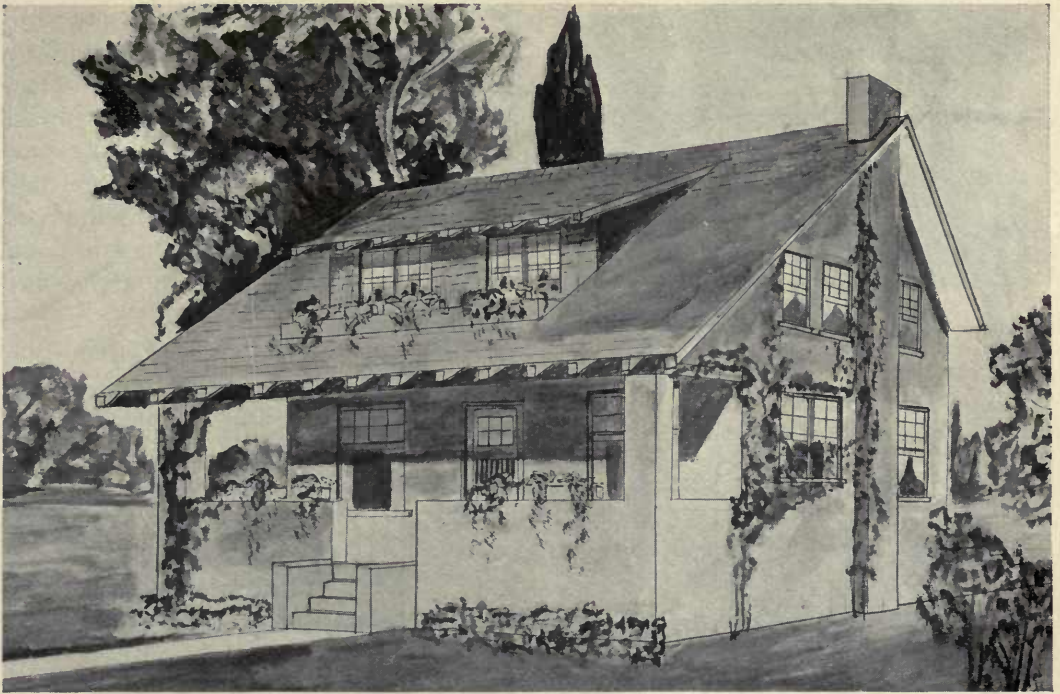
YES, she could make a cherry pie, the crust whereof would melt in the mouth, and was—as one enthusiastic partaker of the delectable concoction, passing up for a second helping, said—"lickin' good." But unlike the girl of the song, our bride was *not* "a young thing who couldn't leave her mother." Au contraire, she had reached the sensible age of twenty-eight and knew what she was about.



"A Yellow Rose-Vine Clambered O'er the Door."

It follows that she wanted a home and not "an apartment" with free ice and a disappearing bed. In spite of her twenty-eight years, or because of them, she had dreams of an adorable bungalow with a yellow rose vine clambering o'er the door. The *yellow* rose, was because every one else had *Crimson Ramblers* or *Dorothy Perkins*. Besides it "went" beautifully with her exterior color scheme of warm grey plaster, green sash and blinds and green roof shingles. A *Yellow Rambler* was decided on about the first thing—long before the plans were started. But all winter, not much was talked about, but "plans." Every detail was well considered, and the minute they could dig for the foundation, work was started, for their home was to be ready for them to go into when they came back the last of June. Of course it is not finished yet, nor furnished; so we can only show the architect's sketches, and are kindly permitted to present some of the furnishings.

Our Bride's Bungalow, is in true bungalow style, though the sleeping rooms are on the second floor, for this young woman of decided ideas, likes an "upstairs." She says she likes to go upstairs, and she doesn't like to sleep on the ground floor. Besides they could get so much more out of the house. The ground dimensions of the main bungalow are only 24x30, but see what is included in the floor plan. A generous, great living room, 23x16 ft. with partially recessed stairway so treated as to be a pretty architectural feature yet avoiding drafts, a

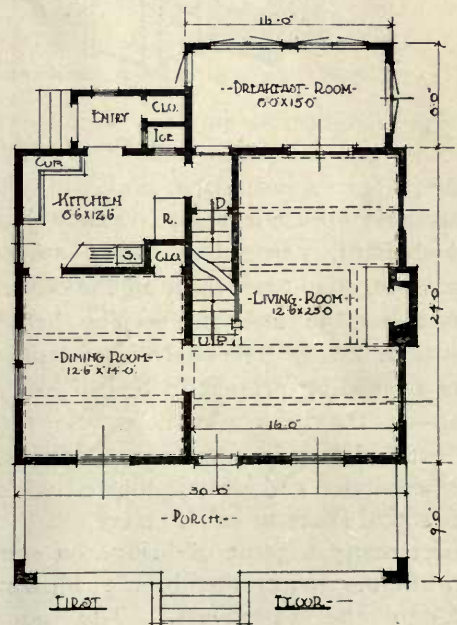


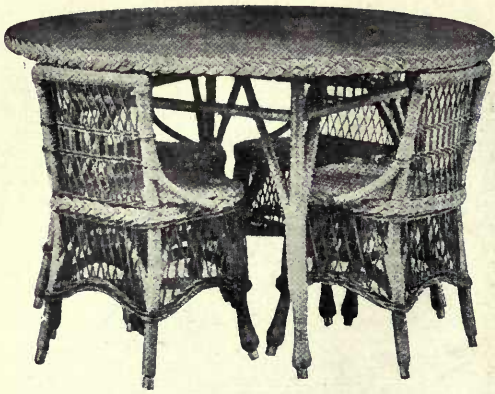
The June Bride's Bungalow.

very good sized dining room that will seat comfortably a dozen people, with three good sleeping rooms, bath and a store-room, on the second floor. Two of these rooms have full height walls. The breakfast porch, opening from the living room through double French doors and from the kitchen also, is an extension unexcavated, but is plastered like the rest of the house and heated from the hot water system.

This breakfast porch was an especial, pet dream of our bride's, who had her heart set on the charming willow table and chairs to match which fit under the table so compactly when not in action. She is having her chairs seated with a foliage cretonne in leaf green, and the woodwork painted an apple green. The walls are just the natural soft grey plaster, and the grey composition floor has a green rug in the center. The composition floor was decided on because of the many plants, for this breakfast room is

to be a sun parlor and indoor flower garden as well. So there are a couple of wicker arm chairs besides the four of the breakfast table and a wicker maga-

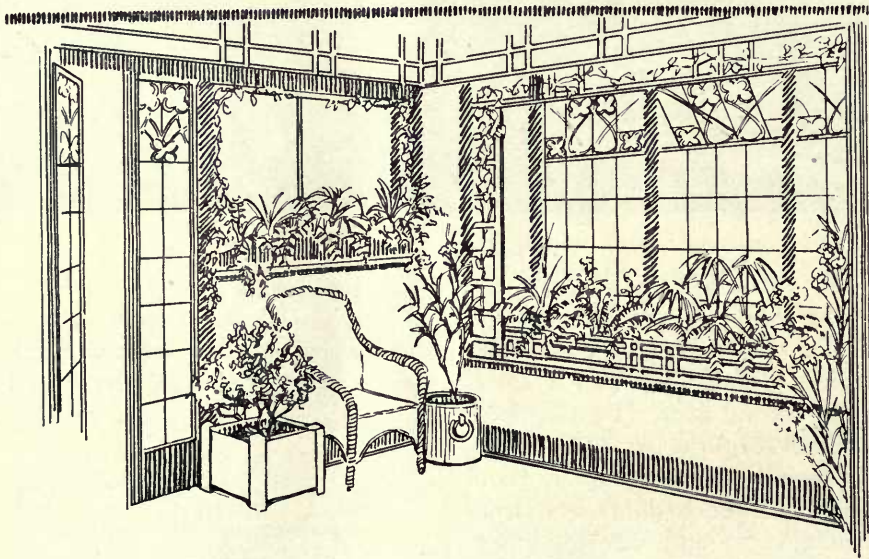




The Breakfast Set of Her Heart's Desire. Prices: Table, \$10.50; Chairs, \$3.75 Each, Without Upholstery.

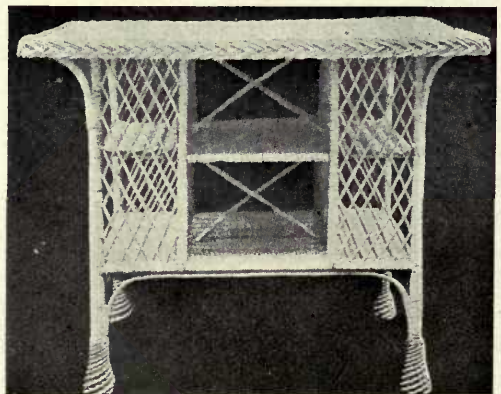
proper across the front, is to have chairs and a swing couch of green prairie grass, and is not to be enclosed, but is truly a porch. The long slant of the roof down over this porch, with the carefully proportioned dormer let in, is a large part of the charm of the design. As the roof is much higher in the rear, there is room for a low sleeping balcony above the breakfast room.

Even if the bungalow were completed, we could not show all of its appointments. The finish of both living and din-



The Flower Garden Corner in the Breakfast Room.

zine table which is a joy. Fancy June strawberries, percolated coffee amber-clear, hot, crisp toast right off the electric toaster, and the June bride serving them in this little Eden. The charming furniture was a wedding present in lieu of bric-a-brac—at the bride's request. So they do not feel unduly extravagant. So was the percolator and electric toaster, which toasts two slices at once. Here too they expect many a game of bridge on summer nights with the breeze blowing through the casements. The porch



Book and Magazine Table in Wicker. Price \$15.00.

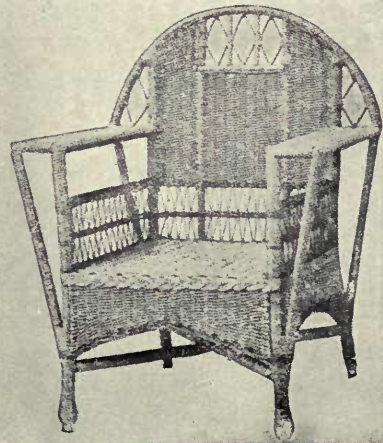
ing rooms is ash, stained a silver grey. The light fixtures are oxidized silver, and the walls in both rooms a warm grey. In the living room warmth and color are to be given by rugs, hangings and upholstery fabrics of rich mulberry, while the dining room rug is a lovely blue, and the chairs are seated with blue leather; not a dull, dingy blue, such as one might fancy leather might have, nor yet a hard, shiny metallic blue, but texture and color soft as the blue of a blue-bird's wing. Our choosy young woman selected the slender shapes of Sheraton mahogany for

Arm Chair
\$11.50.



Side Chair
\$7.75.

The Silver Grey Chairs on Sheraton Lines with Blue
Blue Leather Seats.



Wicker Armchair and Hanging Basket in Sun Room. Prices: Hanging Basket, \$3.00; Armchair, \$10.00.

her dining room furniture, but had it made special at the factory from ash, and finished in the silver grey. It is very delightful with the blue leather. The



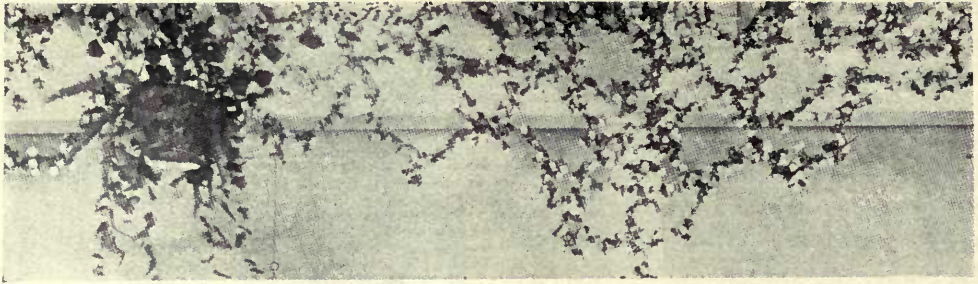
The Dining Room Sideboard in Silver Grey with White Inlaid
Line Decoration. Price \$72.80.

grey wall has a simple decoration of green garlands. These blues of the dining room blend in with the warmer pinkish, brownish mulberry of the living room in a soft harmony, with the grey walls binding together and unifying the whole. The dining room is for ceremony, for guests, for dinner—but the gay little breakfast room is their heart's delight.

It goes without saying, that our June bride's kitchen is as near right as she could make it. Here was to be her workshop.

"In it day by day—

*She lived and worked with patient, tender
care."*



The Frieze Decorations—Garlands of Bluish-Green Foliage and Dull Pink Blossoms.

Here again she decided on the composition floor, and as the kitchen faced the north, the floor is a light, yellowish brown in color. It is carried up as a baseboard and above this the entire wall to the ceiling is hard cement laid off in large tile, in yellowish cream. The woodwork is white enamel and sash curtains of dainty white muslin.

We can give only a peep at some of the appointments of our bride's own chamber. Like the girl in the castle-builders—who said—*"let me think—I'll have it in the pink"*—she chose that most delightful of all bedroom schemes, and the pic-



The Dressing Table with Glass Top, Stool and Mirror Are \$50.00.



The Fern Stand Costs \$30.00.

ture gives a hint of the charming things that went to its furnishing. Here against a wall of softest pink, the old ivory twin beds with cane panels still deeper in tone have a dresser to match, but all the other pieces are in natural wicker, upholstered in pink and pale green cretonne on an ivory ground. In the sunny window stands this bewitching fern-stand with bird cage attachment. The rugs are the new effects in cotton sun-dure, warranted to be washable and unfadable.

For the rest—let us hope we may receive a bid to the bride's first "At Home."



“Homes We Have Built” Series

EDITOR'S NOTE:—Contributions to this series desired. Address Editor for further particulars.

How I Planned and Built a Home on Small Capital

Lillian B. Streeter



IN THIS article I am going to tell how I built a \$4,750 bungalow home on \$1,000 capital. At first, we thought we would buy a ready-built home on the installment plan (thinking it was all we could do on our limited capital). So we began looking,

and we looked and looked and kept on looking, but we could not find just the house that suited our ideas—there being always some disagreeable feature. We had them by the score to select from too, for they build homes by the wholesale in Los Angeles. The terms on installments

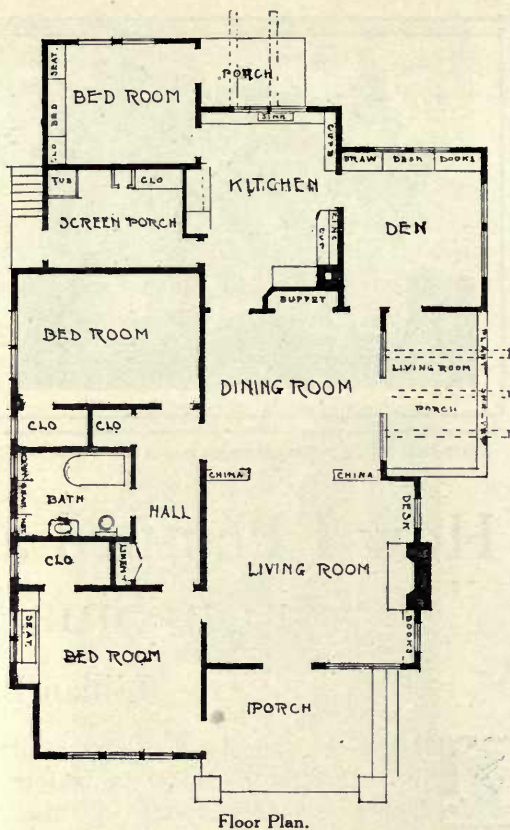


The Exterior of the Bungalow.

are very easy, yes—\$25 or \$50 down, and so much a month—but think how much interest one is paying and so little on the principal; and again they charge \$300 to \$1,000 profit to begin with. This is an easy way to get a home, for no one can deny that it is work to build, and do it right. On the other hand, there is a pleasure and an enjoyment in it, and the anticipated satisfaction that it will be arranged ideally according to one's own concept, makes the work entailed really a joy. Then think of the saving to the pocket book.

I was growing rather discouraged in not finding my ideal home already built, when I discovered a dandy 50x150 foot lot in an ideal location that, for cash, I could pick up for \$900, which was easily \$300 under the market (the owner needing cash badly). All the improvements were in so that I knew there would be no added expense there. I did not sleep over it, but that same night had a deposit on that lot, and immediately began planning my bungalow. Such fun as it was! I could now have it all just as I wanted it! I was optimistic, knowing that if I had a good clear lot, I could get a house on it.

In evolving my plan, I spent considerable time. I have had a lot of experience in renting inconvenient, badly arranged houses (i. e., in one kitchen, 14x16, the stove was in the corner diagonally opposite the pantry where were placed all of the cupboards and the sink; a journey of 42 feet every time I needed to go to the stove—think of it!). Needless to say, I profited from this experience. I gathered hosts of new ideas and all the latest kinks in building, in my search for that "ready-made" bungalow, and after starting my plan, I went through still more, to straighten out details as they developed; I am sure I went through 75 new houses, all right up to the minute in style. I bought 6 of the newest bungalow



books and studied these for ideas. Assembling these various ideas, and uniting them with my own original ones, I drafted my sketches. I wanted my kitchen in a central location, so I placed it on the plan first, and grouped the other rooms around it. I also had in mind plenty of sunshine and light, and I planned all the most lived-in rooms on the south and east, to get the greatest amount of sunshine; there are 21 windows and five full-sized French windows. Every detail of the plan which I present herewith, has worked out practically, and after a year's occupancy of this home, I feel happily compensated for the much time spent upon every detail. It is really the details after all that unite to make the whole a success.

I worked some on my plan every day for two weeks, and then took it to an architect; I explained to him just what

I wanted in detail, and he drew my plans and wrote up the specifications; and right here I insert this advice to the novice in building: Have your specifications very definite in every minute detail; verbal agreements are often forgotten and cause misunderstandings, and sometimes the contractor forgets purposely, as, in a house which I built at the beach, I had nearly a hundred dollars to pay extra on

right there yourself to look after the details; the contractor cannot be there all the time, and mistakes will occur. I lived within three blocks, so I was there once every day, and saw to it that every thing was progressing properly. I was given an allowance for wall paper, mantel, front door, hardware, electric fixtures, etc., and I made my own selections of these.

The contractor secured the loan for the

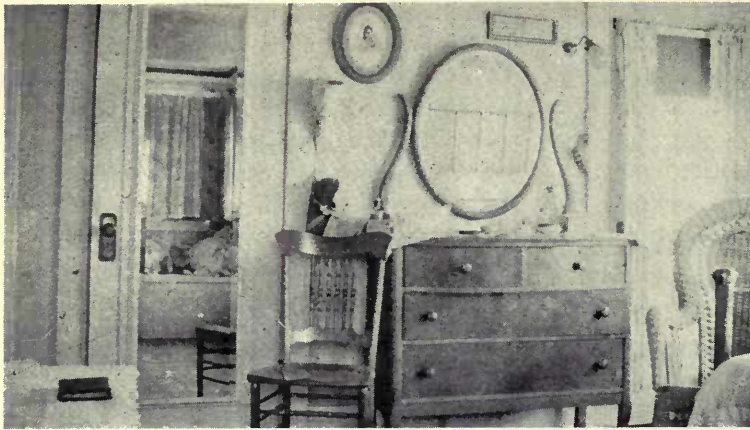


Living Room—Looking Toward the Dining Room and into the Den Beyond.

various things the contractor had agreed (verbally) to put in for me. When the plans and specifications were completed, I had three different contractors figure on them. In the meantime I investigated their work and references. The one to whom I awarded the contract proved most worthy; he was very conscientious and always willing to make any reasonable change. There are always, in building, little things that need to be adjusted in the evolution of the work. We had a few larger changes made, but for these of course paid extra.

It is very necessary in building to be

building; he got \$2,300, but it cost me \$100 to get it. For the \$2,300 I built my 7-roomed bungalow complete (including the cost of plans), and it is a well built house of the very best of materials. Has it paid? Was the venture practical? Decidedly and unhesitatingly, yes; we now have the pleasure and comfort of our very own fireside, and sit beneath our own vine and fig tree (literally) for a less monthly expenditure than we were paying before (\$25 for an old style, inconvenient house); the home we built would bring \$35 easily. The interest on the loan (\$2,400 in all) amounts to \$14 per month;



Bed Room—Sleeping Porch de Luxe, Showing Mirror and French Door.

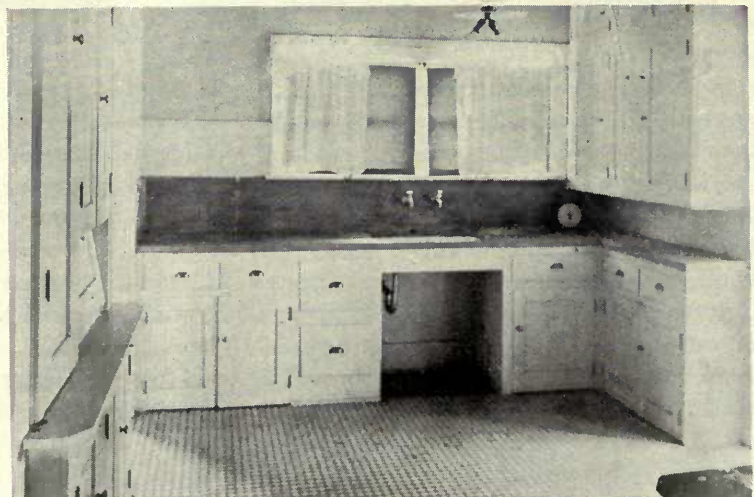
the taxes and insurance bring it up to about \$17.50 a month. The total cost was as follows:

Lot	\$900.00
House	2,300.00
Loan	100.00
Garage, fence, fruit trees, shrubbery and extras.....	100.00
Total	\$3,400.00

We have improved the lot ourselves with lawn, vines, shrubbery, fruit trees, roses, and flowers, and we now have a home that would easily sell for \$4,750.00 if we wanted to dispose of it. I figure we saved a good \$1,000 by building rather than buying a ready built home. It is universally admired by all who see it, not only for the convenience of arrangement, but for the artistic lines throughout.

The plan shows the general arrangement, but I would like to mention a few of the important features, particularly in the kitchen upon which I specialized. It is in-

deed practical and beautiful as well. It is buffet style, finished in white enamel woodwork. Blue and white linoleum covers the floor, and blue and white curtains are draped at the windows. There are cupboards in all of the wall space from floor to ceiling. Each one is designed for a special use — utensils, dish, cooler, fruit, storage, jelly, and pastry cupboards. There are zinc lined drawers for bread, cake, and sugar; a zinc covered table at the side of the stove; a plaster hood over the stove with ventilator in the top to carry off odors and smoke; a pastry cabinet, with built-in flour bin and sifter attached; a built-in ironing board; a woodstone sink drain built 36 inches high (instead of 30 inches, the average height, which is hard on the back); and the dish cupboard placed where the dishes can be put into it directly from being dried, without taking a single step. In this kitchen, work all but does itself.



End View of Kitchen Showing Sink and Grouping of Cupboards. Note the Woodstone Sink Drain Extends Up the Back About 12 Inches. Pastry Cupboard and Cooler to the Left.

The den is a room for genuine comfort. It is used as a breakfast room, a sewing room, and a sitting room for the family, and is connected by a French door to the living room porch.

Other noteworthy features are: a beautiful arch between the living room and the dining room; the placing of a screened porch at the side on the north (always cool for the laundress), thus giving an east exposure for the rear bedroom, (the house faces west); a generous "catch-all" and storage closet off the screened porch; automatic water heater; a dressing cabinet and $\frac{3}{4}$ length mirror, with adjustable light over it (ideal for shaving) in the bath room; full length mirror in the front bedroom, which, with its five windows and a French door, can be used as a sleeping porch; tile mantel; hardwood floors; two china cabinets op-



"The Ideal Kitchen," Showing Location of Range Near Zinc Table with Electric Light Immediately Over. Grocery Cupboard Above Zinc Table.

ening from the buttresses in the dining room, and an unusual amount of built-in furniture throughout the house, all of which lessens the expense of furnishing the home.

A Plea for the Detached House

Aymar Embury II

THE HOME, next to the children in it, is the object in which the normal human being takes most interest and there is, after all, only one sort of a home that completely and comfortably shelters the affections—the detached dwelling with its surroundings. No apartment can ever have the same meaning, because with a house, as with a child, what we tend and care for and regard as permanent we most love. I suppose there was never a man who owned his own house who did not have in his mind some scheme, small or great, for its improvement in comfort and appearance; and the detached house offers a wide range of opportunity for changes and developments. Conditions of living in an apartment house are accepted as something fixed and unalterable; no one

wishes to spend money on improving the property of another; nor to become too sentimentally attached to a home which can only be regarded as temporary.

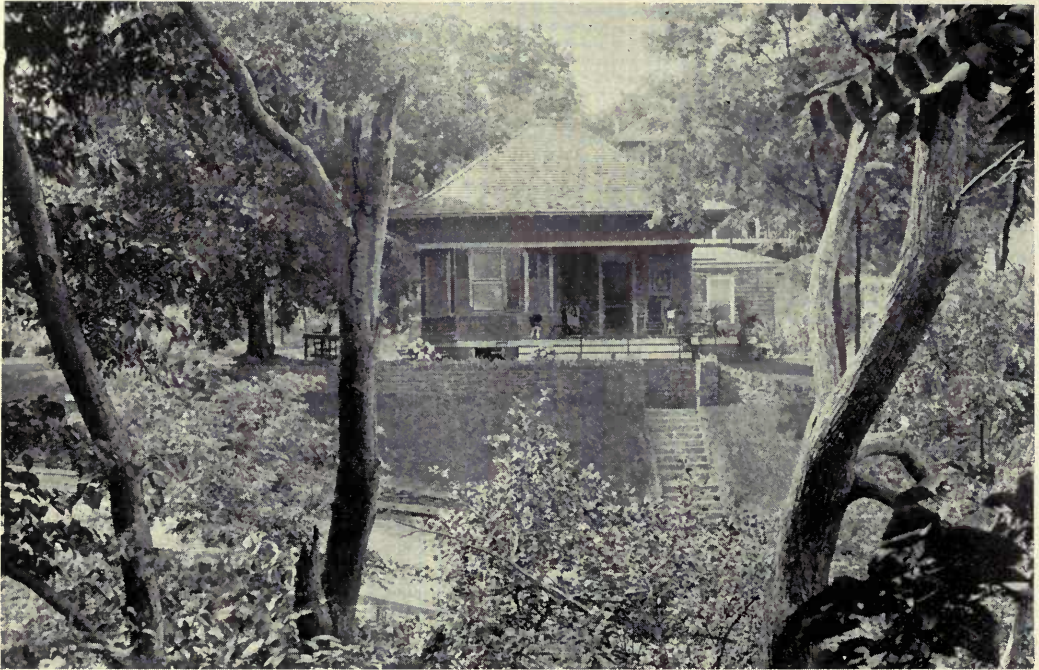
The detached house, standing in its own grounds, is the only sort of place where one can really find the simplest and yet essential necessities of life—air and sunshine. To deliberately exile one's self from these things by occupying a bedroom on a light court (light in name only) is certainly foolish; to bring one's children up under such conditions is hardly short of criminal. The saving grace of the hurried and fretful life that most Americans live lies in the fact that they may, perhaps, disregard their own health and comfort, but very earnestly seek them for their children. Consciously or otherwise, in the United States it is the coming gen-

eration for whom best provision is made, and nowhere can we better serve the coming generation than in helping them to sound, healthy bodies and sound, healthy minds.

Little Gardens of Eden.

The detached house presupposes a certain amount of surrounding grounds that can be a source of infinite pleasure to the home owner and of inexhaustible utility

Your own house may not be very different in cost or design from those of your neighbors, but, whether you build it yourself or buy it ready made, it has inevitably many features which appeal to your taste and individuality, and which conform to your standards of comfort and appropriate living. Nor need it fall short of the best apartment house in material aids to comfort. You have your radiators



Little Gardens of Eden.

to his children. Where the dining room of the apartment house usually opens upon a magnificent vista of occupied clothes lines, the dining room of the detached home may look out upon a garden space as beautiful as the owner cares to make it. You come to your own front door through air impregnated with the good, sound smell of Mother Earth, and not with your nostrils filled with the fumes of your neighbor's cooking; and from the windows of your living room you see hedges and green lawns instead of dusty and noisome streets.

for steam or hot water heating, and you have, in addition, the open fire place, which is surely a highway to health. You may have to heat your own water, but you also know that no apartment below is going to use so much water that you get none. You may have to repair your own plumbing, but you know that the rent you pay does not cover the expenses of repairing damages done by your careless and slovenly cotenants—not neighbors, since one has no neighbors in an apartment house.

There is another side of life in the de-



The Character of One's Surroundings and Neighbors Is An Important Matter.

tached or suburban house which is not commonly thought of, but is quite as important as those which have been mentioned. That is the character of surroundings and associates and their effect upon growing children. You may have an apartment in a neighborhood where you do not know and do not wish to know any of the people about you; you can, and do, go long distances to see your friends; but your children must meet and play with others that live in the same block.

The Neighborhood.

In the suburbs most of the people in the same neighborhood are of the same sort and standard of character, and in the suburban school which your children will attend the pupils will be the children of people in your own walk of life, the sort of children with whom your own should

grow up, associate and mate. The buildings are not overcrowded, because the population is not dense enough to cause overcrowding.

In the last analysis the home owner is what God intended him to be, a normal, healthy man, raising his children in a normal, healthy way, doing it in a home that allows for the fullest expression of his individuality and that of his family, subject to an environment of his own making that brings out the best that's in him.

If you haven't thought of this point before, call on a fellow flat dweller and feel the limpid, aenemic howdy-do handshake and the lack of enthusiasm. Then call upon some friend living at the edge of city or deep in the suburbs, and when you ring his bell you'll get a hearty greeting and a heartier handshake from a man with the light of the joy of living in his eye.

Growing Beauty of Bricks

C. C. Johnston



ONE OF the oldest industrial arts of which the world has knowledge is just now in the midst of a striking æsthetic development. This industry is more widely diffused than any other of a craft nature, and in the value of annual product ranks well up to the top of the column. Yet its further growth, especially along new lines, would seem to be almost unlimited.

Ten years ago the question of beauty, in any large sense, did not enter into brick architecture in America. In fact it has been within a much less period that people generally have begun to think of a brick wall, in residence building, at least, as anything more than a protection from the elements.

What is familiarly known as pressed brick has, it is true, been in use for a considerable period, but in its earlier form

it did not belong to fine brickmaking, as we now understand the term. Although having the advantage in appearance of smoother surface as compared with common brick, it remained monotonous in color, shape and architectural treatment. In the unusual instances when it was not of a certain standard red it was of some other unvaried color, determined alone by the chemical nature of the clay.

A decided advance was made when it was discovered, through accident or otherwise, that by sharp changes of temperature in burning a kiln of bricks, a variety of shades of the same general color could be produced. The process is known as flashing. Another innovation was that of speckled effects. This was obtained by the use of clay so freely impregnated with small particles of iron that it had heretofore been regarded as unfit for brickmaking. Iron is now often mixed with clay artificially to get the same result. The two departures that have been cited admitted of color shading and variation in the same brick unit, as well as adding color diversity in a more general sense.

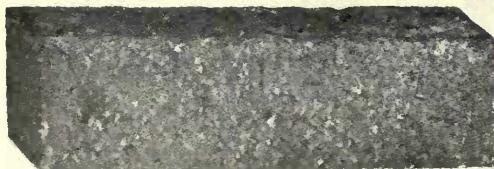
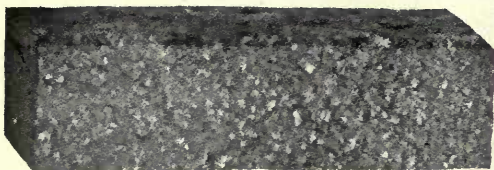
Meanwhile there had been a breaking away from traditions in other ways. This was seen in the sudden popularity of the Roman brick. The name applies to shape alone, characterizing a brick with a narrow face. A few leading architects were by this time producing effects that had originality in the use of bricks, in weaving them into mosaics and in other ways giving character to walls. These efforts were forerunners of the new era.

An important step, but one whose real significance yet remained hidden, was the coming into favor of the stiff-mud brick.

One advantage of the stiff-mud brick



A "Somerset" Smooth Brick in the Richest of Warm Vivid Reds.



Tuscarawas Texture in Shades of Golden Brown.

lay in the fact that it could be vitrified. The demand was growing for an impervious brick. This quality cannot be satisfactorily obtained through dry press treatment. Efflorescence—the appearance of white stains on walls—had always been more or less of a bane to brick-makers. When Napoleon III was rebuilding Paris the annoyance of this disfigurement induced him to offer a large prize for the discovery of its cause and

way in the “Harvard” and other sand-mold bricks, the object being to secure a surface that would be soft to the eye. A brick known as the “Raindrop” was another drift in this direction. Some bricks that had been caught out in a heavy shower after the moulding stage were found upon burning to have been given a certain pleasing oddity, as a result of the pelting they had received from the rainfall. From this accident a limited sale



Flemish Bond, Black Joint, Rough-Faced Texture.

remedy. It is now known to arise from such chemical action of the kiln gases upon the lime in the clay. More careful burning has checked the tendency toward efflorescence, but without being able to eliminate it altogether. An impervious or non-absorbing substance is necessarily non-excretive. Therefore the stiff-mud brick was not subject to blemish from internal cause after being exposed to the weather.

This leads up to the beginning of the present era of artistic brick product. There had long been premonitory evidences of a departure from traditional standards. They were seen in a limited

developed on brick to which the same general effect had been imparted by mechanical means.

The discovery of the matt or rough-face brick was an epoch in brickmaking.

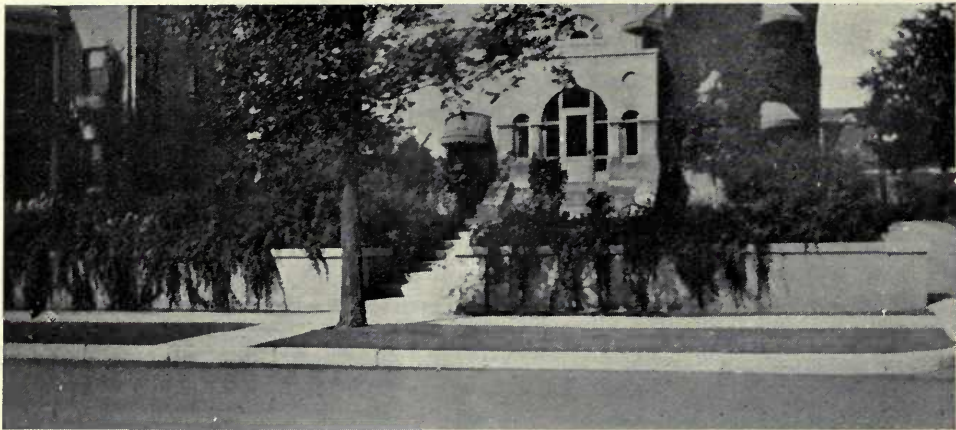
Under the new process a wonderful impetus has been given within the past five or six years to color diversity. There is almost no limit to the intermediate shades which may be obtained. They range from delicate buffs and grays to rich reds, russets, browns and even blacks. Such unexpected shades in brick as green and purple, mostly in combination with other hues, are common. A brick unit may have a core of bright color with edges of

sober tone, presenting a marked but harmonious contrast. Without the rough face not only would many of these shades and combinations be impossible, but even if they could be secured on a pressed surface they would lack beauty.

An argument for the matt brick is that it appeals to the universal sense of beauty through nature's own quiet methods. Should the point be raised that this is a lofty claim for a thing with so base a pedigree as a brick, which yesterday was unsightly mire, we are told that in its

able in the increased attractiveness of the individual building and in the wide range of color as shown by different buildings in the same general group or neighborhood. There can be imparted to a wall practically any effect desired.

All this has proved a stimulus to architects in reproducing English and continental features of design in house building, belonging to various periods. The native softness can be counterfeited in large degree through the selection of brick. We are becoming accustomed to the sight



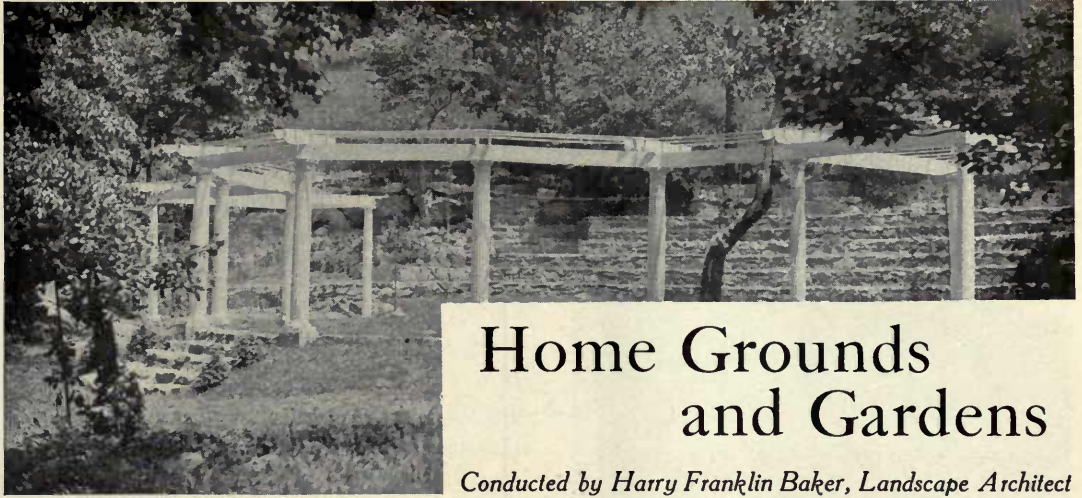
Low Wall of Light Grey Brick with Creeping Vines Hanging Over.

mellowed "texture" as it comes from the firing, we have that which in felicity of coloring ranks with the leaf and the tree-bark. Various shades of the same pigment overlay and merge into each other, or different colors blend softly, absorbing the light, instead of reflecting it. In brick-making these effects may be realized only with a rough face.

Released from the former narrow traditions of brickmaking, the industry is showing great enterprise in striving after further artistic results. Hand-made brick of ancient and medieval times are being copied, even to the extent, in some instances, of their slight irregularity of shape. Nature, it is held, avoids absolutely straight lines. The result of this enthusiasm is becoming everywhere notice-

of that once ugly, occasional detail of the American home—the garden wall—now made beautiful by artistic brickwork and growing vines. These changes are by no means confined to the more expensive class of buildings, but they are reaching even the workman's cottage.

This revolution had its birth in so simple a thing as forcing plastic clay into contact with a piece of wire, and in sending to the kiln in an imperfect state a few rough cubes thus formed. Possibly the same thing had happened before by accident and the freakish-looking objects thrown aside as culls when the kiln was opened. At least let it be so imagined, for the sake of the paraphrase—the brick which the burner rejected has become the head of the corner.



Home Grounds and Gardens

Conducted by Harry Franklin Baker, Landscape Architect

Plans for Small Gardens

M. Roberts Conover



WHILE large gardens permit the use of much detail, the limited space to be interesting for its beauty and as a resting place as well as within the compass of the average home owner as to planting and care, must be simple.

The plan here given is for a small plot not level but falling to a lower grade, a condition commonly met with and capable of interesting treatment. Of course, in a small space it will not do to sharply define this difference in grade by rigid walls or straight dividing lines as such a method of treatment will restrict the two garden levels too much for good appearance and for the actual use of permanent plants.

In the plan here given, the change of grade is modified to the eye as much as possible using either continuations of color or of line to get a more spacious appearance.

The plan is for a garden of flowers forty feet wide and sixty feet long. The upper side of the garden which is also the

entrance side has the floral plantings arranged around three sides of a space of close-cut sod. A dial is appropriate to this space and seats near the plantings. Paths separate the sections of annual and perennial plants for convenience in cultivation and gathering of the flowers.

Masses of peonies are used in the forward part of the border on either side of the entrance and hardy hydrangeas in the corners. Either annuals or perennials may continue this border to its termination on either side. Perennial phlox would be very satisfactory. In the narrow curving beds before the boundary border, such annuals as phlox Drummondii, asters, balsam, poppies, etc., are used with fine effect.

Sodded steps extending to within ten feet of either side of the garden descend to the lower grade. These steps curve gently toward the lower part of the garden and help to give an effect of breadth.

Shrubbery comprising *Deutzia Gracilis*, *Hydrangea Paniculata* and *Spirea Van Houttei* extend from the ends of these

steps to the boundary of the garden at either side. If *Forsythia Viridissima* is added to this group, bloom will be obtained from spring until autumn with comparatively short intervals between.

The space in the lower garden is devoted to roses which occupy two beds $14\frac{1}{2}$ feet wide. Walks four feet wide surround this space and a five-foot walk divides it. These walks if sodded give a restful appearance and continue the green of the steps and upper level. The middle walk may be made narrower by one foot and the sidewalks by six inches if desired.

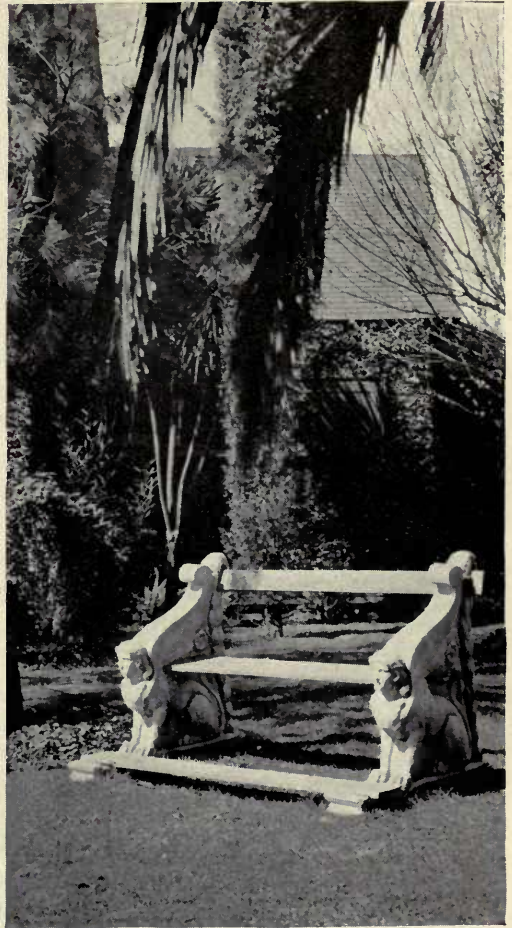
The rose plantings are made interesting until fall if everbearing roses are plentifully used among those that bloom in early summer. Good roses for this purpose are Gen. Jacqueminot, Gloire Lyonnaise, Pink Maman Cochet, White Maman Cochet, Francis E. Willard (white), Gen. Robt. E. Lee (yellow), Highland Mary, Hermosa, Malmaison, Monthly Cabbage Rose and Mme. Eugene Marlitt.

The entrance to this garden may be made very attractive by the use of *Forsythia Suspensa*, the *Crimson Rambler* and *Clematis Paniculata* over a support above the entrance. These vines will not conflict to the death if each is planted against a separate support as the columns of a pergola. A pergola-like support with two or three columns on each side may be used. The *Forsythia* and *Clematis* may be used nearest the entrance and the *Rambler* farther along.

The kind of enclosures of these small gardens depend much upon the nature of the surroundings.

If surroundings are slightly a low hedge of privet would be satisfactory—the hedge kept just high enough to give a neat basal line for the border plantings.

For this plan, a hedge of the *Rosa Rugosa* is appropriate and in harmony with the garden.



An Italian Carved Marble Seat.

A Few Suggestions

One of the most useful annuals for making beds around the house is the nasturtium. If care is taken in selecting the variety, and later in selecting your own seeds from the best plants, nasturtiums may be had with unusually large blossoms and with very attractive colors. These plants usually thrive well even in the shade and, if you look about, you will surely find a place that was occupied by weeds last year that can be used to good advantage by nasturtiums. They produce a continuous array of blossoms during the entire summer and fall.

For sunny situations and dry slopes, the portulaca is about as pleasing as any-

thing. It may be had in all colors. It is also suitable for rockeries or for planting along stone walls. It blossoms during the summer and fall.

Sweet peas may be sown any time from September to June. Usually the earlier plantings are favored, but if there chances to be a space around the fence or hedge that has not yet been put into use, sweet peas may still be planted to good advantage.

Quite often it happens that there is some unsightly object in the garden or the yard that you wish hid. One of the good old-fashioned flowers, helianthus, better known as sunflower, is especially suited to this purpose. If the seeds are planted thickly in front of a wood-pile or tank that is unsightly, the plants will soon

grow tall enough to cover it, and, in addition to serving as a screen, will produce a number of attractive blossoms early in the fall.

Because a garden is hardy in name, never have it such literally. Annuals are invaluable for ringing temporary changes, as well as for covering up the spaces left bare by the dying down of bulbs after blooming. The pure white single petunia, any clear red, pink or white single or double poppy, rose or lilac scabiosa, the deep-rose hybrid *Nicotiana affinis*, *Clarkia elegans*, the single China aster, the single pink or double lavender *Delphinium Ajacis*, the Vesuvius variety of *Dianthus Chinensis*, sweet alyssum, *Dimorphotheca aurantiaca*, Love-in-a-mist, sweet sultan, and the red or white *Phlox Drummondii*, are especially good selections.



LET US learn to be content with what we have. Let us get rid of our false estimates, set up all the higher ideals—a quiet home; vines of our own planting; a few books full of the inspiration of a genius; a few friends worthy of being loved, and able to love us in return; a hundred innocent pleasures that bring no pain or remorse; a devotion to the right that will never swerve; a simple religion empty of bigotry, full of trust and hope and love—and to such philosophy this world will give up all the empty joy it has.



—David Swing.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 509 BUNGALOWCRAFT CO., Los Angeles, Cal.
B 511 CHAS. S. SEDGWICK, Minneapolis, Minn.

Design No.

B 513 A. C. CLAUSEN, Minneapolis, Minn.
B 515 H. C. WHITEHOUSE, Spokane, Wash.

Design B 508.



N this plan, everything has been studied to reduce the cost of construction, yet the simple lines and plain trim have an appealing charm. The foundation is of poured concrete which is carried up two feet above grade with wooden strips embedded in the concrete, over which drop siding is placed, running same down from the belt course directly beneath the first story window sill. Above this course, siding may be continued or shingles used. With soft finish, fir flooring and hot air heat, this house without frills could be built for about \$3,830.

The stairs are conveniently, as well as economically located, with access to each chamber above from the hall. The kitchen

range fits into its nook like a glove. The second story rooms are full height except a slight cut-off at some of the corners, but the lowest height is 7 feet. Altogether it is a heap for the money.

Design B 509.

This house is one of the most attractive corner residences in Los Angeles. It requires a lot at least 50 feet wide and still greater width will prove a vast improvement. As will be seen, the construction is all of wood except the chimneys and the walls and buttresses of the porch and terrace. These brick walls have a "clinker" laid in here and there and the effect harmonizes well with the general architecture. The side walls are covered with cedar shakes laid 16 inches to weather. The roof is shingle. The interior arrange-

Cost Estimates of Designs Shown in This Issue

MATERIALS AND LABOR	DESIGN NUMBER						
	B 508	B 510	B 511	B 512	B 513	B 514	B 515
Excavation at 30c per cu. yd.	\$55	\$63	\$47	\$68	\$48	\$70	\$85
Mason Work, to include Foundation Walls, at 20c per cu. ft.	180	190	175	208	200	225	240
Cement Floors at 45c per sq. yd.	36	40	30	51	32	60	165
Hollow Tile Walls	45	330	140	290	225	215	175
Chimneys and Brickwork at 65c per hour ....	....	....	....	....	....	....	....
Tile Work for Roof ....	....	65	....	....	....	....	....
Tile Floors and Wainscot ....	....	....	....	....	....	....	....
Lumber	660	680	630	960	560	1,050	535
Millwork	585	615	590	1,060	600	1,100	510
Exterior Cement Plastering at 90c per sq. yd. ....	....	60	180	65	125	115	....
Interior Plastering at 26c per sq. yd.	315	375	265	460	345	540	260
Painting	200	260	180	325	175	360	165
Carpenter Labor at 45c per hour, Common Labor at 30c per hour.	580	650	525	1,090	540	1,140	500
Hardware (Rough and Finish)	250	265	175	270	210	285	190
Electric Wiring	50	65	45	60	35	125	40
Galvanized Iron and Tin Work	80	95	75	125	70	140	65
Heating (Air or Water)	150	165	140	175	365	200	370
Plumbing and Gas Fitting	250	285	250	275	250	275	255
Miscellaneous	45	70	35	65	35	100	20
Cost	\$3,481	\$4,273	\$3,482	\$5,547	\$3,815	\$6,000	\$3,475
Contractor's Profit, 10 per cent.	348	427	348	554	381	600	347
Total Cost	\$3,829	\$4,700	\$3,830	\$6,101	\$4,196	\$6,600	\$3,822

This table is computed on the basis of prices of labor and material now prevailing in Minneapolis and vicinity.

ment is somewhat out of the beaten path. Sleeping rooms are all of good size, well lighted and ventilated and are in a part of the house by themselves but all convenient to the bath room. Plenty of large closets are provided. If not required for a sleeping room, one bed room may be connected with the living room by a wide buttressed opening with book-cases, etc.

Design B 510.

A square house, relieved by sun porch extension on the right. The first story to be either siding with cement above or cement with shingles above. The type of design is rather formal and stately with a good deal of dignity for a medium cost house. There is a very unique treatment to the entrance, the porch being on the side and treated as a sun-parlor. Entrance is through vestibule directly into living room, separated from dining room by a wide cased opening. There is a splendid vista through these rooms showing fireplace in end of living room and in the dining room directly opposite, four high windows. This house was planned especially for the residence of a physician. The room marked office could of course be utilized by anyone as a bedroom or library. On the second floor there are four good sized chambers and bath. There is no attic except for moderate storage reached by scuttle from the upper hall. Interior finish intended to be fir throughout the lower rooms, either fir or cypress on the second floor, stained or painted. Also fir flooring in the bed rooms with birch or beech flooring first floor. Furnace heat included in estimated cost.

Design B 511.

The size of this cottage is 26 feet front by 27 feet depth with a piazza on the right hand side extended 8 feet, making the total width of the front 34 feet.

The vestibule entrance is at the right with a living room 20'-6" by 14'-6" across the front, lighted with wide triple window and single window at the side. In the

center of the opposite side is a wide fireplace with opening at the left into dining room and at the right book shelves and doorway leading to kitchen and stairs to the second story, below these stairs are the basement stairs with grade entrance. There are many nice little points of convenience about this plan. The main living room opens with wide French window on the piazza, making a pleasant feature of the plan. The first floor is finished in oak with Mission stain and natural oak floors. A good full basement with concrete foundation.

The second story has three chambers, all with full height and a small sleeping porch over the kitchen, with glazed windows across the side and rear. The finish of the second story is in pine stained dark brown, with birch floors.

The exterior of the house in the first story from the grade line is cemented on metal lath with "pebble dash" finish and a cement base at the grade line. The roof is in gambrel form, bringing the cornice low over the first story windows. The first pitch of the roof receding 3 feet from the front and the upper pitch of roof brought forward and back over the front and rear windows with a shed roof, not shown on exterior. The second story above the cornice, gables, etc., is to be shingled on the outside and the shingles stained.

Design B 512.

This charming cottage design will appeal to many who love the artistic and are partial especially to the low English half-timber cottage style of architecture. The plan of this design is especially pleasing, the vista across the hall and front rooms being very attractive. The combination stairway is economical of room and there are four good sleeping rooms on second story, besides bathroom. There is, of course, no attic space in this design to amount to anything.

One feature of the second floor is the



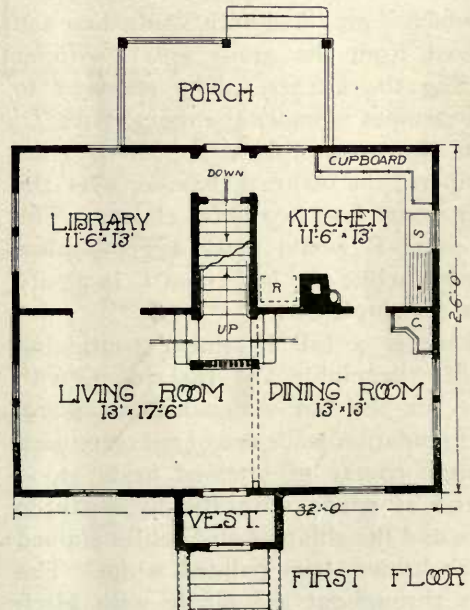
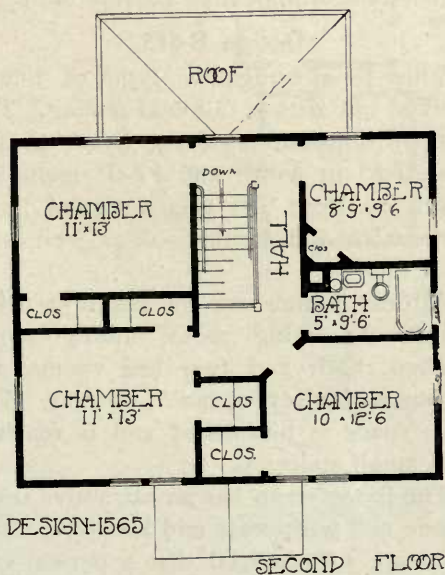
DESIGN B 508

A House of Simple Lines and Plain Trim

attractive alcove off of the hall, giving a spacious appearance to the second floor.

The pantry is well equipped with the necessary shelving and the basement extends under the entire house. A hot air

heating apparatus is provided, and there is ample space for laundry fixtures, fuel, vegetables, and storage. The outside chimneys are of brick with stone trimmings below second story.



The first story exterior finish is of shingles, but if one could afford to use brick for the first story it would give a very pleasing effect in this design, increasing the cost probably by \$250 in the average locality, if not too expensive brick be used. The second story is pebble-dash or plaster between the timber-work panel. Hardwood finish and floors are intended in the principal rooms on first story, balance pine or poplar painted.

Design B 513.

In this design we have an attractive little cottage with the first story walls of cement plaster with shingles in the gables, the entrance being to the side through a screened porch with French doors leading into the living and dining room.

The living room extends across the front and is 13x21½ feet; this does not include the space taken up by the stairway or the front bay. The room is well lighted and has a large open brick fireplace in the end. Buttressed openings with built-in china cupboards below, separate the living and dining room. The kitchen is very complete with built-in cupboards, work table and a place for the refrigerator which if provided with a side door can be iced from the grade entry without entering the kitchen. The stairway to the basement is under the main stairs.

On the second floor are three good chambers; the owner's chamber over the living room has two good closets. The bed room B would make a good guest chamber while the bed room C is plenty large for single bed.

There is a full basement containing laundry, vegetable and fuel room, with space for the hot water heating plant. The foundation walls are of concrete with a single course of vitrified brick stood on end at grade with the light stucco above and the shingles and gables stained a dark brown, trim painted white. The floors throughout are maple with birch

finish. The architect's estimate on this cottage complete is \$3,800.00; for detailed estimate see table.

Design B 514.

It is hard to excel this arrangement in a plan for a moderate cost home. The reception hall is a very effective apartment and the staircase is unusual, in that it has a center flight to a broad landing, with two side return flights.

Direct communication between the kitchen and front door, without passing through any of the rooms, is secured. Back stairway goes up from this little connecting entry to the landing and thence up the staircase proper. Cellar stairs go down under the main staircase, reached from the kitchen through the rear entry. This gives an outside cellar door at grade line.

Full basement under the entire house is provided, with hot air heating apparatus, ventilating system, etc. Laundry and cistern are also provided in basement, and in the attic there is plenty of space to finish off a couple of rooms, if desired.

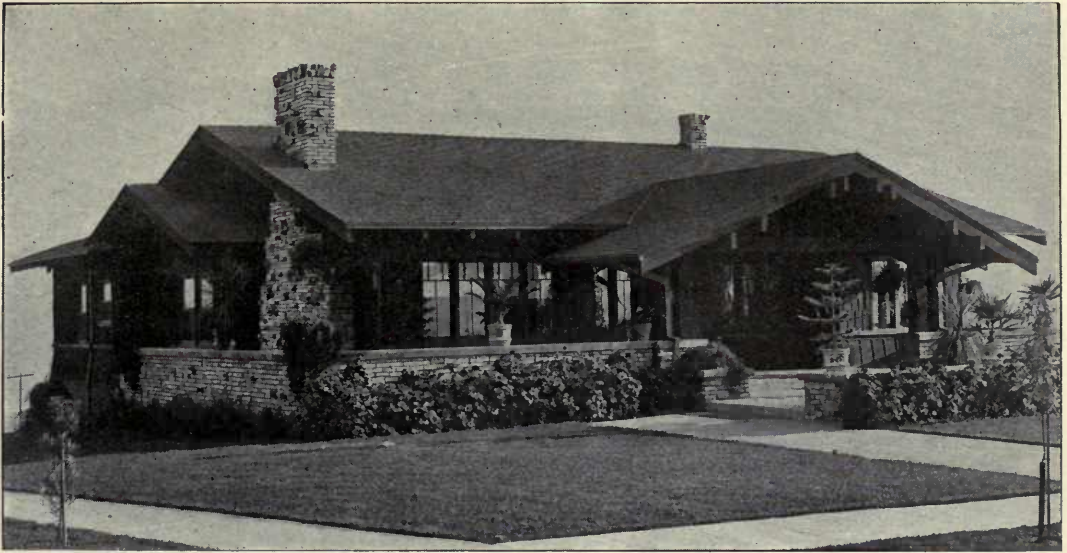
The exterior is clap boards up to the belt course at second story window sills; above that shingles, or narrow siding.

Design B 515.

This is a bungalow type of house, worked out with a Colonial feeling. The outside dimensions of the house proper are 26'-8" in width and 59'-0" including porch on front. It was designed for a narrow lot, but would look as well on a wide lot.

All the rooms are on the first floor, which are living room, dining room, kitchen, bath and two bed rooms, together with sleeping porch on rear. The attic space is unfinished and is reached by a small stairway.

The living room has an attractive nook in one end with seats and fireplace. The seats are so arranged that a person can read with good light or watch the fire. A

*Bungalowcraft Co., Architects.*

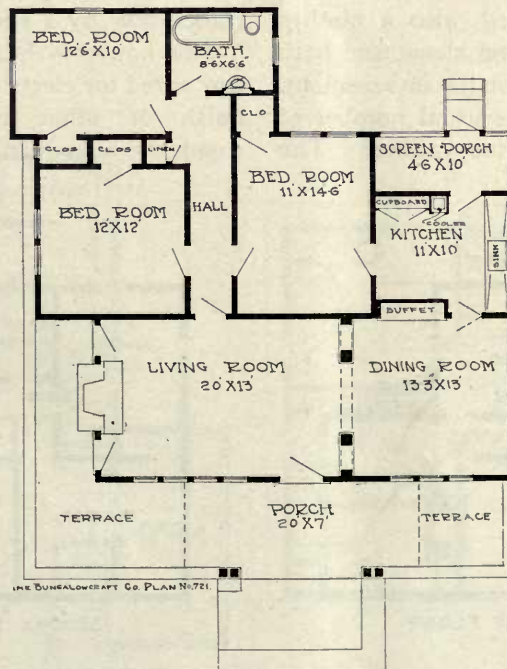
DESIGN B 509

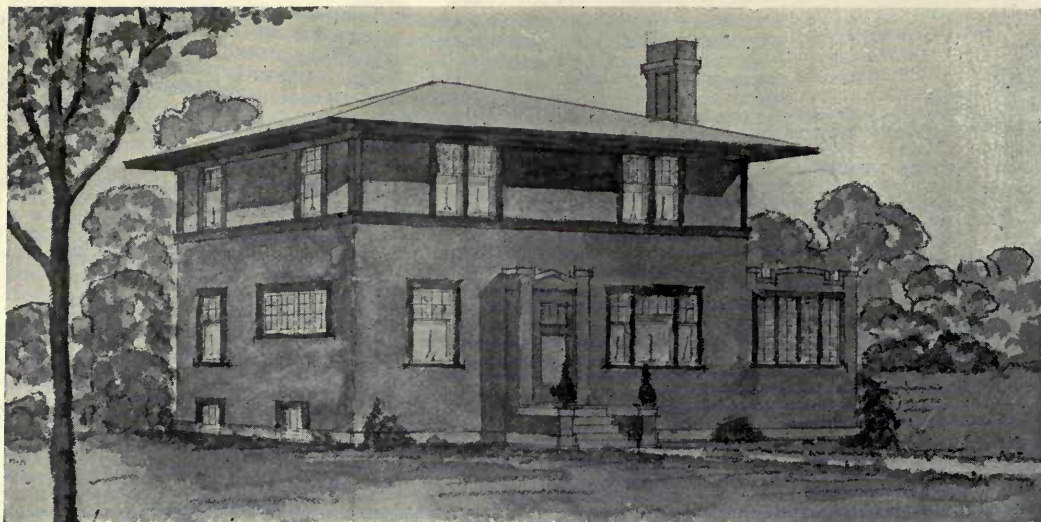
A Bungalow for Any Section

coat closet is provided at the side of the nook. Bookcases are built in between the dining and living rooms.

The dining room is fitted with a simple

plate rail, also a large buffet. The windows look out from an oriel bay. The kitchen is of the buffet type, with ample space in its drawers, cupboards and bins.





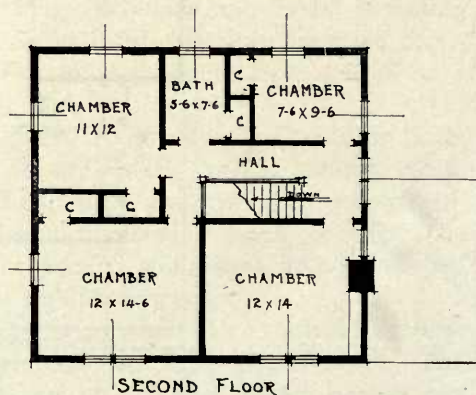
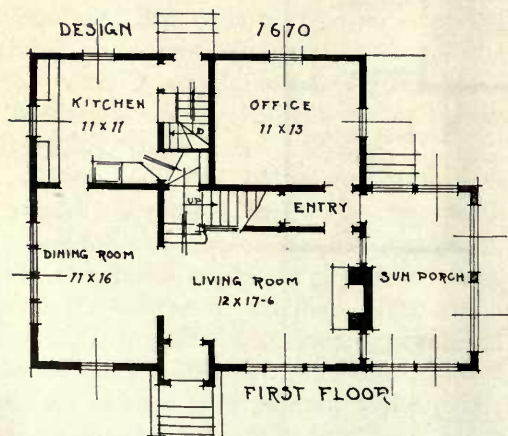
DESIGN B 510

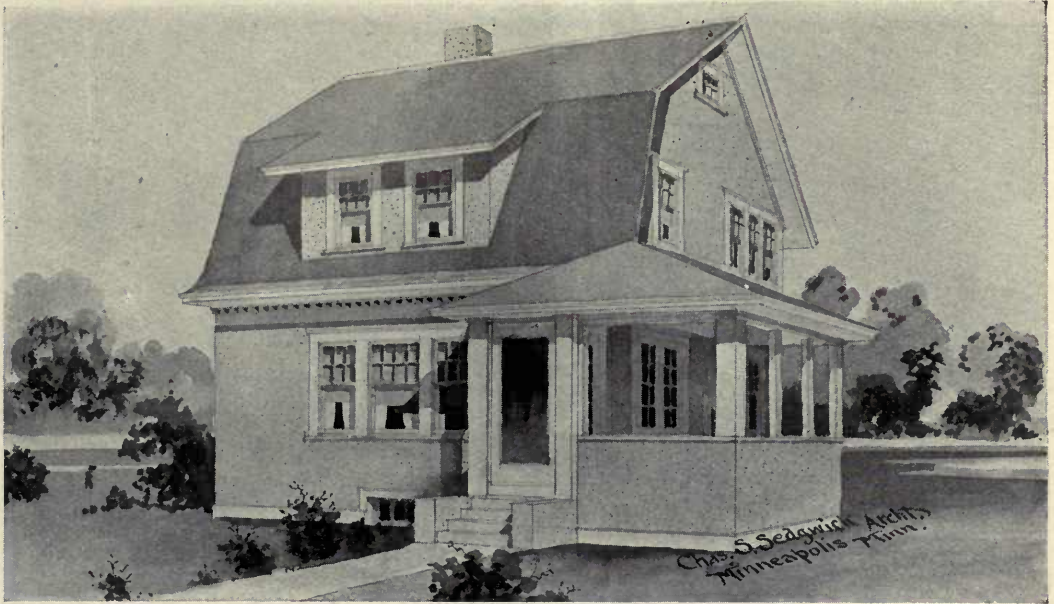
A Dignified Design of Moderate Cost

The bed rooms are of good size and are shut off from the main part of the house, leading from a small hall. A good sized linen closet is provided, also a clothes chute from the bed room closet and bath room leading to the laundry in basement. The bath room has the usual number of fixtures, also a medicine cabinet. The

sleeping porch is open on one end and is screened. It connects with the rear bed room by French doors, also the bath entrance way by a sliding door.

The house is heated with hot water, and wired for electric light. Using fir as a finish or other inexpensive finishing wood, the house can be built for \$3,200.00.

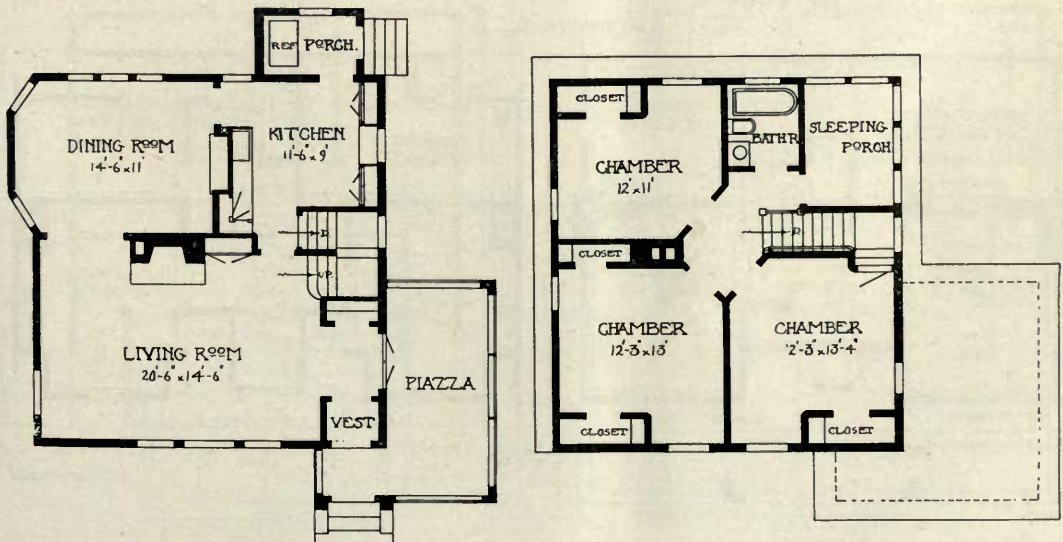




Chas. S. Sedgwick, Architect.

DESIGN B 511

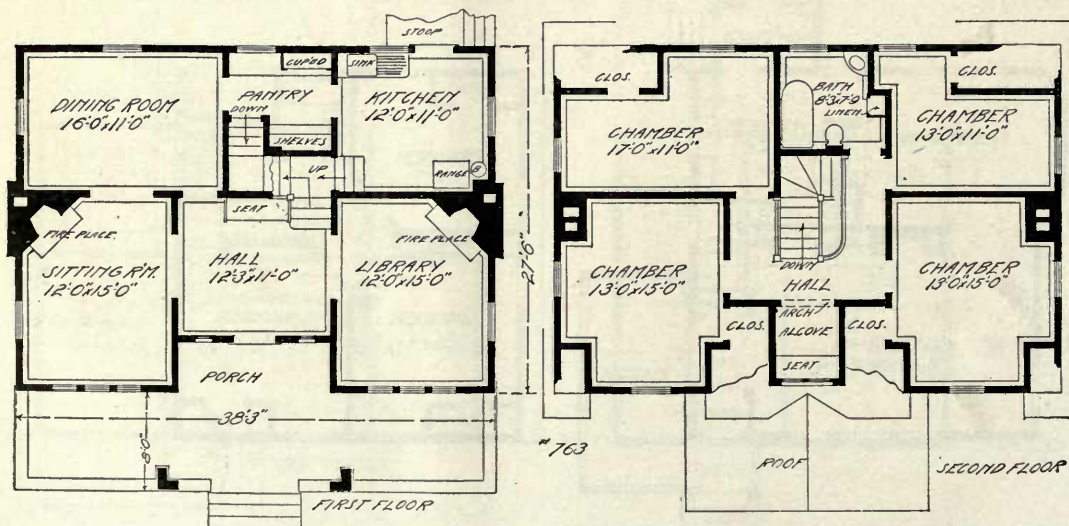
A Seven-Room Gambrel Roof Cottage

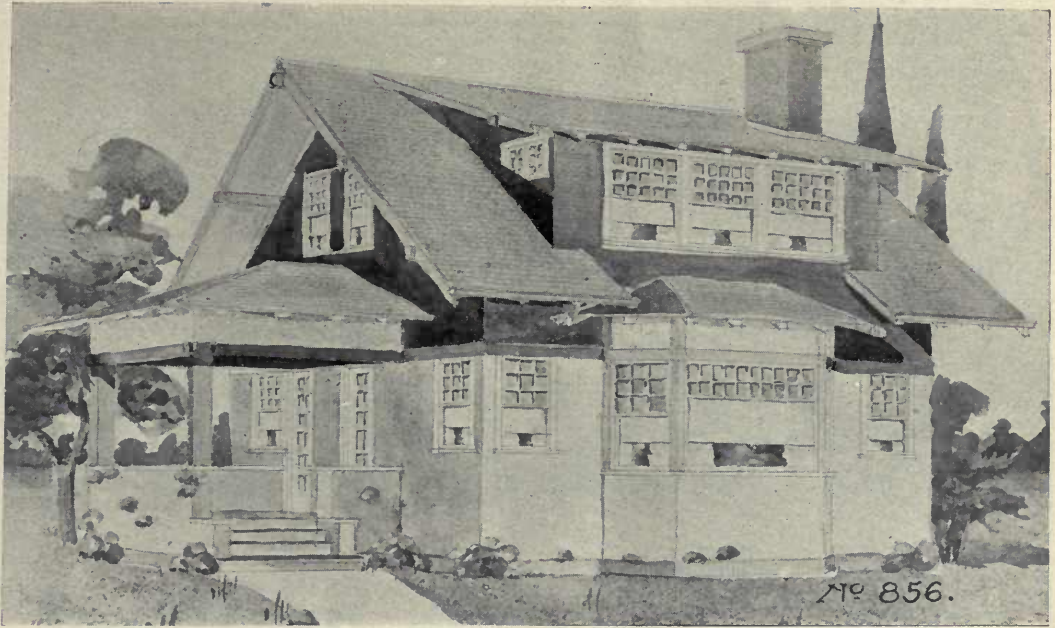




DESIGN B 512

A Handsome House in Cottage Style

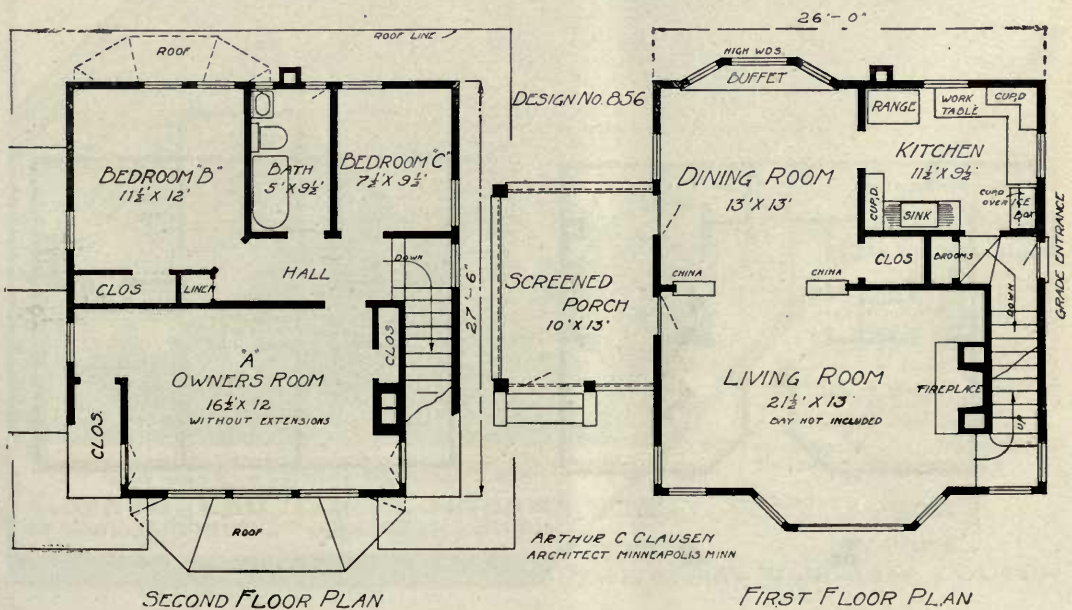




Arthur C. Clausen, Architect.

DESIGN B 513

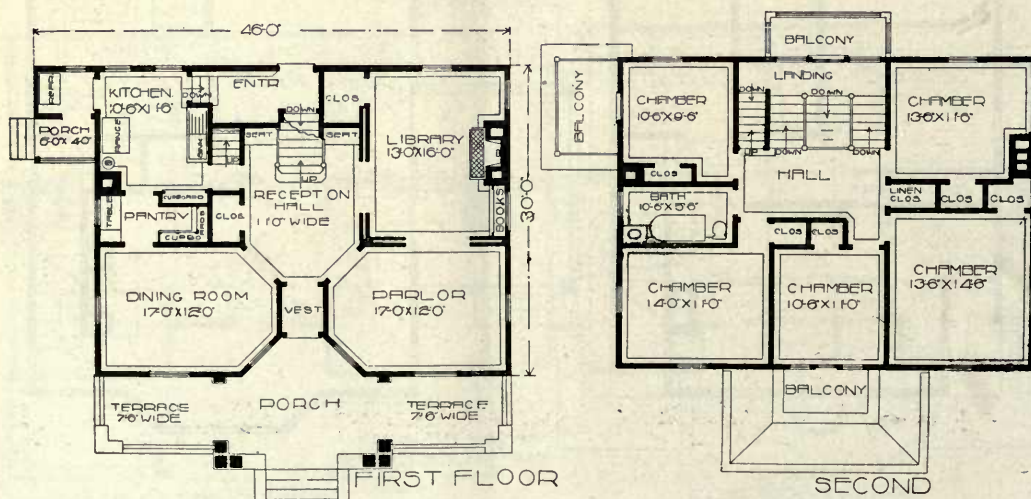
A Cottage Design in Cement and Shingle





DESIGN B 514

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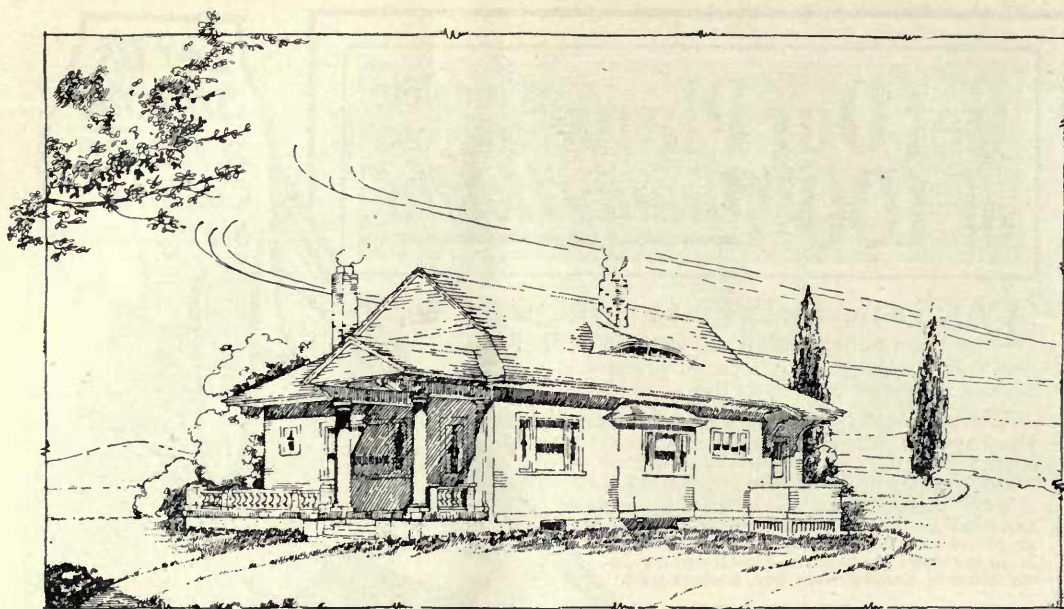
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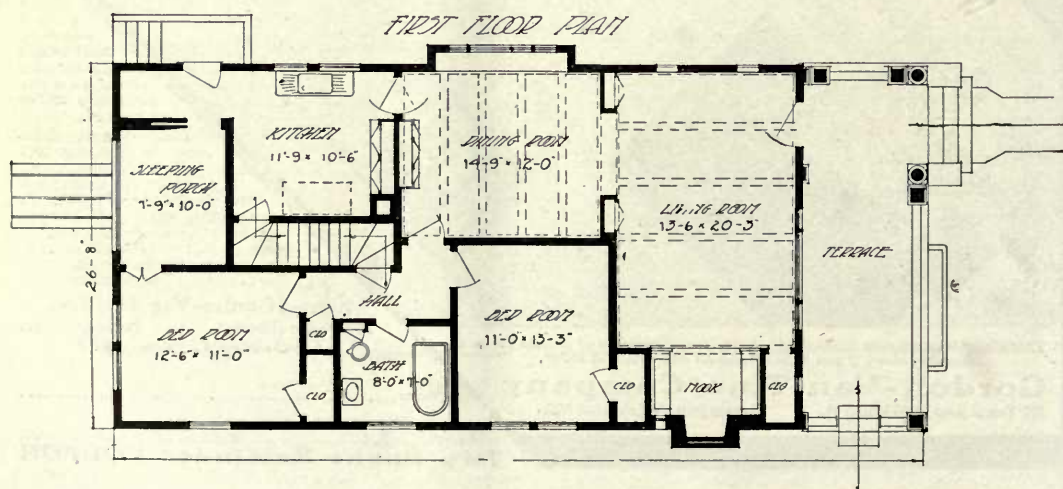
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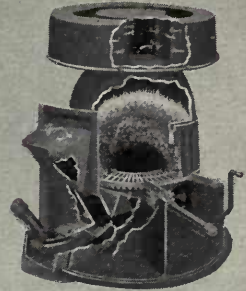


Harold C. Whitehouse, Architect.

DESIGN B 515

A Bungalow with Colonial Features





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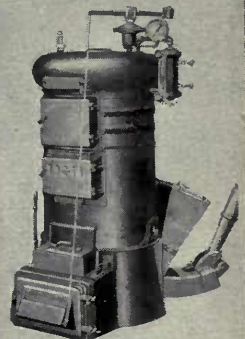
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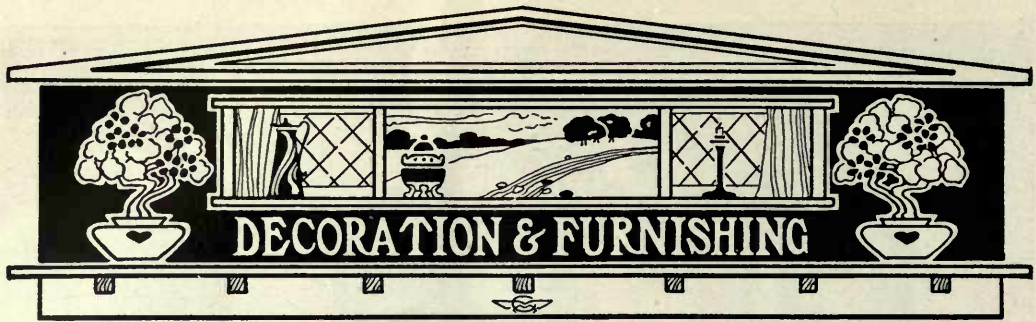
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The Use of Cretonne.



It may seem to readers of this department that undue importance is given to cretonne, to descriptions of its various designs and to suggestions for its use. It is not that cretonne is a panacea for all decorative disabilities, but the fact remains that it is one of the cheapest and most available forms in which to secure artistic pattern. A wall paper of equal decorative value is apt not only to be prohibitive in price but very difficult to obtain. Nor is the wall of elaborate pattern often desirable in the house of average size.

Not that every cretonne is desirable. Very many of them deserve places in a museum as examples of sheer ugliness. But anyone with a fair sense of color and some idea of what constitutes good design has a wide choice at command. In all the larger cities it is possible to get the beautiful printed cottons of the English firm of Liberty, and the range of design and coloring is very wide. The latest achievement of this firm is the reproduction of the French toile jaspé, the exquisite and dainty shadow cretonnes. Liberty makes these in single width and in warm and rich tones of coloring as well as in the pale tints of the French goods, and the difference in price is very considerable. The mere fact of being able to get them in single width is an advantage, as the narrow width is more easily managed and cuts with less waste.

Among the more expensive cretonnes are copies of the eighteenth century toile de Jouy, so-called from the little town where it was made. The striking feature of these is the repetition of a large oval medallion, the long axis being horizontal, containing a group of figures, printed in either black, blue, or old red on a grayish

ground. These ovals are cut out and used for pillow covers, with an edge of gimp. The fabric in its entirety is very handsome for the cover of a large sofa or a single arm chair, but would be rather overpowering when applied to an entire room. The printed linens, mentioned in a recent number have many of them the same sort of medallion effect, but on a smaller scale. The very latest colorings in these linens are purplish, ranging from lavender to plum color, and in combination either with green or with bunches or stripes of bright colored flowers on a cream white ground.

Among really cheap cretonnes, at thirty-five cents a yard some of the best have a neutral tinted ground, made up of hair lines of tan or gray and conventional designs in carefully blended reds, blues and olives, what are sometimes called the stained glass colors. Others have cross stitch effects of various kinds. One particularly good one is in several shades of blue on a white ground. Others copy old block printed cottons and the white background is covered with tiny black dots.

The more decorative the pattern of a cretonne and the stronger its coloring, the more it needs some sort of a foil. This may be supplied by a neutral tinted wall, or by much dark furniture in willow or wicker, but very often the needed relief to the eye is best secured by the use of another fabric, plain or nearly so. Denim, cotton poplin, or dress linens are all useful, but perhaps the most effective for the purpose are the mercerized fabrics used for wall coverings, either the hair lined jaspé, or the small patterned armures. As the colors of these materials are rather light, they are best adapted to the more delicate cretonnes but in the right place they are charming. They cost



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Architects see Sweet's Index, pages 1004 and 1005.

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An agreeable contrast to the heavier cretonnes with gray backgrounds, of which there are many, is found in the heavy Russian crash sold for dish towels, and which harmonizes delightfully with fumed or nut brown oak.

Making the House Attractive for Summer.

One of the most agreeable functions of cretonne is in transforming the city house and giving it a cool and summery aspect during the warm months. With the rugs all taken up, leaving the bare floor in evidence, heavy draperies replaced by thin white ones and slip covers of cretonne and cushion covers of the same material, a few flowers in tall green or white glasses and greenery of some sort in the fireplace, the parlor of the city house becomes so charming that those who must stay in town need not be wholly unreconciled. If there are window boxes filled with plants and kept well watered and the outside air comes in under awnings at the front and through closed blinds at the rear the temperature will be bearable and the air will not have the oppressive deadness which results when the outside heat is kept out by closed windows and drawn down shades. A recent English book recommends the use of grass porch mats instead of awnings, having them fitted on spring rollers like an inside shade. They may be in use in this country, but the writer has never seen them.

The Finish of Cretonne Furnishings.

One advantage of cretonne is its adaptation to home upholstery, but nothing gains more by careful finishing. The very simplicity and cheapness of the material makes it more imperative to have it well cut and well finished. Slip covers should have all the seams welted. Curtains should either be lined or else finished with a narrow gimp. I have seen a handsome room the general effect of which was ruined by the fact that the very expensive cretonne curtains had been left with only the selvage edge for a finish. It is worth while to study the finish of the curtains at a good upholsterer's or in a department store. The cost of a narrow gimp, repeating the colors of the cretonne, is a

trifle but it adds many times its value to the effect of the curtain or cover. If a table cover or scarf is made entirely of cretonne it should be edged with a gimp, but if the cretonne is used merely as a border, it should be mitred at the corners and the whole cover lined with percaline or sateen. Dressmaker's weights improve the hanging of cretonne covers, as they have little weight of their own.

It ought not to be necessary to state that only one kind of cretonne should be used in a room, and that as far as possible there should be nothing else in the room of as positive a pattern. A striped wall paper looks best with most cretonnes, unless a plain color is used, repeating some part of the pattern of the cretonne. One of the lavender and green printed linens, mentioned above, would look well with green wicker furniture and a low toned green wall, or the furniture might be lavender enamel and the walls green. A very large number of the floral cretonnes look well against a wall of a rose tone, wood-work of medium brown giving the needed accent.

The Delicate Green of Celadon.

What we generally call celadon, the delicate, highly glazed, Japanese porcelain in light green, is one of the most charming things possible to associate with those cretonnes which have either a good deal of green or else the rose reds which are so good in combination with pale green. Nothing could be more charming for the tea table which is often a part of the bedroom equipment, and a number of other pieces, besides those used for table service can be had. Celadon tea cups and saucers at twenty-five cents are an index to the cost of other pieces.

The Hanging of a Tapestry.

Wall tapestries, modern or antique, do not come in the way of many of us, but are not exactly impossible. Those one sees are apt to have an adventitious air, to have very little relation to anything else in the room. The living room, unless a very splendid one, is not the place for them, and they are best hung in the hall, the dining room or the drawing room. The writer has seen one which was balanced by setting the long side of a grand



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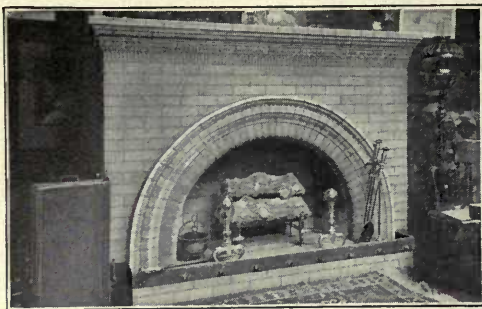
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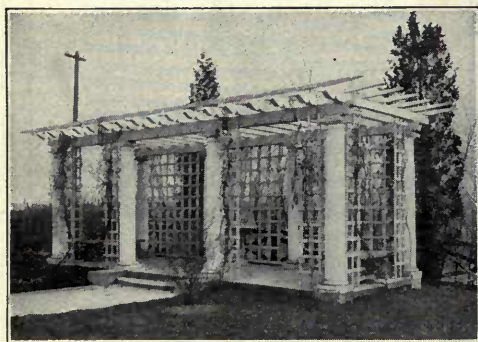
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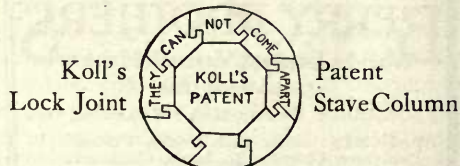


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DECORATION AND FURNISHING—Continued

piano against it. The effect was admirable, and as practically the entire side of the room was occupied, the contrast with other furnishings was less marked. An interior at the Architectural League Exhibition showed a Jacobean dining room, with a tapestry on one wall, with a six or eight-legged console of just its length below it. This supported two tall candelabra and other silver pieces which would be agreeably relieved against the rich and sombre coloring of the tapestry. When a tapestry is hung in a hall, a long sofa can be placed beneath it. In pictures of foreign interiors, one often sees a wall partially covered by a time worn tapestry of indeterminate design, with one or more portraits hung against it, and is reminded that after all tapestry was less pictorial than utilitarian.

Such an exhibition is always valuable as giving hints as to various minor points. For instance, one of the stained glass windows exhibited had a beautiful color scheme, which could easily be worked out in a room, low tones of pale green, gray brown, the deep pinkish ivory of magnolia blossoms and a dash of vivid emerald green. The great triptych for the Chapel of the Intercession is a wonderful lesson for the decorator in the harmonious blending of varied tones of red and blue. A mural painting of famous women from the Harriman house at Ardmore gives another interesting suggestion in the vivid contrast of sage green and scarlet in the costume of Joan of Arc.

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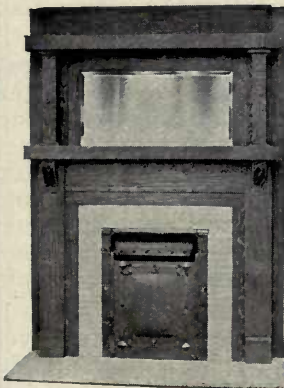
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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.
 * Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Color of Fireplace Brick.

"I write to you not knowing any better place to go for information concerning home decoration. I have been greatly interested in the several issues of your magazine that I have obtained through a news stand in Buffalo. Enclosed please find a rough sketch of floor plan of the bungalow I have under way. Would be pleased to have you suggest a color scheme for interior decoration.

"The fireplace is in place now, and as I stated before, is dark red pressed brick. How should I change the foregoing color scheme to make it harmonize with the red brick fireplace or what new scheme would you suggest?

"My first idea was to have the brick in the fireplace a light brown, interior trim brown weathered or golden oak; brown rugs in living and dining rooms, Mission furniture, walls tinted soft yellow tan, curtains cream net with bronze green silk outer hangings in the living room and the outer hangings in the dining room to be yellow silk, which would be the only difference in the color scheme of the two rooms, etc."

Ans.—It is a pity that the kitchen, bath and den occupy the south side of the house and living and dining rooms the north; also deeply shaded by the veranda. Everything must be done to lighten up these rooms. Your first choice of the brown fireplace brick was correct, and the red brick makes the matter worse. We wish, too, that the den had been a six-foot alcove merely, and the fireplace centered in a larger living room. A corner fireplace is very hard to deal with, especially in the matter of rugs. These you do not mention, or the character of your furniture. As the hall has no light, we advise white paint there and in bathroom. The

kitchen may have natural finish if you prefer.

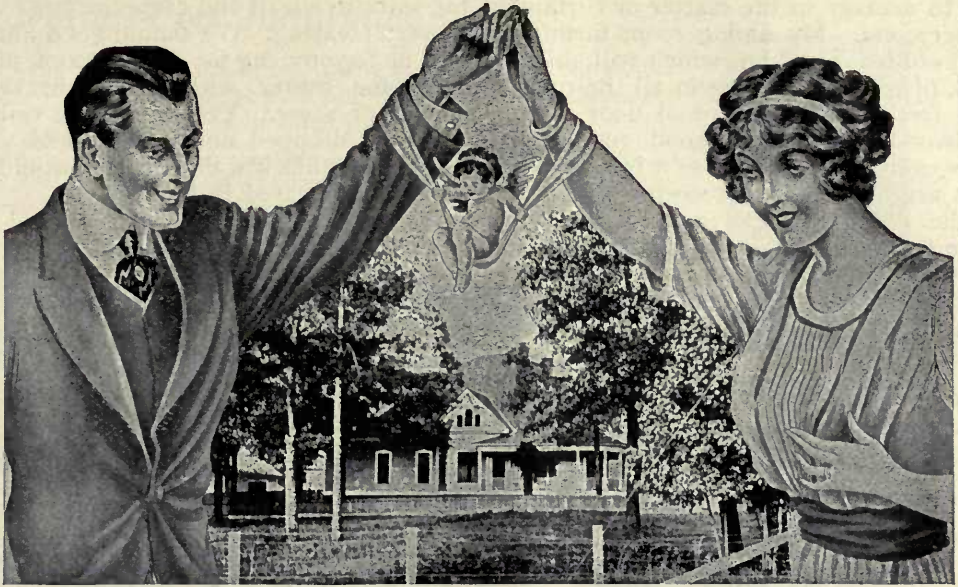
With the light brown stain on the balance of the woodwork, and the red brick fireplace, we think a pale greyish ecru wall would be the best choice in living room. That is, an ecru which has a grey tone rather than a buff. Green should be introduced very sparingly in this room. We would not have over-draperies at windows, but one hanging only of soft greyish ecru. Some wicker or willow furniture, upholstered in cretonne, with rich reds and browns with some green, would help this room. The yellow silk curtains in the dining room would not be as appropriate for a bungalow as a yellow sunfast.

Your green burlaps below the plate rail would be far better than stenciled plaster, which would be sure to chip and mar. The burlaps are good protectors. Do not have it too dark. The wall above could be tinted a light dull shade of yellow and the ceiling cream. In this way you would get an effect of sunlight into the room and with a rug in plain green you would have a pretty room.

The floors should be finished all over the same. They may be stained or not, but do not have a border alone stained.

Black Walnut Woodwork and Furniture.

"I would like your help in doing over the living room, dining room, hall and parlor in my home. Enclose a rough sketch of floor plan. Dining room first; woodwork black walnut, floor oak, a chair rail, and beneath it lincrusta painted to match wood. No fireplace, but an old-fashioned brown marble mantelpiece. The two south windows reach to baseboard, the west one ordinary length. There are inside blinds at all the windows except bays, and I find them rather diffi-



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ANSWERS TO QUESTIONS—Continued

cult to manage in the matter of curtains, drapery, etc. My dining room furniture is all old black walnut, which will still be used, of course. Ceiling in all the rooms 10½ feet. The living room floor is not hardwood, nor hardly good enough to show even when painted as it is now. The bays are about six feet deep in addition to the 21 feet length and 15 breadth. Have two old portraits in gilt frames and a very old oval mirror about five feet long with a much ornamented frame, bronzed. Where would you use the portraits?"

Ans.—We advise running a general color of soft greyish tan through hall, parlor and dining room, combining it in parlor with rose shades and in dining room with soft blues. We approve of your plan to paint hall woodwork old ivory, also lincrusta dado. The black walnut hand rail and floor will be excellent; also black walnut doors. We should use tapestry in recovering (combining mahogany and dull blues) one of the old sofas, placing it along the stair wall; also on seats of two of the black walnut chairs, the straightest and tallest backs. Then with your blue and mahogany rugs and runner you will have a very handsome, artistic hall, from which the parlor with its soft background of greyish tan with old rose over-draperies at windows and the other mahogany sofa upholstered in old rose will open harmoniously. Tan batiste with woven border in a new and beautiful curtain material will be in harmony with the wall and the tan filling of floor and rug which you say must remain.

If possible, place the piano in living room and use only the mahogany pieces in parlor. Your furniture is too much mixed up; bring the black walnut together and the mahogany together. Put the portraits either in parlor or hall. Both house and furniture are on the antique order and can be made to look distinguished if properly treated. It would be better to paint all woodwork except doors old ivory. Of course it seems a pity to carpet the living room floor, but we see nothing better to do if a hardwood floor cannot be laid. The expense of a parquetry wood carpet would not be much greater than the wool. The marble mantel should also be painted old ivory. Then

the soft olive wall and carpet or rugs will be very pleasing. We should get a Shawmut or Saxony rug for dining room, plain dull blue center with border in three shades of same. Yes, the white ceiling could be dropped down to tops of windows. The black walnut chairs would be stunning if seated in blue velvet.

A Remodeled Interior.

"Being about to remodel a home in middle Tennessee and return to my native state, I come to your most helpful magazine, of which I have been an interested reader for some time. I desire a bungalow-cottage effect, plain and substantial, but in good taste. Woodwork is now yellow oak, highly varnished, etc."

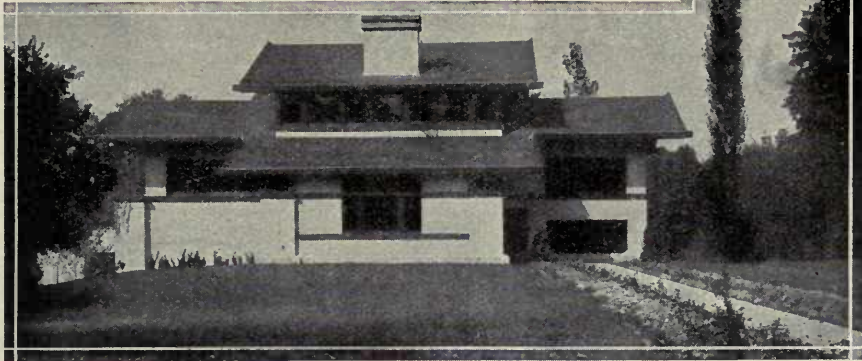
Ans.—You have certainly a problem on your hands to modernize this interior. First, we advise you very strongly to take out the partition between living room and hall and enter the living room directly from front door. The hall is long, narrow and ugly; the front part useless as it is. By doing this you start the hall even with the dining room wall, all it needs, and you throw that ten feet of space into the living room, badly needed there, as it is impossible to make a good effect of such a square high box as it now is. You will then have a living room 16x26, which is something like, and the way living rooms are planned nowadays. You must not expect to get a "bungalow effect," either outside or inside. It cannot be done with such high walls. Bungalows have eight-foot ceilings. You can, however, reduce the apparent wall height by using a deep ceiling drop or a wide frieze.

Your yellow oak woodwork can be retained, but to do this all the varnish must be taken off to the bare wood. This is a big job. We think the simplest and best way is to paint all the woodwork, ivory in living and dining rooms and hall, white in chambers. You could, if you wish, take the doors off the hinges and have the varnish removed, then stain a brownish mahogany, and this would take away the effect of too much white woodwork, be very pretty, and would not be hard to do. The kitchen woodwork we would paint cream; as to using a mahogany stain there, it is pretty but not practical as it will soon be washed off. As this

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ANSWERS TO QUESTIONS—Continued

is a northwest kitchen, we would paint the walls buff, cream ceiling, with a cigar brown wainscot and brown and cream linoleum on the floor. This will be pretty and serviceable. Your plan for the dining room is very good, only the foliage paper should be in light greys and greens on a white ground; white ceiling. The room is not light enough for a dark paper. We would not like tan for living room wall, but a small figured textile effect in greys. With ivory white woodwork and blue and green cretonne furnishings, it would open very agreeably from the dining room.

Early English Finish.

"Please give suggestions for our interior. Hall and living room are to be finished in fumed oak, dining room early English, kitchen natural color (oak). All hardwood floors through the entire house. All the furniture that I have is a mahogany desk and cheval mirror, which I thought could be used in the large bedroom. We thought of using Circassian walnut in the other front bedroom, which is to be finished in red gum stained with that finish, etc."

Ans.—Your choice of a fumed oak finish in living room is good, provided you get a light fumed brown. This means, of course, fumed oak furniture, and there are several shades of that. Do not choose the dark tone. We would mix in two or three pieces of natural wicker with the fumed oak, such as a fireside chair, another smaller chair and a window bench under the north window. These should be upholstered in cretonne, while the oak davenport and easy chair could be plain velvet. You have some light and air from the high south windows and such other good lighting that, notwithstanding the northeast main exposures, the room will stand a color treatment of warm greys and soft rich blues. The wall should be a soft pinkish gray; gray brick in fireplace, a large 9x16 rug in plain rich old blue, with the blue velvet upholstery. There is a very beautiful cretonne, imported, having these blues with deep rose touches mixed in, on a light grey ground. This should be used on the wicker and as side hangings at the windows over sheer scrim. This scheme with the fumed brown wood will make a beautiful room.

We would use a tapestry paper in hall and there is a lovely one in wood greys and dull rose red. In the dining room we would much prefer ivory white paint, with ivory walls and a gay frieze. Mahogany furniture. Make your glass doors opening in from hall ivory sash.

Walls and Woodwork.

S. E. K.—"I am enclosing floor plans and would like suggestions about the finishing of woodwork and colors best to use in the upstairs rooms with reference to the exposures. The finish will be yellow pine (or I could have cypress if desired)."

Answer.—We regret that we cannot give this correspondent the mail answer desired, but we really cannot furnish this free advice and the postage too. Replying to the inquiries, it is advised to paint the woodwork deep cream in the bedroom with bird's-eye maple furniture, as yellow pine natural does not harmonize with the maple. With the golden oak set you can either stain the woodwork a soft brown or paint it a dull olive green. The dining room stain should be brown. We do not think cretonne would mix well in the living room with red leather, but you could upholster the brown wicker chairs in a cotton tapestry in a small pattern, mostly dark red and brown.

The velour portieres can be used. Though not what one would buy new, people still use handsome draperies of this sort if they have them on hand. The Turkish chair is not suitable for the reception room, but the rose and green cover would be all wrong with the other living room furnishings. Better make a slip-cover for it of dark red-striped denim. However, we would advise doing nothing about the furniture till you are able to get the new rugs and finish the walls.

We should think the blue and gray rug would be well placed in the southwest bedroom, with white woodwork and old blue walls. The northeast bedroom to have the golden oak furniture, pale tan walls, cream ceiling, green woodwork and rug, fireplace tile soft green, unglazed. The guest room to have bird's-eye maple furniture. The living room tile wood-brown.


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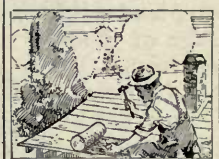
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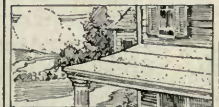
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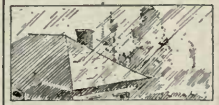
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The Pros and Cons of a Light Diet.

FOR the last ten or fifteen years we have been told constantly that Americans eat too much, that a European family subsists on what one of ours throws away, and there is no doubt that we can learn valuable lessons of thrift from those peoples who have for many years been compelled to live at the lowest point of nutrition at which it is possible to sustain life.

The question at issue is one of starch and protein. The races that live really cheaply are the Orientals who are largely rice eaters and the bulk of their food is carbo-hydrates. As you ascend in the scale the consumption of protein increases, and the Anglo-Saxons and Teutons lead in this respect. In fact the average of the well to do classes is probably too high. What are we to make of the fact that the Oriental is a tireless and efficient worker, apparently deriving as much energy from his light diet as we do from our varied and rich food? It is the difference between shoddy and tweed. The shoddy material has a fine appearance, gives a certain amount of warmth but does not wear, while the tweed does admirable service as long as its threads hold together. The diet which is almost wholly starchy gives abundant energy but no reserve force. No strength is stored up for emergencies. This accounts for the way in which plagues and famines sweep the Orient, while the western races are comparatively immune.

So there is much to be said for a generous diet, with plenty of protein, plenty of sugar, and starch in limited quantity and in its most easily digested forms.

The matter of a wise economy in the provision of protein is another question. Protein exists in equal proportion in shin of beef or in the fillet, its assimilation in the one case rather than the other, a matter of careful preparation. It also exists in other articles than meat, notably in cheese and in some grains and vegetables, so that there is a wide choice in securing it. It is in this respect that we can learn a great deal from our European cousins, especially the French, who are past masters of the art of getting much out of little.

The Rehabilitation of Sugar.

Sugar has been in disrepute for many long years. An indulgence in it to any extent has been considered a pleasant vice and not to be lightly condoned. Now we are beginning to understand its value as a heat producer and its consequent value in the balanced ration. The child's craving for sweets represents a real need and the properly adjusted diet includes a great deal of sugar, not in its crude form but in composition with other articles. The quantity to be consumed in a day should not amount to more than a half pound for each person, but that is sufficient to gratify the most highly developed "sweet tooth." Especially does the matter of the consumption of sugar demand attention with the coming of cold weather with its need for additional animal heat. The more internal heat the less fuel will be needed and the more likely individuals will be to be satisfied with the house temperature which is most conducive to health.

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The expense is generally estimated at about a cent and a quarter an hour, varying with the local price of oil. The care involved is of the slightest, five minutes at the outside being required for filling and wiping. The air is not vitiated as is the case with gas nor is there the bother of an attaching tube. It may be objected that the oil heater is not ornamental but it is easy to arrange some sort of a screen. The low fireplace screens sold in Oriental shops are useful, some of them highly decorative, or it is easy to have one made which can be covered with something to match the furnishings of the room.

The Bugbear of Dishwashing.

Dishwashing is a joy to very few people, least of all to the cooks. It may be assumed that those of us who like to cook hate to wash dishes. Still dishwashing may be systematized so as to be at least a mitigated terror.

In the first place the number of the dishes can be lessened by careful planning. Serve the meals with as few dishes as need be. Only put onto the table the dishes and silver needed for what you are going to serve. Why put a fork at the place of the member of the family who breakfasts on coffee and a slice of dry toast? Why use bread and butter plates with a cold lunch? A useless clutter of dishes and silver spoils the appearance of the table, as well as adding to the work of clearing it off.

It pays to take time to wash the cooking utensils as they are emptied and to this end nothing helps so much as a clean

wire sink brush and a sufficiency of some good washing powder. One of the strong points of the casserole is that it is so quickly washed, even flour mixtures coming off very easily.

When it comes to washing the table dishes it is a good way to clean them off with a small brush under the cold water faucet, after they have been scraped. Pour boiling water over them, through the soap saver, as they are piled in a pan or in a dish drainer and wipe them out rapidly and you will be surprised to note how quickly the operation goes.

In a large family two or three are apt to wash the dishes together and the process is quickly over. In the small family and with dinner at night it is well to wash the knives and silver and to leave the dishes themselves to soak until morning, having one big dishwashing for the day. Old fashioned housekeepers would doubtless condemn this method but it is a saving of labor and fatigue, and an enterprising woman will often find time for the task in the intervals of getting breakfast.

Glass Fronted Ovens.

One of the latest kitchen improvements is the portable oven, lined with asbestos and fronted with glass, which enables the housewife to watch the progress of her roast, her cakes or bread, without opening the oven door. It can be used on any gas stove and there is also an adaptation to electricity.

The Trick of Baking Cake with Gas.

But if one must use the old sort of gas oven, one is apt to have difficulty in baking cake, especially if it has a good deal of butter in it. Unless it is very carefully regulated the average gas oven is too hot to secure the gradual rising which is necessary. Try putting the cake in with the oven entirely cold and letting it heat gradually with the oven. It will take longer to bake, perhaps three-quarters of an hour, but it will be much lighter than when put into a heated oven and the risk of its falling be much less. For a fruit cake set the keys of the oven burners about half way, so that the oven will not get extremely hot at any part of the process. When baking cake in this way

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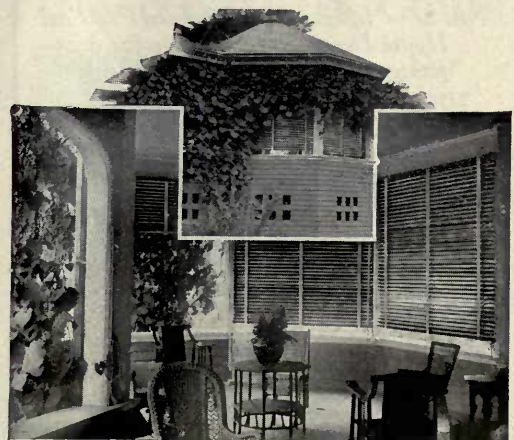
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HOUSEHOLD ECONOMICS—Continued

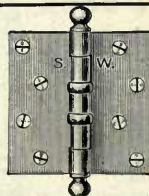
it is safe to add one-half to the time given in the cook book. When the rising process is complete and the cake beginning to brown one can tell by the smell that it is time to inspect it.

Soaps for the Vacuum Washer.

With the increased use of the vacuum washer there has been a demand for soap which does not require to be shaved up. Quite a number of brands are on the market, all of them borax soaps and white, and they are admirable for other purposes than clothes washing. It is something to get rid of the acid smell of strong yellow soap. The writer recalls the fact that an aunt of hers who was a notable housekeeper always insisted on having washing done with white castile soap, which she said paid for the increase in expense by the whiteness and greater durability of the clothes. There is a chance now that yellow soap may, before many years, cease to be anything but a tradition.

Saving the Cream.

A kitchen trifle which pays for itself several times over in a short time is a cream dipper, which removes all the cream from the top of a bottle of milk, without the necessity of pouring it off, a process in which a good deal of the cream is necessarily lost. The cost is only a quarter. And does everyone know that the longer milk stands the more thorough the separation of the cream? If you depend upon bottled milk for your cream, it is worth while to keep it twenty-four hours, except in the very warmest weather.



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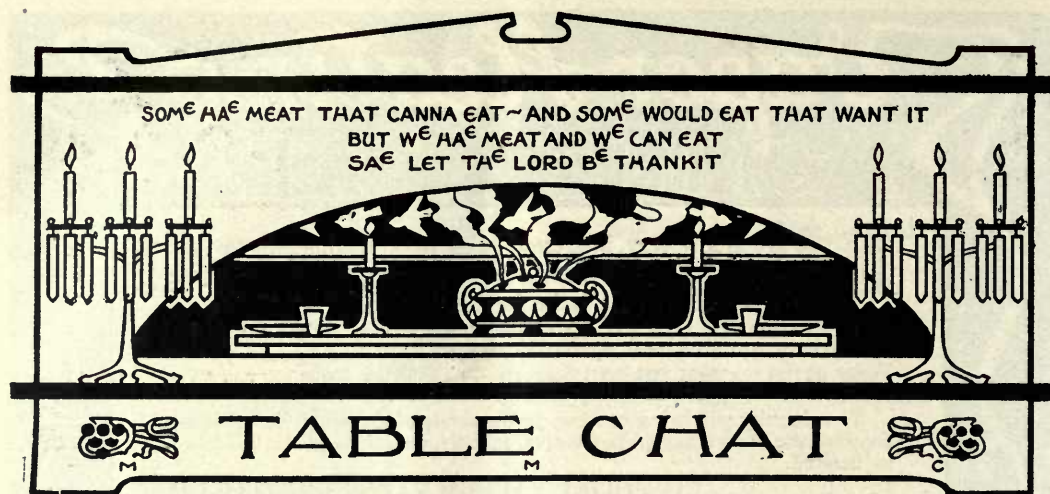
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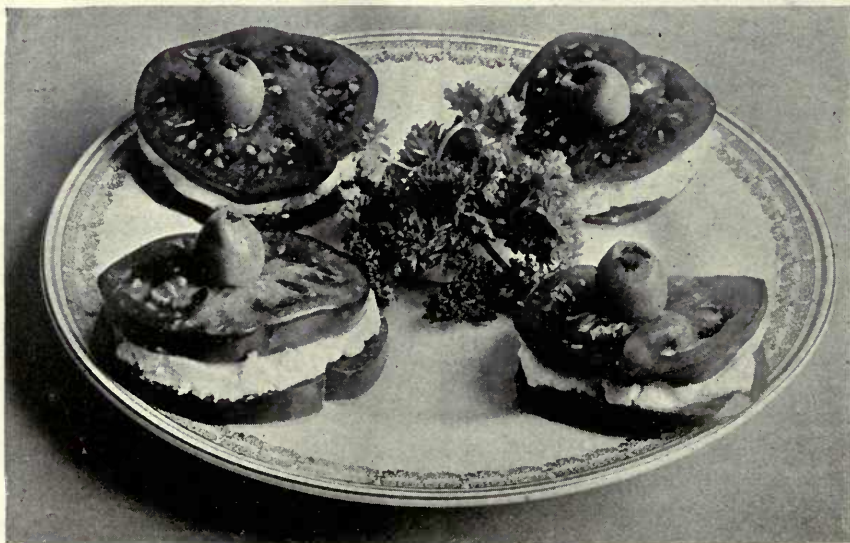
WITH the coming of the warm days of early summer, there is apt to be a distaste for heavy food, which if not combated is sure to result in physical disaster. Fruits and green vegetables have their value, but they are not sufficient for the bodily needs, and if the system refuses strong meat these needs must be supplied in some other way.

The cream soups and salads dressed with a good deal of oil are helpful, and addition of milk and butter to the various vegetables increase their nutritive

value, while the different cheese preparations are rich in the needed protein. There is a great deal of solid nourishment in shredded wheat biscuits, and crisped and buttered they may take the place of toast made of white bread. Breads made from entire wheat, graham or oatmeal are also useful, and Boston brown bread is not only good but a valuable article of food.

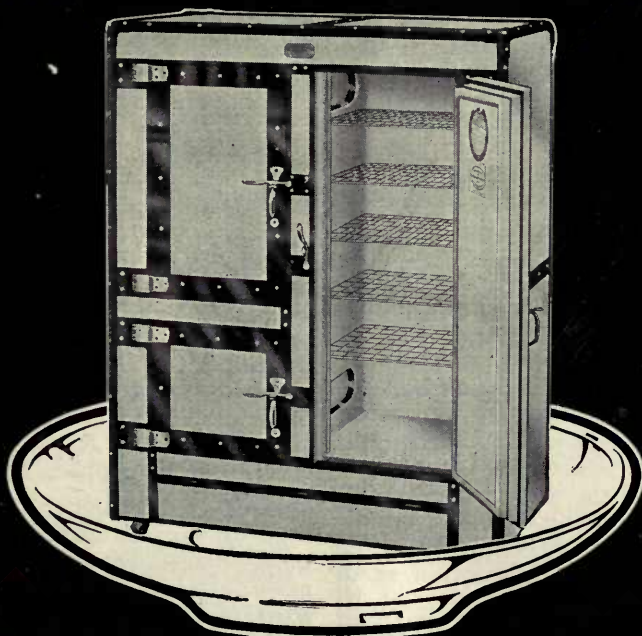
Salads Without Oil.

There are many people to whom olive oil is positively distasteful, and who can detect it under any disguise. It is quite



Tomato and Cream Cheese Sandwich.

Like a clean china dish



The Passing of the Old-Time Refrigerator

LONG, long ago you had a zinc-lined or galvanized iron bath tub in your home; before that, you had perhaps a tin tub. Now, of course, you have a porcelain-lined tub. You wouldn't go back to the zinc or tin tub for anything, would you?

Have you in your home a zinc-lined refrigerator? Or is it lined with painted tin or iron? Or is it made of sheets of something cemented or screwed together? (Suppose you were offered a bath tub made of several pieces cemented together!)

Leonard Cleanable Refrigerators

Why not have a refrigerator that's at least as sanitary as your bath tub?

The snow-white, one-piece porcelain lining in the Leonard Cleanable Refrigerator is germproof, without joints, crevices or cracks. There's no place for grease, dirt or germs to collect.

This lining is ever-lasting,—so hard that you can't scratch it even with a knife. It's made of much finer porcelain than any bath tub.

Throw away your old-fashioned refrigerator or sell it to someone whose standards of cleanliness are less high than yours. Get a Leonard Cleanable porcelain-lined or, like the one illustrated, porcelain inside and out. Made in seven sizes, prices range from \$75 to \$150. Fifty other styles, in oak or ash cases, \$15 to \$90. Can be arranged for outside icing and for water cooler if desired.

Leonard Cleanable Refrigerators are sold by the better class of dealers. Ask your dealer, or send us his name, and receive free a copy of "Care of Refrigerators" and an interesting sample of Leonard Porcelain.

If no dealer is convenient to you, send for our complete catalog. Freight charges allowed to Ohio and Mississippi rivers. Money returned if not satisfactory. Write today.

Remember, you've never regretted installing your porcelain bath tub; you'll never regret buying a "Leonard Cleanable" Refrigerator.

GRAND RAPIDS REFRIGERATOR CO.

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TABLE CHAT—Continued

possible to make a salad dressing with other ingredients, very good indeed, only lacking the distinctive taste of the oil. These dressings need rather more flavoring to redeem them from insipidity than an ordinary mayonnaise, mustard, onion, cayenne and even a suspicion of garlic.

One way of making such a dressing is to use creamed butter, about a tablespoonful for each egg yolk, proceeding just as you would for a Hollandaise sauce, but using hot milk or cream instead of hot water, and cooking it in a double boiler. Lemon juice or tarragon vinegar should be added with a sparing hand.

Another dressing is made with a much advertised brand of cotton seed oil, and which is quite destitute of the peculiar, rank flavor of the ordinary cotton seed oil. This makes a thick jelly when carefully blended with egg yolks, and is generally made with lemon juice, and has the advantage over the other that its consistency is exactly the same as that of an olive oil mayonnaise, though the color is a little lighter. As this cotton seed oil is much cheaper than the olive oil, it may be used to advantage when large quantities of salad are to be prepared, combining enough olive oil with the dressing to give the distinctive flavor.

Still another dressing can be made from unsweetened condensed milk, working it into the egg yolks and adding lemon juice and various seasonings. Evaporated milk can be used in the same way, but must be cooked and the dressing allowed to thicken like a custard.

Using Early Tomatoes.

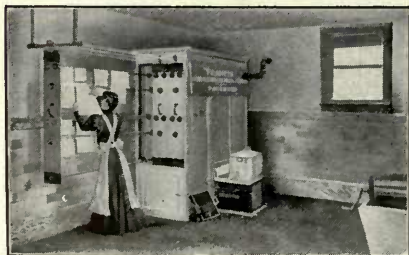
The tomatoes which make their appearance early in the summer come up from the south, are picked when half ripe and are not sweet enough to be very good when cooked. They are much better when used for some sort of salad, and

there are many variations. Tomatoes for a salad should always be sliced or at least slashed, so that the dressing may penetrate them. If possible they should be peeled without putting them in boiling water, they should stay in the refrigerator several hours before serving, and be marinated in oil, vinegar and salt for at least half an hour before the mayonnaise is added.

Good sized, whole tomatoes are peeled and used as cups, after most of the pulp has been scooped out. The rejected pulp can be used for scalloped tomatoes. One filling is cold boiled peas mixed with chopped capers and pickles and mayonnaise. Nut meats may be used for this instead of capers and pickles. Cold boiled corn cut from the cob, highly seasoned and mixed with mayonnaise is unusual and very good. A pretty color combination is green peppers and cream cheese.

The tomato cups are also good for fillings of various sorts of chopped meats, ham, chicken or veal, mixed with mayonnaise. It is well to pass additional mayonnaise to be used on the tomato itself. An unusual and very pretty salad is made by marinating a small tomato, after having cut five or six slashes in its sides. At the same time some chopped cress is marinated and before serving this is pressed into the slashes and the mayonnaise added. Each tomato is set into a nest of lettuce leaves.

A very appetizing summer breakfast dish is made by cutting tomatoes in two lengthwise, peppering and salting them and dipping them in egg and crumb. Cook very carefully a few slices of bacon until all the fat has fried out. Take them out and fry the breaded tomatoes in the bacon fat. Shred the slices of bacon very fine with scissors and scatter the bits over the tomatoes.



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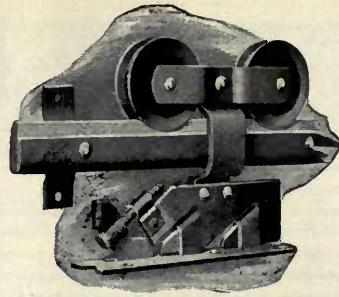
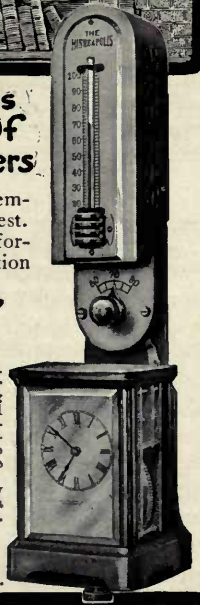
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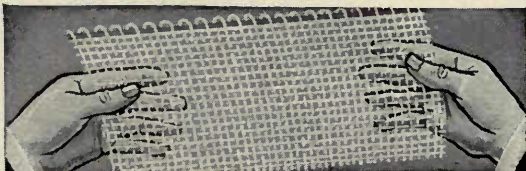
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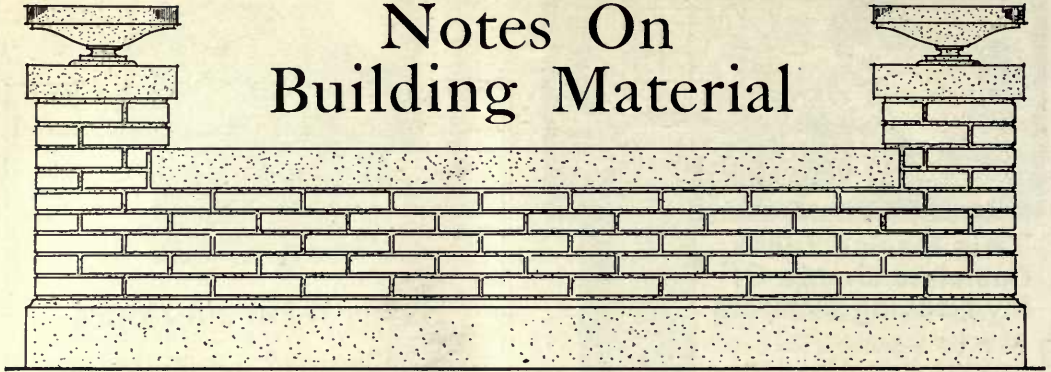
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LIGHTING FIXTURES

Notes On Building Material



Composition Flooring.

COMPOSITION flooring is no longer an experiment. It has "made good" and is so widely specified and used today that there is no question whatever in the minds of those who have followed the progress of this material since its introduction abroad and in this country that it is destined to fill a definite and no insignificant field in the building industry.

The architect or engineer who has had no experience in the use of composition material, and who may contemplate specifying it for some project he has in hand, should bear in mind four factors which largely determine a successful issue. These are:

Selection of material to be used.

Provision for adequate foundation.

Use of skilled and experienced labor.

Protection and after care of the finished work.

To refer to these points briefly:

An intelligent selection of the flooring material. Owing to the fact that manufacturers in this country hold their various formulae as trade secrets, the architect is unable to specify the precise formula for the make up of the material as he does in the case of portland cement. When we take into consideration the fact that oxy-chloride cement used in all composition flooring is capable of carrying other ingredients up to 20 times the weight of the cement, we can readily see what a vast variation there may be in composition flooring, not only with respect to the number of ingredients added but also in the relative properties secured. It is quite possible, and indeed very likely, that no two floorings of two different manufactur-

ers are essentially alike. For these reasons the careful architect or engineer will not specify merely "composition flooring." He will name only those manufacturers whose material he has thoroughly investigated and this investigation will include the inspection of work installed for some length of time so that he may see for himself just how the material will stand up under service.

Under no circumstances should the architect or engineer make his selection solely from samples submitted. All samples look very much alike. Often the impractical mixture will make up into a better looking sample than the efficient material for the simple reason it is often easier to trowel-finish such a mixture to a good even surface.

An adequate foundation should be provided for in the general specifications: A large percentage of difficulties encountered in the past has been due to the inadequate foundation. I refer to concrete foundation as wood foundation presents no great difficulty.

The concrete foundation must be of sufficient richness and under no consideration should it contain lime. Buckling or coming away from the foundation is almost always due to one or the other of these causes. Most manufacturers provide printed foundation sheets giving the proper mixture of the concrete fill and method of its installation.

Skilled, experienced workmanship essential: Composition flooring requires radically different handling and troweling from that given portland or other cements. It is utterly impossible to take a workman inexperienced in the work of this material, from either a cement work-



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THIS material easily takes the foremost place in the evolution of roof coverings. It gives a roof of imperishable rock at a little more than the cost of the cheapest most perishable roofing. Its body is a fabric of long-fibred asbestos bound with another mineral substance—genuine Trinidad Lake Asphalt—forming a pliable stone sheet. It is watertight, will not crack or split in winter, or run, shove, dry or drip in the hottest weather. Requires no paint, gravel, or slag. Sparks, cinders or flying embers cannot even scorch it. When a fire occurs inside a building, J-M ASBESTOS ROOFING prevents the flames from spreading to adjacent structures. Laid with J-M CLEATS, it is a roofing at once attractive and distinct. The Cleats hold edges in a vise-like grip, eliminating the possibility of leaks.



Lends an added charm to the appearance of the roof, is easily applied, and prolongs the life of the roofing.

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ers' union or a plasterers' union, and expect him to turn out a satisfactory piece of work.

Such a man would not become proficient in this line without many days of actual experience in working with this material. For this reason it is not advisable to buy the material in bulk from any particular manufacturer and plan to install it by local mechanics. Expert workmanship is of the greatest importance owing to the fact that the color appearance of the finished flooring is dependent largely upon the time and manner of the final troweling.

Protection and after care of finished work: Owing to the liability of damage from other mechanics (composition flooring is far more liable to such damage when it has been newly installed than will be the case after it has reached its maximum hardness) this material should be practically the last thing installed in a building. In so far as it may be possible the plastering should be done, the trim set, the glazing in place, the painting done and all fixtures installed.

Composition flooring should receive the same care to prevent damage caused by other contractors that is exercised in the case of finished wood flooring. Many an excellent piece of work has been permanently marred by carelessness in this regard. Most manufacturers will leave their work well covered by heavy paper, sawdust or both.

The after care of this material is of importance. Frequent washing and an occasional oiling will serve to keep a floor in perfect condition and with this care it has been repeatedly demonstrated that composition flooring improves in appearance as it ages under service.

From address of Mr. R. W. Page, before the Structural Engineers Society, Pa.

• Tile Partitions in Buildings.

Hollow tile for partitions is made in two grades known as porous and semi-porous, the result of mixing in the clay a proportion of sawdust which burns out, 20 per cent of sawdust being used in the semi-porous, and 25 to 35 per cent in the porous. This leaves the finished product in such a condition that it can be cut with a saw and nails can be driven into it. The

semi-porous is used for partitions with about 40 per cent of full porous ones to hold the nails where trim is needed. Solid or dense tile is suitable for floors but not for partitions, excepting perhaps in outside exposed positions, and wood nailing strips must then be inserted if nailing is needed. The blocks are made either 12 inches square or in either form, 12 inches long and 4 to 8 inches deep, but the large square ones can be laid much faster than the smaller ones and at a less labor cost.

Inside Facts About Stucco.

The ease with which stucco lends itself to artistic treatment, has tended toward a precocious development that has been harmful. The trouble is that a stucco job which at first appears to be an artistic gem, gradually develops flaws which may finally overshadow the original beauty.

What is the cause of the "checking" and "hair-cracking?" Is it superficial, or is it hidden in the physio-chemical composition of cement? Much valuable study has been devoted to the external treatment of stucco, but few have stopped to question its internal composition. Let us therefore study some inside facts of stucco mortar.

The subject is an interesting one and the conclusions startling. Who would have thought, for instance, that cement acts like wood, swelling up on wetting, and contracting on drying? But this is proven by careful measurements.

A. T. Goldbeck, of the U. S. Department of Agriculture, showed this in experiments described in *Engineering Record* for July 8, 1911 (p. 45). His researches were confirmed by Prof. A. H. White, working independently in the University of Michigan, and were published in *Engineering Record* for July 15, 1911 (p. 73). Both of these gentlemen proved scientifically and conclusively that mortar and concrete expand on wetting and contract on drying, the action keeping up for years.

In some cases the amount of expansion (due to wetting) was as great as that due to 100 degrees increase of temperature. This is a startling fact, when it is remembered that concrete expands with heat just as much as iron does. The strains



Drawn from photograph, Williamson & Crow, Architects, Grand Rapids, Mich.

How Well Will It Sell?

Don't overlook the *resale* value of the house you are going to build. Five years from today you may want to dispose of it and then its worth will depend upon its

The *back* of a wall plastered on metal lath. See how the plaster forms in knobs that are bigger than the mesh openings. This is the "key" that can never loosen.

appearance. And prospective purchasers look first for cracks and roughness in the *walls*.

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Expanded Metal Lath

makes inside plaster and outside stucco permanent.

Plaster lasts as long as its base. Kno-Burn can never rot away because it is a *metal* lath. Plaster cracks when temperature changes cause it to expand and contract sufficiently to break its bond with the lath behind it. Kno-Burn expands and contracts *with* the plaster. Ask your architect.

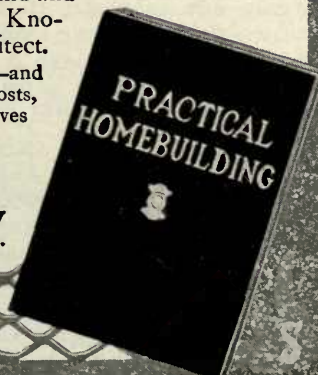
"Practical Homebuilding," our new booklet, covers all this—and a great deal more—in detail. It contains house plans, comparative costs, numerous photographs and a wealth of building information that solves the very problems that are puzzling you.

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North Western Expanded Metal Company

Old Colony Building

Chicago, U. S. A.



due to wetting and drying are therefore very severe, and come quickly and repeatedly. It is not difficult to see why this should be such a serious source of cracking.

It is fortunate that only the cement is affected, the sand remaining practically uninfluenced by moisture. Therefore lean mortars are much less affected than rich ones; a 1:3 stucco when moistened expands much less than a 1:2. But, as Prof. White says, "If a stucco is lean enough to avoid cracks, water will go through freely, and if it is rich enough to keep water out, it will crack."

It is, of course, true that a 1:2 stucco is more waterproof than a 1:3, but it is very much more liable to crack. On the other hand, a 1:3 stucco, properly applied, is safe from cracking, though very porous. This, then, is the dilemma which confronts the constructor: how to make stucco lean enough to avoid cracks, yet non-porous enough to keep out water. The problem has been solved by the use of a 1:3 mortar in conjunction with an effective waterproofing compound.

The leanness of the mortar prevents cracks, and the compound makes the mortar waterproof. This gives absolutely reliable results, both as to permanency of surface and permanency of waterproofing. It is in every way more satisfactory than asbestos or patented stuccos, which do not positively prevent checking and are never entirely waterproof.

Practical experience has corroborated the laboratory in showing the need for lean mixtures; but, as is frequently the case, we did not see the everyday facts in clear light until science opened our eyes. For instance, it has long been known that excessive troweling of a floor, etc., should be avoided. Now we understand the troweling worked the particles of cement to the surface.

Some years ago an architect was building a stucco home for himself. The contractor ran short of cement and asked for permission to use a leaner mixture. This was permitted for the back of the house where it wouldn't be noticed, but the richer mortar was insisted on for the rest. To the surprise of everyone, the back wall is still flawless, while the front of the house is full of hair-cracks.

A permanently waterproof stucco is dependent on using a compound that is absolutely insoluble and unaffected by the elements. Bituminous waterproofing products belong to this class; and compounds have been developed with are miscible with water, yet become absolutely insoluble after the mortar has set.

Bituminous materials so prepared give a very high degree of permanent waterproofing. They are absolutely unaffected by salt-air, brine, running water, boiling water, and ordinary chemicals. Weight for weight they give four times the efficiency of soap compounds, yet they actually strengthen the mortar instead of weakening it, and, because of the lack of all harmful action, the amount of compound is not limited to 2 per cent. If desired, 10 per cent or more may be incorporated in the mixture, and the waterproofing effect correspondingly increased. In this way a factor of safety may be secured which is as important in waterproofing as in other branches of engineering. It then becomes possible to waterproof under guarantee a cellar 50 feet below tide level by means of a three-quarter-inch interior mortar facing. Evidently this is the kind of material that gives satisfaction also in external stuccos, where no pressure is encountered, but where, on account of the lean mixture, a safety factor is desirable to cover variations in mixing and plastering. Thus the troubles of checking and cracking are prevented and cured by the use of an effective waterproofing compound and a worthy material is secured for the best ideals of architecture. *Cement & Engineering News.*

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A stucco wall, on a proper foundation, is permanent; a protection against fire, the cold of winter and heat of summer. It ages to a soft tone of great beauty.

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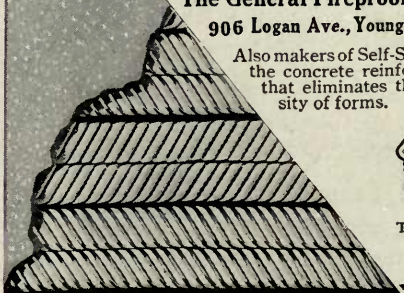
Herringbone walls, partitions and ceilings make a house that defies time. It's the modern construction that is being made use of more and more each year as people come to know its real advantages.

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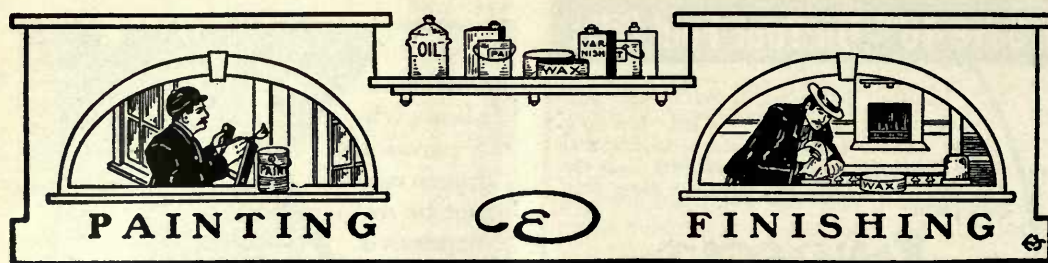
It shows pictures of Herringbone houses and contains interesting facts that will prove of great value in helping you build the best home at least cost. Mention your architect's name so we can co-operate through him.

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The Chicago Forests Products Exposition



GREAT exhibit of West Coast woods, in finished and unfinished state, is enroute from this city to Chicago, where it will occupy space in the Forest Products Exposition, allotted the West Coast Lumber Manufacturer's Association.

The center of the exhibit is an attractive open sided structure of modified Colonial architecture, occupying space thirty feet square.

One front represents a veranda of a modern home, showing the use of fir porch flooring, fir ceiling, and cedar siding, together with a Colonial fir door.

Another side shows a reception hall of a house, with stairway. This room is richly paneled with strikingly beautiful slash grain fir, all woodwork being stained in natural colors.

A third side shows a living room in which the paneling, beamed-ceiling and fire-place are in slash grained western hemlock, done in gray and with hardware of dull silver. The flooring is fir.

The fourth side is a dining room with built-in buffet; and with a beamed ceiling. This room is exclusively in fir, stained in a soft green shade, and handsomely set off in harmonizing draperies.

The top of the exhibit is a fir pergola having a weathered finish covered with flowers and vines.

The outside of one front shows the beauty and practical use of clear red cedar shingles, stained and put on eight inches to the weather. Other fronts show the application of cedar siding, hemlock siding and spruce siding.

A Prominent Architect,—

Oswald Herring has utilized lattice work on one of his most important dwellings in combination with decoration of molded concrete. Within, the lattice idea

has been continued, but in an entirely novel manner, by simply stenciling the lines upon the wall. Wood paneling will break up large areas of concrete surface and is entirely in keeping with the old half-timbered style of architecture, so familiar to our fathers. It is impossible to appreciate the pleasing exterior surface which has been obtained on this modest appearing dwelling, but a slight explanation may help to make clear how the effect is obtained. The finish is known as a dry dash and in this instance has been applied to concrete blocks. After the plaster coat has been applied, a dash mixture of white marble and bluestone chips with gravel screenings is thrown on, which imbed in the mortar and furnish a clean, bright surface without further treatment. When a coarser effect is desired it can be obtained by a rough cast, the mortar mixture being thrown on with a paddle and the texture of the surface depending entirely upon the size and character of the aggregate and consistency of the mixture.

Such advancements are being made in the use of colored aggregates, it is generally possible to obtain all the color variations necessary in the concrete itself. An intensely red coloring matter in the natural aggregate has given the walls a light salmon tint, which is very attractive.

French Doors and Casements.

French windows, so-called, which are really doors, are usually in a more or less protected location, generally opening on a porch protected by the porch roof. In such a case it is not necessary to take any more precautions than with an ordinary door and the jambs are usually detailed in the same manner as ordinary door frames. If they are to be placed in a more exposed position they should be detailed in the same manner as the casement windows.

French windows and casement windows if properly designed and used, add

"LEAD-AND-OIL"—the elastic paint—made of

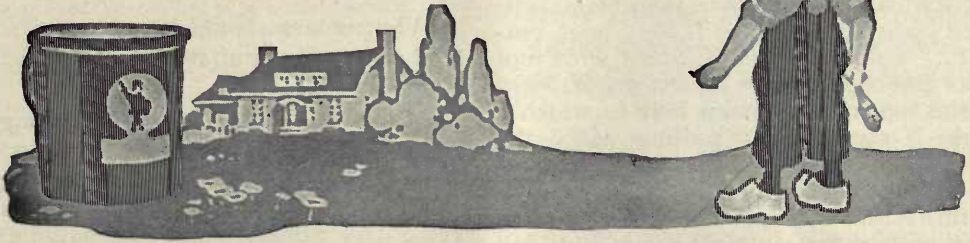
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and Dutch Boy linseed oil, withstands wood and weather changes, without cracking and scaling. It stretches with wood in summer's heat and shrinks with wood in winter's cold.

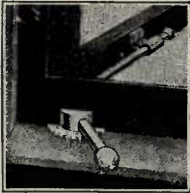
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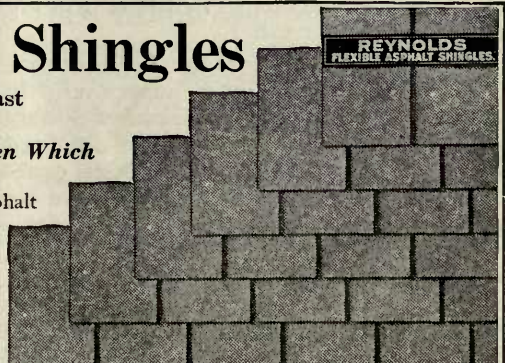
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West Grant St., Grand Rapids, Mich. Established 1868.



remarkably to the appearance of a cottage. It is customary to detail them with small lights, and in fact their appearance is greatly improved by keeping the lights small. The appearance is improved if the panes are slightly higher than they are wide. In the case of a cottage, for instance, the French windows on the lower floor open into the living room and give more light than would the ordinary window, as well as adding an air of distinction to the cottage. The upstairs casements are three feet high and can be opened so as to give the full benefit of the entire window space.

These windows can be fitted with fixtures which will permit of their being fastened open any distance if they open outward. They are usually fitted with foot bolts and cupboard locks, and are fastened at the top with a spring bolt to which a chain is attached, by pulling which the bolt can be unfastened. Sometimes a basquille lock is used. This consists of a knob or turnscrew at the center of the meeting rails with a bar running to the top and bottom of the sash. When the knob is turned the rods push upward and downward into eyelets in the casing, fastening the window.

—*Building Age.*

Paying for Sash Priming Twice.

To illustrate one little point where a subdivision has caused expense. In order to save time, window frames have been bought by the job superintendent from a local mill. These are sometimes primed with paint by the manufacturer, and sometimes are not. If the painting contract is let by another person without knowing what has been done with window frames, it has happened that priming has been paid for twice.

In the purchase of manufactured articles such as doors and windows, and in letting sub-contracts, hundreds of dollars can be saved and better results obtained if handled by a person who by long experience has become familiar with all the details of the materials themselves, the dealers and manufacturers in various localities, and who is also familiar with the relationship of all these materials to one another, as well as with the estimate and contract.

Paint Problems.

From the Dutch Boy Painter.

Gold for Stenciling.

I would like to apply a stencil in gold and would thank you to let me know how to mix the gold.

Ans.—Mix the gold powder with one gill of pure honey to a smooth paste. Add a teaspoonful of refined glycerine and enough soft water to make it of the right consistency for stenciling. If it sets too rapidly add more glycerine.

Painting Metal Cornices in Imitation of Copper or Antique Copper.

What colors should be added to white lead to produce imitation bronze and antique copper?

Ans.—The first step in producing an imitation of antique copper or bronze is to apply a ground color consisting of white lead, chrome yellow and venetian red. The vehicle should be half linseed and half turpentine, so that when dry it will have a faint eggshell gloss, resembling dull copper. Instead of white lead and tinting colors, the ground work may be obtained, if desired, by mixing red lead with a little lamp-black.

Over this groundwork apply a copper bronze mixed with the highest grade of French exterior varnish thinned with the best quality of turpentine. When dry apply a glaze, using the best grade of French verdigris ground in linseed oil or elastic varnish. Thin with turps sufficient to produce a faint eggshell gloss.

If you do not like the greenish effect of the verdigris use raw umber as a glaze. Before the glaze has set hard a very pretty effect can be obtained by wiping out the high lights and then going over it with a blender.

Removing Sanded Paint.

Would you recommend using paint remover for removing sanded paint?

Ans.—No. Paint removers are not very satisfactory in cleaning a surface which has been sanded. The best way is to use a torch, burn the paint and scrape it off.



To protect and beautify concrete work

It is commonly agreed by architects and owners that the durability of concrete surfaces—outdoors and in—can be improved by the use of a coating which seals the surface and causes it to resist wear and weather.

At the same time rich, attractive, harmonious effects may be had to meet varied architectural styles.

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fills the pores of the surface and waterproofs it. It resists alkali action, forms a hard, dry surface to which dust and dirt does not readily cling, is easily washed, and after years of service insures a good surface for repainting. For cement floors, use

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It gives a hard, smooth surface—just glossy enough to be handsome. It protects the floor from wear, prevents dust, and lasts well. It is particularly pleasing where it is desired that the floors harmonize with the wall finish.

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See Sweet's Catalog 1914
edition, pages 1916-1917.



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Do the plans for your new house call for an unusual roof—curved, thatched, or with sharp angles? Know, then, that Flex-a-Tiles are made so that they can be bent to fit the curves in any plan. However you lay them—flat or curved—there they stay; durable, weatherproof and fire resisting.

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Coal Bin Data.



THE following information is frequently asked for by those who wish to provide bin capacity for full season's supply of coal:

One cubic foot of hard coal (stove size) weighs approximately 52½ pounds;

1 ton of 2,000 pounds hard coal occupies 38 cubic feet.

5 tons of hard coal occupy 190 cubic feet.

10 tons of hard coal occupy 380 cubic feet.

A bin 8x10x4¾ feet holds of hard coal, 10 tons.

A bin 9x10x6½ feet holds of hard coal, 15 tons.

A bin 10x14x5½ feet holds of hard coal, 20 tons.

A ton of soft coal occupies approximately 50 cubic feet.—*Ideal Heating Journal*.

Oil Bricks for Heating.

Bricks of solid oil, to be burned like coal, are now suggested by science as a practical fuel. The new science of hardening oils by a hydrogen treatment is proving so successful that the hardening of the oil is not difficult, and a few advantages can be seen for such a fuel. It could be piled up like coal, without much danger; and, stacked up carefully, it would take little more room than liquid oil.

Solid oil has been found to burn with no slag, explosion or sparks, and to give a long, bright flame. It is claimed that it is possible to produce the oil bricks at a slightly less cost than for an amount of liquid oil of equal heat value.

* * *

With a furnace in the house you need no weather bureau reports. Every time the thing starts to burn briskly you know it is much warmer outside.

—*From Birmingham Ledger*.

She Preferred Vacuum Cleaner to Automobile.

Miss Lily Dale Atkinson, superintendent of the Trenton (N. J.) City Tuberculosis Hospital, who refused to buy an automobile with an appropriation made by the City Commission for that purpose, has a vacuum cleaner for the institution instead.

The hospital is on the outskirts of the city, miles from the nearest trolley line. As the superintendent must visit the city several times daily, the City Commission thought she should have an automobile. But Miss Atkinson thought the hospital had greater need of the vacuum cleaner and spent the money that way.

The Rise of Vacuum Cleaning.

In the early part of 1900 the inventor Booth commenced considering the use of atmospheric air for the purpose of cleaning, and after certain experiments, on August 30, 1901, he applied for patents throughout the world for his invention. A search through the United States Patent Office will reveal the Booth's application, on or about the date mentioned in 1901, was filed in the patent office and subsequently this patent application was sold to Mr. David T. Kenney, a United States citizen.

The vacuum cleaning system has been developed in such a way that we are now dealing with the removal of coal dust from mines, the removal of all classes of dust from factories, such as boot factories, ore refineries, leather works, color works, printing works, etc., for the textile industry for removing dust from carding engines, for large power plants for removing dust, that is, flue dust from the boiler flues and also dust from the economizers that go with such plants, and in fact, everywhere where dust is found.



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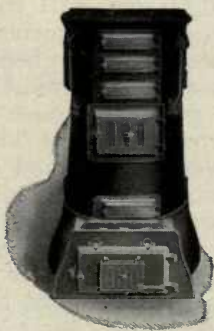
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have nearly as much selling or renting power as a finely finished parlor.



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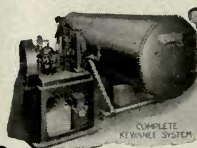


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SPLINTERS AND SHAVINGS

Cost of Residence Construction.



NO branch of building is the unit price more difficult of accurate assumption than in residence work. Not only is cost largely influenced by locality, including the local material market, wage scales, working hours and efficiency of mechanics, but it varies with the type of plan and design, while the character of construction and materials remain unchanged.

If the cost be estimated according to cubage for a certain construction and finish, it may be modified by percentage factors to determine roughly the cost of different materials, workmanship or equipment.

The larger and more elaborate the house, the more difficult it becomes to assume a cubic foot price, says Robert C. Spencer, Jr., in a recent issue of the *Architectural Record*. For the house of moderate cost, however, fairly trustworthy data can be given, remembering that they vary with locality, size and construction, and that the tendency of all forms of wood construction and wood finish is to gradually increase as our forests continue to dwindle.

Twenty years ago good small frame houses were being erected in Chicago's fashionable suburbs at seven and eight cents a cubic foot. The same houses now cost more than double. Five years ago a good frame and stucco house costing ten to fifteen thousand could be built in our western suburbs at seventeen cents, but would now cost twenty—probably more.

Simple brick houses will average not more than 20 per cent more than frame and "stucco."

Combination Brick and Stucco Houses.

The combination wall of brick for the first story and stucco or stucco and stained wood above will cost usually nearly as much as the all-brick building, but has a picturesque and lively quality, which renders it suitable to some sites,

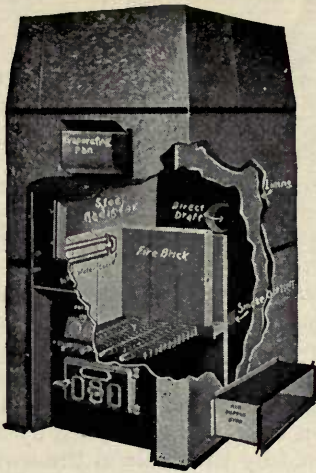
while the frame walls of the second story may be readily extended in the form of bays, overhangs, or upper porches, allowing greater freedom in planning the upper floors.

In some localities where gravel or crushed stone is close at hand, hollow cement block for outer walls, including foundations, compete in cost with ordinary frame construction, but are unsightly unless cast without facing and the walls "rough-casted" all over. Hollow terra cotta blocks similar to those used for the partitions of fireproof buildings take and hold cement rough casting well, but the cost is so variable at the present time that the writer would hesitate to name a cubic foot price for the Chicago suburbs with which he is familiar. For the construction of a simple, square cottage costing \$3,500 at Concord, Mass., the architect states that it cost but 8 per cent more than a shingled, frame wall construction according to the bids received. On a \$15,000 hollow tile and stucco house recently built, 3 cents a foot covered the difference in cost for the same house in frame and stucco according to the bids received. But the 26-cent house had no furring or lath. It is not advisable to dispense with wood furring and lath for the inside of exterior tile walls. The furring will almost save its cost in the labor of cutting for pipes, conduits, etc., but the lath, preferably metal, is of course an added expense.

Cost of Tile Houses.

We have had tile cottages built as low as 15 cents and I quote Lawrence Buck's published statement that his own charming story and a half hollow tile walled house at Ravinia cost but 18 cents, including a roof of heavy interlocking red tile.

Brick veneered houses are warm and durable, and in most localities cost somewhere between the price of frame and solid brick. On one \$8,000 house we found a saving on comparative bids of



Your House May Be Beautiful,

Its construction perfect, its arrangement and furnishing artistic, but it will not be a *home* unless it is *comfortable*. Your comfort will depend on your heating system; and the success of the heating system will depend on the man who plans it. It makes no difference what system you use; if it is improperly planned the comfort won't be there.

Our hot air furnaces are not offered through dealers, and the main reason for this is that we want close touch with the home builder; we want to plan the arrangement of the heating apparatus, to specify the size and position of furnace, pipes, registers, air supply, etc., so that we can make his home comfortable and thus succeed in our heating business.

To this end we invite you to send us a sketch showing the sizes and arrangement of the rooms in your house. We will make a plan, drawn to a scale, showing exactly how we would arrange the heating equipment, and with this plan we will submit an estimate of expense, telling you just what the equipment will cost, all made to fit your house and delivered at your railroad station. ¶ We will guarantee to warm the rooms comfortably in coldest weather, and we will let you try the equipment till January 1st, before we are paid, you to deposit the purchase money in the hands of your own local bank, to be held subject to your test of the heater. We pay freight charges and guarantee arrival of the material in good condition. ¶ Thousands of our equipments have been placed in this manner, and we can refer you to someone in your neighborhood who uses our furnaces. ¶ Selling *direct from factory to consumer*, we can save you some money. Write us today, while you think of it. We make no charge for plan, estimate and furnace booklet, and you are under no obligation to buy.

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The interior finish that will satisfy you

The Northern Hemlock and Hardwood Manufacturers Association

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only \$100 in favor of brick veneers, so naturally used solid brick.

Stone is seldom used for wall construction in the house of moderate cost, although in many localities it will compare closely in price with brick.

The cost of foundation material is decidedly a local question as between brick, rubble stone or concrete. For a small house, hollow tile or hollow concrete blocks are strong enough and sometimes cheaper.

The cost of a good shingle roof covering is roughly from 7 to 8 cents a square foot or \$7 to \$8 a square, as builders estimate it. Shingle tile are worth from \$16 to \$20 a square, including trimming and flashing, depending upon the character and size of the surfaces to be covered. Slate costs somewhat less, varying in quality and surface exposed to weather.

A few years ago solid brick-walled and shingle-roofed houses of good size could be built at twenty-five cents. The price of brick has since increased materially, and local wage scales are higher, with wood framing, floors and finish more expensive. Each year, too, the standard of quality demanded is higher, particularly in the matter of equipment. Wiring for electric lighting, formerly largely done in the cheapest way, is now run in metal conduits. The bathroom floors must be of tile instead of wood. Piping for vacuum cleaning must be installed, and maids' quarters must offer the equivalent of good hotel accommodations, so acute has grown the servant problem. The old-fashioned, wide open porch is now a sort of over-windowed annex to the living room and must not only be glazed with sliding or casement sash, but provided with enough radiation to render it livable all winter.

For small frame houses, wide, sound, tight, stained, lapped, knotted boards, ship-lap or boards tongued with rebated battens to shed rain are the most economical exterior covering over sheathing and waterproof building paper or "quilt."

Shingles have nearly doubled in cost in the last five years.

None of the cubic foot costs enumerated make allowance either for architects' fees or the work which must be done upon the grounds about the house.

Builder's Insurable Interest.

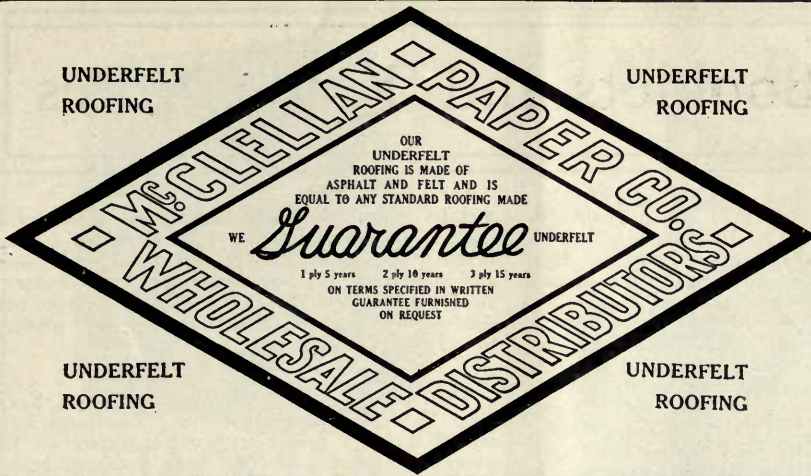
A builder who has agreed to erect a building, furnishing the materials therefor, has an insurable interest in the structure, irrespective of payments made to him by the owner. On destruction of a building which was insured and destroyed in the course of construction, the builder was entitled to recover only the value of the building at the time of the fire, less its value when he commenced work.

A building contractor is not liable in damages to the owner for delay in completing contract work, if no practicable apportionment of the delay caused by him and that caused by the fault of the owner or his architect can be made. (*Washington Supreme Court, 132 Pacific Reporter 1015.*)

The Employers' Liability Law.

The new California employers' liability law, which became effective on January 1, has been the source of much discussion in trade circles here. The new law makes an employer liable for all injuries to or accidental death of his employes while in his employ, except in cases of intoxication or of wilful misconduct; and negligence on the part of the employe does not relieve the employer from liability for damages. Another feature of the law is that the contractor, owner and financial backer are all liable in the order named for injuries to workmen. If the contractor does not pay the damages, the owner must; and, in case the owner does not, the financial backer becomes liable. The net result of this is that contractors are virtually compelled to insure their employes before beginning work on a job, as the owner and the banks insist that they shall be protected from their liability. It now appears that all of the brick manufacturers and brick contractors will take advantage of the insurance features of the law and have their employes properly insured. While sentiment is not unanimous, the general idea seems to be that in the end the law will work out all right, since the insurance will eventually be paid out of the wages, and the employers will be relieved of the danger of expensive damage suits in case of injuries to workmen.

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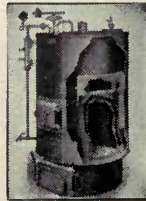


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New Booklets and Trade Notes



E have received from the publishers—Bobbs-Merrill Co., Indianapolis, Ind.—a copy of *Architecture* and the *Allied Arts*, by Alfred M. Brooks, Professor of Fine Arts, Indiana University.

This very beautiful and interesting work is a volume of 250 pages with over 150 illustrations very carefully and intelligently selected. The large, clear type and wide margins add to the attractiveness of the volume. The price is \$3.50 net.

The work is not at all in the nature of a textbook or even for reference, though conveying a fund of information in an informal manner. It is a study of architectural ideals rather than a presentation of architectural models for modern use. It is valuable as a source of inspiration for refined architectural style and as outlining the broad, basic principles of plan and structure.

While modern conditions may not permit a close adherence to the great historic styles, an intelligent study of them goes far to lift modern design from the trifling and the freakish, which characterizes too much of our modern work. Such a study is interesting to the general reader as well, indeed, to all who desire culture in any form.

We make mention also of a work, something less ambitious, but on extremely similar lines, and perhaps even better adapted to the general reader in its treatment of identical subjects.

Historic Architecture, by W. J. Keith, while a smaller volume, contains nearly the same illustrations of historic masterpieces, together with many views of English and Continental domestic architecture, the prototypes of much of our own modern residence work in English Cottage and Half Timber, Spanish and Moorish design, Italian Villas and French Chateaus. The text is clear and concise, but simple and informal. *W. J. Keith, Publisher, Minneapolis, Minn. Price \$1.00.*

* * *

The Art Metal Construction Co., Jamestown, N. Y., issue a symposium of four very artistic booklets illustrating the advance made in art

metal fittings and embellishments for public buildings. The booklet devoted to *Libraries* is particularly noticeable, showing the metal book stacks and staircases, as well as other metallic fixtures. In *Banks*, the field for art metal is large, and the booklet devoted to this branch of their product is very comprehensive.

* * *

The Kelsey Warm Air Generator Co., Syracuse, N. Y., in addition to other publications, have issued a large folder with photographs on the covers of a handsome New York residence heated by their system, with complete floor plans on the inside showing the disposition of all heat outlets and ventilating ducts. It is instructive and interesting.

* * *

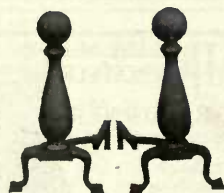
We have received from H. B. Wiggins Sons, manufacturers of Fabricona Woven Wall Coverings, one of the handsomest folders which has ever come to our table. It is in book form, showing panels displayed at the Exposition of Craftsman Home Builders, and these panels illustrate the varied possibilities of Fabricona goods. The panels can be slipped out from the sheets to which they are attached and folded back on a center line to represent the corner of a room, thus giving a better idea of the effect. Full directions accompany each panel also samples of the actual goods, so that the scheme can be reproduced anywhere.

* * *

The Belden Brick Co., Canton, O., send us a very artistic booklet illustrating in colors their high class product. It would be difficult to find richer colors or more interesting textures than those shown in this catalog. Specially attractive, we note the shade 61, a rough texture brick in gun metal, purple and red coloring, laid with a chocolate joint. In decided contrast to this is the shade 52 laid in Flemish Bond, a rich red stretcher and seal brown header alternating. The joint may be any color preferred, but as illustrated and laid with a white joint produces a wonderfully cheerful result. The Tuscarawas, just as they come from the kiln, are full of new, beautiful colorings—purple, brown and golden shades and soft, velvety texture. The Belden Co.'s policy of making but one line of brick at each plant insures great perfection of workmanship and permanency of color.

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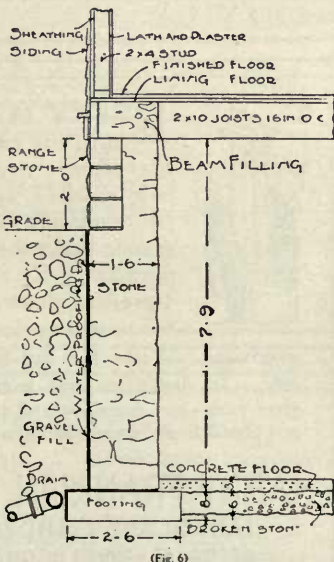
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the trick, and they give diagrams, facts, and figures to prove it.

* * *

The spring booklet of Harry Franklin Baker, landscape designer, Minneapolis, is well calculated to set people longing for "green things growing." The cover is an exceedingly soft and harmonious landscape in greens and yellows, buffs and browns; while the sepia half-tones inside are artistic and delightful. They show quite wonderful results obtained from first year's work. "The man who builds well and plants intelligently per-

forms a public service," is the slogan of this gardener, and it is a good one.

* * *

The Alabastine Company, Grand Rapids, Mich., is pretty well advertised, but the very attractive cover of their new booklet—The Alabastine Book—is quite inspiring. There are also many color plates of interior decoration in the pages, and a book of stencil designs accompanies it.

* * *

The Chicago Dryer Co., specialists in laundry equipments, send us their booklet acquainting the public with their devices for simplifying and improving this work in homes and small buildings. Their very complete system of heating and ventilating cabinets as well as their outdoor sun-dryers are well worth investigating.

* * *

The Richards-Wilcox Co., Aurora, Ill., issue a booklet full of interest to all who run a car. It is titled *Doorways*, and deals with the garage door problem. How to hang them and how keep out the weather. Working drawings showing how this firm handle the problem are presented in their comprehensive booklet.

* * *

The Lowe Bros. Co., Dayton, O., are wide awake to the benefits of attractive advertising. They have just issued a series of three booklets—titled respectively *Varnishes*, *Paint and Painting*, and *Homes—Attractive from Gate to Garret*. The latter deserves particular mention as the last word in booklets, from its soft and lovely color-cover right through. Every page is a picture, a study in beautiful color and press work; while the accompanying text is most illuminating. These booklets are cheerfully sent on request.

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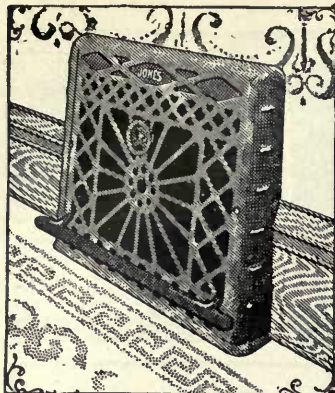
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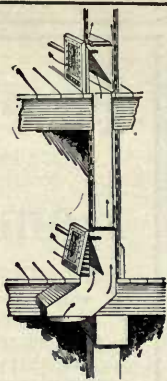
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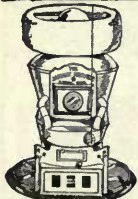
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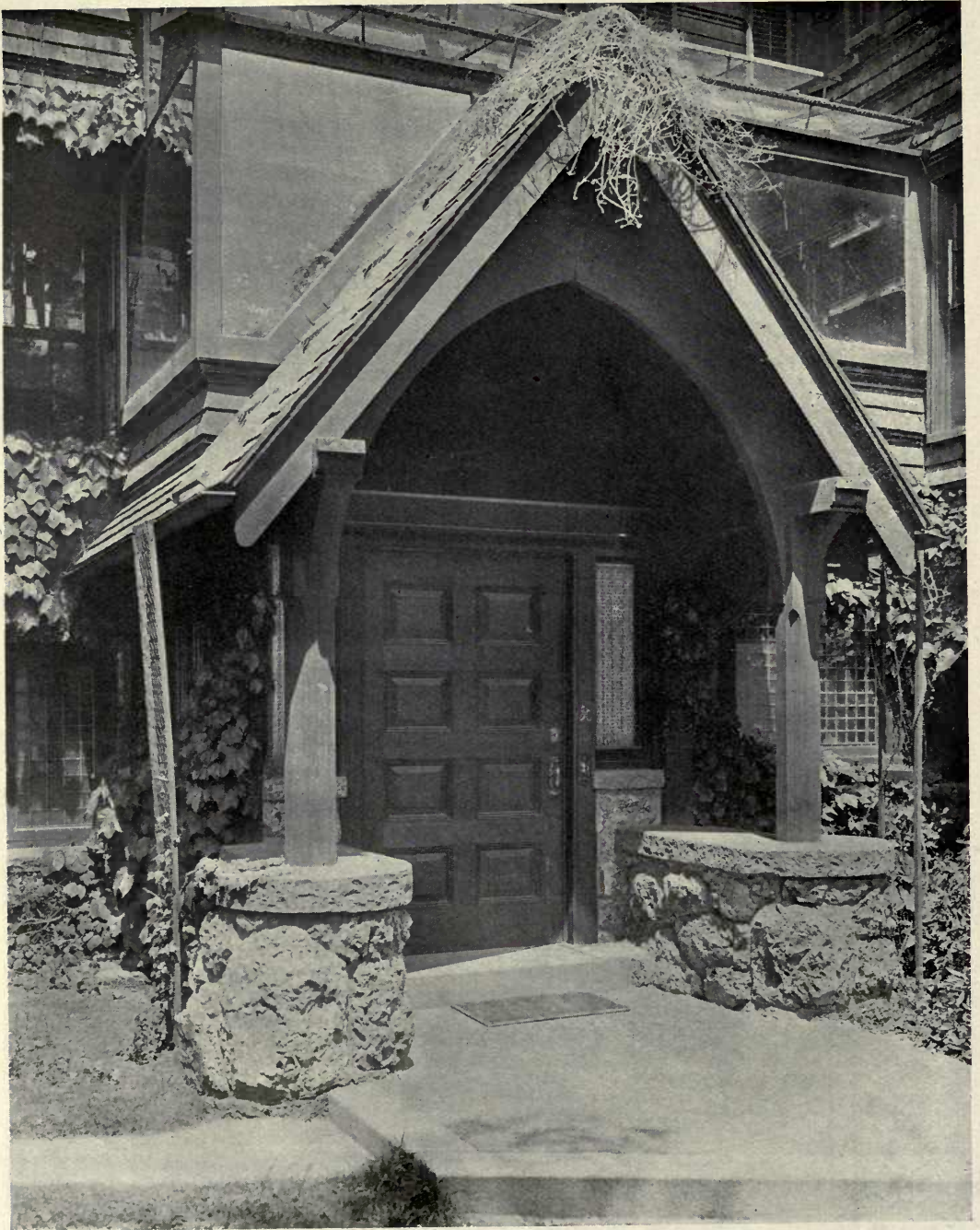
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An Entrance with Gothic Motif.

KEITH'S MAGAZINE

VOL. XXXII

JULY, 1914

No. 1

Modern Entrances of the Best Types

E. I. Farrington

FIRST impressions are lasting and the first impression of a house is certain to be obtained from the entrance. It has been said that the character of the man who lives in a house may be determined by his front door. That is not altogether true, of course, for in these days, when architects are given much latitude, it is quite possible that an attractive entrance doorway may be devised and executed for a house owner who is quite incapable of appreciating it. It is a fact, however, that an entrance gives expression to a house and therefore must receive the most careful construction. For a long time the old colonial doorways of the eastern towns have been held as a standard and it is very difficult to improve upon them. Very many modern houses are built with adaptations of these old-time entrances, but some architects are beginning to work along an entirely different line.

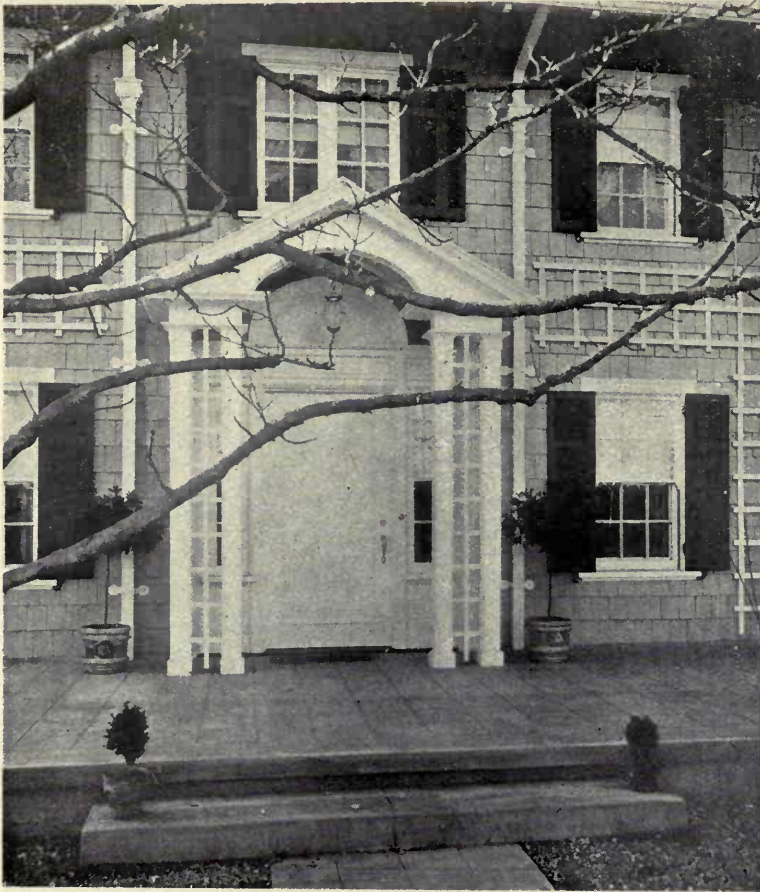
A house need not follow any definite style in order to be attractive. The same applies to any details of the house, including the entrance. There are several points, however, which must not be overlooked under any circumstances. This applies to proportions and materials among other things. The old colonial houses were built as a rule without piazzas or porches across the front, excepting those found in the South, where pillars extending to the roof were common.

With many styles of architecture, it is still found preferable to have nothing more than a small entrance porch in connection with the front door. A small porch is a decided improvement. If there is no porch at all, there should be at least a hood over the doorway. In some houses an attractive effect is secured by making a square hood with a light iron railing around the top.

It is quite the custom to build houses very close to the ground and the result was almost invariably picturesque, especially if there was a single wide brick or stone step in front.



Colonial Entrance to a Modern House.



Successful Use of Lattice Work.

The ordinary cottage of modest proportions has a simple flight of steps with a broad landing at the top. Such steps should preferably be of wood or brick when attached to a frame house. Cement steps look quite out of place, although they may be used if the house is elevated from a street and a long approach is required. If the house is stone or brick, cement steps are allowable, although stone is to be preferred. About the only place for using iron side railings is in a connection like this. The iron work blends in well with the brick and the stone.

The steps leading to a front entrance should invariably have a low riser, in order that they may be easy to ascend. As a general rule it may be said that the

sum of the riser and tread should be seventeen and one-half inches. Seven and a half inches should be the maximum height for any riser and an eleven-inch tread is really better than one of ten inches.

It is easy to make an exceedingly attractive front entrance, if brick is used for the approach and this approach divided into two or three landings wider than the steps, with the steps made only the height of a brick set on edge. If this arrangement is properly carried out, even a comparatively high house may be in effect brought down close to the ground.

It is a very frequent custom of architects to use pillars at the front entrance, even when the true colonial form is abandoned. The Doric column is probably used most successfully for a house on simple lines, as it helps to produce a restrained and unostentatious effect. On houses of a more pretentious character it is customary to use the Ionic capitals.

It is getting to be quite a fashion to build modern houses with a recessed porch or façade, especially in the case of somewhat pretentious dwellings. The result is often extremely good, particularly when the entrance is emphasized by two exterior columns with a small hood.

Lattice work is being used rather freely by a number of architects in order to create a homelike atmosphere. The re-

sults are good if the lattice work is not too heavy. Some architects, and more particularly some home builders without much architectural knowledge, seem to work on the theory that if a little lattice work is good, more must be better.

A word must be said, too, about the pergola as adapted to house entrances. The pergola craze has spread over the en-

over, but from an architectural viewpoint he could hardly have made a greater mistake.

At the same time, it must be said that it is quite possible to design an attractive and appropriate entrance for even an unpretentious house by the use of the pergola. A number of bungalows in California boast of pergola front entrances,



An Interesting Use of Art Glass in a Modern Entrance.

tire country; house architects as well as landscape architects have not escaped the infection. Houses and gardens everywhere are being pergolarized, too often with effects which are actually ludicrous. There is an example in the writer's town. The owner of a simple, little, old-fashioned country cottage, painted white, desired to construct a new entrance and accordingly fell in with the popular notion and built a huge white pergola across the door. Doubtless he will find this pergola excellent for growing a grape vine

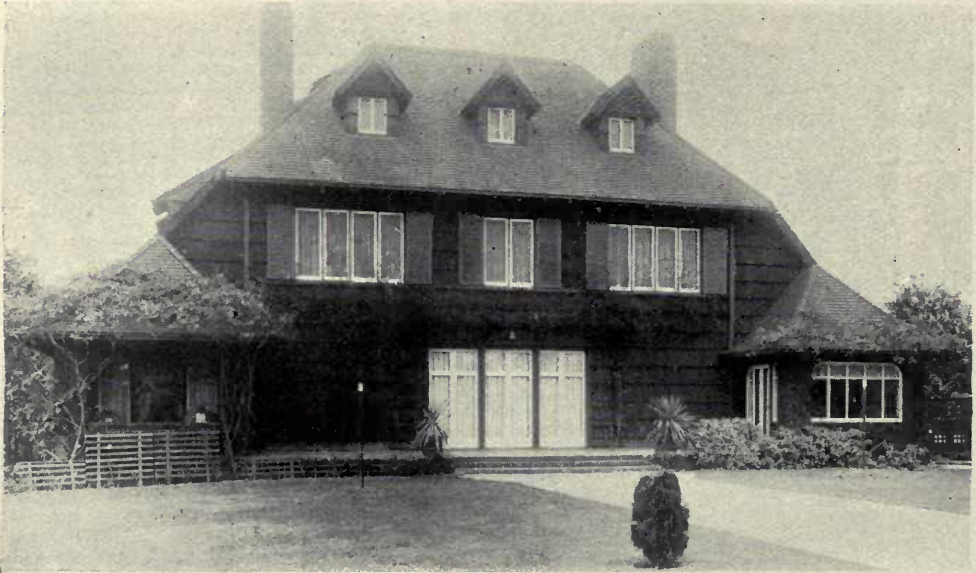
which seem entirely in keeping with the character of the houses. Nevertheless, it takes a first rate architect to use the pergola in this way.

Coming to the door itself, we find a great variety of designs. As a rule a door fitted with glass should not be flanked with side lights, yet there are exceptions. Side lights are perfectly appropriate when the door has only a single pane or a bull's eye near the top, and under some conditions more glass can be used without offense. However, the rule that the glasses

should be either in the door or at the sides holds good in most cases. In many of the old houses there was a fan-shaped window over the door, but this plan is seldom carried out in modern houses except when they are designed on typical colonial lines.

At one time two narrow doors were much in favor, but nowadays single doors are used almost entirely and are much preferable. Such doors are tighter and

ped, they ring a bell in the house. It is not necessary to spend one's time cleaning brass trimmings. They look quite as well after a while, if allowed to weather. Moreover, cleaning is very sure to remove some of the paint. Brass ornamental hinges are not to be recommended. It is much better to use wrought iron for hinges, when the hand-made appearance is desired. Bell pulls are preferable to electric bells, from an artistic viewpoint



Unconventional Entrance to a California House. A Pergola Thatch Over French Door Which Opens Directly Upon the Brick Terrace.

are not so likely to warp. Moreover, they make a more attractive appearance. Some of the best modern doors are made with solid center panels and when painted white are most pleasing. A good oak door may be given a natural finish and will look well for many years. Pine doors are much better painted white. As a rule, an entrance porch and door are more attractive in white than in any other color.

Brass trimmings are effective and, if there is a solid door, a brass knocker is a pleasing accessory. Modern knockers are so arranged that, when they are drop-

ped, they ring a bell in the house. It is not necessary to spend one's time cleaning brass trimmings. They look quite as well after a while, if allowed to weather. Moreover, cleaning is very sure to remove some of the paint. Brass ornamental hinges are not to be recommended. It is much better to use wrought iron for hinges, when the hand-made appearance is desired. Bell pulls are preferable to electric bells, from an artistic viewpoint

at least. All trimmings for the door should find their beauty in shape rather than in ornamentation. Over-decoration is to be deplored. Architects who have broken away from the colonial habit are securing some decidedly interesting effects in their management of doorways and entrances. An example is shown in one of the accompanying illustrations. The house, which savors of the Austrian type of architecture, is as thoroughly modern as it well can be, and the entrance is made directly from a brick terrace, reached by two or three wide steps. The doorway is not re-

cessed and has no hood; in fact, it is almost startling in the way it ignores accepted rules for entrance construction. The doors are filled with glass and flanked by a window of exactly the same size on each side.

Architects giving their attention to the bungalow form of dwelling have been particularly bold of late in departing from time-honored customs. It is especially true on the California coast, where some very interesting houses of this type are being constructed. The western architects are not afraid to decorate their houses freely and an interesting case in point is the use of art glass as shown in one of the ac-



Unusual Recessed Entrance.

companying illustrations. The doorway shown is very beautiful as seen from within while daylight lasts, and from without at night, when the hall lights are on.

On each side of the side entrance door is a small door of similar design which is opened in summer for additional air and ventilation. The way all three doors as well as the windows have been composed is particularly interesting.

The last illustration shows an entrance of cast concrete. Cast concrete stone, forms the entrance, and the belt courses and sills were cast in sand molds, except the lintel of the portico, which was cast in a glue mold. The aggregate was crushed field stone.

The lintel over the entrance is a single casting of reinforced concrete, conforming in shape to the typical elliptical concrete arch and showing bold relief, which is possible to cast only with glue or plaster molds. A concrete of considerably lighter tone was used for the lintel than for the trim in order to give greater prominence to the design.



Cast Concrete Stone Entrance Detail.

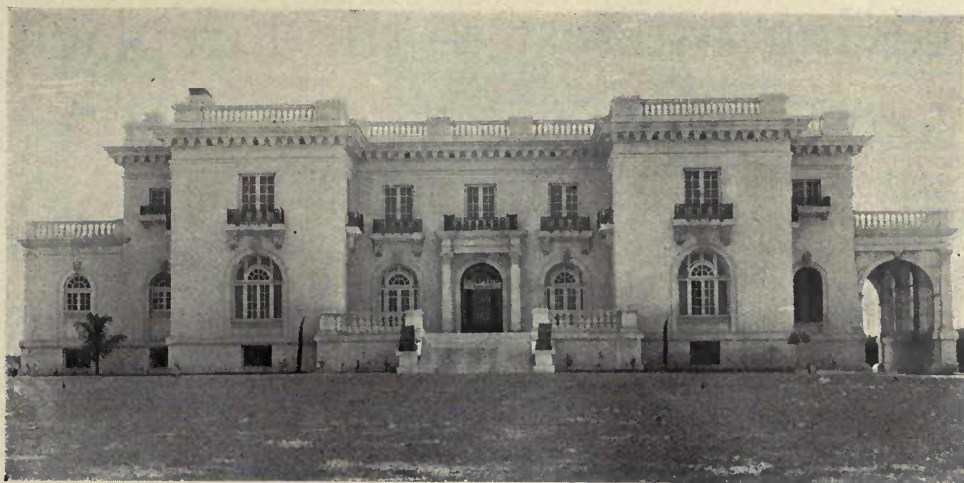


The Purity of This Composition Will Be Justified When Relieved by Proper Plantings.

New Ideas in Plaster Homes



Where "Old Chester" Feeling in the Half Timber Treatment Is Harmonized with the Plaster.



One of the Stately Homes in Oak Knoll in Pasadena. The Openings Are Gems of Architectural Design.

Photographs by Una Nixon Hopkins



Another Magnificent House in Pasadena, Where Very Free Use Is Made of Wrought Iron, Flower Boxes and Ornamental Window Heads to Relieve the Wide Extent of Plain Plaster.

Giving Interest to the Fireplace

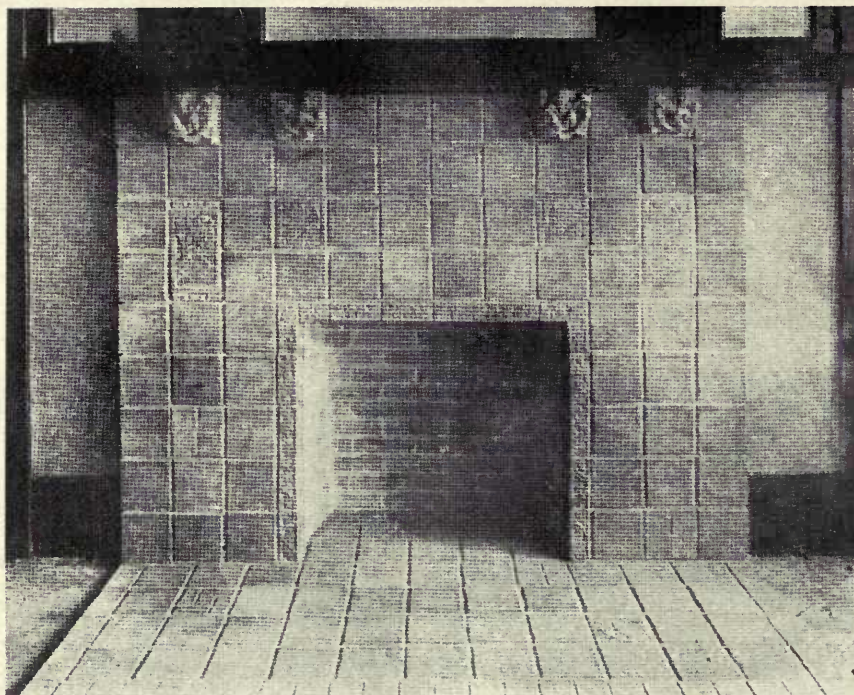
"A Breezing Ingle and a
Clean Hearth-Stone."

—*The Gentle Shepard.*

A HALO of romance and storied lore has ever encircled the open hearth. In the olden times the fire on the hearth was the sign of wide-doored hospitality and betokened friendliness, with its ruddy welcome.

*"Come, sit beside my hearth;
'Tis wide, for gentle companie."*

Gone are the old days, and with them the broad-breasted, deep-chested chimney pieces of our forefathers. It would be impossible to fit those great fireplaces with their roaring blaze—to our modern homes and our modern ways. Nevertheless in the last decade, there has been a great reaction toward the open hearth



Fireplace in the Home of Dr. E. S. Merrill, Los Angeles, Calif.

was the friendly message conveyed by the open fire. It was the symbol of home, the synonym of gladness and good cheer. To sit by one's fire was the privilege accorded to intimates or the welcome extended to the guest. *"Thou didst swear to me upon a parcel-gilt goblet, sitting by my sea-coal fire,"* was the reproach of Dame Quickly to her faithless lover.

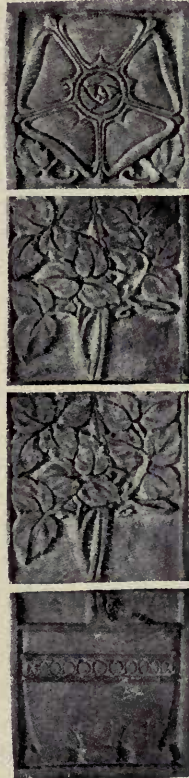
in some form in the house. Those awful years in the middle of the last century when the fireplace was utterly discarded in favor of the furnace and the atrocity of the "air-tight" stove, have passed, and we have returned to the friendly corners of the inglenook and to the social significance of the open fire. True, the fireplace and the chimney breast are often thought

of and desired for their decorative value merely, as a now necessary part of the architectural treatment. It is one of the curious and incomprehensible differences in people, that there are those who having handsome fireplaces enriched with ornament and the rich tones of handsome wood, never add to this beauty the warmth and brightness of a glowing fire, nor do ashes, shavings nor even soot, nor all the unholy litter of the fireplace devotee weigh in the scale against its message of cheer.

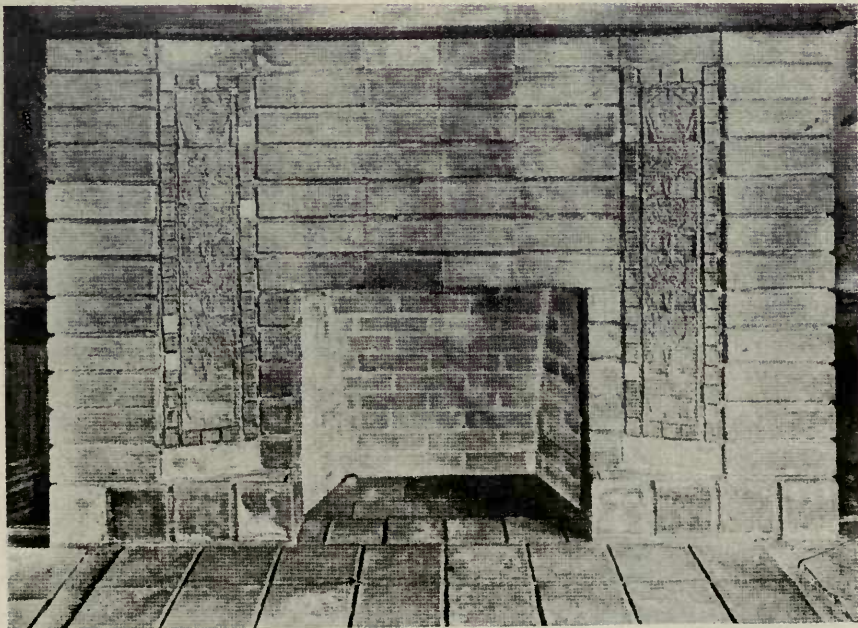
It is rare indeed, nowadays, to find a house with any pretension to design, which is not provided with one or more fireplaces. As a center of interest in a room, there is nothing approaching it. Endless are the materials and the combinations of material used in their construction. But we wish in this

article to present to our readers something original in decorative tile.

The name of Rookwood is a household word; but way off in California is manufactured The Batchelder Tile, which for exquisite beauty and softness of coloring, interest in design and permanence of product, will stand beside if not before that noted tile. Earnest A. Batchelder, artist and author, and noted art-constructor, is the originator of these hand-made tiles, a new movement in art and color, destined to be famous. The industry started as a back-yard experiment; and within a period of two years has experienced such a demand for the tile, as has resulted in a permanent factory with a capacity for turning out 4,000 tile at one firing. The tiles are hard wrought, by their own peculiar processes,



Enlarged Detail.



Detail of Rose Tree Tile in Fireplace of Mr. John E. Marble, Pasadena, Calif.

and have the slight variations in shape, hazards of the kiln, which distinguish them from machine-made tile, and which while unsought, are desirable and inevitable, like the irregularities of a real Oriental, hand-woven rug. The likeness to the Orient does not end here, for the singularly rich and harmonious coloring of these tile suggest the blue-deep well of the desert, the green of its bersim fringe,



Peacock Tile, 10"x10", Price \$2.00.



The Cymbal Player.



The Lute Player.

the mauve and saffron-red of the sky and the grey-brown of its sands for the background of this soft glow of color of a rainless land. The color effects, though so rich, are soft rather than bold, musty pinks, greyish greens, blues of an Egyptian tomb—warm reds—blended into dull and brownish tones or with scumblings of blue and green. Like a rich, antique Persian rug, they are rich, warm but mellow, and blend in delightful harmony with the darker tones of rich woodwork. When set in place and the face of the tile oiled and rubbed down, they have the finish of soft ooze leather, instead of the shine of varnish.

This whole product shows the individualism of hand work. The clay is rolled out by machinery it is true, but each tile is cast in its individual mold, from their own designs, which are far and away from the hackneyed and the commonplace of machine-made tile. Nor is the expense prohibitive; in



Landscape Tile, 8 1/4"x8 1/4", Price \$1.50.



The Singer.

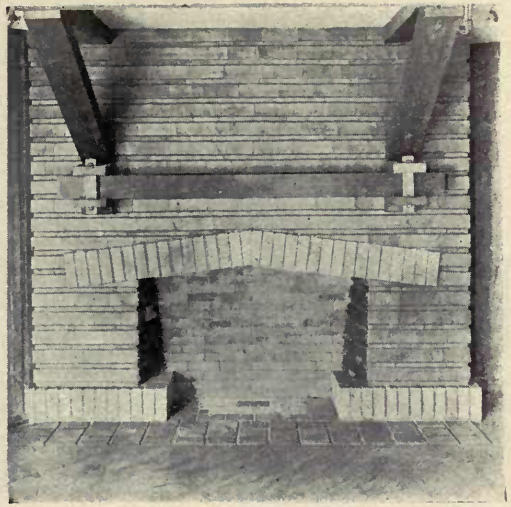


The Trumpeter.

spite of the individualistic character of the work, the plain tiles for hearth or facings sell at \$1.00 per square foot, each order laid out as it is to go when set, and the color scheme adjusted. The illustrations give an idea of the prices of special tile for inset work.

The Batchelder Tile have been taken up by artists and wealthy people for many uses, as for instance, a San Diego artist has used for decorative effect on the entrance to his studio, large insets, representing a flaunting peacock in foreground with castle walls rising behind. The rich tones of blue and green in the bird, the dull reds of the castle walls relieved against the creamy plaster, a beautiful and individual decoration. The larger part of their output however, is designed for fireplace and hearth—which brings us back to our starting point—giving interest to the fireplace.

These wonderfully soft yet luminous color effects are nevertheless all mural colors, and will stand fire and glazing without flaw. The illustrations present a few of the fireplaces in which these tile have been used, with enlarged detail of



Fireplace in Home of Mrs. Glass, Los Angeles, Showing New Method of Recessing Tile.

the corbels supporting the mantel shelf of the Merrill fireplace and of the Rose-Tree design inset on the vertical sides of another. In the latter, the plain tiles are a grey-blue in tone while the Rose Tree is brownish pink with subordinate tones of green and brown. The small landscape design is particularly interesting, having the pictorial quality in a marked degree.



The Vine and Peacocks—A Horizontal Panel in Two Sections. Price of Each Section, \$2.50. Total Length, 36 Inches. The Peacock Is a Favorite Subject of the Batchelder Tile and Is Introduced Freely in Their Designs. Its Rich Coloring of Greens and Blues Against the Mellow Backgrounds Are Always Delightful.

A House for \$300

A Summer Cottage for a Song

Mabel Putnam Chilson



IHAT a livable house can be built—and well built, though of box frame—out of the average man's savings for a year, has been demonstrated of late in California, where groups of the accompanying cottages are being erected, to accommodate the man

colonial stock doors. Ceilings are finished in different toned burlaps, according to color schemes desired, and are paneled in squares, batten-finished. Windows are hinged to swing inward, screen being used over each. Doors of screen are supplied, also patent terra



Cottage No. 1.—In the Peach Orchard.

of small means, who nevertheless would like a summer home.

It is, indeed, possible in California to live in these little houses all the year round, if one happens to be in a protected locality; but they are designed primarily for summer homes, the walls being of one thickness only, battened both inside and out. Redwood boards of twelve-inch width and one-inch thickness, surfaced on one side, make the walls of the house; three-inch redwood battens, surfaced on three sides, being used on the interior. The doors are the ordinary five-panelled

cotta flues standing on iron brackets; sinks of white enamel, with one cold-water faucet, a drain shelf, P trap and wastepipe. Clothes hooks, shelving, and curtains of burlap for closets, complete the interior. Obviously no stationary tubs for bathing or washing, and no hot-water pipes are used.

The porches of cottages No. 1 and No. 2 are covered by roofs, but cottage No. 3 has a pergola finish, flower-boxes being hung outside the porch-rail, instead of under the windows.

These little places may or may not be



Front View of Cottage No. 1.

painted—preferably not, as the unfinished lumber absorbs quantities of paint. It is, nevertheless, advisable to paint the doors, sills and trim, on account of looks, as well as for protection from the elements.

Building restrictions in cities would, of course, preclude the possibility of erecting these cottages; but in the suburbs, or at watering places and other summer

resorts, they are ideal for summer use. They would require the heat of a stove in cold weather; and the inconvenience of outside toilets would be an added hardship for winter usage. However, one set of these little buildings was designed for a company promulgating the small chicken-ranch idea. For such places, individual cess-pools are dug, at least 25 feet from the houses, patent toilets being set



Cottage No. 2.—Sonoma Vista.

on the back porches. For places where the houses are built in groups, a community cess-pool is sometimes used, piping from each individual building being in order.

The set of houses herewith shown is built in a peach orchard, each purchaser being allotted a certain number of trees, according to the size of his lot. The trees are full-bearing, which is an allure-ment for the prospective buyer.

Ingenuity of design for outside trim, window-box and railing, are to be encouraged. There should be an overhang of at least a foot, but more than that would have to be figured as an extra; though for hot weather nothing is more desirable than a broad expanse of roof. Some of these houses have been built at a cost of not more than \$200, while some of them have run up as high as \$400, according to the particular desires of the buyer.



Cottage No. 3.—With Pergola Over Porch.

As many people object to sleeping indoors, cottage No. 2 is designed with a view to having a screened-in porch at the end, with nearly all the end wall made into rolling doors. This plan is optional with the builder, the idea being to roll cots out onto the porch at night, and be enabled to keep them inside during the day time. An additional expense of at least \$20 accrues where this plan is adopted.

Lattice-work makes a pretty finish for the foundation, allowing plenty of air to circulate underneath the low floors, laths serving this purpose very well.

Obviously the man who builds a group of houses gets a better price proportionally, than he who builds but one. Nevertheless, the single-house man is more interesting to the contractor, for in him lies individuality and earnestness. He is not generally speculating, so the contractor knows the work must be better done; in the long run, this will give to the builder a better advertisement than to show a group of buildings hurriedly thrown together, for speculative purposes. For it is a deplorable fact that when houses are built for sale or speculation, they are slaughtered.

A Japanese Room

Arthur E. Glead

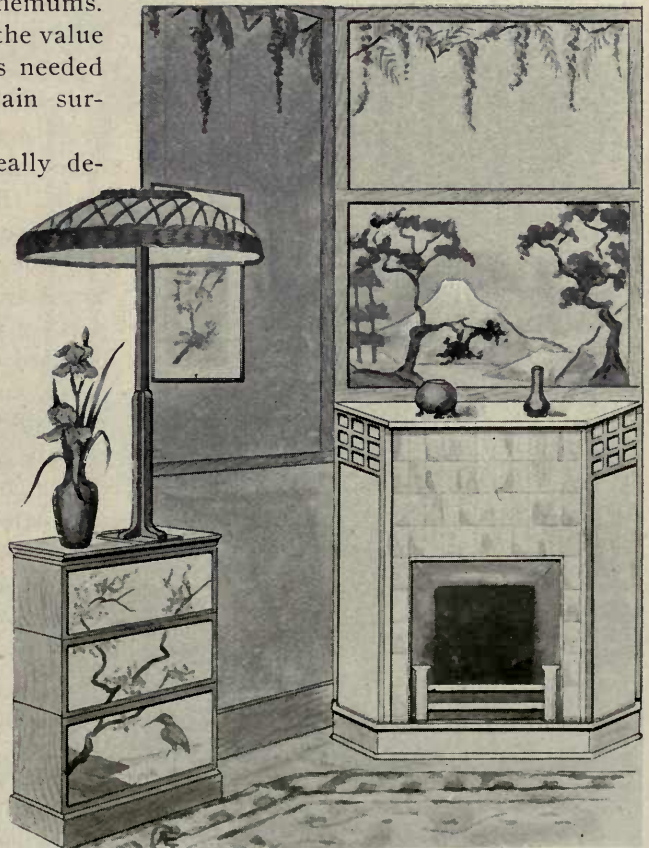


THE Japanese are such wonderfully clever decorative artists that it would be greatly profitable to anyone about to decorate a room to study their methods. They study natural objects with almost microscopical keenness, yet they have the gift of adapting the forms and colors they observe to fit perfectly the requirements of good decorations. Take as an instance one of their four-fold screens, and notice how gracefully they will make, perhaps, a pine branch stray across the upper panels, and then satisfactorily fill the lower space with a group of irises or chrysanthemums. They seem to know instinctively the value of open spaces, and how little is needed to add grace and beauty to plain surfaces.

In these matters they have really developed far beyond us, for in our attempt at decoration we too often surfeit ourselves with pattern and color. There is something distinctly wrong with the way we paper our walls with a patterned paper and then overlay it with pictures. Either the wallpaper should be pleasing enough to form a background for the room, or the pictures should be given a chance as effective decorations against a plain surface. It is true we are reforming these matters and plain papers or those with very indistinct patterns are now much in use, yet we still need to bear in mind the fact that complexity of design is inartistic and soon becomes irritating, and

that the beauty of simplicity is its restfulness. On these points the Japanese can teach us much, so their ideas are worth studying.

In suggesting a Japanese room it is not intended that we should make a replica of a room as found in a Japanese home, for to so decorate would be an affectation and result in a room entirely unsuited to our daily routine of life. The idea is to adapt Japanese decorations to our requirements, producing what might be called a Japanesque effect, but retaining all those furnishings we are used to



Treatment for Fireplace and Sectional Bookcase.

and which give our idea of comfort. Rooms in Japanese houses are almost bare of all mural decorations, the walls are severely divided into panels with perhaps a print or two to relieve them, the partitions between the rooms are mere paper screens, and the furniture is of a height to accommodate a kneeling posture. For us to adopt all this would, of course, be absurd, but we could arrange a room with panelled walls decorated with a Japanese frieze, have furniture on simple dainty lines and woven wicker

chairs, and with cushions and hangings embroidered with Japanese designs, and so produce an interior that would suggest the spirit of Japan, but at the same time be charmingly comfortable for us.

The illustrations given are for a room of this character. The color scheme is the neutral buff shade of Shantung silk, together with a willow green, as a background for the more lively tints of wistaria and chrysanthemums. The ceiling is tinted a pale ivory shade and the walls painted neutral buff. Flat toned oil paint is used for the walls, as this gives a soft velvety surface as well as unfading, washable, and wearing qualities that are invaluable. The wood panelling is stained the yellowish green of willow bark, and runs from the ceiling to within three feet of the skirting board. It is of the lightest material possible, the wood being two inches wide by a quarter of an inch thick. Basswood, Georgia pine, or whitewood are suitable as they are free from heavy grain markings, and when stained would harmonize completely with the light buff walls. Below the panelling is a dado of Japanese matting three feet wide and joining the skirting board. This matting forms an excellent covering for the lower parts of walls, as it will stand any amount of hard wear and can be easily dusted clean, and even washed when necessary. It should be chosen with as little distinct pattern as possible, and in the present case a combination of natural straw color and pale green would accord excellently with the upper walls. The standing woodwork, that is the doors, window frames, etc., must be made to harmonize with the walls. If they happen to be finished with a light buff stain they will need no further treatment, but if stained dark or painted they must be repainted willow green to match the panelling. The same with the floor, if of light polished hardwood a few rugs and mats of Oriental design will complete it, but if the boards



An Attractive Corner for Afternoon Tea.

are in bad condition they could either be painted dull buff or completely covered with straw matting, over which could be laid whatever rugs seemed necessary.

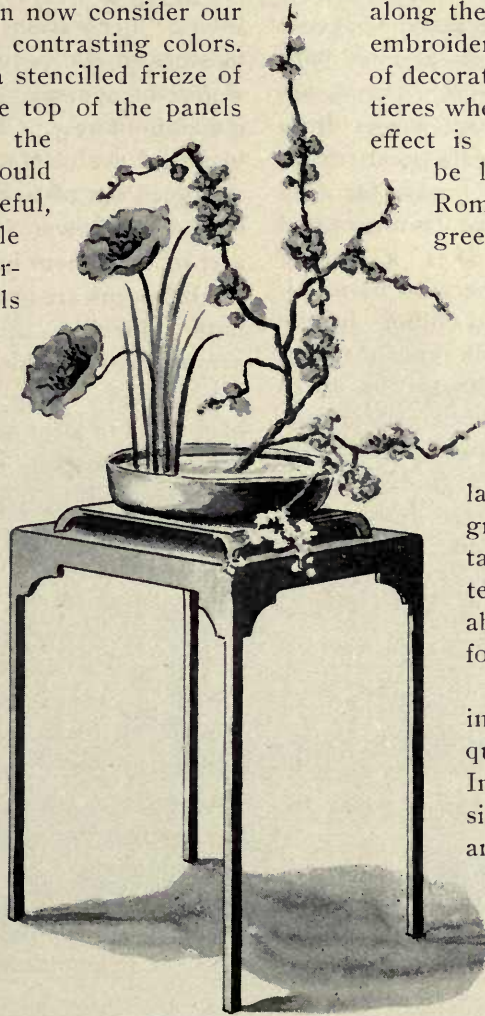
Having completed our background of green and buff we can now consider our decorative designs in contrasting colors. The first of these is a stencilled frieze of wistaria placed at the top of the panels immediately below the ceiling. The design should be slender and graceful, and the coloring pale that it may softly harmonize with the walls and not be too striking. A warm mauve should be used for the blossoms and the green of leaf and stem should be decidedly yellowish in tone to unite with the background. Should the decorator be unable to execute the stencilled work, an alternative would be a cut-out wall paper design, but care must be taken that both design and coloring are not too heavy. Further decoration to the walls could take the form of Japanese prints, either in nar-

row black or brown frames, or hung unframed upon rollers as many Japanese wall decorations are. The prints should be chosen with the color scheme in mind, and should have in evidence the buff, green and mauve tints of the room. Other tints that could be safely introduced are the gold and brown shades found in chrysanthemums, and the whole gamut of autumn leaf tones from amber to russet.

For curtains and portieres the ordinary washable Shantung silk would suit perfectly. They could be enriched with a stencilled design of golden brown chrysanthemums carried down one side and along the bottom, or if preferred embroidery could be the means of decoration. In the case of portieres where a thicker and heavier effect is wanted, the silk could be lined on one side with Roman satin of willow green.

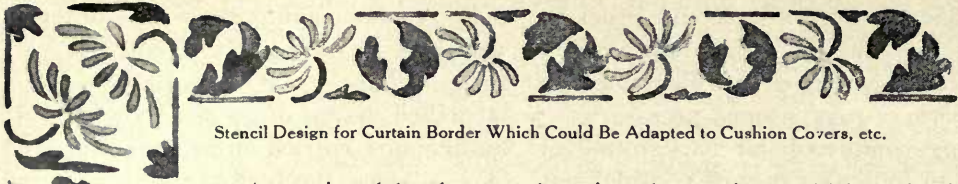
One corner of the room is fitted with a long low upholstered seat, and a good supply of cushions with Japanese covers. Here with a dainty table of black lacquer, a few chairs of graceful wicker, and the table set with a Japanese tea set, a most comfortable corner could be made for entertaining callers.

If there was a fireplace in the room it would require special treatment. In the illustration given the sides have panels set at an angle, the upper parts of which are filled by square grilles or lattices. The front of the fireplace is filled in with green tiles, the side panels



A Japanese Flower Arrangement.

painted buff, and all the other woodwork stained willow green. Above the mantle shelf is a decorative picture of the Japanese sacred mountain Juji Yama, that figures in so many of their landscapes. This picture would form a good opportunity for decorative coloring, as it could represent the somber greens and browns of autumn, with vivid golds and russet of the maple trees in the foreground.



Stencil Design for Curtain Border Which Could Be Adapted to Cushion Covers, etc.

A sectional bookcase could have its doors filled with embroidered silk. Doors are useful to protect books from dust, but there is good reason for hiding the books, for only too often their multicolored appearance makes a jarring note in an otherwise harmonious room. By filling in the doors with silk and carrying one design across the three spaces an original decorative effect will be obtained. Lamp shades of pale gold silk and those of Japanese design having black lacquer frames and painted panels, can be adapted to the electric light fittings and will add the correct note of color. Another satisfactory form of shade is that of light wicker lined with silk which, in this case, would be particularly useful as it would agree so well with the wicker furniture.

A word of warning is perhaps necessary against making a display of a number of Japanese ornaments and vases, for this is far from the Japanese idea of

interior decoration. Although they are masters in the potter's craft it does not make them display their vases and jars indiscriminately. They understand the beautiful use of pottery so well that they will keep out of sight many of their vases until such flowers are in season as will accord with them in color and form, then the blossoms are arranged in the vase and both enjoyed to the fullest extent. The arrangement of flowers is with them an art in itself. They do not place a bunch of flowers in a jar and feel satisfied as we do. An illustration is given of one of their methods. A low flat bowl is placed on a raised stand and this is set upon a small lacquered table, then by means of lead clamps placed in the bottom of the bowl, tall slender flowers are arranged in an upright position exactly as they are found growing, and a branch of some blossoming tree is placed to display its naturally graceful curves and angles. This method owes its beauty to the few flowers that are used, these being allowed to display their beautiful lines instead of being cramped by others; and also to the isolation of the whole arrangement by

(Continued on page 32.)



Suggestions for Cushion Covers.

Our Neighbor's House-Building

Verona Gee Lucas



HIS is a Building Experience of our neighbors, who have delegated us to write it. Our neighbors had outgrown the little house in which they lived and decided to build. For more than a year they had been in

Those were interesting days for all concerned. We had much to do to keep the tenth commandment. Our neighbors' children were busier than all the workmen together. They would make their morning visit to "our house" and bring



Residence of Dr. Karl Danielson, Litchfield, Minn.

possession of a three-acre block about a mile from the center of the town—out where they could see the fields, smell the new mown clover, glimpse the woods and the flashing waters of the lake.

In April they invited an architect to come from the city to look at the grounds and draw the plans.

back an auto load of material. We knew every day how the work was progressing. For a while they built foundations, then walls, chimneys and porches, and then a day came when everything was covered with metal lath, later, tufts of hair were scattered over the lawn, and we began to dread the time when the house would be



From Corner of Living Room, Showing Hall and Dining Room.

finished and the small neighbors too far away for observation.

The construction for the first story is terra cotta brick laid English bond and brought down to the ground over a concrete foundation. The second and third stories are covered with brownish gray stucco half timbered in Washington fir and stained brown.

The entrance is on the north side and is

reached by a brick driveway, a brick platform extends from the drive to the entrance, the steps being "in built." The grounds on this side are very attractive—the driveway is bordered with flowering plants and shrubs, and somewhat screened from the street by a tall hedge of lavender and white lilacs. A terrace extends across the west end, two French windows open thereon, flower boxes filled



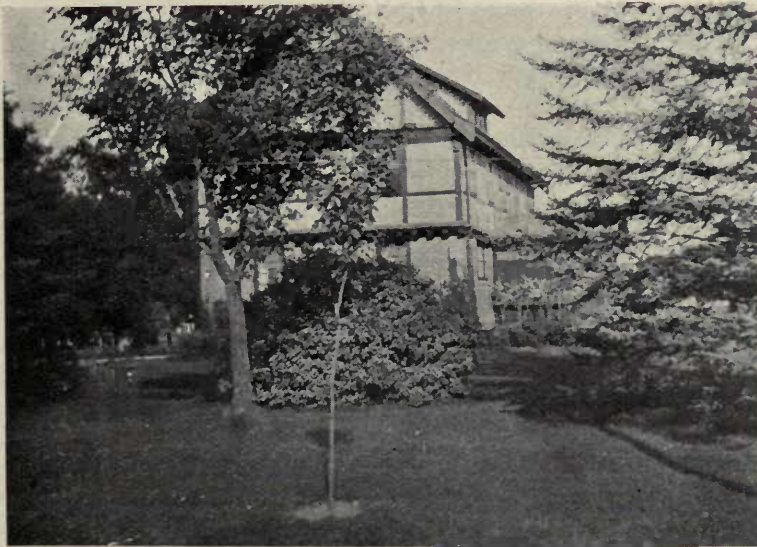
The Small Neighbors.

with beautiful plants and vines are placed the entire length, and from early spring until frost comes are a delight to the eye.

The house is placed on the northwest corner of the grounds; on the south is a large living porch screened, curtained and flower bordered. It is here that the most charming view is obtained—a broad sweep of velvety lawn surrounded by masses of peonies, hydrangeas, roses and

tance. We so often hear the call, "Back to the farm!" Why not back to the small city or town? There are wonderful privileges in such places and they are near enough to the country to satisfy almost anyone.

The picture shows a broad hall through the center, with parlor and living-room on the right, dining-room, kitchen, and telephone booth on the left, a wide stair-

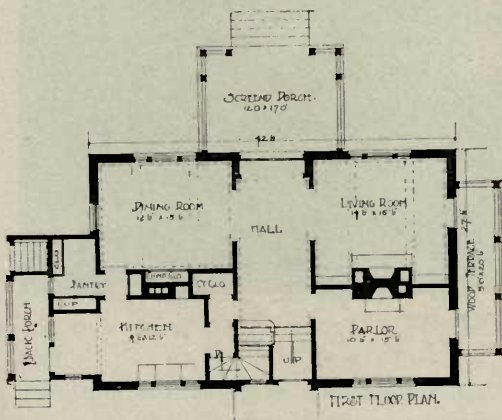


Friendly Relation Between the House and the Grounds.

many other choice varieties of flowering plants artistically arranged.

Beyond are the gardens, orchard, the woods, and finally the lake in the dis-

way on the north and folding glass doors the width of the hall, opening on the south porch. This is a most attractive feature at all times of the year, but in the summer months it seems especially so, when the breezes come over the clover fields and flower gardens. From this part of the hall one gets a view of the dignified treatment of the living-room with its great fireplace extending from floor to ceiling, and the heavy oak mantel reaching across to the top of the built-in bookcases. The dining-room on the other side has a built-in sideboard and a group of windows on the south overlooking the flower gardens. The color scheme in the hall and both rooms is a satisfying brown, the woodwork oak, with all of the beauty



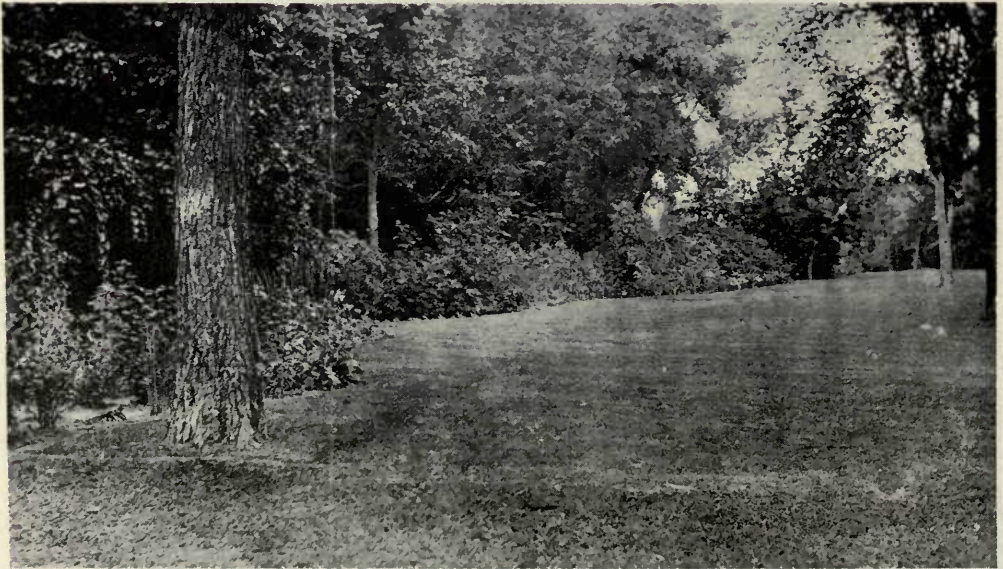
brought to the surface by skillful handling. The ceilings all ivory beamed and the floors dark. Oriental rugs are used throughout this part of the house and the parlor, and the effect is exceedingly rich.

The kitchen our neighbors have made all that it should be, sanitary, light, airy and convenient; it is in the northeast corner and has a glass door opening out to a porch on the east, the north side has a group of windows over the sink, where even dishwashing becomes a pleasure when the view is so inviting; a well-lighted pantry leads into the dining-room, and the telephone booth separates the kitchen from the front hall and entrance by two doors. The kitchen is long and narrow, with the ranges on one side, sink and work tables on the other, thus saving steps.

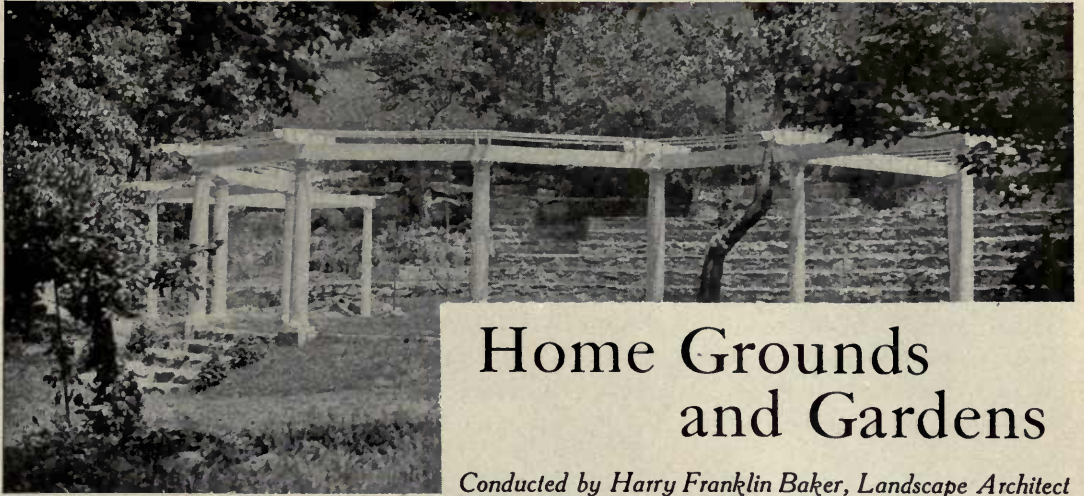
The central hall is carried from basement to attic. On the second floor four chambers and a bath-room open from the hall and a sleeping porch is reached from one of the chambers. The servants' rooms are on the third floor.

Pages might be written describing the chambers with their white enameled woodwork, dark floors and pleasing wall treatment and the tiled bath-room with its excellent fittings. Having seen much of cheap and unsatisfactory work, our builders gave particular attention to the lighting, ventilation and to sanitary plumbing.

Our neighbors' house is honest, well-built, with all of the modern conveniences at a reasonable cost; and it is an example of what can be accomplished in the way of building a home in a small city, which is a comfort to the owners, and a credit to the community.



An Approach Through Trees.



Home Grounds and Gardens

Conducted by Harry Franklin Baker, Landscape Architect

Roses for Small Grounds



NOT so many years ago, roses in northern climates were considered beyond the reach of anybody but the rich, who could afford the gardener to take care of them and run over their exotic requirements. The hardy, hybrid roses, now put out by the growers in a hundred varieties, were then unknown. Well does the writer remember the wonder and the glory of a neighbor's garden, roses in Minneapolis,—Jacquemot with their dark glorious crimson, Marechal Neil—Tea Roses—each and every one staked and tended like a delicate child, by no hired gardener but by a woman as glorious as the roses, whose dark beauty matched them well and whose love for them was the secret of her success. None of her roses were adapted to the northern winters and had to be wrapped like mummies in bales and bales of straw, while one precious climber was carefully untwined from its supporting trellis in the fall and laid to rest under a great mound of leaves and earth.

Within a few years the florists have not only developed a hundred new im-

proved strains of roses, but their methods of planting large, dormant rose-plants have been reduced to a science, and are so practical that the most amateur gardener can be sure of success in growing the most beautiful of all flowers. The parcels post and the new rates of the express companies are also a factor in simplifying rose culture on a small scale, so that the most remote rural districts are just as easy to reach as the dwellers in cities. The florists dig these one and two-year-old plants late in November, cut them back to a few buds, pack them in damp mass and put them in cold storage. There they stay at a temperature just at the freezing point, and when they are taken out in the spring they are frozen, but on their journey by express they thaw out enough to grow quickly when put into warm, moist ground.

While April or May, according to climate, is the usual season for setting out rose-plants, they are ordered from far and near, fall, winter, every time but mid-summer, and as now is the time that homes are building, it is a good time to

direct the attention of home-makers to these wonderful advantages in recent methods, that they may not fail to make provision for these glorious flowers if only in the back yard.

Nothing adds more to the charm of the plaster house, now so popular, than rose vines climbing up angles or over entrances, so that if one does not desire a rose garden, they can at least possess this added charm. In this connection we extract some valuable directions and information from an article on roses in a recent issue of *Suburban Life*.

However favorable the climate, soil, and season, and the roses inclined to do their best, there is yet considerable pains to be taken to insure success. The almost fatal mistake to make, when roses are taken from packages, is to unwrap them and let them lie in the sun and air. Even one hour of such exposure is detrimental, and half a day is fatal. Have the holes in readiness before the roses come. Locate them in well-drained, sunny places. Avoid the shade of trees and shrubbery. Horace has told us that the roots of trees extend as far as the top spreads; further-

more, the roots of trees and shrubs that have been pruned extend considerably beyond the spread of the branches. If the garden space is cramped, and roses and shrubs have to share and share alike, make a practice of building up the top soil of the roses all along through the season. The subsoil is drained by the strong roots of shrubbery, but roses can stand the drain if the surface is enriched. Everybody knows, for everybody has been told over and over again by all rose-growers, that roses must have tenacious soil. They do not grow or bloom well in light, sandy, or porous soil. Have the excavations made deep in the alluvial soil, and fill them with humus,—



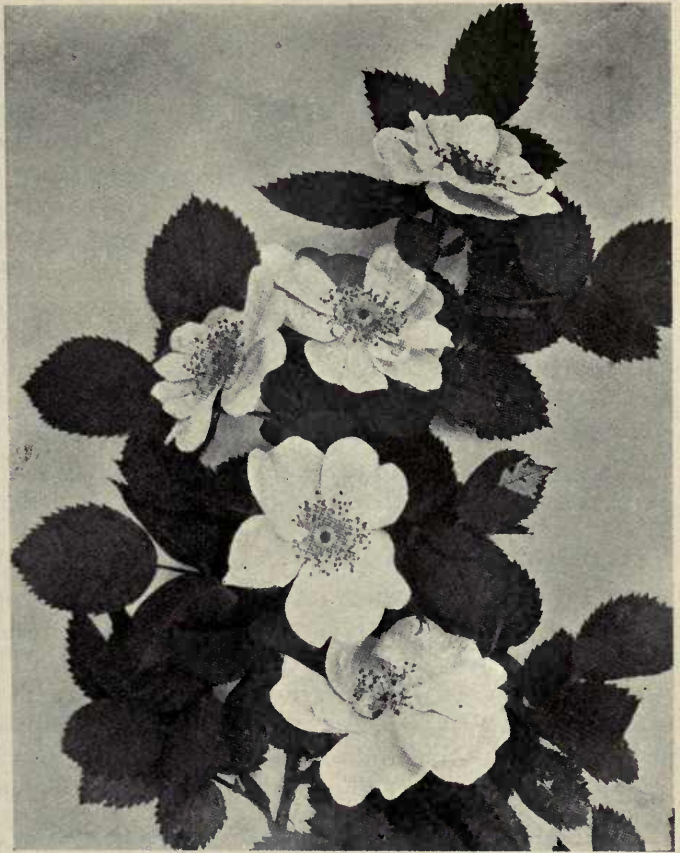
An Old-Fashioned Baltimore Belle Rambler on Minneapolis Dwelling.

dried or "cured" cow-chips broken into pieces from the size of a bird egg to the size of the fist, decayed leaf-mold, and sand. The roots of the roses are spread out and watered to a puddle in a pint of adhesive soil. The plants are set just a bit deeper than they were before, and up to that mark the holes are filled with the cow-chips and sand, and drenched with water. Cow-chips are fibrous and the water filters through gradually, not blistering the surface as in ordinary soil when watered. The excavations in the sandy soil have oyster-shells put in to solidify the bottom, and are then filled precisely as those in alluvial soil, and the roots of the plants bedded in the same way.

Classes, kinds, and colors of roses are innumerable.

Popularity is won, not given by favor or interest, and arises from meritorious properties besides mere beauty, even with roses. Widespread, continued popularity, without a dissenting voice, has been won and is steadily maintained by the Maman Cochet hybrid tea roses. The group is composed of the white, yellow, deep rose shaded crimson Helen Gould, pink, and dark crimson Etoile de France, too well known to need description, and also too beautiful to be truly described. No loss of the Cochets has ever been reported from exposure to the cold of winter as far north as New York, and the hot sunshine of southern summers brings out their latent forces and perfect roses are cut daily.

For gardens of limited dimensions and without places for roses to climb, the tree form is advisable.



Lord Penzance Sweet Briar Rose, One of the Best of the Climbing Roses.

For the amateur, the easy way to make a rose-tree is to cut to the ground a strong, hardy climbing rose in early spring, leaving the strongest shoot uncut. Let the shoot grow at will without pruning until it is five or seven feet, tied to a stake to keep it as straight as an arrow. Rub off every bud that begins to grow, from the ground to the top, including the terminus where the head is to form. Keep the trunk protected on the south side by a plank driven down, and water it all along through the summer. The second spring, keep the buds rubbed off of the trunk everywhere except on top. Let the young shoots put forth from the top and encourage growth. Before the season is over, every branch will arch out, depend gracefully to the ground, and the tree, fully established, will last for many long

years in unimpaired beauty, if kept enriched and the branches thinned out and trimmed to preserve symmetry.

Climbing roses are the only kinds that make graceful rose-trees. Some florists are offering dwarf or baby ramblers grafted on hardy stock in tree form. To my way of thinking, the baby ramblers and all other bush forms of roses appear infinitely better as bushes. An upright rose budded on a tall trunk is conspicuous, I admit, but is too stiff to be graceful. However, these stiff rose trees are very appropriate to formal gardens.

The history of roses proves the Sweet Brier type to be one of the longest-lived of the whole genus. Long life in any rose of northern habitat means, of course, a hardy constitution, which relates to the hybrids as well as to the type.

Light and airy, blooming on short stems at every leaf juncture, in wreaths from one end to the other, they make ideal rose-trees. When not in bloom, the fragrant foliage makes full compensation. It is retained until late in autumn, and

then the branches are very nicely bedecked with reddish-yellow rose apples, or hews, persisting, quite ornamental among winter shrubbery.

Sweet Briars do not flourish in full exposure to the sun, like other roses. They do better in partial shade. The rose-tree can be located on a lawn fully exposed to the sun, yet have partial shade by the way shadows fall during the day from trees, shrubs, or buildings too far away for dense shade all day long.

The world-wide fame and distinction of the Sweet Brier is due to its fragrant foliage. The leaves have russet glands on their under sides, which secrete aromatic oil. Hence the delicious perfume of the foliage. No other rose in the world has this sweet-scented foliage. The perfume of all other roses is in the petals, never in the leaves. There are many types of brier roses with small pink blossoms, and other characteristics exactly like the true Sweet Brier, but not one with aromatic foliage. This is one of the unexplained mysteries of Nature.

A Japanese Room

(Continued from page 24.)

means of the stand and table. Most interesting experiments can be carried out upon these lines for so little is needed to produce charming results. The lead clamps can be obtained at all Japanese stores, or they can be improvised by bending a strip of lead about an inch wide and twelve inches long into a series of tubes, bending the lead round a pencil as a form.

It is hardly necessary perhaps to mention that there are many Japanese articles that are quite unsuited to this room. Bamboo furniture unless of quite high

quality is to be avoided, for often it is manufactured in our own cheapest furniture factories, and has no Japanese design about it. Most of the paper lanterns are garish and would spoil this delicate color scheme. Japanese umbrellas and fans as decorations have luckily gone by, and we will hope it is for ever, for they were never in good taste. By bearing in mind the background of buff and soft green, it will not be difficult to select all the necessary decorations in shades of pale mauve, gold, tan, and russet to produce a charming interior.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 517 GEO. H. KEITH, Spokane, Wash.

B 518 CHAS. S. SEDGWICK, Minneapolis, Minn.

Design No.

B 520 BUNGALOWCRAFT CO., Los Angeles, Cal.

B 522 JOHN HENRY NEWSON, Cleveland, Ohio

Design B516.



SQUARE floor plan is the most economical to build, and permits of a very compact interior arrangement. In this design the square exterior is given interest by the projections, the portico entrance and the two bay window extensions. The portico entrance has the advantage of affording unobstructed light to the living room which often suffers from a porch across the entire front. The corner fireplace releases the wall space between the two high windows for a piano and the dining room bay gives a generous dining room. A sun parlor opens from this dining room through sliding doors with sleeping porch above. The provision for the refrigerator is especially good.

The low hip roof provides only storage room in the attic, but there are four fine chambers on the second floor and not an inch of wasted space. The first story is 9 ft. 5 in. in height, second floor 8 ft. 3 in. Estimated cost includes birch finish and floors, hot water heat, etc.

Design B517.

In the bungalow shown herewith the unusual and interesting roof treatment furnishes it with a fine second floor, while preserving a bungalow effect. It is an achievement to provide eight large rooms in a bungalow with ground dimension of 26'x41'. There is a large living room, extending across the entire front of the house with an single nook effect at one end. At the opposite end of the room is a bay window with built-

Cost Estimates of Designs Shown in This Issue

MATERIALS AND LABOR	DESIGN NUMBER						
	B 516	B 517	B 518	B 519	B 521	B 522	B 523
Excavation at 30c per cu. yd.....	\$62	\$88	\$68	\$90	\$40	\$55	\$65
Mason Work, to include Foundation Walls, at 20c per cu. ft.....	210	215	225	325	210	185	200
Cement Floors at 45c per sq. yd.....	45	46	50	75	32	40	55
Hollow Tile Walls.....	.....	.....	.....	.....	.....	.....	.....
Chimneys and Brickwork at 65c per hour.....	825	190	360	1,260	290	160	225
Tile Work for Roof.....	295	.....	.....	.....	.....	.....	.....
Tile Floors and Wainscot.....	33	.....	.....	90	.....	.....	.....
Lumber.....	620	645	725	1,125	460	550	504
Millwork.....	485	610	680	1,850	385	600	465
Exterior Cement Plastering at 90c per sq. yd.....	.....	.....	275	40	115	.....	265
Interior Plastering at 26c per sq. yd.....	440	325	425	925	220	325	275
Painting.....	215	220	280	610	160	250	215
Carpenter Labor at 45c per hour, Common Labor at 30c per hour...	550	575	700	1,925	375	565	440
Hardware (Rough and Finish).....	275	290	310	225	175	215	280
Electric Wiring.....	55	60	65	125	40	45	45
Galvanized Iron and Tin Work.....	120	85	110	245	60	75	72
Heating (Air or Water).....	440	480	520	785	285	365	160
Plumbing and Gas Fitting.....	285	265	350	450	250	250	265
Miscellaneous.....	70	40	80	140	25	50	20
Cost.....	\$5,025	\$4,124	\$5,223	\$10,585	\$3,122	\$3,730	\$3,551
Contractor's Profit, 10 per cent.....	502	412	522	1,058	312	373	355
Total Cost.....	\$5,527	\$4,536	\$5,745	\$11,643	\$3,434	\$4,103	\$3,906

This table is computed on the basis of prices of labor and material now prevailing in Minneapolis and vicinity.

in seat. In the ceiling angle is placed a wood cornice.

The dining room is separated from the living room by a sliding door. There is a paneled wainscot five feet in height, beamed ceiling, recess for sideboard and a bay window with built-in seat.

Back of the dining room is the den, the partition between being practically all glass, having French glass doors with glass side lights. The two outside walls of the den are given up entirely to windows which make an ideal sun room out of the den.

The stairway rises two steps from either the kitchen or living room to a common landing and thence on up, and can be shut off entirely from the living room by means of a sliding door and panel.

The kitchen is completely equipped with cupboards, clothes chute from second story and kitchen down to laundry, and modern plumbing with a comfortable and convenient maid's room opening from it.

The second floor is arranged for three bedrooms, balcony and bath. The front room is quite large and has unusually large closets with built-in cases of drawers.

The basement contains a fine laundry, servant's toilet, and hot water heating plant.

The foundation walls are of concrete. The superstructure is of frame, shingled. The estimated cost is \$4,500. The interior finish and floors are of selected fir or birch.

Design B518.

Here is a design that has all of the modern conveniences of an up to date two-story frame house. The exterior finished in cement stucco on metal lath with Oriental brick from grade line to sill course and is colonial in general character. It is thoroughly well built in every respect and substantial with full base-

ment, built with concrete foundation wall, cement bottom, divided into rooms for heating, laundry, vegetable cellar, etc., and provided with a grade entrance under the main stairs. The ground dimensions are 34 ft. front by 30 ft. in depth exclusive of porch and piazza projections.

The plan is suited to a west front and comprises a large living room 25 ft. 6 in. by 15 ft. with a glazed-in sun porch connected on the south side by French windows. The main entrance is on the left or north, with a liberal vestibule and protecting porch. The vestibule opens into a hallway 7 ft. wide having a columned opening into living room and at the rear a platform staircase leading to the second story with basement stairs underneath. The kitchen at the rear is separated from the front portion of house by a small hall way from which the stairs lead down to the basement and has a large coat closet. The dining room opens on a wide screened piazza with French windows. There is one main chimney for heating apparatus and a large fireplace in the living room with book shelves on either side. The four grouped windows in the front of living room form a pleasing feature and a recess with a wide seat. Finish of lower floor birch or oak.

This house is kept low with the first story 8 ft. 6 in. high and the second story 8 ft. On the second floor are four good chambers and a sleeping porch. Each chamber has fine closets and in addition to this is a hall closet and linen closet. The attic is left unfinished, but has ample space for two good rooms if desired. It is estimated to build this house complete for \$5,000 to \$5,500 exclusive of heating and plumbing. The exterior cement to be tinted a light cream color and all of the trimmings painted white and all roofs stained red.

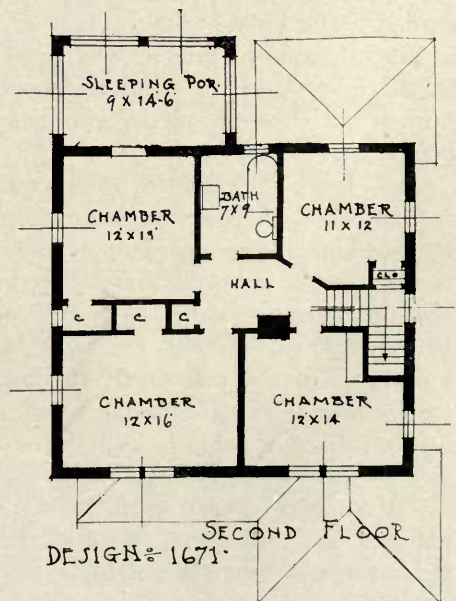
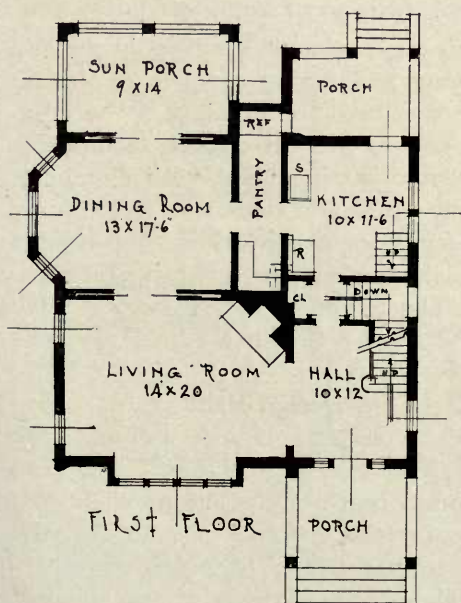
Design B519.

There is a strong English feeling to this handsome house which is imported



DESIGN B 516

A Practical and Livable House



by the double gable treatment of the roof. The turreted battlements of the sun parlor and the small panes of the windows and minor details in the same spirit. The exterior of brick veneer with the handsomely detailed brick trim of sills and copings, the heavy, timbered bracketing of the portico entrance, all are in sympathetic unison with the general design. The interior arrangement is on a spacious and handsome scale; the fine central staircase at once conveys an impression of elegance, while the vista through the wide openings into the main connecting rooms, is a very beautiful one.

The second floor has five large chambers and two baths, with ample quarters for the maid's besides a billiard room on the third floor which is well lighted and extremely pleasant.

Quartered oak or mahoganized birch are figured for the interior finish, with fir on the third floor. All hardwood floors with composition for the service part of the house. Hot water heating plant and full plumbing.

Design B520.

This little home was designed not only for exterior beauty but for inside convenience and easy housekeeping.

The illustrations give a fairly good idea of the house and its room arrangement, but do not show the many conveniences embodied in the plan.

The arrangement of the toilet, connecting with both bath room and rear porch is excellent. The den has a concealed bed under the broad leather-covered seat, thus making an extra bedroom in an emergency. Bookcases are built in the buttresses of the colonnade opening between living room and dining room. The buffet in dining room is built in on each side of the broad fireplace.

The kitchen has not only the full complement of cupboards, closets, shelves, etc., conveniently arranged, but it also has a built-in ironing-board, concealed in a

neat little wall closet when not in use, and also a dust chute. This dust chute is one of the most welcome additions to the schemes for easing the labors of the house wife and prevents all the backache of dust pan stooping.

This house was designed for a lady who "does her own work"—a model housekeeper—and her ideas, based upon years of experience are all embodied. Any man can plan a house, but it takes a woman to design a home.

This house cost in Los Angeles \$2,000; with warm construction, cellar and furnace for a cold climate its cost will be from \$2,300 to \$2,600. The size is 28 ft. by 56 ft., exclusive of front porch.

Design B521.

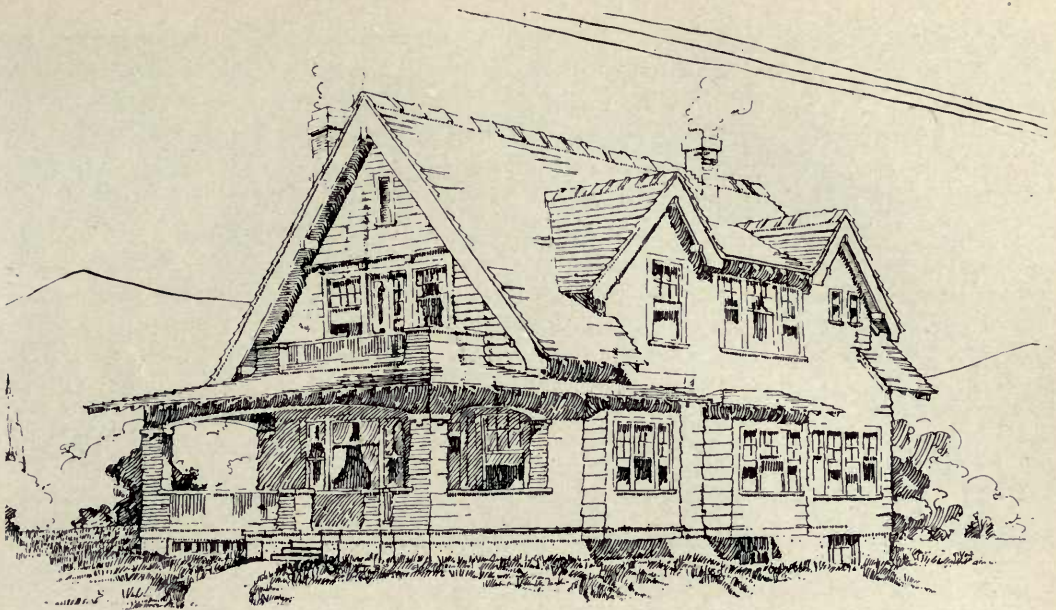
This attractive little cottage design was recently built and sold by the owner within 60 days from the time it was completed. Half a dozen offers were made for this house, which is of frame construction, with stucco finish for the first story and shingles above. The brick porch adds much to the artistic effect as a whole, the same having a cement floor. Though somewhat of a luxury as it together with the steps cost some \$200, but it is well worth the cost.

Note the casement windows in the end of living and dining rooms. A Navajo brick was used for fireplace. The complete cost of this little home, including a hot water heating plant with plumbing, cement porch and steps was \$3,400.

The interior woodwork is birch stained Circassian walnut; birch flooring throughout. The height of the first story is 9 ft.; second story 8 ft.; lowest height on second floor, 5 ft.

Design B522.

This exterior is of wide siding to the top of the first floor windows, and shingles from that point. The porch is covered over the entrance and the balance open terrace effect. A novel feature of this plan is the division of the chimney



Geo. H. Keith, Architect.

DESIGN B 517

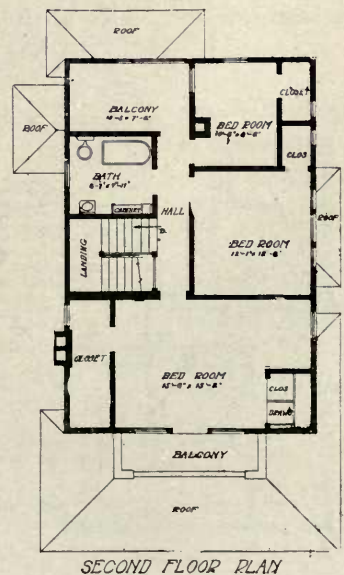
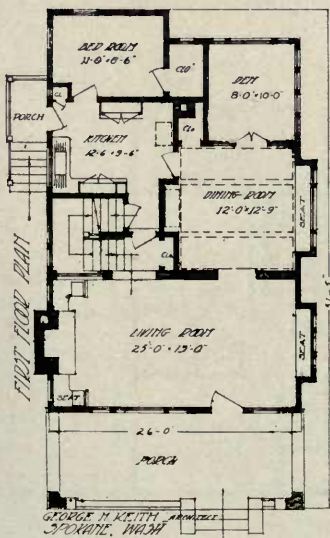
A Bungalow with a Splendid Second Floor

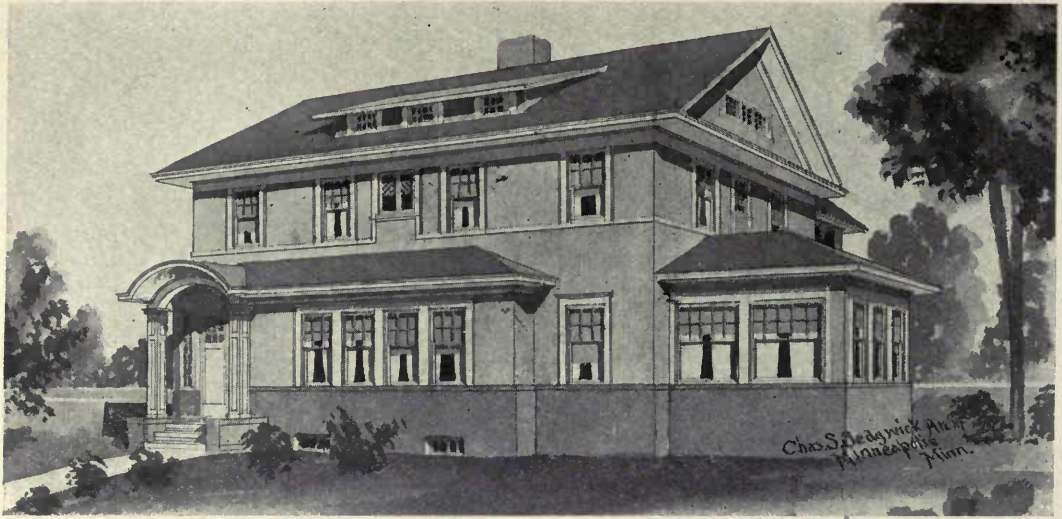
on the second floor in such a manner that it appears above the roof on the center of the gable.

The living room extends across the entire front except for the vestibule space. Good cross ventilation is obtained in the kitchen by the window on the combina-

tion stair landing. There are built-in china cabinets in the dining room and a recess for buffet.

The second floor has four chambers and bath, and there are good windows in the attic. The ground dimensions are 30x28 ft. and with the usual finish, furnace heat





Chas. S. Sedgwick, Architect.

DESIGN B 518

A Modern Two-Story House

and plumbing, under average conditions is estimated to cost about \$4,100.

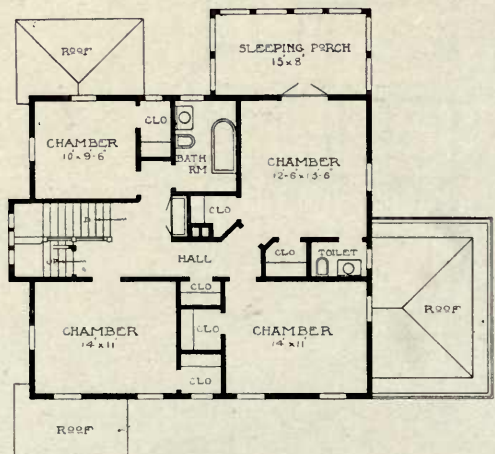
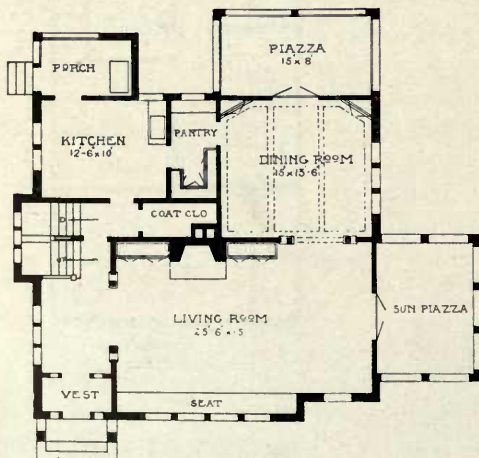
Design B523.

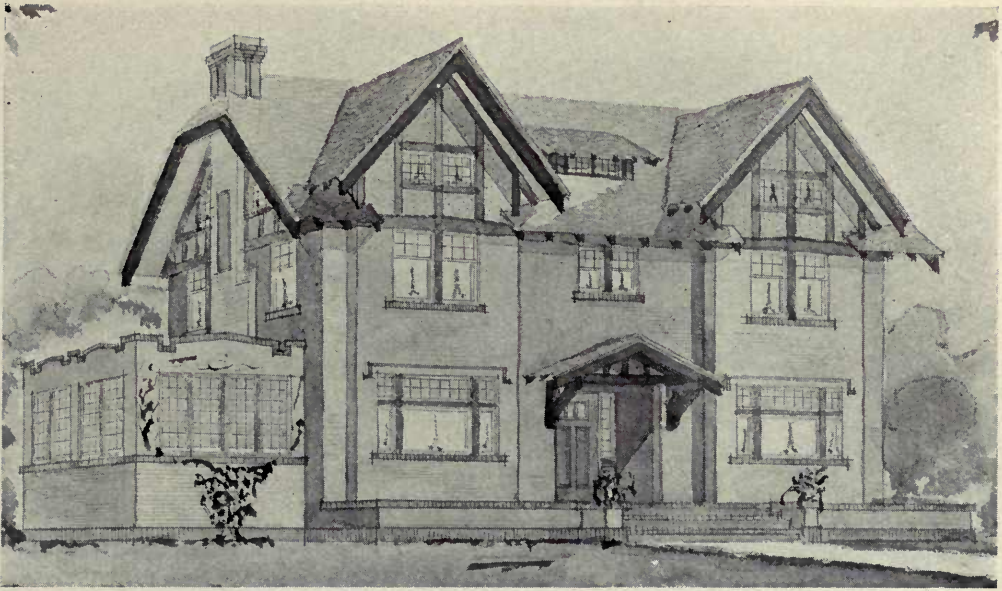
Here we have the bungalow feeling which is so popular, but with sleeping rooms on the second floor.

There are many pleasing features embodied in this design, which has been carefully studied with a view to economy yet comfort and appearance. The simple

lines of the exterior are wonderfully pleasing; the deep eaves and wide roof extended to shelter the entrance, and simple lattice decoration, all are in harmony with a cottage design.

It is not usual to secure such a living room with four fine chambers and all the arrangements which go to make a complete house—in a house of such low cost. The bedroom ceilings are slightly clipped





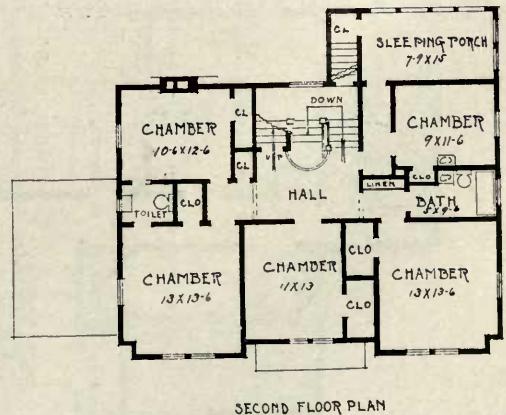
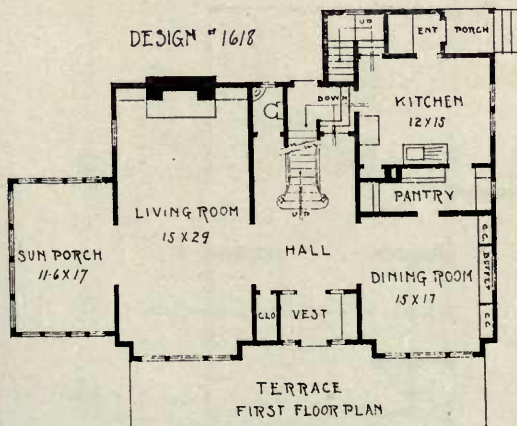
DESIGN B 519

A Design with Double Gable Treatment

at the corners, but the lowest wall height is seven feet.

The interior finish is for soft wood, cy-

press or fir, and with hot air heat and good plumbing this house can be built for \$3,900.

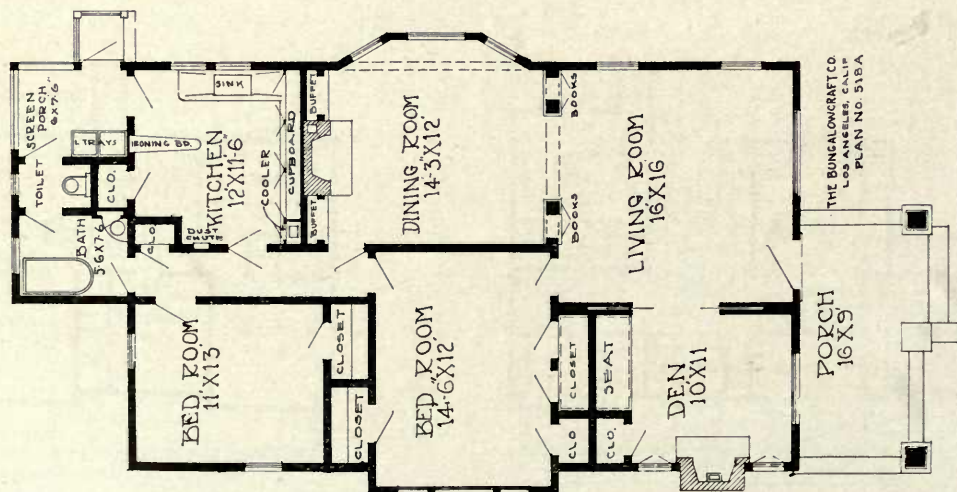




Bungalowcraft Co., Architects.

DESIGN B 520

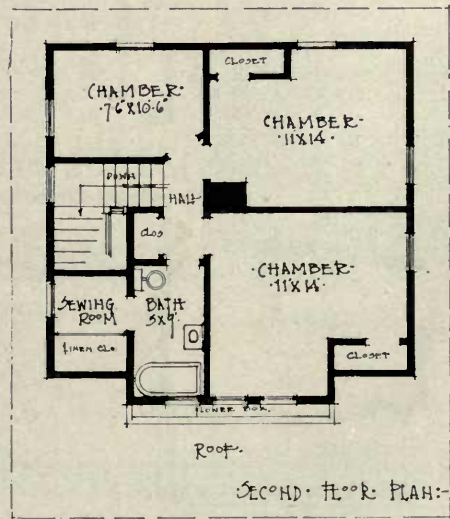
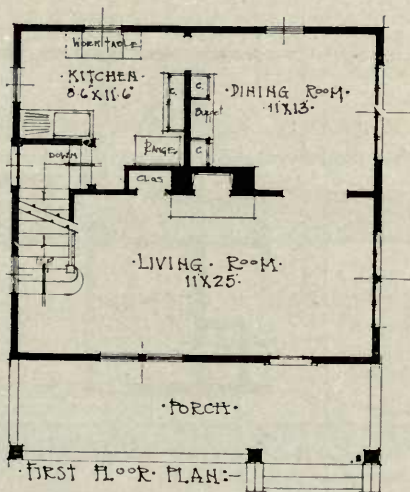
A Cozy Bungalow with Unusual Conveniences





DESIGN B 521

The Brick Porch Adds Much to the Artistic Effect

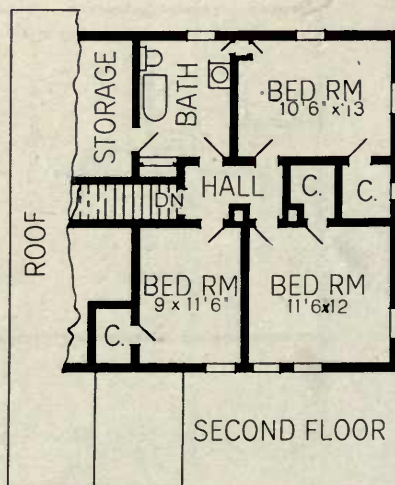
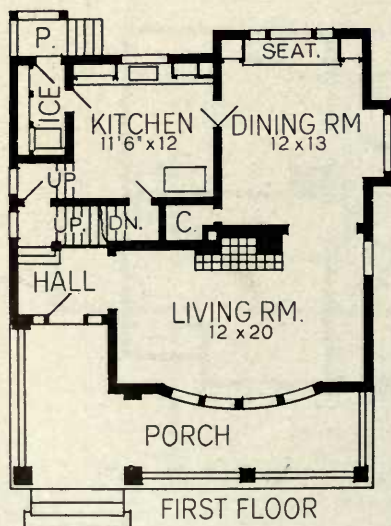




John Henry Newson, Architect.

DESIGN B 522

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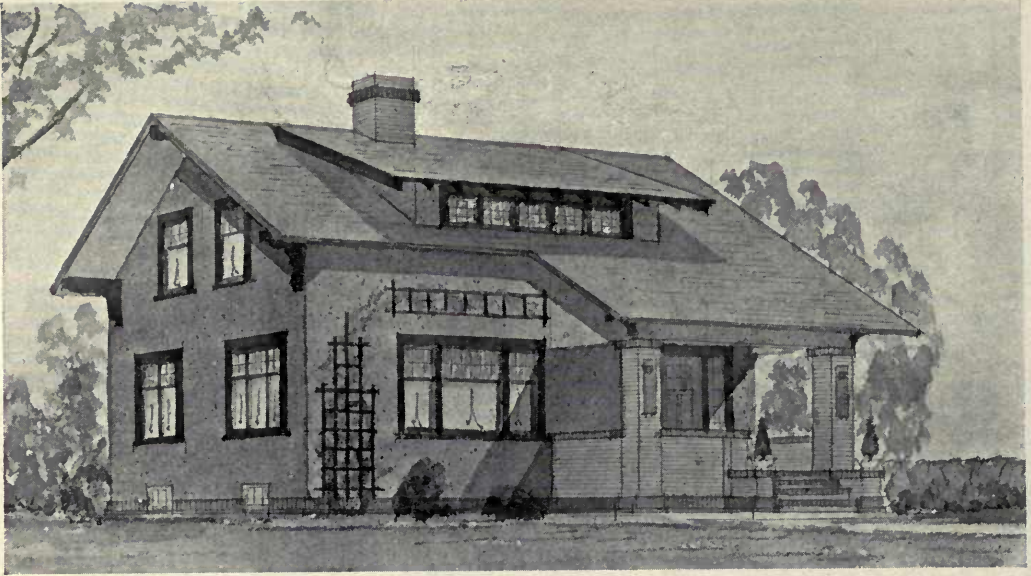
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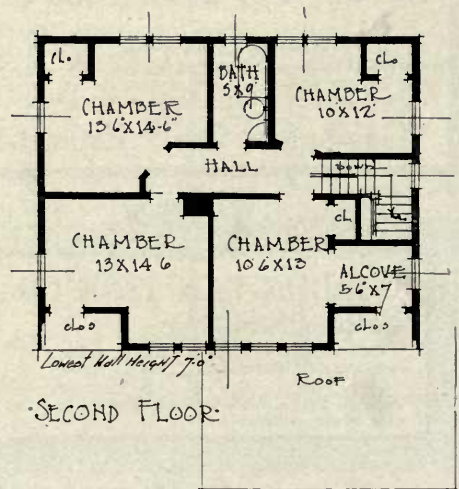
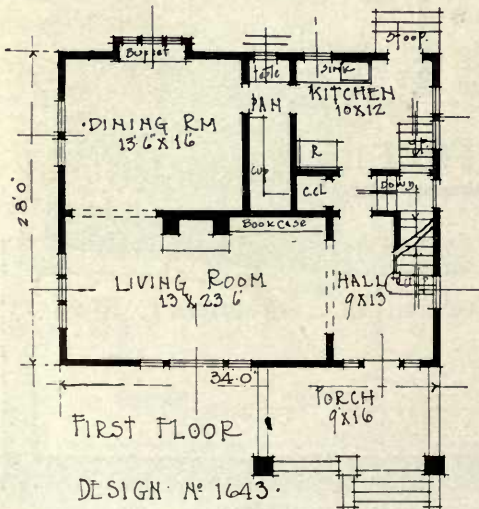
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Architects are respectfully referred to pages 972 and 973 Sweet's Index.



Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

The Vogue of Painted Furniture.



T needs no great effort of memory to recall the cottage furniture of the period before the Renaissance of domestic art in America, primitive in color, crude in design, and as to the groundwork an imitation of some highly grained, imaginary wood, with a strong resemblance to molasses candy. Such as it was it represented the fulfilled ambition of the average American family, and its relics can be studied at the present time in the attics and store rooms where they enjoy a deserved repose.

Now, after long years of the apotheosis of natural wood, oak, mahogany, Circassian walnut, the pendulum is swinging back to painted furniture again. But with a difference. This is the painted furniture of old France and of the Adam period of Georgian England. To begin with most of the painted furniture is of some sort of hard wood, oak or birch, the best of it under its many coats of pigment, white mahogany. Many of the designs chosen suggest stencilling, little conventional borders made up of small forms, flatly painted. Much of the white furniture is painted with the garlands and torches and little cameo medallions which the Adam Brothers made fashionable. Some effective furniture in apple green has a very French decoration of pink roses and knotted blue ribbons. This decoration was used on a dining room set for a country house. There was no sideboard but a long side table in the form of a console, with two glass backed corner cupboards. Then again much of the Louis Seize furniture, with panels of canework is decorated with more or less elaboration, with little festoons of flowers, with medallions copied from Wedge-

wood pottery, classic subjects in white on a gray blue ground.

The very last, and it may be added the most expensive thing in the way of painted furniture is the bedroom set of many pieces, made of hard wood with a good deal of carving, and painted bronze green or old blue, not with a solid coat but with a curiously uneven effect, as if the paint had been worn away in places, showing the ground. All the pieces are low and wide, the headboard of the bedstead rather low and slatted, the top of the footboard just on a level with the mattress. The blue set seen had a slight decoration of cleverly painted daisies, but the green one was unadorned. The sets comprise a bed, dressing table and mirror, a chest of drawers and a second mirror, a desk, a circular table and three rush seated chairs, and the cost of this last word of elegance is five hundred and seventy-one dollars and some odd cents.

Furniture of this sort offers a great opportunity to the clever amateur. A great deal of the golden oak furniture with which the market has been flooded in the last fifteen years is of excellent design and, once the layers of coarse varnish have been removed, can be given two or three coats of paint, gray, willow or apple green, old blue, or even yellow, and look extremely well, with or without the addition of a pattern. The substitution of wooden or glass knobs for the brass handles generally used is essential. The combination of this colored furniture with cretonnes whose general tone is the same gives a room great distinction, and while, in city houses, the bedrooms would seem to be the proper place for it, it is much used for the dining rooms and living rooms of country houses.



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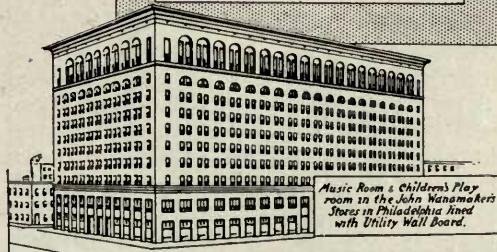
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Musie Room & Children's Play room in the John Wanamaker Store in Philadelphia lined with Utility Wall Board.

The Latest Development of the Blue and White Dining Room.

Here is a room which may not sound as well as it looked. It was paneled in white wood up to the plate rail and above that was a pale yellow tint which was a good background for the Nankin plates and platters which rested against it. The floor was covered with a Chinese rug in yellow and blue and the furniture was white rubbed to a dull finish, the seats of the chairs of blue leather. The sideboard was set out with silver, the china closets held only blue china, and there were blue jars on the white tiled chimney piece, while the center of the table between meals was occupied by a blue and white vase. Cushioning a couch and an easy chair and curtaining the windows was a cretonne with a grayish white ground and stripes of hollyhocks in shades of salmon red, which made a charming contrast with the dull blues of the china and the white walls and furniture. The rug seemed to the writer a mistake, although the yellow was subdued, and she would have preferred either an old blue Wilton or an Oriental with dull blues and reds.

The Return of Red.

Going about the shops one sees everywhere signs of the return to favor of red, not old red, not the crimson shades, but unmitigated scarlet, sometimes approaching to orange. One sees wicker furniture in white or delicate gray upholstered with printed linen with scarlet stripes on a white ground, cabinets and chests of scarlet and gold lacquer, toilet sets of scarlet glass with silver stoppers, trays of all sizes in the most brilliant scarlet, lacquer or enamel.

One does not see a corresponding display of red wall papers. People are beginning to understand that red is charming in small quantities, overwhelming in masses, and that it is chiefly valuable as an accent for a more subdued scheme of color. It is possible to combine these vivid reds with almost any neutral color, but they look best in association with black and white, with white alone, or with gray. And there is much charm to that distinctly oriental combination of dull blue and scarlet.

Mirror Tables.

These are found in exclusive shops, painted to match the frames of mirrors. They are semicircular in shape, with two legs at the front and so shallow that they are adapted for use in the narrow halls of apartment houses. Standing just below a small mirror, they give it an air of premeditation which adds greatly to its effect.

Scotch Homespun Rugs.

The Scotch Homespun rugs are admirable for rooms of a simple sort, less pretentious and far more durable than a Wilton at the same price. For a long time the range of color was very limited, blue, rose or green centers, with a floral border, pretty enough in themselves but better for bedrooms than other rooms. Later came those in two tones of color, light centers, darker borders, among them the popular gray rug which seems just the right thing for a room with gray enameled furniture and bright chintz. The latest importations show rugs with solid centers of violet with a floral border, a very good rose and excellent browns, these last with a border of black and white stripes powdered with small floral forms. With a poorer range of color and less variety, the domestic homespuns are yet an excellent investment, and cost only half as much as the Scotch. They too are made in a very good gray, as well as in satisfactory browns and greens.

The New Desk Screens.

This is a clever combination of two pieces of furniture in one. When it is closed it is a firescreen the sort which has a square panel raised on a standard, and with a ledge just beneath it, on which a tea cup can be set in the intervals of conversation. This panel is double and hollow and its back lets down forming a leaf to write upon, while the space between the two is fitted with all the necessary writing materials. The whole is carefully weighted and balanced so that it is quite steady. A similar piece is made in cretonne covered wood. It is a small table whose top looks like rather a deep box and is hinged so that it can be opened and used for a desk, the upper half holding stationery. It is very light and can be carried about from place to place.



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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Wall Decoration and Furnishing.

L. H. McR.: "Enclosed find plan for the little house we are to build. We have the following furniture which we must use:

For living room: mahogany table, desk and sectional book cases, mahogany and leather chairs.

For dining room: furniture of very plain dark weathered oak.

For guest room: furniture of bird's-eye maple.

Woodwork throughout house finished in dark oak; walls, tinted.

Are the cut-out paper friezes on tinted walls good in rooms with beam-ceiling, or should they be used in bedrooms only?"

Ans.: Neither your letter or floor plan gives any hint of the exposures of rooms; it is therefore impossible to advise you as to wall colorings.

While the two rugs mentioned in some measure determine the treatment of the rooms, either the green or the tan and cream tones of the rugs, could be emphasized, according to the exposures of the rooms.

The dining room does not appear to us to be so closely related to the living room as to demand a particularly unified treatment of these two rooms; rather we would bring dining room and breakfast room into harmony. The dining room proper could be given, with its heavy oak furniture, a more formal treatment, and the breakfast room be made light and joyous, at the same time linking them together by means of a color scheme of greens and creams.

While tints can be used in the majority of the rooms, we have in mind a paper showing gay birds, blossoms and green boughs on a cream ground, that would be ideal for this breakfast room, and your suggestion of plain green painted furni-

ture would chime in excellently well. We hardly, see, however, how it would be possible to use a 9x12 rug here, as the room is but 9 ft. wide and the hearth projects out upon that.

Certainly a frieze decoration, either stencil or paper can be used with beamed ceilings. Not one of the cut out borders suited to bedrooms, but a more formal and conventional design.

In regard to furniture for owner's room, the bed and dresser must be either Circassian walnut, mahogany or oak, or some of the enameled furniture which costs just as much. With any of these, willow chairs, table, etc., could be used. Some of the woven grass furniture is excellent for porch furnishings and is stronger than wicker. Porch furnishings have been illustrated and described many times in the magazine.

An Old Fashioned Piece.

C. F. A.: "I have an old colonial 'press' as my grandmother called it, in my dining room, which takes the place of sideboard. It is rather pretty and interesting, both my mother and grandmother having always used it. It has been in constant use probably about 75 or more years, and I wish very much to use it still in my home.

"The upper part shows a beautiful wood. I stands about eight feet high and about four feet wide. Is divided across the middle by a very wide shelf, with wide, deep drawer underneath.

"I wish I had a picture of this piece of furniture to send you. It's quite plain but really very interesting. You might then get a better idea of it. I hope, however, you will be able to help me or show me how to use it. I have no hall down stairs and none up large enough to accommodate it."



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Ans.: Replying to your dilemma about the walnut press, we should advise if possible, retaining the piece as it is. As you say, it is handsome and distinctive and while it can be cut in two parts and the upper used as a china closet, the lower as a buffet, these would have no special character. Why could you not recess the whole thing in the wall in place of building in a china closet? Or, you could place it in the living room and use it as a bookcase, using the shelf part as a desk. It does not seem adapted to bedroom use and we would not think of enameling it.

Should you decide to cut it in two parts, then the upper part with glass doors should have a base made for it similar to the base on the lower part. It would also be our judgment to take off a foot of the width of the shelf so that it would not project much beyond the brackets. In this way you would get two good pieces, but they would dispense with the built-in buffet and cabinet.

Lighting Fixtures.

F. W. K.: "I should like to avail myself of some of your good advice on decorating our new home.

"The house is of brick, first story, and stucco for second floor. The trim on the house being of white sandstone. The house has south front and open east exposure as the lot is over 80 feet wide.

"Our furniture for dining and living room is dark oak and we will, unless you advise otherwise, have woodwork in these rooms finished in dark oak with rubbed finish and the oak floors the same.

"I would like to have you suggest the color of shades we should use, the color of brick being Old English mission style, red predominating, the sash colonial yellow and other trimming on house is dark nut-brown stain.

"The dining room wall will be paneled with burlap, etc."

Ans.: Inasmuch as your dining room has only an east lighting, we would not use a dark brown stain on the woodwork. We would have the burlap panels a golden brown and the wall above tinted a light tan with a decorative frieze of leaves in browns, creams and greens.

As the living room has a good many south windows, we would use a slightly

greyer ecru tone on the walls, not so warm as the dining room, with pale ecru ceiling and curtains the same tone. But we would have the rug in a soft reseda green, plain center, rather light with border in two darker tones; and we would use a good deal of the same green on the furniture.

As to color of shades, they should be duplex, reddish brown on the outside and cream on the inside.

The lighting system is electric of course and an inverted bowl or indirect lighting will be good over the dining room table. The living room should have a center ceiling light, a shower of three or four lamps, with bracket lights each side the chimney. A round ceiling globe for the porch light and a small ceiling fixture in vestibule. Brushed brass is usually used with brown woodwork, and the shades may be either plain or Tiffany colored, according to your purse and taste.

Library and Hall.

I. R.: "I have been for some time an interested reader of your magazine, particularly the decoration and furnishing department, and am taking the liberty of writing to you for advice on the furnishing of my library; I should say library and living room combined. This room is 16x18 ft. and has two windows toward the east, these windows coming down to the floor. The woodwork and cabinet mantel are finished to imitate golden oak. The ceiling is higher than in the average house, and this with the long windows, gives an appearance of being very large.

"As yet I have not purchased the furniture I wish to use in this room. I have a mahogany piano but nothing more. I prefer to use a mahogany library table, mahogany bookcase and an easy davenport, also two or three mahogany chairs, and wish to know if you think the golden oak woodwork would be too much of a contrast. I do not like the woodwork in this room and would be glad of your advice as to how to change it to harmonize best with mahogany furniture. Also please tell me if you think white woodwork, mahogany furniture, and a dull blue rug and hangings would look well in this room. We only have the sun in it during



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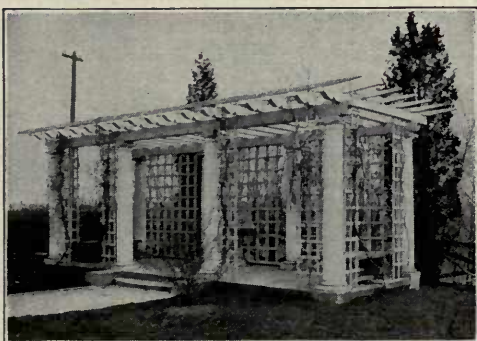
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Trellis-covered stone effect produced by using BEAVER BOARD in Verandah Cafe on the Mauretania.



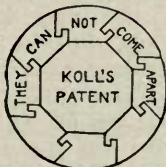
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ANSWERS TO QUESTIONS—Continued

the forenoon, and for that reason I should not like the walls dark, but as the mantel is so large I didn't know how it would look if finished in white. Please give me your advice about the woodwork, furniture, wall paper and rugs."

Ans.: We think your plan of painting the ugly woodwork white, is much the best thing you can do, but we would make it ivory, and not pure white. We should do the mantel the same, as most of the Colonial mantels in old houses were white.

We would use on the walls a paper all soft, misty greys, and as the ceilings are so high, it would be well to have a wide ivory wood cornice in the ceiling angle. Mahogany furniture is the thing to use and the rich blue rug and hangings will be beautiful. Also the davenport can be upholstered in the blue velvet, but we would have the chairs wicker, stained grey and one small one cushioned in the blue velvet, but a large fireside chair and an arm chair upholstered in an English cretonne, all blue and soft grey-brown foliage.

You should have a mahogany or a wicker desk and chair, and bookcases each side the mantel. The long windows will be rather expensive as the curtains must come to the floor. We should loop back the inner curtains, which in this case best be of figured lace net, a Colonial pattern.

A Color Scheme.

S. W. K.: "Some time ago we purchased a set of plans of your Design K1017 and are going to build from these plans this spring and would like to know what color scheme you would suggest for painting inside and out. For the inside trimming and floors we will use red oak, both on first and second floors, etc."

Ans.: This design will be extremely attractive with the first story of the exterior finished with stucco plaster, a warm creamy grey color. The gables shingled and stained cigar brown, if white cedar or cypress. If red cedar, simply oil with linseed oil, which will give them the same light brown effect. Stain the roof shingles a little darker brown. Paint the outside trim including under side of roof cornice, cream color. If, however, you prefer to use siding for the first story, then paint it

a warm grey, which is almost a tan. Paint the porch floors the brown of the gable shingles and the porch ceilings buff. We think you will find this color scheme quiet and refined, yet not at all tame.

As to the interior, that depends so much on the character of the furniture to be used, that we advise you to write again giving some details of furniture and rugs, also exposures of rooms. We should not choose red oak as an inside trim for second floor. It is too heavy. It is not suitable for painting and will only take dark stains. Maple is best for flooring for bedrooms, though the red oak could be used, but we would take birch if you want a hardwood finish upstairs, or pine or cypress to paint, with birch doors.

A New House.

W. R.: "We have been for over a year delighted subscribers to your magazine, and now that we are to build a home, turn to you immediately for suggestions.

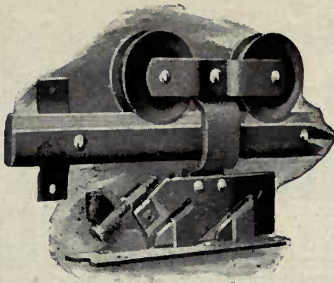
"Most of our furniture is fumed oak and we want our yellow pine woodwork and floors to correspond. How must our woodwork be treated? What must be done to our floors? As to the stairway, shall we treat the top board of each step like the floor, the rest like the woodwork? We do not wish to use a runner. The painters here are inexperienced and we would appreciate it if you will be very explicit. We want to wax the floors, which will be edge grain yellow pine, etc."

Ans.: Without some knowledge of your design and location, it would be impossible to give you explicit advice as to interior treatment. In regard to interior, fumed oak furniture is so adaptable, it is beautiful with either a wood trim to match or with the new silver grey or yellow pine, or the Fillipino, which is a little dark tone of greenish grey, impossible to describe.

The treads and risers of the stairs should be the same, and like the standing trim. The floors will be much prettier stained a light brown, before shellacing and waxing. The booklets of manufacturers of floor finishes will give you detailed directions and specific information on how to treat them.

We will be glad to give you further information on receipt of fuller details.

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Door
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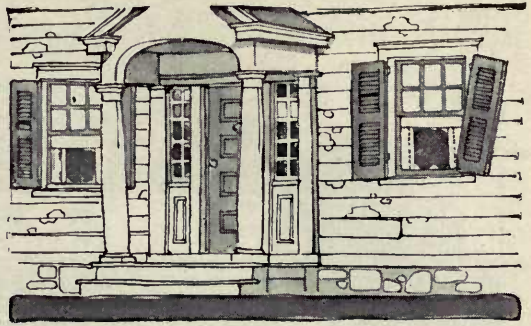
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Silence as a Domestic Asset.



THINK very few of us realize the waste of energy involved in the continual chatter over trifles, which is the habit of most of us.

The average housewife has a way of discussing the details of her housekeeping interminably. A slight mishap is the theme of a morning's lamentations. The plans of the day are canvassed as if the fate of nations hung upon them.

My dear sisters, it is horribly trivial. It is a thing which throws the entire conduct of life out of balance, and confuses the end and the means. So long as the machinery of the house is the subject that fills your mind and loosens your tongue, just so long will you fail of the broad vision of the purpose of domestic and family life, which is essential to the perfection of that life.

For it is a fact that while speech is the expression of thought, it is also true as the two processes go along, side by side, that speech inspires thought. We people who write know how often the phrasing of an idea helps in the formation of the next in the sequence, until the whole chain of thought is complete. The habit of talking about the processes of life is a distinct hindrance to the end of them, by distracting attention from it. How disastrous this is must be understood by everyone who has had a part in organized religious or ethical work. The tendency is to concentrate on the method of doing things, to make that of so much importance that the real purpose is lost sight of. The result is the doctrinaire habit of mind and the devotion to red tape, which are so common. The same tendency is

omnipresent among educators. This is the age of the formulation of knowledge, and sometimes the knowledge seems to get lost in the process.

It may be said that the convent and the religious house are relics of medievalism, and have no part in the life of today. But no one can deny that they are a part of a very wonderfully organized system, carefully thought out by people who were masters of the knowledge of human nature. If there is a place in the world where daily life goes on without friction, "unhasting, unresting," where each hour has its duty perfectly done, where rest and toil are so balanced that they exactly supplement each other, that place is a religious institution. What is the secret of such incessant labor without exhaustion? It is that silence is the rule of the working hours.

To make an illustration of more common occurrence, we often notice that a person, so deaf that he hears no ordinary noises, and has ceased to try to hear any sounds not directly addressed to him, does not get tired as people with the full use of their senses do, when traveling, or going about in a large city, where a great deal of noise is incident to life.

If you do not talk you have time to think, and most of us do not think nearly enough about things that are worth while. All sorts of great issues are calling for our attention and we haven't had time to think about them, because we were lamenting over the loaf of cake that fell in the oven, or wondering if the egg man will come on his regular day, or fretting over the stain on the wall paper in the east attic bedroom.



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IF YOUR HUSBAND had to do the housecleaning he would look for some labor-saving, mechanical device, swift, efficient, harmless, sanitary and economical. And he would find, as thousands of other business and professional men have found, that the best of these devices is the

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The TUEC forces all the germ-laden air through pipes *outside* the house,—*not back into the room*,—and deposits all the dirt in an air-tight tank in the basement. It is strong, simple and so economical that the cost of operation is practically nothing.

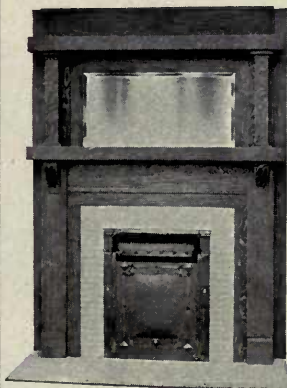
You can now buy a TUEC-170, complete with hose and tools, for only \$160, F. O. B. Canton, Ohio. There is a TUEC agent in your vicinity and he will make the installation in your house at any time.

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Another value of silence is a moral one. It is so easy to pass from statement of fact to complaint, and from complaint to blame, and from blame to recrimination, and so on through all the vicious circles of a domestic unpleasantness.

And if the habit of trivial discussion, works havoc with our relations with our own, how much more harm does it do with the stranger in our gates, the hired helper upon whom our comfort so largely depends. Shall we never talk to a servant about the housework? There are several desirable occasions. One is when we praise her for the thing she has done well. Another is when we criticize the thing she has done ill, not at the time, but when she is going to do it again, and then in the most casual manner that we can achieve. And a third occasion is that on which you take her into your confidence about your economic budget and ask her co-operation in keeping within bounds, and her advice as to ways of doing so, using all your tact to make her feel that she is part of the family and shares in its interests.

The Coming of Warm Weather.

For most of us it requires all our available fortitude to stand hot weather at all, unless we can get away from our usual surroundings. But as this is not practicable for everyone, or at best for only a part of the summer, it is well perhaps to consider some of the alleviations of extreme temperatures.

The elementary principles of keeping a house cool are imperfectly understood. A knowledge of the fact that windows open at the bottom ventilate and open at the top cool a room should be more widely disseminated. With this in mind the fly screens should be so arranged that the whole of the window is covered. The best way is to have full length screens, hinged and opening out like a door, fitted with some sort of snap catches at two points in their length. Then it is possible to close or open the outside blinds at will, while the windows can be down at the top for a foot or more, insuring a constant passage of heated air outward.

If screens of this sort are not practicable, it is a very simple thing to tack wire gauze across the upper part of the win-

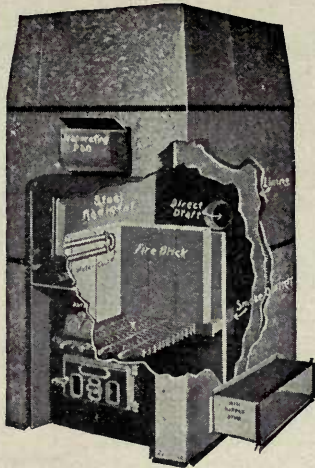
dow frame for a sufficient depth to admit of the upper sash being well pulled down. Least expensive of all is to cover the entire window frame with wire gauze, or even with plain black mosquito netting, the plainly woven sort without checks.

The writer's opinion is that it is a mistake to keep windows tightly closed during the day, in hot weather. A house so treated may be cool, but it is inevitably stuffy because all circulation of the air is prevented. The same end is achieved by closing the blinds, to keep the sun off the glass, or by using awnings. Some of us are so constituted that we are distinctly unhappy behind closed blinds. It would seem as if the outsides of windows, on the sunny side of the house, and not otherwise protected, might be supplied with narrow strips of the material of which porch screens are made, which would keep the sun from the glass.

Another point on which summer comfort depends very largely is fly prevention. Screens do very little good if the screen door in the kitchen or laundry is allowed to stand open, as it surely will at times, unless it is weighted.

A bit of personal experience may be in order. I once lived in an apartment which had been made from one floor of an old fashioned house, as is often done in the East. The large hall of the house was common property, and both families kept their doors more or less open in warm weather. Despite careful screening we were infested with flies. One day I was in the kitchen of the apartment below and my neighbor lifted the cover of her garbage receptacle. At least a dozen tiny flies emerged from seclusion. Never since have I kept a garbage can, however small, inside the kitchen.

A simple appliance, which is very useful for getting rid of flies and mosquitoes, to say nothing of worse pests, is a large tin atomizer, costing fifty cents. The fluid used is a strong decoction of red cedar, very discouraging indeed to the lungs of the insect world, and the odor is rather agreeable than otherwise, when not too closely confined. A good volume of the medicated spray can be sent into every corner of the room, and the results are instantaneous.



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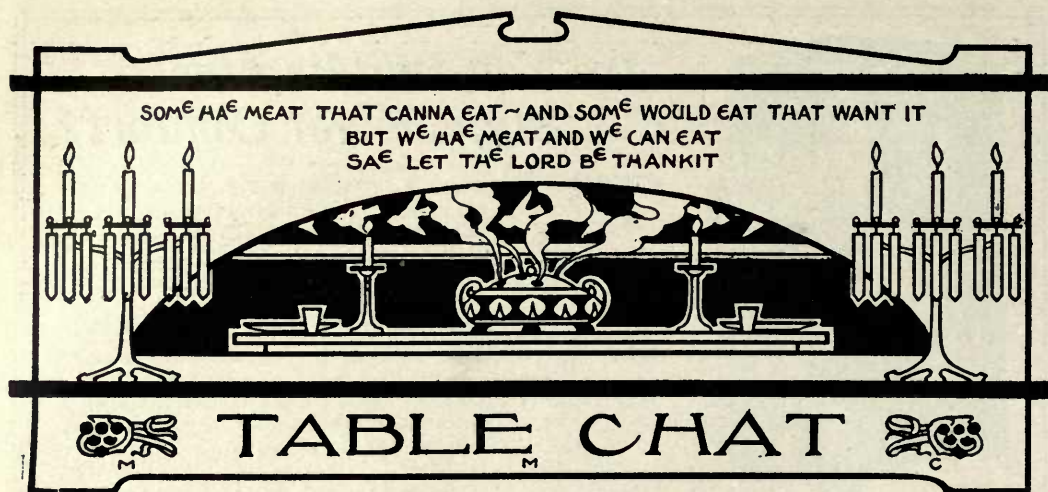
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Come-Packt Furniture Co.

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Inch
Top



The Picnic Lunch

DAININESS and abundance are its principal needs. We have all of us experienced the sort which is so messy as to awaken distaste instead of appetite, and so limited in quantity as to tantalize what hunger survives its unprepossessing appearance. As to quantity it is safe to provide just twice as much for the picnic meal as you would for a luncheon or supper to be eaten at home.

A higher standard of excellence is attained when the meal is made up of contributions from a number of people, as every housewife has her own specialty, but the composite lunch requires careful planning and estimation of quantities lest any one article should predominate or some other be missing. Paper plates and napkins have simplified things very much and it is as well to ask each person to supply his own drinking cup. The paper cartons such as are used to hold packages of cereals are quite the best thing in which to carry the different items, as they can be thrown away and the picnic party come home light handed.



Most picnic menus err on the side of elaboration. You need a great many sandwiches, a great deal of bread and butter, a liberal supply of sandwiches and plenty of fruit. These are essentials as are the means of making coffee, and they should be carried in such shape that a meal can be gotten together very quickly.

If there is one occasion on which bread crusts are out of order it is on a picnic. Trim the crusts off your twenty-four hour old loaf before you slice it, whether for sandwiches or for bread and butter. It takes time to eat crusts and naturally you will need more bread. The exception is in the case of finger rolls or of delicate short biscuit. It is a great help to cream the butter as you would for cake, mixing it with an equal quantity of chopped meat or cheese for sandwiches. The various sorts of mayonnaise sandwiches are rather messy for a picnic, and a superfluity with a good salad.



The Picnic Hamper.

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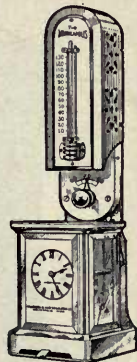
Has brought the serviceable and sensible handling of home heating to the point of perfection. It has proven that temper, trouble, and a lot of time are eliminated when the heating plant is controlled by this device. It fully and finally demonstrates a saving of fuel and affords protection from any chance of fire which so often occurs from overheating.

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QUILT is not like common building papers. It is twenty-eight times warmer. It is a matted lining full of dead-air spaces and keeps out the cold in the same way that a bird's feather's do. It costs about 1 cent a foot and will pay for itself over and over again in saving fuel, and in protecting stock, poultry or stored fruit, and you and your family from discomfort and doctor's bills.

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LIGHTING FIXTURES

TABLE CHAT—Continued

A Good Picnic Salad.

The satisfactory picnic salad is never messy. On terra firma, with a china plate, the flavor of a salad may excuse its sloppiness, but it is intolerable in one's lap on a paper plate. For this reason do not mix the salad until lunch is about to be served. Have the lettuce carefully washed and dried, tied up in damp napkins and put into a pail with a piece of ice in it, with the jar of mayonnaise if there is room for it. In another pail, with more ice, pack the solid part of the

the salad brown or whole wheat is preferable to white, and some of it may be spread with cream cheese instead of with butter. A little Roquefort added to the cream cheese improves its flavor.

Beans and Bacon.

Primitive, perhaps, but immensely satisfying is a liberal provision of Boston baked beans, cooked for hours in a slow oven till the beans are evenly browned and the pork is of a jelly like consistency.

Another delectable addition to the picnic menu is bacon, with the rind taken



Picnic Sandwiches.

salad, sparingly marinated. Putting the ingredients together is the work of a minute.

For the solid part of the salad nothing is better than chicken. Choose a fowl weighing five or six pounds and cook it at the slowest simmer until it is absolutely tender. Do not use celery with it but mix it with plenty of hard boiled eggs and chopped olives before laying it on the lettuce leaves. A less expensive salad is made from the red Alaska salmon, which is very firm and not at all oily. It should be freed from every particle of skin and bone and may be mixed with shreds of sweet pepper. Deviled eggs are a nice accompaniment and a tartar sauce is better than a plain mayonnaise.

For the bread and butter to eat with

off and cut in the thinnest of slices, ready to be broiled over a wood fire. If some long steel skewers are taken along the operation is easy and several slices can be broiled at once, or an oyster broiler can be packed with the other utensils.

What to Drink.

Making coffee out of doors sounds attractive but is extremely troublesome. Far better have a plenty made at home fresh and strong, add the cream to it and carry it in quart bottles, serving it cold. If plain soda water is obtainable at the place where the picnic is held it is a great scheme to carry along a jar of lemon juice and a supply of cut sugar, with which an agreeable drink can be made at short notice.



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It tells all about the proper method of finishing floors and interior woodwork, and improving furniture. A big help in beautifying the home—new or old.

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Comes in 17 harmonious and natural shades. Makes cheap, soft woods as artistic as hard woods.

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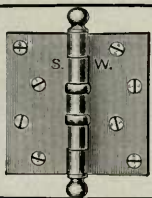
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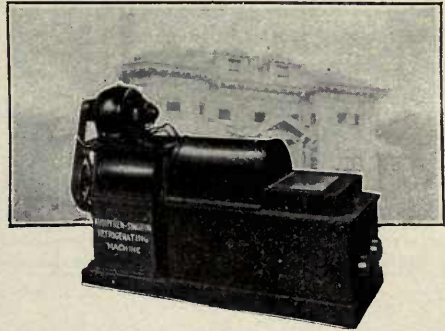


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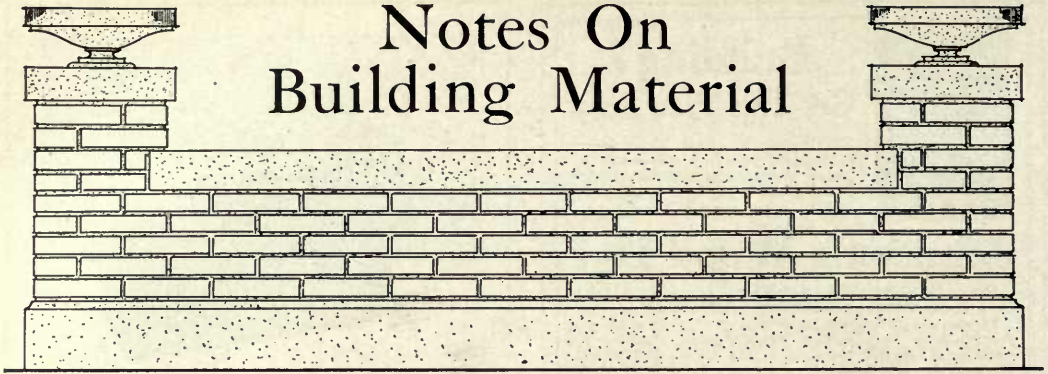


The Canadian H. W. Johns-Manville Co., Ltd.

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Notes On Building Material



Sea Air an Enemy of Concrete.

THE past winter along the south side of Nassau county has demonstrated that brick and frame building construction is superior in a salt atmosphere to concrete construction. Hollow tile by itself is all right, but it has been found almost impossible to make concrete adhere permanently to it in a salt atmosphere, according to a Nassau county developer.

Lumber dealers as a consequence are receiving larger orders for general lumber from the south side of Nassau county this spring than they have received since concrete construction became extensive. On the other hand the inland suburban districts in New Jersey and Westchester county are showing an increase of hollow tile and stucco exteriors placed over wire lath.

It now seems likely that so far as southern Nassau county is concerned exterior frame construction as well as interior has come to stay. The bulk of new house construction this spring bears out this statement.—*"New York Sun," April 12th.*

The High Cost of Trim.

Any means of reducing the cost of building, without reducing the practical value of the structure, should prove welcome to all concerned. One of the big items of cost is the outlay for trim and interior woodwork. In structures of even moderate cost the interior trim frequently is made to order.

"Making trim to order" means that the owner pays for the "set-up" for a run of a few hundred lineal feet of casing, base, and molding, and possibly 150 to 200 feet of window sill and apron. Under such

circumstances the setup costs vastly more than the run. The owner secures the benefit of a slightly different form of trim—he cannot tell wherein it differs from that in the next house if asked—and pays a very heavy premium for "something different" which is difficult and expensive to produce and of no value greater intrinsic than other trim after it has been produced.

For the benefit of both it should be known and understood that the milling on stock patterns of trim—the machine work—is equal if not superior to that on special patterns. The only advantage gained by paying three or four prices for special designs is the design and there is not one person in a hundred who can distinguish between special and standard patterns.

Here is an excellent opportunity to lop off a part of the "high cost of building," without decreasing the value of the structure one cent. Try it.

Porch Columns.

A rough timber, or a section of a tree will support a roof just as well as will the ornate product of a column factory. The timber or the tree section will not look like much of anything except a mistake on the part of the builder.

However, there are ways of securing attractive columns without paying high prices for them. One of these ways herewith is described:

Take four pieces of 2-inch dimension, 1S&1E—2x4 for a 6-inch core, 2x6 for an 8-inch core, 2x8 for a 10-inch core and 2x10 for a 12-inch core—and nail together to form a square. Properly built the edge of one of the pieces will show on each face.

If You Could See



Architect—F. L. Wright

the care lavished on the manufacture of Atlas-White non-staining Portland Cement you'd never hesitate an instant in insisting on its use in building your new home.

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A PERFECTLY SANITARY system using nature's bacteria to purify and dispose of the house sewage. Permanent, requires practically no attention. Efficient in all climates and soils. No chemicals. No odors. All ready to connect to. Pat'd and fully guaranteed.

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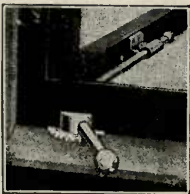
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Our beautifully illustrated booklet tells why all the windows in your house should be casements. It's invaluable

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Aren't some upstairs bedrooms sweltering summer nights? It's because nothing more than one layer of roofing paper is applied under the roof. That can't prevent the passage of heat. The whole attic and upstairs soaks up the sun's heat all day long. Are like ovens all night long.



LINOFELT

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Applied under roof and between walls will prevent all that. It insulates the whole house. Keeps heat out in summer. Keeps cold out in winter. 38 times more efficient than best building paper, yet costs no more than back plaster. Write for Free Booklet.

Union Fibre Co.
115 Union, St., Winona, Minn.



Where the porch is open to the floor, i. e., not solidly enclosed to table height, the bottom of the column may be covered with beaded ceiling placed upright, this to be crowned with a wide watertable. The upper portion may have 4-inch siding mitered around it, the rough side being turned out if it is desired to stain the siding.

Architects who have handled the column question in this way have been highly pleased with the results. So have the owners and the contractors.—*The Pine Cone*.

Sand for Concrete.

Little thought has been given to the comparative value of sand as affecting the quality of the work, also the convenience and economy of construction.

Sand's Strength Differs.

A given sand may possess twice the strength of another sand from the same locality in the proportions of mortar or concrete commonly followed. Some sands in proportions of three parts of sand to one part cement will develop equal or greater strength than other sands in the proportions of two parts of sand and one part cement, or where the difference is not quite so marked the better sand will develop a strength in three days equal or superior to the inferior sand at seven days.

If the concrete does not harden promptly and it is necessary to push the work, it means that additional lumber must be purchased. The real value of sand as a mortar ingredient, or for concrete, can be determined only by tests. Unfortunately, the cost or inconvenience of having sand tested in the laboratory forbids this investigation in a great majority of cases. This may be performed somewhat in the following manner:

Test for Contractor.

Take one quart of Portland cement, well shaken down, and three quarts of sand, and mix the sand and cement thoroughly dry, then temper with clean water to the consistency used in the work. Put this wet mixture in a form, tamp or shake down, and allow to stand in a protected place without being disturbed, and examine at the end of one day, two days, or three days. If the sand is of good quality the mortar should be hard and

possessed of considerable strength at the end of one day; at the end of forty-eight hours remove from the form and test by striking with a hammer for strength and hardness. If several sands are tested in the same manner, it will be easy to distinguish the best.

Concrete in sidewalks or steps, where the area exposed is large compared with the bulk of the work, the concrete should be protected from the direct rays of the sun. It would improve work of this character if sprinkled frequently following completion of the work.

About Asphalt Shingles.

Just a few years back whenever roof coverings were thought of or desired, nothing but the wooden shingle was considered, but conditions are changing. To-day the wooden shingle is much scarcer than it was in days gone by. It is being manufactured almost exclusively in the northern and western states, hence by the time it reaches dealers and, through them, the consumers in the markets of the eastern and central states, the freight rates have placed a high price on the shingle.

The modern shingle is the asphalt shingle. The popular size of these shingles is 8x12x3-4 inches, four inches of the length being exposed to the weather. They are absolutely waterproof and in most cases are coated with crushed rock. To effect a desired color these shingles are coated with rock of different tints. The popular colors are gray, green, red and slate.

When laid with the four inches exposed to the weather, these shingles form three thicknesses of absolutely waterproof material and wherever nails occur, there are four thicknesses.

Asphalt shingles are just the thing for residences and public buildings. Their color aids materially in bringing out any color scheme that an architect or builder may desire. The possibilities obtainable with the decorative effect of red, green, gray or slate color roofs are easily comprehended.

The uniform size and thickness of asphalt shingles is in their favor as they can be laid quicker and cheaper than shingles of various sizes. They are fireproof, waterproof and non-conductors of heat and cold.



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The Mis-Use of Light.



N a volume entitled "*The Lighting Book*," Laurent Godinez tells us that dazzling brightness in an artificial light is a menace to our eyesight. As a result, he asserts, we are surfeited with lighting that is devoid of attraction and which is, at the same time, ingenious. He tells us:

"This question of quantity and quality of modern light-sources is of grave import.

"No matter how beautiful an interior may be, or how harmonious its decorative ensemble, if glaring light-sources blind the eyesight all sense of comfort or repose is lacking, and pictorial value is destroyed. Often one is conscious of a feeling of disquietude or unrest even in an esthetic environment.

"Since the days of the candle the source-brightness of our illuminants has steadily increased. It has passed the danger-mark, but the saturation-point is not yet in sight. If values of from 0.1 to 5. candle-power per square inch constitute visually the safe range of source-brightness, glance at the following tabulation, and cease to marvel at the optician's prosperity.

Source of Light	Candle-power per square inch
Candle	3— 4
Oil-lamp	3— 8
Gas flame	3— 8
Carbon filament electric lamp	375— 400
Welsbach gas-mantle	20— 50
Tungsten lamp	1,000—1,500

"From an inspection of the foregoing it is apparent that each successive development of electrical illuminants has been attended with an amazing increase in source-brightness, and that where a value of 5. candle-power per square inch is considered the maximum limit of safety, we have exceeded that limit two hundred times!

"Of course, in many instances unfortunately not the majority, the eye is protected by some sort of glassware in the

form of shades which should serve the double function of eye-protection and ornament."

It is a mistake to suppose, the writer goes on to say, that the brightest room is the best lighted. Too intense light is fatiguing and hurtful.

"In the days of earlier illuminants the page was, perhaps insufficiently lighted, and eye-sight was impaired through strained perception. Then came the oil-lamp, with its soft, mellow radiance, which has yet many admirers in the student world. We 'see' the small print on our reading-page by contrast—the contrast of the black type against the white background—but the total area occupied by the blank white paper is far greater than the total area occupied by the black type. In other words, the white paper area, which serves to reflect light, if glazed, or to diffuse light, if rough, from a lamp into the eye reflects or diffuses more than is necessary to perceive the small black-printed matter by contrast. With earlier forms of electric illuminants the white page was modified and softened by the amber color of the light-source itself, and against this soft, mellow background the contrast of the small black characters was less abrupt, more readily perceptible, and less tiring."

While no absolute rule can be laid down, owing to individually different requirements, there is one positive method of determining whether or not the source of light is dangerously bright. If it can be regarded fixedly without ocular discomfort, squinting, or annoyance, it is not too brilliant from the physiological viewpoint.

The brilliant sources, the writer concludes at length, are unobjectionable, if toned down, which can be effected by the use of some translucent substance. The "indirect" or semi-indirect lighting fixtures now much used, go far to lessen the evil.

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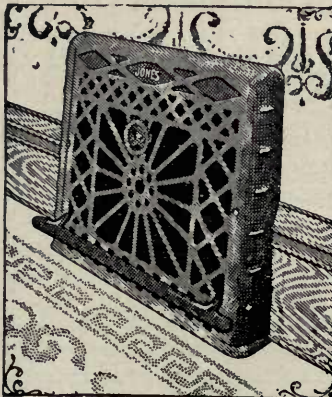
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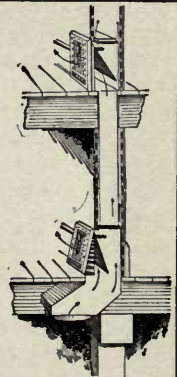
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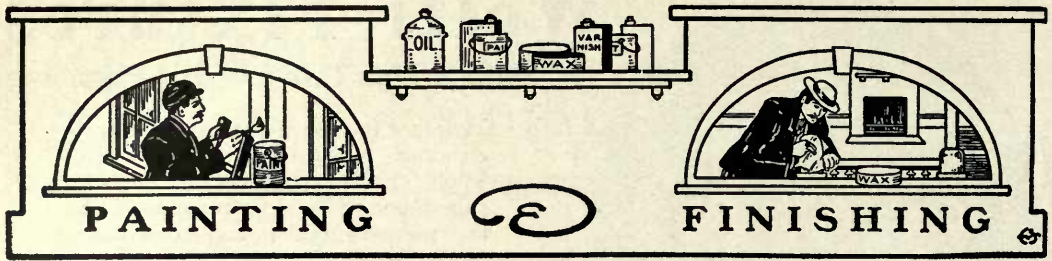
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How to Use Silver Grey Stain.

The following directions for the use of this beautiful and increasingly popular stain will be appreciated, embodying as they do the experience of experts in the use of finishes.

SILVER GREY—one of the most delicate and elusive of finishes—being an acid stain effect, is more particularly applicable to hardwoods, both open and close-grained.

Though in effect always a monotone, silver grey becomes, in fact, a two-toned finish when used on the open-grained woods, such as oak, ash, chestnut, etc. These woods furnish a green or yellow influence which has a tendency to throw the silver grey off-color, and so we combine with the silver grey acid stain a white paste filler, which performs the dual duty of filling the pores of the wood and re-inforcing the acid stain in such a way as to hold down the alien influence of the natural wood color. Most rubbing and polishing varnishes, also, have a tendency to give this effect a green cast, so we recommend that nothing but palest interior varnish be used over silver grey.

On the close-grained hardwoods, we do not recommend a paste filler for any purpose, but fortunately the woods of this class which are most commonly employed—maple and white birch—are light enough in themselves to take a beautiful silver grey with the acid stain alone. Particularly is this true of maple.

A welcome exception to the rule that hardwoods only are available for silver grey, may be cited in gumwood. In our experiments we have arrived at beautiful results by using both the white paste filler and silver grey acid stain on this wood—notwithstanding the fact that we do not make a practice of using paste fillers and acid stains for close-grained and soft woods. In this instance, how-

ever, the paste filler is applied directly over the acid stain without the intervening coat of shellac noted in our last letter. Here it is an advantage to have the stain and filler mingle. In working out this effect, care should be exercised not to thin the paste filler as much as might be done for an open-grained wood.

When and How to Paint.

Extracts from paper read at convention of Master Painters at Pittsburg, Pa.

"There is some difference of opinion among master painters, as to the best season of the year to do exterior painting, some advocating spring, others autumn. I personally prefer the autumn, not because I have any particular love for flies, black gnats, sand flies, mosquitoes, white frosts, etc. It is because as a rule, we have more settled weather, coupled with the fact that paint dries best in cool, clear weather. The drawing and absorbing influence of a strong sun is eliminated, permitting the paint to dry and harden by natural means.

"The average good job of painting done in October or November will present better protection, better wear and look better, the following August, than the average job in that month painted in June previous.

"Spring being the 'cleaning up time,' all nature coming up and out, clothed in freshness and beauty, and of course at this time, the good house wife's demands are irresistible, and we are found taking chances between showers by day and dew by night, dust storms, etc., forgetting all about the after effect of sun and heat, we sometimes being almost distracted in doing what we can do to beautify and pacify.

"It is, I believe, generally accepted that mid-summer weather is, as a rule, not suitable for best results in exterior paint-

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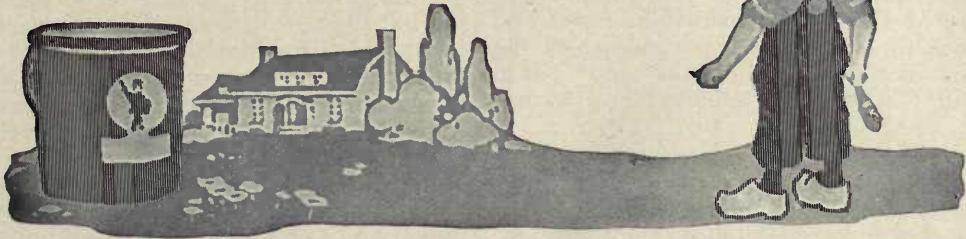
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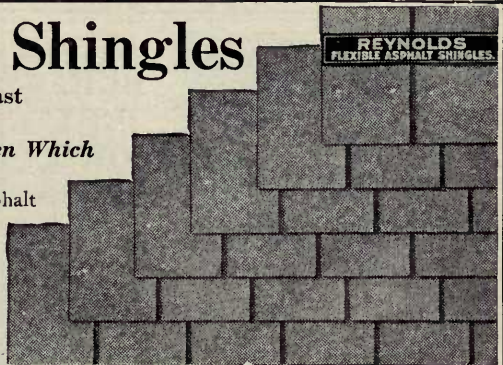
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ing, by reason of its many deteriorating influences on the paint coatings as well as the paint in the pot. Seventy-five per cent of the virtue in a good paint consists of the man who applies it. He must have discerning ability and be able to read the signs of conditions, let them be surface or climatic. Many an otherwise good job and paint has been ruined by an indifferent painter, also by the master not giving proper supervision to the work, leaving it wholly to the judgment of others, and notwithstanding the fact that his best business asset, a good reputation, is being dissipated. There are but few sights, at least to the true painter, more beautiful than a well painted and finished house, workmanship, paint and colors in tune with the harmony of the structure, 'designed in beauty and built in truth.' Who would debase the royal dignity of true labor?

It is necessary to have a heart understanding of vehicles and their requirements, also of pigment solidity and permanency. As you know, paint is composed of vehicle and pigments.

"One of the essentials to the life of paint, is that of a drier, and its proper use. In a sentence, know your drier, then use as little of it as possible. Remember that an exterior paint, made from pure, well settled linseed oil and turpentine, and applied under proper conditions, draws largely from the atmosphere natural drying elements. Cheap 'Japan Driers' are the vicious enemy of an otherwise good paint, likewise an excess of good dryer.

"In this connection regarding the use of benzole, I would recommend in the painting of cypress and southern yellow pine, that the vehicle in the priming coat, and priming coat only, should be 40 per cent of 160 degree benzole, 10 per cent pure spirits of turpentine and 50 per cent raw linseed oil. The character of these woods is such as will not permit of the penetration of paint made by the usual vehicle practice. With the turpentine and the addition of benzole, which is one of the greatest penetrating solvents of rosin, gums and grease known, the oil and pigment, when well brushed out, are worked into the wood and there find a lodgment.

"I have no hesitancy in saying that all new woodwork to be thoroughly protected should receive four coats of paint, thereby erecting a substantial surface for protection, then with its solidity and purity of color it cannot fail but be a masterpiece for permanency and beauty. To properly distribute these four coats, I would recommend that the first or priming coat be applied as soon as the structure is erected, followed by second coat. The third and fourth coats should be put on close together at the completion of residence or building. When the volume is over loaded with pigment and the painter is called upon to apply two coats by one application, that is not painting, it is plastering with paint pigment, and results will be most damaging.

"In regard to the proper application of paint on new wood, I want to dwell particularly on the first or priming coat, which is of such vast importance to the success of subsequent coatings. Is it not the 'footing course' which all true architects and builders are so earnest in their efforts to have just right, realizing as they do that the strength of the entire fabric rests upon its bearing and solidity?"



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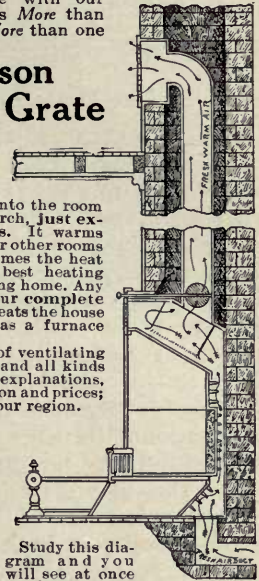
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The Architect's Corner

How To Use Waterproofing Compounds.

Ques.—I am thinking of building a concrete block house and I want to know which is the better way to use waterproofing, whether to put it in the mix before the blocks are made or to wait and put it on the finished walls, and in fact, do these things really prevent the moisture from penetrating the walls?

Ans.—I understand it is a good deal better to work the waterproofing compound into the dry cement thereby securing the waterproofing benefits by the same being worked into the mixture as the blocks are made; this in preference to a surface coat of waterproofing. Of course to get a doubly good job, both ways, I would advise you to mix your waterproofing compound (in dry state) first with your dry sand, then add dry cement, then mix all again thoroughly and then add water and mix thoroughly again. If plenty of cement is used in your mixture, then with the waterproofing, your results will be more satisfactory.

Cement Over Painted Brick.

Ques.—Will cement stick to a brick wall that has been painted? What is the best method of treating porch columns when they show the joints?

Ans.—I should be afraid to recommend your putting cement over a painted brick wall. The porch columns might be filled first with lead and oil and then painted or if the joints are wide, a little glue could be mixed with sawdust for the filling and allowed to harden before painting.

Imperfection in Mortar.

Ques.—We are having our exterior brick veneered. In mixing the mortar, the builder said he found it impossible to get all the small lumps out of the lime. The joints are raked and where the point of the trowel smeared those small lumps of lime, they have left white streaks. They would, in time, I think, weather to the shade, substantially of the rest of the mortar. But if I knew of something like a penetrating coloring matter that might be

squirted upon them, or touched to them by the point of a fine brush, I would like it, where the spots are bad. If something like this cannot be done, we will have to have the joints raked deep enough that we can have other mortar filled in over the spots. What do you advise?

Ans.—We are of the opinion that there is no really satisfactory way for you to remedy the trouble you are having with the discolored joints other than to have them raked out and rejointed.

While it might be possible to touch up these joints when you come to look at the wall as a whole, after it was so fixed, it would very likely appear patched. It would be bound to look that way unless exceeding care was taken by the man who redrew the lines. It is unfortunate that your builder should not have had a smooth mixture in his lime mortar; something quite necessary, and certainly quite possible of obtaining. I believe that the only way to get a satisfactory appearance is to rake out the joints and have them repointed.

Concrete Floors.

Ques.—I have been a subscriber for your magazine for nearly three years and now I come to you for a suggestion or two and will appreciate very much your kindness in giving me same.

I am building a house of brick, am building this house to rent. I expect to have a concrete basement under house (30x30 ft.), also concrete front porch (10x30 ft.), back porch (12x12 ft.), and concrete kitchen floor (11x15 ft.), now is it necessary to have these floors cut into squares or can it be put down without the concrete having joints or seams in it? Is the floor likely to crack if there are no expansion or contraction seams in them—both inside the house and on the porches?

Another question—my inside floors throughout the house will be either of birch or beech—the doors and trim in general will be birch and pine. Now I want to have the doors and baseboards and casings a mahogany stain and varnished, etc. What

(Continued on page 78.)

Are You Going to Build?

At the time you are arranging to plan that new home with your own architect, and naturally desire to study the ideas of other leading architects who specialize on residences of the moderate-cost type, you can get many valuable suggestions from designs and plans shown in eight issues of

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SPLINTERS AND SHAVINGS

The Door as a Character Index.



WHETHER true in fact or not, there is nothing about a house that seems to reflect or be an index to its character as the front door. One might class the front door as a sort of face to the house which reflects the character within.

This point has been impressed in a way on writers from time to time and here is one expression from a popular writer of fiction:

"If the door is mean and squalid, you look for squalor and meanness within. If the door is noble and beautiful, why, then you take for granted that it will lead to something worthy of itself. You can't say exactly what it will be till you go in; but even while you stand without you can be satisfied in having expectations."

Perhaps it takes people of lively imagination like writers of strong fiction to see and appreciate the full meaning of the front door. Anyway it is a peculiar fact that most of the impressive sentiment we find about doors is expressed not by door manufacturers and jobbers and retail dealers in doors, but by outsiders, by poetical people and writers of fiction.

It would be a splendid idea to post up now and then on this sentiment pertaining to the front door that you may impress on customers both by talks and in your advertising literature the importance of having front doors with character, pref-

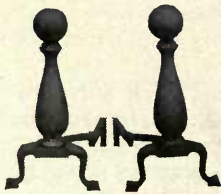
erably with character that will suggest and harmonize with what is beyond it inside the home. There is usually only one front door to a house, and the matter of a few more dollars in price should be of small consideration as compared to the satisfaction to be had from obtaining just the right kind of a door to fit the character of the house and those who live within. A little impressing of the sentiment of the front door should enable one not only to sell a better grade and get more out of it, but to have customers who are better satisfied, for that is what brings them back again and causes them to send others to you.

When Planning the House.

"I cannot afford all the little luxuries now; wait until I get the essentials, and then see if there is any money left for novelties and notions," is the conventional frame of mind of the home builder, and it is quite a natural frame of mind at that. But wait and see if it is practical. To find out for yourself whether it is practical or not, invest a dollar or so for postage and stationery, and spend two or three winter evenings writing for catalogues of as many household conveniences as you can learn about which come on the border line between absolute essentials but undoubtedly desirables.

For instance, start with the windows and shutters. There must be fasteners for both. These are essentials. But does it not also appeal to your conception of comfort to have a little contrivance on the inside of the casing whereby you can open or close the shutters without opening the window or disturbing the screen? And as to the screen, how would you like a screen which rolls up and disposes of itself like a shade on a roller, in place of the old kind which slides rigidly up and down and which is always either too tight or too loose in its tracks?

While still going to the window for light on this subject of fitting the house in its beginning for later economy and efficiency, would it not be worth while to



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give a thought to the newest form of window ventilator which admits a reasonable modicum of fresh air to the room without depositing it all on the back of your neck? Everybody knows nowadays about the potency of fresh air without drafts as a tonic for ill and well alike, but far too many people still know too little about how to get it. The prime time to learn is when building a house.

Another device designed to accomplish a similar purpose is an attachment for radiators which keeps the air moist, thereby improving its qualities for breathing purposes, and keeping the furniture and

wall paper from shriveling up and passing away prematurely.

"The man who owns his own home, who owns the roof over his head and the ground under his feet, whose children have a place that they look upon as their own, gives to himself and to his family a chance a thousand times better than that of the individual who is living in a box called an 'apartment.' Don't buy what you can't afford to pay for. But remember that if you are really able to pay the average rent, you are also able to pay and gradually buy the home and own it."

—Arthur Brisbane.

The Architect's Corner

(Continued from page 74)

color would you advise the floors to be? I was afraid if I had the floors and doors, etc., all the same, that is, mahogany, it would be monotonous. Still I don't want oak. Can you give me an idea? I will thank you very much indeed for your advice and suggestions.

Ans.—In the laying of a concrete or cement basement floor of your house, it will not be necessary to mark off this floor into squares, though there would be no particular objection to doing so, excepting that the divisions or grooves in the floor would, of course, hold the dirt. It is quite possible that if the flooring is grooved, that when the same tends to crack, the crack will follow the groove, but I do not know as this would result in any particular advantage. Concrete work is usually marked off where open to the weather and exposed to extreme heat and cold. When frost gets into the ground it often will cause cracking of a cement sidewalk or pavement, but, of course, this difficulty is not to be encountered where the flooring is in the basement of your house. The concrete porch floor would be a different proposition, but I wouldn't recommend your having a concrete floor on the porch for a number of reasons. In the first place, it is very diffi-

cult to get the base solid enough so that there will be absolutely no settlement, no matter how well the base is constructed. Then, concrete is a mighty cold, hard flooring and it belongs on the sidewalk, pavement or driveway, and to my notion, has no place in the house. By all means don't try to put it in your kitchen floor for you will surely regret it.

As to the finish of the birch or beech flooring, would say that I wouldn't attempt to give them any color unless possibly it is putting just a suggestion of tint in the filler when the floors are finished, but it would be much better to have the natural color tone of the birch or beech wood against the effort to stain them, beyond what I have just suggested. You were certainly right that if you attempt to stain the floor mahogany finish and the standing finish is the same, you would have too much of a monotone color scheme throughout the room. There are some very excellent floor finishes on the market and a number of them you will find advertised in the columns of Keith's Magazine. You could do no better than to secure samples of beech or birch flooring with some of these floor finishes, and the manufacturers of the finishes would certainly be most happy to supply them.

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| 3. Halls and Stairways. | 7. Billiard Rooms. |
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New Booklets and Trade Notes



THE Aeroshade Co., Waukesha, Wis., manufacturers of porch and window shades, have hit upon a felicitous name for their product, which they call the *Aerolux Shades*—*Aerolux* being compounded from the two Latin words "Aer"—air, and "Lux"—light. Their new catalog illustrates and describes these shades, woven from thin strips of Limewood so as effectively to exclude the sun, while admitting light and air.

This firm makes a specialty of very wide shades, as single shades are desirable even for very wide openings. Sample pages showing the range of colors used, are included in the catalog, also photographs of buildings showing the method of attachment and operation.

* * *

Properly Hung Doors make all the difference in a house between comfort and discomfort. The Stanley Works, New Britain, Conn., in their booklet under this title, claim to insure the owner of a new home that his doors will be properly hung. Their catalog is well worth looking through.

* * *

It is seldom that so much thought, taste and money are put into a trade catalog as appear in the large and handsome portfolio sent out by The Quality Furniture Co., Grand Rapids, Mich. Nearly 200 pages are filled with cuts of every description of beautiful and practical furniture at moderate prices. This company makes a specialty of retailing to the customer direct from the factory at wholesale rates, and their trade name "Quality" indicates the character of their goods. While they furnish the most elegant suites in such styles as the Jacobean, Adam, Sheraton, etc., they pay equal attention to the growing demand for furniture appropriate to the bungalow, the cottage, the den or the porch, and their Qualtex Fibre Furniture is specially desirable in this class of products. Home builders will do well to examine their offerings.

* * *

Practical Home Building, the new booklet of the Northwestern Expanded Metal Co., Chicago, Ill., is full of valuable hints and suggestions to the intending home-builder. The firm are pleased to send this book on request upon receipt of 10 cents to cover postage and wrapping.

* * *

Owing to demands of increased business and to facilitate the same, the P. & F. Corbin Co., Specialists in Hardware, have consolidated their up and down town offices and are now located in the Architects Building, No. 101, Park Avenue. Their display rooms are models of artistic arrangement and convenience and visitors from out of town are made heartily welcome.

The fetching little booklet "*The Casement Window*," issued by the Casement Hardware Co., Chicago, is an inspiration in the matter of trade publications. It is so attractive that one reads it for pleasure as well as information, though it is not lacking in the latter quality.

* * *

Modern Plumbing is the handsome and well arranged catalog of the I. L. Mott Iron Works Co., New York City, displaying many inviting bath room fixtures and other specialties.

* * *

The Trussed Concrete Steel Co., Detroit, Mich., send us their last word concerning Rib Lath and Rib Studs for plaster and stucco buildings. Specifications, directions for use and cost of application are given and it is freely illustrated.

* * *

A very interesting volume has come to our table—an old and rather hackneyed theme so delightfully treated as to invest it with fresh and poignant charm.

The History of the Dwelling House and Its Future, by Robt. Ellis Thompson, will be found as fascinating as a novel by all who are interested in home building, and even by those who are not contemplating that pleasant pastime. We are so accustomed to our modern houses and all their improvements that this generation has little idea of how really short a time has elapsed since the greatest lords of the earth had not a chimney to carry the smoke out of the house. They had bowers and halls—but not houses. The chimney made possible the divisions of the hall into floors and rooms. The author traces these developments, not in a dry textbook way, but with lively comments.

Then he describes the house that is to be, and his ideas are certainly interesting and progressive. The doing away of the staircase is one novel suggestion. They also seem quite practicable. May we all live long enough to enjoy these houses, streets and cities that are to surpass the present as far as the present surpasses the past. J. B. Lippincott Co., Publishers. Price, \$1.50.


* * *

The Norman Henley Publishing Company send us their new reprint of *Modern Methods of Waterproofing*, containing the most important data and up-to-date methods of waterproofing concrete construction. The author, Myron H. Lewis, C. E., here condenses and simplifies the more extended discussion of this and kindred topics contained in papers read before the Municipal Engineers of New York, and from his numerous contributions to technical periodicals.

KEITH'S MAGAZINE ON HOME BUILDING

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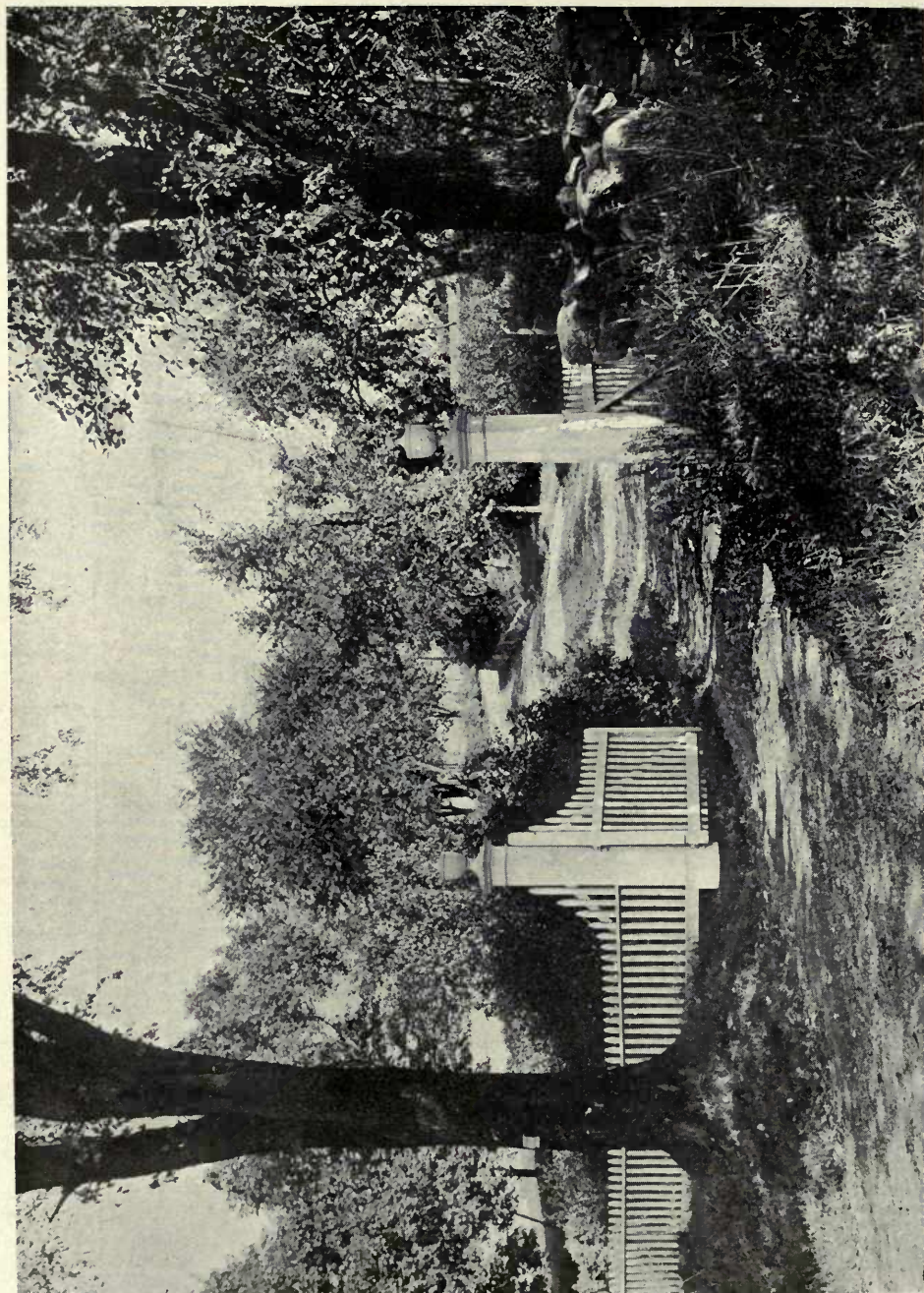


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A Glorified Picket Fence.

KEITH'S MAGAZINE

VOL. XXXII

AUGUST, 1914

No. 2

The Revival of Walls and Fences

E. I. Farrington



OR a time there was a tendency all over the country to do away with fences wherever possible.

They seemed to be considered an unmixed evil. Of late, however, there has been a sort of reaction and people are coming to realize that fences and walls need not be offensive or out of harmony. It is true that in suburban sections, where one lawn joins another in an unbroken stretch of green, fences be-

tween the lots are not desirable. On the other hand, there are many estates and private grounds, as well as simple gardens in suburban towns and in more rural communities, where it is highly desirable to have a fence, a wall or a hedge.

It is often the case, too, that a fence adds to the appearance of the house and grounds. It is certainly true that the fences and gates of old Salem play an important part in the architectural



The Architect Has Designed a Cement Wall in Keeping with the House.

scheme of the best of the old time houses. A flower garden is doubly attractive when surrounded by a brick wall or a white picket fence. In England, in the olden days, lofty walls were used for the reason that one's neighbors were likely to be over-inquisitive, if not positively obnoxious. These old walls are admired for their associations and ancient picturesque-

an excuse in the assertion that they are going to cover the fence with vines, but there are no vines which will really hide such a contraption.

Wire fences are not objectionable, because of the fact that they are not prominent, especially if set with iron posts. They are easy to erect and last a long while, providing that the posts are gal-



An Admirable Retaining Wall of Field Stone—Where Grounds Are Higher Than Roadway.

ness, but there is no reason for duplicating them in this democratic land.

A plain picket fence painted white often helps to set off the simple country cottage in the most effective way. Unfortunately such fences are expensive to build in these days. The most modern fence is built of iron or wire. Sometimes gas pipes run through wooden posts are used, but certainly are not to be recommended. In fact, it is difficult to make any defence for a fence of this kind. Sometimes people who put them up find

vanized. This point is important, for otherwise the posts will rust off at the surface of the ground. Some of the best fences are made with iron anchors which, when attached to the posts, hold them absolutely secure.

Iron fences naturally cost considerably more than those made of wire and are adapted to large estates. They usually need to be set off with heavy posts of stone or brick, preferably the latter, in order to secure a certain feeling of formality. Commonly the brick posts are

surmounted by heavy iron balls. Some iron fences are really objectionable because of their ornamental character. Simple iron fences built along the top of a low brick wall are the most pleasing to the eye.

There is nothing quite so satisfactory for a garden wall as brick, for the red of this material harmonizes perfectly with the green of the foliage. The brick, however, should be of the rough textured variety and not the pressed brick commonly used for fireplaces. The latter is entirely out of place in the garden.

In some parts of the country, particularly in England and New York, stone walls are found in great numbers and are by all means to be retained. A well built stone wall, especially if laid up without mortar, is a delight to the eye. It is even worth while building a wall of this char-

acter, if field stones abound and especially if one can get an Italian stone mason to do the work. The Italians seem to have a special aptitude for the handling of stones in any shape.

A stone wall is appropriate whenever the house is of an informal character and not over pretentious, no matter what the material of the house may be, save that a brick wall looks better with a brick house. Too often we see cement walls in which field stones are imbedded. Probably some people think that walls of this kind are pleasing to the eye, but it must be confessed that their good taste is to be called in question. Even a stone wall loses something of its character when laid in mortar, except where stones wide and flat, such as are found in Pennsylvania and some other parts of the country, are used. A wall built with stones of this



Excellent Combination of Cement and Iron.

sort is quite different in appearance from the field stone walls of states farther north.

Whatever kind of wall is used, there is no reason why climbing vines should not be grown over it freely and the result is sure to be delightful. The Wichuraiana rose is particularly charming when allowed to ramble along a stone fence. Hall's honeysuckle is also to be recommended, for it makes a rapid growth and

Cement has come into use as a common building material of late years and in order to give a house the proper setting, the wall or fence which surrounds it must necessarily be harmonious. If a cement house sets fairly well back from the street, there is no reason why a picket fence painted white should not be in good taste. Usually, however, if the house is at all pretentious, it is desirable to have a cement wall or else cement used in connec-



Old Wall of Clinker Brick Set with Field Stones.

retains its foliage until late in the winter, besides yielding great numbers of fragrant blossoms during the summer. The common rambler rose is sometimes used and makes a wonderfully brilliant effect during its brief flowering season. The fences around Thomas W. Lawson's estate not far from Boston are covered with Crimson Ramblers and people come many miles to see the June display. After they have flowered, however, the Crimson Ramblers lose all their beauty and for the rest of the season are far from attractive. Some of the newer varieties of climbing roses are much to be preferred.

tion with an iron fence. A low cement wall with vines climbing over it is entirely in keeping, but there should always be substantial posts at the entrances as well as at the corners. Often when cement is used for a low wall, it is surmounted by an iron fence and the effect is usually very good, especially if heavy cement posts are used at intervals. Sometimes the posts are crowned with large cement urns containing trailing vines, like nasturtiums, ivy or vinca.

In California of late years there has been a tendency to use clinker brick in quite an original fashion. A clinker brick

wall in which the bricks are laid in irregular order and interspersed with large and small field stones is shown in one of the illustrations. Under most conditions a wall of this kind would be inappropriate and not in the best of taste, but as it happens in this case, the character and aspect of the house and the environment of the whole estate are at least an excuse for this unusual fence.



Brick Is in Keeping with a Formal Garden.

Where the grounds are somewhat

higher than the roadway and a retaining wall is necessary, the effect is good, if this wall is made of stone, brick or cement with a light picket fence above it. As a rule, however, it is desirable that this fence should be of a simple character and with substantial posts at the entrances. Such posts are commonly surmounted with wooden balls or acorns, but these ornaments should be thoroughly saturated with linseed oil as soon as they have been turned out and then given a heavy coat of white lead paint. Otherwise they will be pretty certain to crack or chip off.

Sometimes it is allowable to use rustic fences and to build more or less ornamental wooden fences, but as a rule the plain picket fence, painted white, is to be preferred. Picket fences, it may be observed, are very old. They were used by the English many generations ago when it was impossible to secure brick for garden walls. Sometimes they were

painted green, but when the American colonists began building them in this country, they invariably painted them white and, according to our ideas, white is by far the best color for a garden fence. When the fence surrounds a frame house, however, it may be painted the same color.

Sometimes vines are allowed to climb over wooden fences and the effect is pretty, but the vines are very likely to cause early rotting of the wood. Even at the best, picket fences are not so long lived as might be wished, but they will last longer if posts of chestnut, locust or cedar are chosen and the ends to go into the ground covered with a preservative. A simple plan is to paint the posts with kerosene and then to go over them with coal tar. Creosote is also used and there are several patent preparations on the market.

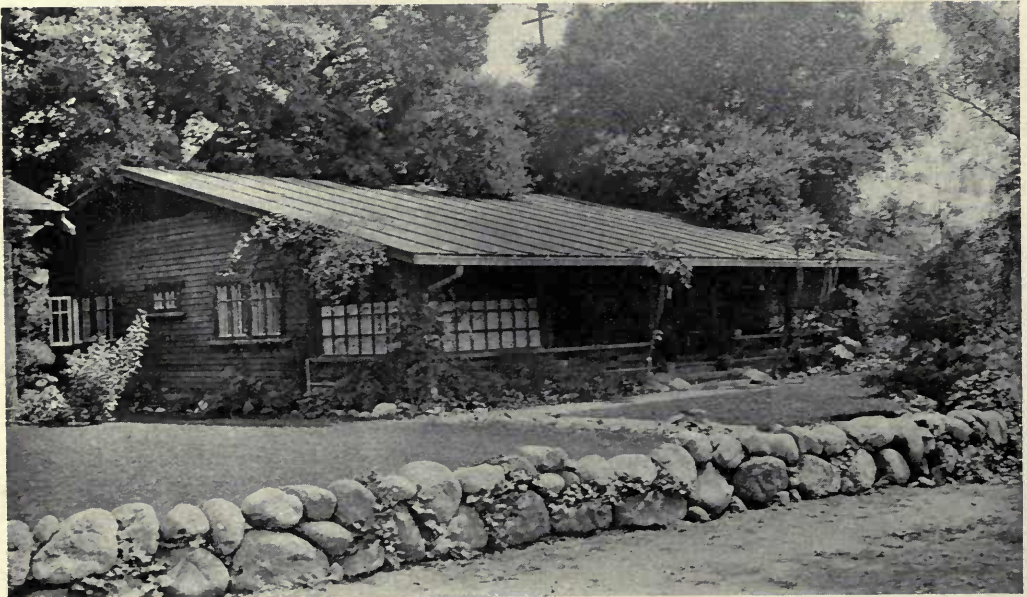
Whether the posts are of wood, brick or cement they should go below the frost

line, which means that in the northern states a hole at least three feet deep must be dug. When wooden posts are used it is well to place a large flat stone at the bottom and to use other stones when filling in around the posts in order that they may stand perfectly secure.

It is a growing custom in this country to use hedges in place of fences or walls, both around the dwelling house and the garden. On the whole, a good hedge is to be preferred in the majority of cases to

well in the shade as in the open. Amur Privet, which is now being used to considerable extent, is much hardier than the California variety.

For a shady situation, and, in fact, almost anywhere, a Hemlock hedge is particularly to be recommended. It makes a strong heavy growth and looks well the year around. It is not, however, quite so well suited to the trim, regular lots of a smug suburban town. Another hedge plant which has grown rapidly in favor



The Low Stone Wall in Friendly Relation with the Broad, Low-Roofed Bungalow.

a fence, provided that the hedge is kept well, but it is usually an advantage from a standpoint of appearance to have solid brick posts at entrances and corners.

Probably the best hedge plants are Japanese Barberry, Privet and Hemlock. Without doubt California Privet is used more than any other plant for this purpose. It grows rapidly, is easy to establish, and makes a dense barrier. Although not an evergreen, it holds its leaves until well into the winter. On the other hand, it is more or less subject to winter killing, it must receive constant trimming and does not thrive nearly so

of late is the Japanese Barberry, which is of special value when it is desired merely to mark the boundary line rather than to offer any real obstruction, although after it becomes well grown the sharp spines on the plants make them a rather effective barrier against dogs and cats. The barberry is of slow growth and for several years may easily be stepped over. It requires very little trimming, is perfectly hardy and holds its red berries much of the winter. Indeed, the fact of its cheerful appearance in winter is one of the best reasons for growing the Barberry.

A Modern Cottage of Distinction in Pasadena

Margaret Craig



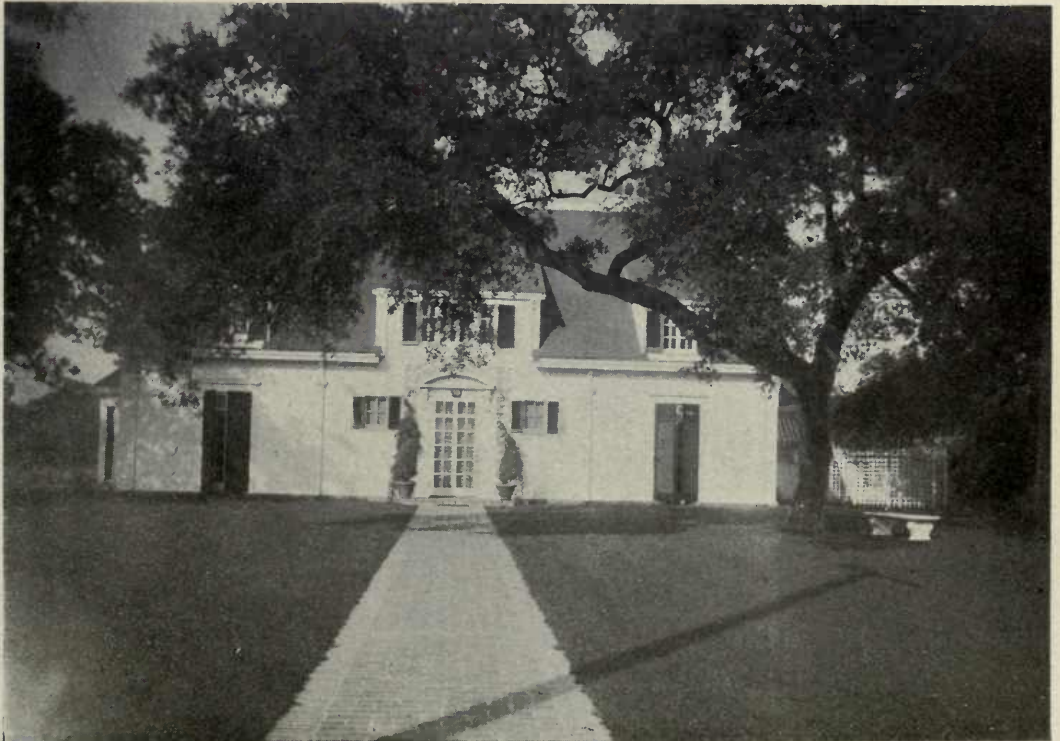
EN years ago there was scarcely a house in the rolling country southeast of Pasadena.

However, within that space of time, without slashing the hills to a monotonous level, but allowing the roads to encircle the little hills grown with the dignified live oaks, and building the houses in the flat spaces or on the broadest hills, a remarkable residence section has been developed.

This is greatly due to the skill and taste of the architects who have shown their ability to relate their art to that of the most attractive landscape gardening.

Among these homes, there is none that wins more attention than the white colonial cottage at the north of this district. Not because of size or any pretentiousness has it gained its eminence, but rather because of its purity of style and effective simplicity. It was built by the architect, Mr. Farquar of Los Angeles, two years ago, and the present owner has carefully endeavored to extend the colonial feeling which has been so ably shown in its structure and plan through the interior.

Placed quite a distance back on the large lot, this house is surrounded by an almost unbroken expanse of green lawn.



Front View of Modern Cottage. Mr. Farquar, Los Angeles, Architect.

The large oak trees on either side of the long straight entrance walk have been encouraged to add their pictorial branches to the resulting effect.

The irregular roof, that has a pleasing variety of line is painted green in contrast to the pure white of the plaster walls. High and broad green blinds have been hung at all of the windows, and in combination with the doorway and dormer windows, these old fashioned blinds give the definite touch that suggests the colonial period of architecture.

The entrance is most pleasing. Lattice work is placed on either side of the

two glass doors for the purpose of supporting flowering vines, and extends in a semi-circle above the door. A narrow shelf supported by a corbel at either end is beneath this semi-circular lattice and supplies a feeling of unity.

On the low brick terrace in front of the door two box plants have been placed to accentuate the entrance and to give the necessary touch of green. On entering the hall through this doorway, one is at once impressed by the exquisite taste in the furnishings of the house, and the appropriate arrangement of furniture in regard to the wall spacing.

The coloring in this ante-room is of the softest putty shade and the woodwork is a cream white. Opposite the door, and diagonally cutting the entire wall space is the colonial stairway with cream-white spindles and dark stained railing and newel post.

Against this stairway is placed an antique chest, with two ecclesiastical pewter candlesticks upon it. At the landing of the stairs, three steps from the bottom, is the old grandfather's clock, and on the floor at this turn of the steps is an Italian carved wood flower-basket containing green plants.

On either side of the front door are rich pieces of modern tapestry, one recently executed by the Herters, of present fame.

The doorway at the left and at the foot of the stairs leads into the guest chamber, while the archway beneath the stairs forms a little telephone room, and opens into the dining room. The wide doorway



The Exquisite Detail of the Stairway.

at the right of the hallway leads into the drawing room.

Everything in this spacious room betokens a happy welcome to the visitor. The coloring of the room is the keynote to the colors used in the whole lower floor. Putty colored tapestry walls form a soft background for the lovely etchings and prints. One of these is a genu-

ine colonial and a rare treasure. The mirror of the over-mantel is a genuine colonial and a rare treasure.

Through the doors near this fireplace a lovely vista of the dining room can be seen. It occupies the center of the east wing of the house.

The walls here are also putty colored and



Living Room in Pasadena Cotrage.

ine Whistler and another a Seymour Haden. Rose colored velvet draperies hang at the doors and French windows, and are repeated in similar shades in the covering of the settee and chairs. The furniture in this room is of the most beautifully carved rosewood and is an example of the best of its period.

At the end of the room is the fireplace, white woodwork surrounding the inner facing of buff marble, set off by a handsome steel fender. The ornaments on

set off beautifully the two large oil portraits and the rich, heavily carved Flemish oak dining-room furniture. The serving table is opposite the long line of French windows in the east wall and the buffet is against the north wall.

These French windows open upon a partly enclosed terrace without, which can easily be used for a delightful out-of-door dining room in the warm summer days.

A doorway leads directly from this din-

ing room into the living room. It immediately suggests comfortable lounging with music from the grand piano, and warmth from the cosy grate fire.

The woodwork here is a dull stained walnut, bought out by a rich brownish wall-paper. On the walls are decorative Japanese prints, that have suggested notes of reds, blues and dull oranges and greens in some of the silken furnishings. Built in bookcases fill the northern and eastern wall spaces, and a table with reading lamp and easy chairs, and a davenport complete the air of the livableness of the room.

Rich English print curtains hang at the windows of this room as well as those of the dining room.

The second floor interior decoration is very lovely also. Its charm is accentuated and made individual by the various roof sloping and dormer windows.

One room is lovely in old blue linen draperies which are made more interesting with a small design of dull red rose-

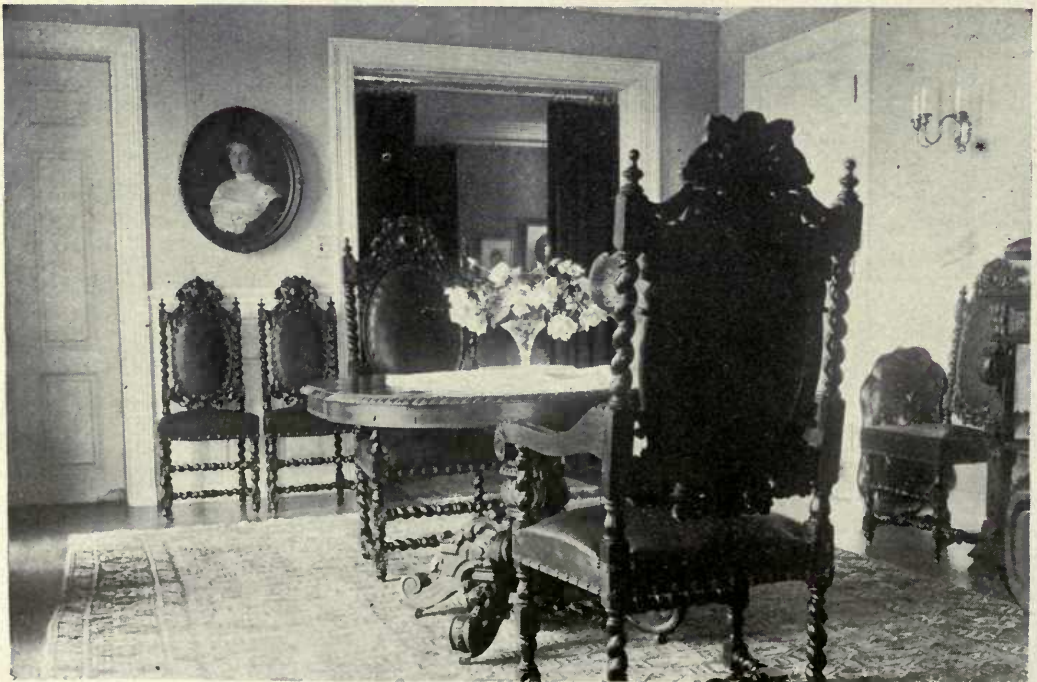
buds. The hangings at the windows and canopied bedstead admirably set off the rich hand-carved Renaissance furniture. The second bed chamber is made very cosy with a small alcoved fireplace, and furnishings that have a strong note of the old red.

The guest chamber is off of the lower hallway and is attractively furnished with white maple and draperies of old rose.

The service part of the house is in the southeast corner and is carefully hidden by a lattice enclosed yard.

Much attention is given now-a-days to making the rear of a house inviting and this house certainly proves the part. The entire ground is well lawned and not even broken by the unsatisfying lines of a garage for in this instance the garage is built on a lower level of the ground and only its green gables and part of the white walls appear at the far end of the lawn.

Altogether the house is simple but elegant and most complete, with every need



The Dining Room with Its Richly Carved Flemish Furniture.



With Hangings of Old Blue Linen and Hand Carving on Old Renaissance Furniture.

supplied with the minimum of space. With its white carved benches under the wide spreading branches of the oaks, its pleasant verandas opening off of much

used rooms, and a well designed doorway to accentuate the feeling of hospitality, it is a fair example of the modern successful cottage.

Framing the Old Summer Home

M. Roberts Conover



HE modern summer home of the bungalow or semi-bungalow type, is made for a setting of trees, fields, vines and flowers, that is, if it is a good type of its class, the architect could not have logically planned its details without thinking of its logical environment and indeed, it is unjust both to the owner and the style of the building itself to give it any but the tender, beautiful touch of natural things. That is the ideal. In reality, the small summer home gets some very shabby treatment, not from any conscious fault of the archi-

tect or owner but rather from an unfortunate collusion of circumstances in which cramped lots, ill-chosen bungalow tracts and inflated advertising are prominent factors.

It is disheartening to stroll through a bungalow colony on a treeless site. There is some good feature in almost every building of this type but this value is entirely lost when a tenderly thought-out plan is used in certain locations and relations. We cry out against an ugly neglected building by the side of one noble in line and dimensions but that



Plantings Begun About Bungalow in Peach Orchard.

comparison has the zest of contrast. One of the objects gains by the survey. Not so with the colony of bungalows real and simulated when built close on small treeless lots and viewed en masse. All attractive details appear submerged. It is not a conflict between styles with one or

more so completely victorious as to dominate the rest, but a dead and comfortless mediocrity,—a thing foreign to the best bungalows considered individually. And it is too bad, for these small summer homes are vital to our modern life being the homes of the many—and they cost



Decorative Value of the Hydrangea.



A Semi-Bungalow with Hedge of California Privet.

money too. One remedy lies in the site itself. More roomy plots on softly undulating knolls—the bungalow nestles comfortably if given a chance—would give a favorable setting. But roomy grounds are not practicable where real estate companies would commercialize the very air we breathe. Trees, vines, flowers and shrubbery are the other remedies, bringing out the artistic details and lifting the small summer home from the common place into which incongruity has forced it.

With two exceptions the summer homes here described are built on small plots on bungalow tracts and show how

the individuality of good plans is preserved, and poor ones rendered charming by planting.

Illustration 1 shows a small summer home just completed on a small lot in a peach orchard. Note the value of the trees in the rear and the slope of the roof lines.

Vines are used about the veranda, windows and porte-cochere and boxes of plants at the windows. Hall's Japan honeysuckle is very useful for such an effect.

Illustration 2 shows the highly decorative value of the hydrangea planting before the veranda.



Such a Planting Need Not Be Expensive.



A Home with More Extensive Grounds.

Illustration 3 is an example of the semi-bungalow type on a small lot. A hedge of California privet is used about it. Arbor vitae and dwarf evergreens are planted close to the veranda to serve as screens. Vines shade the sunny windows and window boxes of flowers and vines are used at the upper windows.

A rear view of a summer home of the semi-bungalow type built on a sharply sloping lot, with basement in the rear, has shrubbery arranged to hide the basement, preserving the bungalow effect. The ivy on the chimney and the position of the old apple trees are also of great value. The taller dentzias, spireas, lilac, snowball, hydrangea, forsythia, and Japanese maple, with a lower border of Japanese barberry, could all be used in similar locations.

Such a planting need not be expensive. The shrubs of a locality can be used. Wax myrtle or bayberry, mountain laurel, wild, or bush honeysuckle, the purple barberry, etc., lend themselves well to such a position.

Illustration 6 demonstrates the use of vines and annual plantings. Ivy, wistaria, trumpet creeper and clematis are used on this cottage. At either extremity, cannas and castor oil plants are planted in large semi-circular beds.

Number 5 is an attractive summer home with more extensive grounds. Its chief attraction is its shrubbery which affords bloom most of the spring, summer and fall. Among the shrubs used are forsythia, spireas, snowball, rosa rugosa, Japanese plum, dentzia, golden-leaved elder, althea, and hydrangea.

The Decorative Value of Lattice in Architectural Design

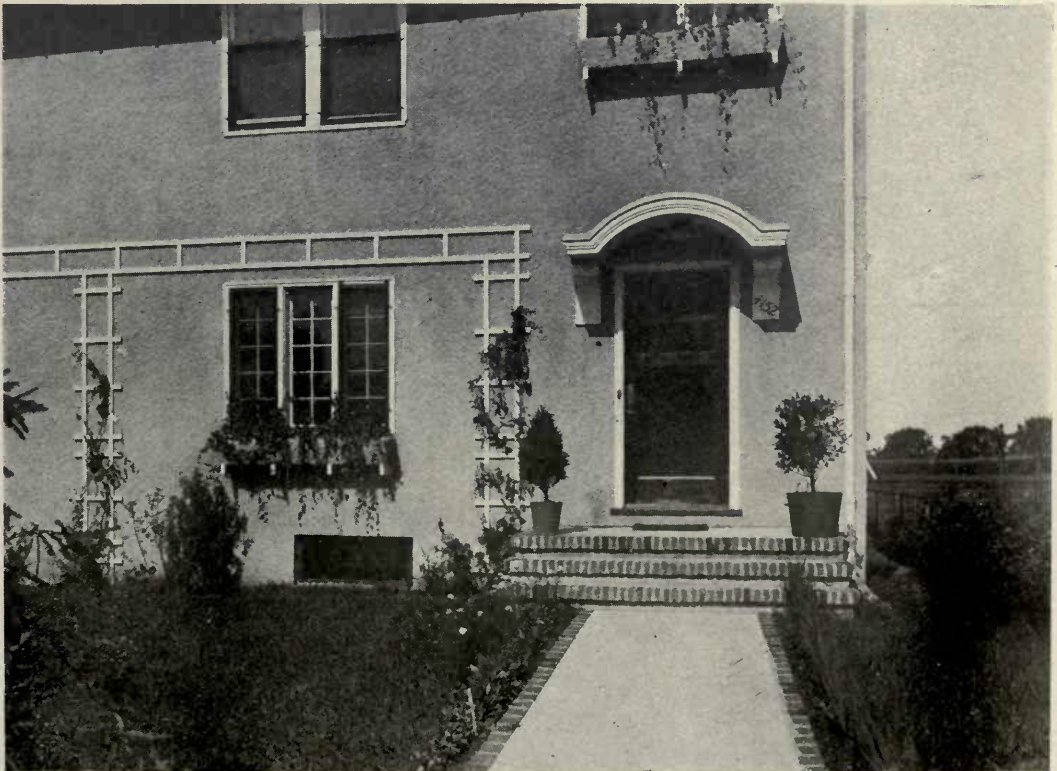
Henry K. Pearson



ANY one who is at all observant of houses cannot but remark on the increasing use of trellis and lattice work on the exteriors of modern design. It is a very charming revival of an old decoration, and one which harks back for its ancestry, not only to our own colonial period, when many old American Manor houses, especially in Pennsylvania and further south, were embellished with pleasing latticed trellises, but to the architecture of Germany and France, where these refinements had been practised even before the seventeenth cen-

tury. Our own use of this feature was of course derived from England, whose Georgian period furnished the motif for our own colonial architecture.

Not that all the early uses of lattice were beautiful or desirable, too often the only use made of the lattice was a high fence dividing the front from the back yard, and more ugly than the ugliness it was meant to hide. Generally this fence was painted a dark green, which intensified its ugliness. Of late there is quite a return to the fashion of fences and lattice screens, but the contrast between



Interest Given to Plain Stucco Exterior by a Decorative Lattice.

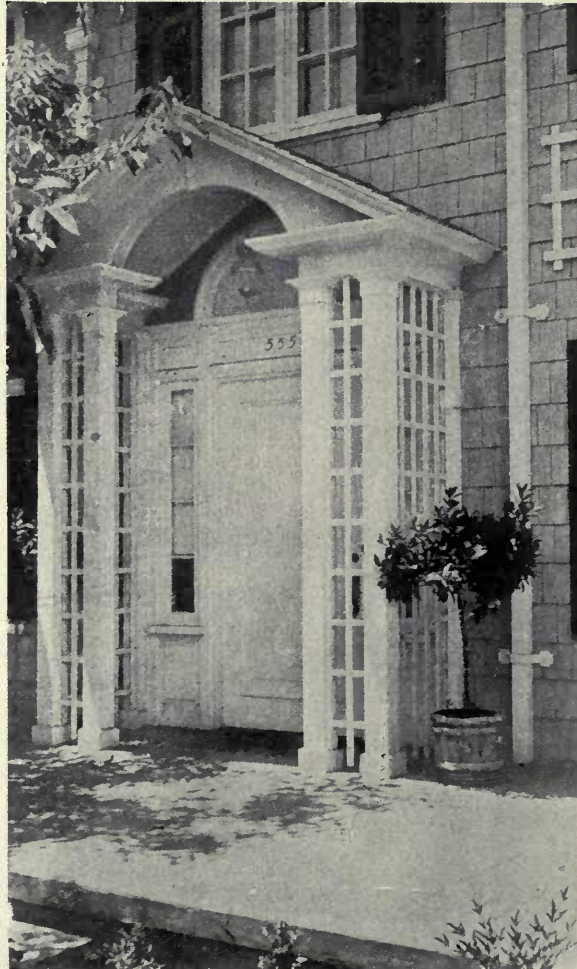
those old-timers with their clumsy two-inch strips between a couple of high up-rights, and the modern way of doing it, is well brought out in one of our illustrations. Such a trellis as this is an ornament and a decoration to grounds, while serving many utilitarian ends. Not only is it useful for shutting off some unlovely feature, but it may serve as one wall of a lovely retired garden, and a blackberry vine trained upon its southern side afford luscious fruit, as well as beauty of foliage.

But it is the trellis as a decorative feature of the house exterior that we are principally considering in this article, and in this application of the trellis American architects show greater discretion and artistic sense than their European brethren. The Germans, for instance, are far

too ornate in their ideas, and load a house down with superfluous and unmeaning application of their trellis work. Striking and novel effects they may, indeed, achieve, but obtrusive and lacking in any harmonious relation to the dwelling. Such, indeed, is the general spirit of German architecture both interior and exterior, which tends either to heaviness, or to the bizarre.

Americans do it differently, and the good architect never forgets that restraint is an excellent thing to keep in mind in the employment of decorative features. Like too much trimming on a handsome gown, over-done ornamentation destroys

its own intention and mars rather than adorns. More emphatically than most things, the lattice demands the "*raison d'être*." If it is just tacked on somewhere with no logical purpose to serve, it offends one of the first principles of design. When, for instance, one sees trellis work on the second story of a dwelling without any ground connection, it is meaningless and valueless. Since the underlying idea of the lattice is to serve as a support for vines, it must bear out that assumption, and at least appear to fulfil its proper functions.

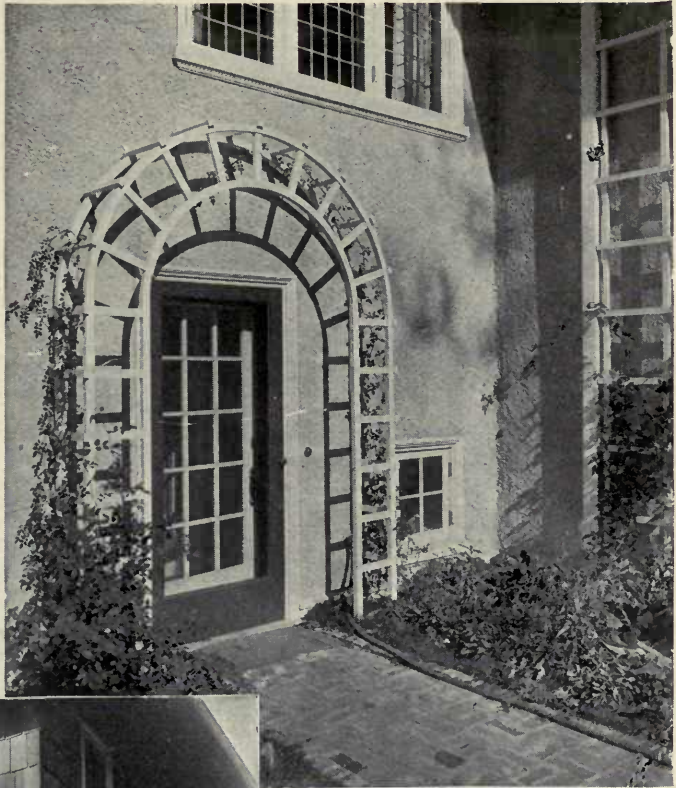


Seclusion Given by Use of Lattice Between Posts of Entrance.

The first illustration is an excellent example of a felicitous use of lattice and trellis work, and shows how interest and artistic beauty is given to plain lines and a very simple exterior, by a clever application of this decoration.

Lattice work is never more potent in its charm than when used in conjunction with stucco or cement plaster, and to be at its best the lattice must be white against

plaster of a soft fleecy grey. We sometimes see brown lattice applied to tan colored plaster, but the effect is sad and unhappy. In the example shown, note the wonderfully softening effect of the simple lattice treatment on the severely plain lines of the exterior. Of course the designer looked forward in his mind's eye to the greatly added charm, when the rose vines just starting at the base, shall trail their slender branches up the lattice running across from window to window and swinging over to catch the arched hood of the entrance



Clever Provision for Electric Light and Planting.

Delightfully Related to the Garden Bloom
Upon Which It Opens.

and hang from it in long, dropping sprays. Such effects, the real artist always takes into consideration, but he also aims at lines which are beautiful in themselves, even before the grace of the green foliage is added. One thing should be remembered in the choice of vines for such a decorative trellis, viz., that vines of heavy, large-leaved and luxuriant growth are not suitable, as they destroy the intended effect of lightness and grace, are too heavy for the frail lattice to support, and moreover completely hide the lattice itself, so that its decorative value is entirely lost. The different varieties of climbing rose are the vines par excellence to use on lattice work;

though the purple clematis can be kept within bounds, its rich blossoms and dark glossy foliage affording a fine contrast to the plaster background. Another vine with charming possibilities is the Bittersweet, its twisting stems and delicate light green leaves have the added beauty of the bright red berries and orange pods till late in the

house. Even the stand pipe from the roof gutter is made an integral part of the design and has real decorative value. Nor is the even simpler treatment of the square portico less charming. Every detail has been carefully planned. Note the break in the over-head lattice to receive the porch light and the provision made



Well Designed Lattice Treatment of Terrace and Porch.

fall, adding a note of interest even in winter.

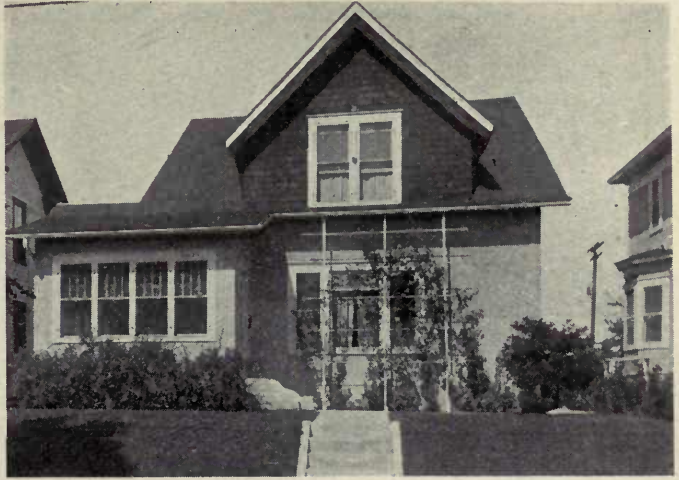
Three illustrations of lattice treatment of the entrance, are full of suggestion. The first two are of houses in Pasadena, where a white trim is combined with grey stained shakes in the one and brown shingle in the other. The clever use of lattice between the posts or pillars supporting the portico roof gives a feeling of being enclosed without losing the light and airy effect which belongs to the

each side of the steps for the planting of the vines.

In the third entrance we have again the charm of lattice combined with plaster in a more elaborate, but not too ornate style. It is the garden entrance on the side of the house and delightfully related to the garden walks and bloom upon which it opens. The return of the lattice arch gives a real, though shallow enclosure to the door

The very well designed lattice treatment of terrace and porch makes a beautiful picture. Here again we note the provision made for planting in the large opening through to the ground of the cement tile floor, a clever way of getting the true spirit of the lattice and the practical benefit of the floor.

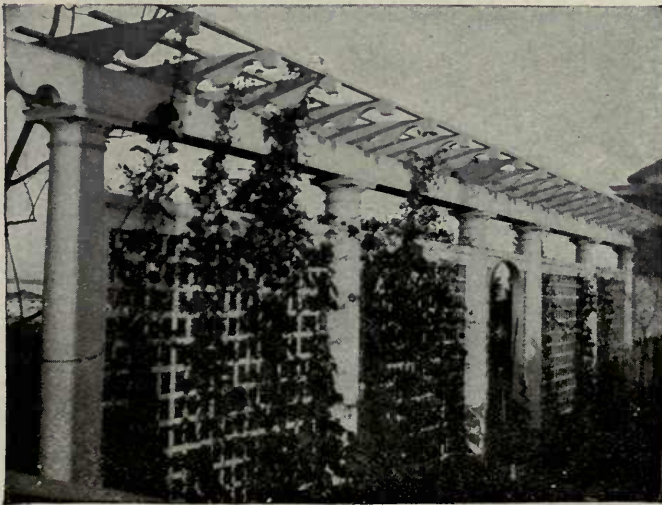
Another illustration is idyllic in its charm, and is a perfect example of the point previously made that the climbing rose is the vine par excellence for the lattice. Here the pleasant glimpses of the white lattice and grey plaster through the delicate verdure of the rose vines are part of the picture, while the nodding clusters of rich crimson give the lovely color contrast so satisfying to the eye. Lattice work is so simple, that when its principles are studied and its limitations observed, it can be applied by the home builder himself, if need be. The lattice strips can be obtained at the mill,



Simple White Lattice and Crimson Rambler Roses.

and a hammer and saw and a pot of paint is about all that is needed for tools. The great point is to avoid anything freakish or *outré* in design.

Not only is lattice work a fertile source of decoration for new dwellings, but it has many possibilities in the re-modeling or re-juvenating of old ones. We have seen a very dismal old-timer indeed, made into an up-to-date, modern looking house by the simple device of tearing off the old porch, covering the walls with metal lath and a coat of stucco and running lattice work around the front windows. Of course the exterior lines happened to be simple and well proportioned, a *sine qua non* for such a transformation. Equally of course a new entrance design had to be substituted for the old porch. The thing to remember is any such experiment is the *spirit* of lattice work—which is simple, delicate and refined.



Modern Lattice Work for Division of Grounds.—Courtesy Hartmann-Sanders Co.



“Homes We Have Built” Series

EDITOR'S NOTE:—Contributions to this series desired. Address Editor for further particulars.

How We Decided It

W. W. Purdy



O build or not to build, that was the question. Whether to build a duplex and occupy the second floor and rent the first, or to build a small story and a half house, was the question that confronted us. It was more than that, a financial question. The one if rented would bring us in a good income,

but the first cost was another problem. Sketches were made for an ideal duplex, something out of the ordinary that did not give the appearance of a duplex. But the cost—Oh, my! Something like \$10,000 without the lot, and it required a corner lot, at least a \$2,000 lot. This settled it and we decided it must be a



Overlooking Three of the Beautiful Lakes.—W. W. Purdy, Architect.

story and a half cottage. We are glad we did.

One fine Sunday afternoon in April, we ran across a lot. An ideal little piece of ground on a corner with 78-foot frontage and running back to a point in the rear, triangular in shape. An odd shaped lot has much to do with the architectural features of the building that is to occupy it. We could picture this little cottage placed on this lot overlooking three of the beautiful lakes for which Minnesota is

from 50 to 75 cents per lineal foot. The filling and grading thus far on our lot has cost in the neighborhood of \$225.00 and this does not include several loads of the neighbors' ashes used in the filling. So the lot wasn't so cheap after all.

The question of design and plans was a matter which was easily adjusted for us, therefore I am not going into detail regarding plans. Everyone knows that to really accomplish something, you must have a definite plan before you begin, no



Rear View Showing Sleeping Porch.

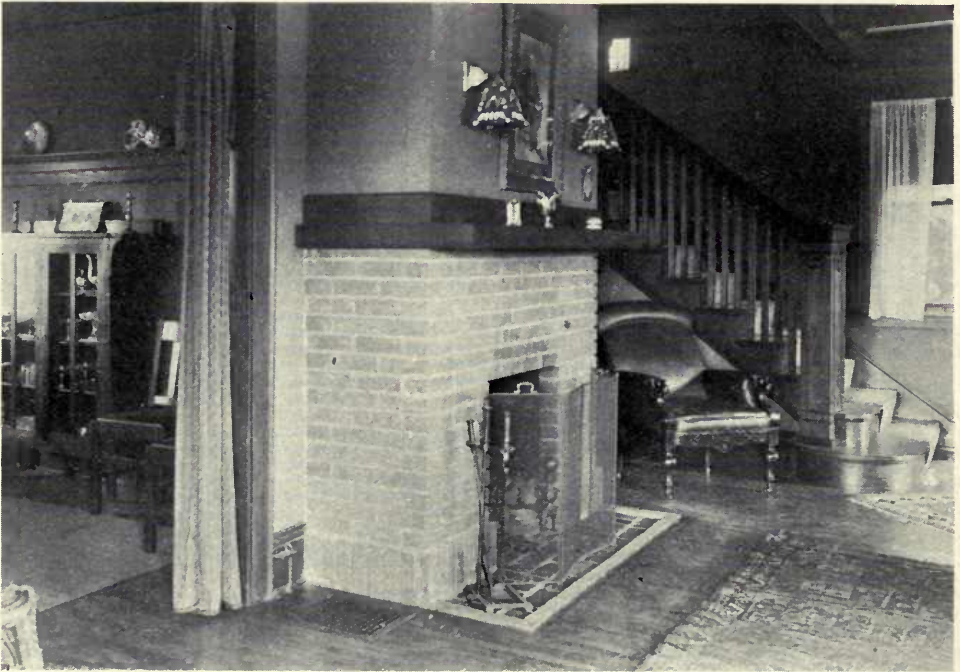
famous. The main trouble with the lot was, that at some previous time an excavation had been started and it had been partly filled. To be sure the excavating would be saved, a matter of thirty-five or forty dollars, but right here let me say, don't ever be induced into the purchase of a lot without having a survey made to ascertain the depth of the hole if there be an excavation on it, for the excavation must be filled; sand is needed if the foundation walls are to be of concrete, and filling costs money. On the other hand, the high lot has to have a considerable amount of grading to be done, cement or brick steps have to be built at

matter what that may be. Next came the financial problem, for even an architect, like everybody else, has acquired that same champagne taste and beer pocket-book, when he becomes his own client that is so annoying to him in other people. We could borrow half, but what about the other half? We must begin to cut somewhere and let me say here that it is very difficult to cut down even a little, once you have your mind made up to have certain things in this new home that you may have wanted so long and do not expect to build again. For the exterior we wished to use a rough brick of variegated colors up to the first story window

sills; above that white cement. In using this for the finish coat, white cement is mixed with white sand, which is not always easy to obtain, and for a house of this size, costs about \$25.00 additional. My wife's hobbies were the kitchen and the bath room; we must have an ideal bath with tile floor, a recess tub extending to the floor and nothing to clean underneath; all these things add to the expense.

getting a water tapping permit if you live in the city and get the plumber on the job, for the first thing you are going to need is water for your concrete work. Then too, you are bound to get a better figure if you get competitive bids in the early spring when the contractors are anxious to get started.

For the benefit of the average layman, let me say here, build by contract by all means. It may cost you a little more,

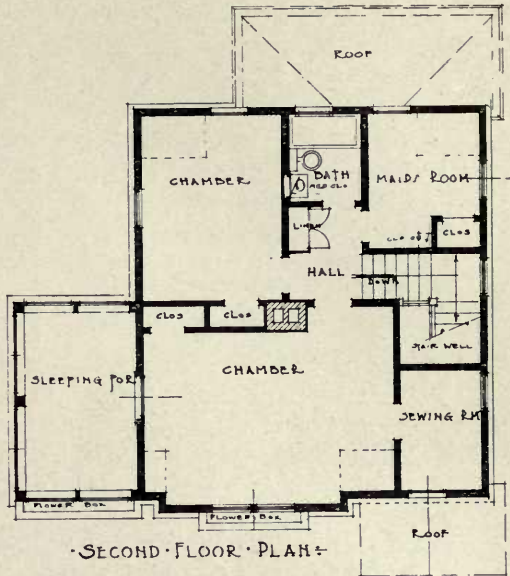
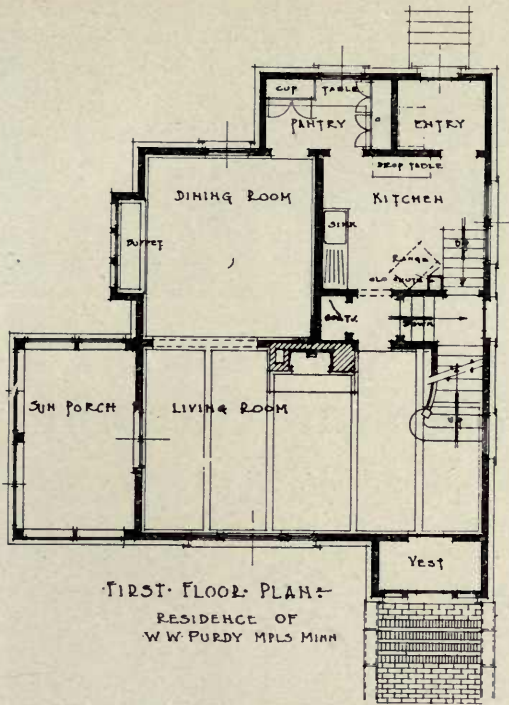


The Fireplace of Oriental Brick Between Stair and Dining Room.

The next question and about as hard to overcome as the financial question, was to get a start. First of all, if you contemplate building, get an early start and don't put it off until mid-summer before having plans drawn and the best contractors are all busy; the poor ones you don't want. The mill work people cannot begin to fill their orders with any degree of promptness and this means delays, first on one thing, then another. On the other hand, begin early (be the early bird and get the worm.) Begin by

but you are then able to tell at the outset if you have carefully prepared plans and make no changes—just what your house is going to cost. Beware of changes; make any and all changes before you have your plans blue printed and contract let, for it is here that so many are “held up” with a bill for extras.

There may be things that you do not care to include in the general contract; the decorating is rarely included, in fact a much more satisfactory job of decorating, whether it be tinting of the sand

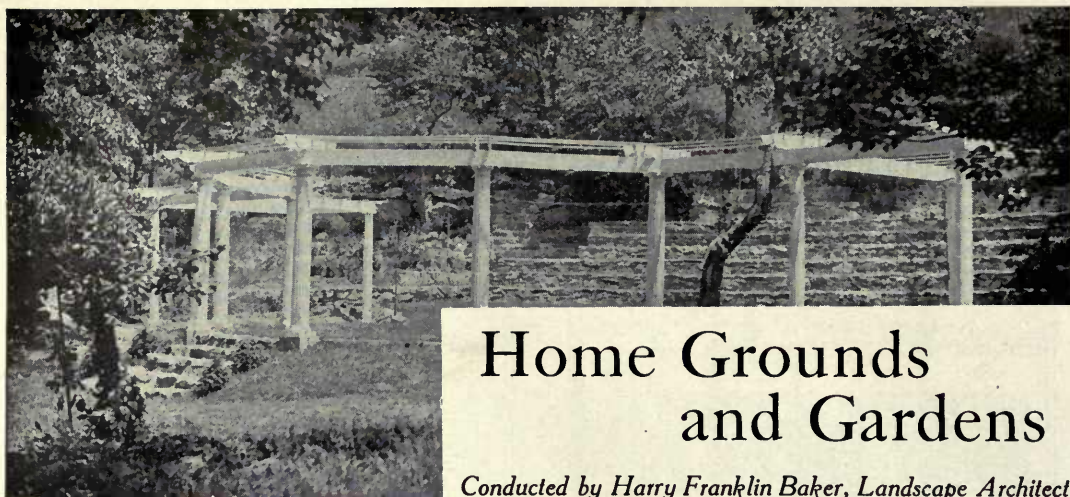


finished walls or papering over the putty coat, can be done after six months or a year, when the building has settled, for no matter how good a job may have been done by the contractor, or careful a job by the plasterer, it is inevitable the material will shrink and walls will crack, some not as bad as others. In some cases the grading (sodding or seeding and sidewalks are not included in the general contract), but are let separately after the house is complete.

In conclusion let me say to the man about to build, first be definitely decided on your plan which of course should be carefully prepared, including complete specifications. Select only reliable contractors to

submit bids. Remember the cheapest is not always the best, and here a word or two about the grounds, the laying out of the walks, drives and the planting of the shrubs, trees, etc., for all these things are needed to make it a truly attractive home.

Remember, "A thing of beauty is a joy forever." And don't be satisfied when you have got the house so you can "move in," to settle down with the bare necessities outside any more than inside. Every dollar you put out beautifying your home grounds will be returned to you ten times over, not only in the pleasure you will take doing it, but in an increased value to the property greatly in excess of the outlay.



Home Grounds and Gardens

Conducted by Harry Franklin Baker, Landscape Architect

The Flower Garden in August

WHILE the cultivation of the flower beds already planted must be faithfully kept up, August is also the month for looking to the future in many ways. In August, many perennials, aside from those of the bulbous sections, may be planted successfully. And wherever this is possible, it is well to attend to the work and have it over with before the approach of the busier days of the fall season.

The *Doronicums* may be safely planted in August. Among these, the best known, perhaps, is *D. Caucasium*, with its large, bright yellow flowers, $3\frac{1}{2}$ inches across, borne on long stems. It is commonly known as Leopard Bane.

The *Campanulas*, in all their numerous varieties, succeed fairly well when transplanted late in August. An attractive grouping of these plants make a sight long to be remembered. They vary in color and in height, are graceful, free-flowering, healthy, vigorous and easily grown.

Foxgloves bear transplanting in August. Dignified, beautiful, old-fashioned

plants, they lend charm and stateliness wherever they are established.

The double blue cornflower is best started in August.

Sow the seed, the middle of August, where they are to bloom; and quite thickly, to insure a good stand. After they are well started, thin to four inches apart. In the fall, cover the base of the plants with fine litter, or leaves. It is best to place brush over this, to keep it in place. In the spring, thin to stand fifteen inches each way. This gives the plants a good start, and they well pay for the extra trouble, as they bloom much better before the hot summer months.

Other Things To Do in August.

Order the hardy bulbs.

Make up lists of shrubs, vines, trees and perennials to be planted this autumn.

Keep the plants free of withering blossoms.

See that there is a goodly supply of manure or other fertilizer on hand for use in making new beds.

Plant Evergreens. Make sure that no

fresh manure comes in contact with the roots. Do not expose the roots to sun or wind. After planting, for four or five days, keep the evergreens covered with cheese-cloth or paper, to prevent evaporation before the roots take hold in the new quarters.

Prepare beds for Peonies.

Plant as many perennials as possible;

August is almost as satisfactory a month for the planting of seed of hardy perennials and biennials as July. Foxgloves and Canterbury bells—the biennial campanulas—give excellent results when planted in August.

The Amaryllis is a bulb, blooming in late summer, which should be in every garden.



Foxgloves Massed Against the Foliage of a Grape Arbor.

but be careful to lift only those that may be disturbed this month without damage.

Continue cultivation. The success of next season's beds and borders depends much on the August and September cultivation.

August is the month in which the asters suffer most from the attacks of black beetles. Watch the plants closely, knocking off the insects as they appear into a pan of kerosene.

Mature bulbs are sure to bloom. I have put them out as late as May, and had fine summer and autumn blooms.

Once planted a foot or more in good sunny and well-drained ground, it stands the cold of winter and the hottest summer weather. The length of their blooming time is from summer until frost. The most inexperienced cultivator succeeds with them. Just tuck the little bulbs in the border and forget that they are there,

and some morning the lilies will remind you that they have been doing well. Their bulbs are small, like the gladioli. They open their flowers in the night, but bloom all day.

The amaryllis makes tall, hollow stalks, and bears the lilies on top; four on some, more on others opening at one time. *Jacobæa* and *A. Johnsonii*, like and unlike in rich crimson, have four large lilies evenly balanced on a stalk, and last many days. White amaryllis in sunshiny weather opens at twilight and closes early in the morning. Cloudy days it blooms

The box itself should be painted a color to harmonize with the surroundings, preferably the same color as the surrounding woodwork. If this is not possible, green may be used.

The box should be filled half to two-thirds full of well-prepared garden loam. This preferably should contain one-quarter rotted cow manure or leaf mold, and three-quarters good, rich garden soil. As soon as all plants are set, fill the box with soil to within one inch of the top.

Almost any type of plants may be used in a box of this sort. Ferns are occasion-



Blue Larkspur.



Gladioli.



Blue Iris.

early in the afternoon and remains open about half the next day. This is the kind with the rose-colored band down the petals; the pure white variety blooms four to a stalk, and keeps wide open for days.

An Attractive Porch Box.

Where one does not have space for a garden, and still wishes to have plants, the window and porch box is an excellent substitute. The outdoor porch or window box should be nine or ten inches deep and ten or twelve inches wide, and as long as the window or space requires. Holes should be bored in the bottom of this from three to four inches apart, to permit free drainage. These holes should be covered with broken pottery, stones, or something similar, to keep the dirt from filling into them.

ally used in shady places. As good an arrangement as any is to plant a few cannas at the back, some geraniums, such as S. A. Nut (red) in front of this, and the trailing green vinca at the front to hang over the side. Sometimes lobelia, or German ivy, is used in place of this. Marguerites, petunias, nasturtiums and coleus are fine plants to fill in.

Do not plant the box too full, as the plants should have plenty of room to develop. Keep it well watered all summer and an attractive box should be the result.

A single variety is occasionally planted in these boxes, such as nasturtiums, petunias, geraniums, or something similar, although, as a rule, two or three well-chosen types of plants give a better effect.

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 525 JOHN HENRY NEWSON, Cleveland, Ohio
B 526 CHAS. S. SEDGWICK, Minneapolis, Minn.

Design No.

B 528 BUNGALOWCRAFT CO., Los Angeles, Cal.
B 530 GEO. H. KEITH, Spokane, Wash.

DESIGN B 524.



HIS interesting design reminds one of those charming dwellings seen in rural England, with its brick walls and timber trim in the cement gables. With red brick, white trim and moss green roof, a pleasing color scheme would be formed with the grey of the cement. Such a dwelling should have a wealth of climbing vines and roses. The pergola would be especially attractive. Entrance is made to the living room from the recessed porch. There is a large fireplace opposite with a seat at one side and a door to the solarium on the other. The beamed ceilings are a pleasing feature. At the right are two chambers and the bath room. At the left is the dining room, stair, kitchen, pantry and entry all conveniently arranged. On the second floor

are three splendid chambers with ample closets, a fireplace and a large linen closet.

Finish of living and dining rooms English oak with oak floors, kitchen part in birch with maple floors and all chambers, bath rooms, etc., in white enamel with birch floors.

Size, exclusive of pergola, etc., 48 ft. 6 in. by 36 ft. 6 in.; basement containing hot water plant and laundry 7 ft. 6 in.; first story 9 ft. 6 in.; second story from 8 ft. 6 in. to 5 ft. 6 in. in lowest part of chambers. Estimated cost \$8,690.

Design B 525.

This is a type of cement house having the feeling of modern German work. The absence of the porch, the bay window on the center of the gable in the front, and the treatment of the stairway make this house unusually attractive.

Cost Estimates of Designs Shown in This Issue

MATERIALS AND LABOR	DESIGN NUMBER						
	B 524	B 525	B 526	B 527	B 529	B 530	B 531
Excavation at 30c per cu. yd.....	\$110	\$60	\$55	\$75	\$52	\$90	\$100
Mason Work, to include Foundation Walls, at 20c per cu. ft.....	260	165	185	275	180	300	250
Cement Floors at 45c per sq. yd.....	85	45	40	50	33	90	65
Hollow Tile Walls.....	.....	.....	.....	.....	.....	200	.....
Chimneys and Brickwork at 65c per hour.....	650	180	285	750	225	250	360
Tile Work and Slate for Roof.....	.....	250	.....	.....	.....	.....	.....
Tile Floors and Wainscot.....	75	25	.....	100	.....	35	25
Lumber.....	1,000	750	515	850	585	950	525
Millwork.....	1,300	875	600	1,130	610	1,000	650
Exterior Cement Plastering at 90c per sq. yd.....	100	260	90	135	225	.....	75
Interior Plastering at 26c per sq. yd.....	600	425	335	570	320	500	350
Painting.....	450	340	200	360	175	550	290
Carpenter Labor at 45c per hour, Common Labor at 30c per hour.....	1,100	725	550	950	600	850	600
Hardware (Rough and Finish).....	400	380	300	400	245	400	344
Electric Wiring.....	115	75	45	85	50	100	70
Galvanized Iron and Tin Work.....	150	125	75	150	80	145	90
Heating (Air or Water).....	680	375	165	560	385	750	390
Plumbing and Gas Fitting.....	625	300	265	350	275	400	285
Miscellaneous.....	200	100	60	125	30	150	75
Cost.....	\$7,900	\$5,455	\$3,765	\$6,915	\$4,085	\$6,760	\$4,544
Contractor's Profit, 10 per cent.....	790	545	376	691	408	676	454
Total Cost.....	\$8,690	\$6,000	\$4,141	\$7,606	\$4,493	\$7,436	\$4,998

This table is computed on the basis of prices of labor and material now prevailing in Minneapolis and vicinity.

The walls being buff colored with the exterior woodwork stained brown and sash painted white, together with the green slate roof and red brick foundation, compose a color scheme which is livened by a touch of brilliant color in the flower box over the hood and also in the flower boxes at each side of the entrance stoop.

A little study of the plan will show how thoroughly everything that goes to make an artistic home has been worked out. Attention is called to the veranda opening off of the dinning room as well as the living room. The second floor has four bedrooms each with ample closet, linen closet, bath room, a well lighted hall and stairway to attic. The basement extends under the entire house and is reached from the grade entrance landing under the main stairs and from the kitchen, or through the hall from the living room.

Sufficient space to be finished off as a billiard room or divided into additional bedrooms is provided in the attic. Estimated cost \$5,500 to \$6,000.

Design B 526.

This design shows a cottage with broad and liberal frontage and is well suited to an east front. The size of the cottage is 34 ft. frontage by 24 ft. depth, the piazza at the right hand extending 6 ft. making a total frontage of 40 ft. Where the lot will admit of the width this makes a very desirable arrangement, piazza to be glazed in.

The entrance at the right is through a projected porch onto the piazza and thence turning to the left into the living room, this main room is 24 feet in length by 12 feet in depth across the front with a wide projected Dutch window and seat in front and at the south end is a liberal fireplace with book shelves on either side and windows above. This room is well arranged for convenience and comfort. Opening from the rear and in the center is the dining room with columned arch connecting and at the left a glazed sun

room, connected with both living and dining room by French windows, making a very attractive feature. The kitchen is planned on the "Dutch" order with cupboards on all sides.

The main stairs are inclosed with a door at the foot opening into the living room; the stairs are arranged with combination feature with a section of stairs from the kitchen leading to the main platform and thence to the second story. The entire arrangement of this first floor has had careful study and will make a very beautiful and convenient home. This first floor is 8 feet 6 inches high and finished in oak, either natural or stained to suit the owner. The second floor has one large front chamber and two small rear chambers with a sleeping porch to the south and connected with two chambers. There is no waste room in this house, every inch of space being utilized. This second floor is finished in white enamel with birch floor.

It is estimated to build this house complete, exclusive of heating and plumbing, for \$3,500 to \$4,000. The exterior is designed to be veneered with brick up to the first story window sills and finished with cement stucco above this point, the roof shingled.

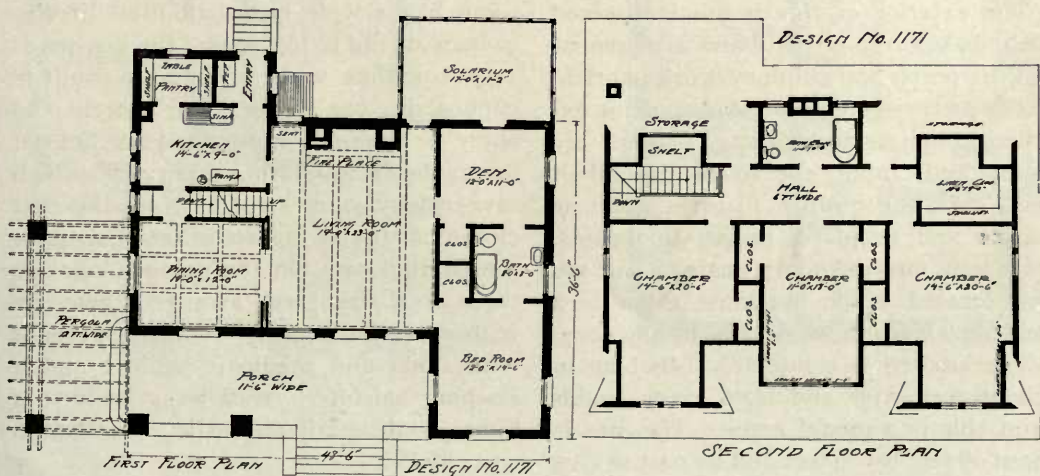
Design B 527.

In this design we have a combination of brick and stucco for the exterior walls with cement floor for the porches, a very substantial looking city or suburban residence having a frontage including the porte-cochere of approximately 50 feet, the house is best suited to a wide lot. The front porch extends across the entire front, the entrance being either from the front through the vestibule into the large main hall or from the porte-cochere entrance into the small reception room in the rear of the large living room. The dining room has a built-in buffet, the kitchen built-in cupboards. A single stairway leads to the second floor which con-



DESIGN B 524

Delightfully English in Style



tains three good chambers, a maid's room and a small sewing room with a large sleeping porch on the rear over the first story porch. Over the center portion of the front porch is a large open balcony that can be used for airing bedding.

There is no attic, provided dormers on the roof (front and rear) provide for a good circulation of air; the second story rooms are all full height.

The basement contains a laundry, fruit and vegetable rooms, fuel and heater rooms, a toilet room and a good sized storage room. The floors on the first floor are oak with oak finish, kitchen pine to be covered with linoleum, with yellow pine, finish natural. Second floor in birch with birch finish. The floor of the vestibule and bath are tile.

Detailed cost estimate calls for \$7,600.

Design B 528.

This new style of structure—a one-story chalet—is wonderfully popular in California and is quite as well adapted to any part of the land.

The roof is braced so that it will safely hold any amount of snow and as the roof valleys are carefully planned, and as the sheet roofings have been brought to such a state of perfection there is no danger of leakage. As the air space between ceiling and roof is ample there need be no apprehension of "top-heat" in summer.

The exterior of this house is covered with shakes, the porch floors are cement and the porch and chimney work is brick.

The picture gives a good idea of the excellent room arrangement. Closets are plenty and ample; the rooms are all of good size; the built-in features, such as mantle and fireplace, buffet, bookcases, seats, etc., are of dainty designs and are well located. The breakfast room is a well-liked feature, handy, bright and cozy.

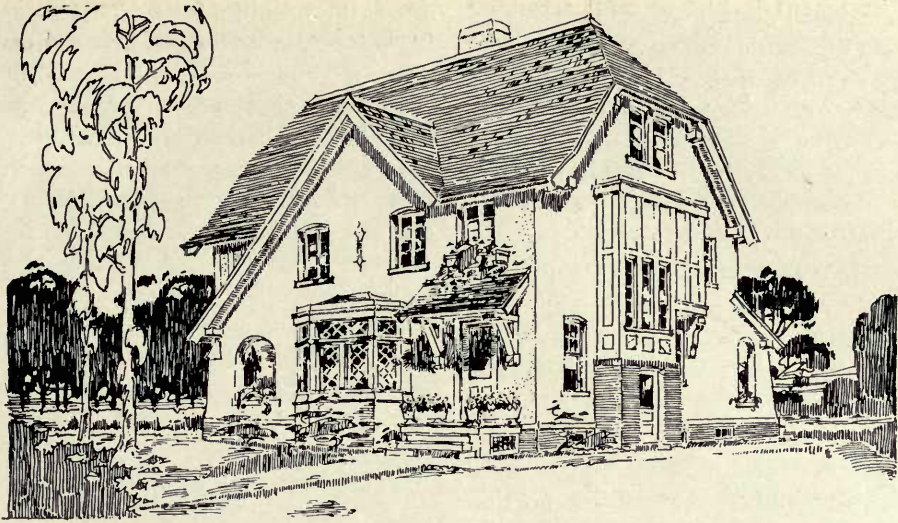
The kitchen is completely fitted up in full cabinet style and from every standpoint this is a model home. The size is about 40 feet by 56 feet and its cost in Los

Angeles was \$3,000—with hardwood floors in principal rooms, beamed ceilings and paneled wainscoting. This cost covered plumbing, electric wiring and fixtures, screen, cement sidewalks and front walk, etc. The exterior is stained and inside the walls are tinted.

Design B 529.

Here we have a simple little residence, having a touch of individuality rarely seen on the small square type house. It must be admitted that the square house is the most economical to build, less room being wasted and without breaks in the exterior walls, the labor is reduced to a minimum. The average square house presents a barn-like appearance, with this it is different. The exterior walls are cement over metal lath, with the exception of a base course of brick at grade, the front porch piers and walls being of brick; the main gables as well as the dormer and porch gables have half timbers.

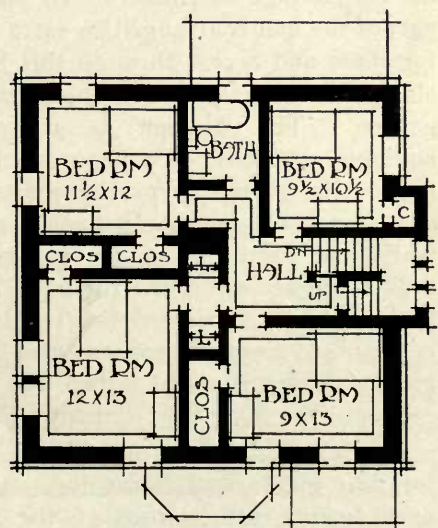
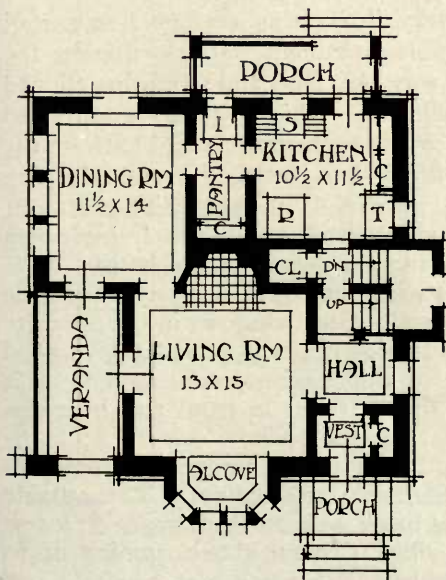
The interior floor plan is a winner and for roominess and convenience it would be hard to beat. With the exception of the corner taken out for the vestibule and stairway the living room extends across the entire front, with a brick fireplace on the outside wall, bookcases on each side and high windows above. Columned buttresses rather unique in detail separate the living and dining room. The dining room has a wide built-in buffet directly in back of the living room; the kitchen is very complete with work table, built-in cupboards, gas range, rear porch and entry for the refrigerator; and last but not least the combination stairway which saves many extra steps. Note the coat closet off the living room convenient to the front door. On the second floor are three good sized, well arranged chambers with extra large closet space, large bath with linen and medicine cabinet and a sleeping balcony. A stairway leads to a light, well ventilated attic. Estimated cost, \$4,493.



John Henry Newson, Architect.

DESIGN B 525

A Modern German Type



The basement is just as well arranged as the other floor plans, having a light laundry, good vegetable room and storage space, hot water heat being included in the estimate.

The floors throughout are clear maple with fir finish on the first floor, second floor pine for white enamel.

Design B 530.

Herewith is shown a model suburban home consisting, on the ground floor, of a combination living room, reception hall and dining room so arranged as to form one magnificent room, when desired. Large screens are planned to be used when it is desired to shut off one portion of the space, and a kitchen and pantry combined. The living room contains a large mantel piece designed in brick, also a book alcove fitted with bookcases. That part of the room used for a dining room has a built-in china closet and buffet. There are wide sliding glass doors opening from this part of the room out onto the screened porch, allowing a table to be moved out onto the porch, where meals can be served in pleasant weather. The vestibule is equipped with coat wardrobe and built-in seat with hinged lid for the storage of rubbers. In the rear part of the hall is arranged an extra closet for coats and access through this hall is also given directly out to the garage or garden. The kitchen is completely equipped with built-in cupboards and one end of the garage is partitioned off for use as a milk room. Inasmuch as the walls and partitions of the garage and milk room are of hollow tiling, plastered both sides, this part of the building is cool and of fireproof construction as the garage ceiling is metal lathed and plastered and the floor is of cement.

On the second floor provision is made for four good sized bedrooms. An unusual feature of these rooms is the grouping of pocket windows. These windows are made the same as ordinary hung win-

dows, on weights, with the addition of a pocket into which both the top and bottom sash may be dropped. In this manner each of these rooms may be converted into sleeping balconies. It will be noticed that all closets are on outside walls and have windows, thus providing for light and ventilation. Bath room and toilet are separate and are tiled. There is a large attic.

In the basement is a vegetable room, built of hollow tiling, large laundry and servant's toilet. The house is heated by hot water. The plans provide for a concrete foundation.

The walls of the superstructure are of frame, finished with shingles on the exterior. The porte-cochere gives protection from the weather when entering or leaving the house from carriage or automobile.

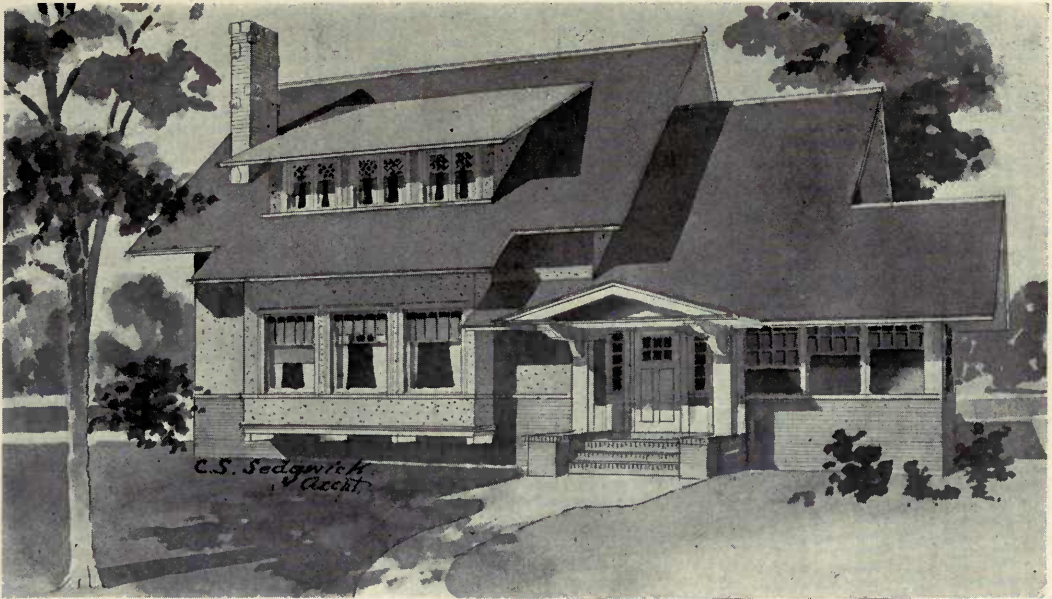
The entire house and garage, as described with all the latest modern ideas will cost up to \$7,500.

The interior finish of the main room and stairway is of curly fir. The balance of the house is finished in pine, enameled. The floors of the first story are of oak and of the second story fir.

Design B 531.

A very interesting cottage home, roof the gable treatment, rafters running the long way 42 feet and slightly clipped on each end. This is a very good sized home with two bedrooms and bath on the first floor, two bedrooms and sleeping porch provided above. The entrance from porch is directly into living room occupying the center of the house. It is 14 feet wide and 26 feet long with fireplace at the end. Four windows in the opposite end with side lights at entrance give good light for this interior room flanked as it is by dining room in front and bedroom and bath at the back.

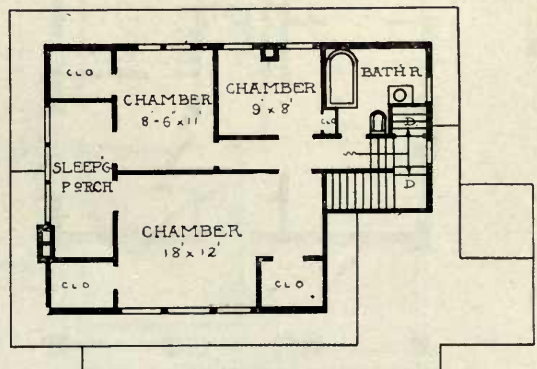
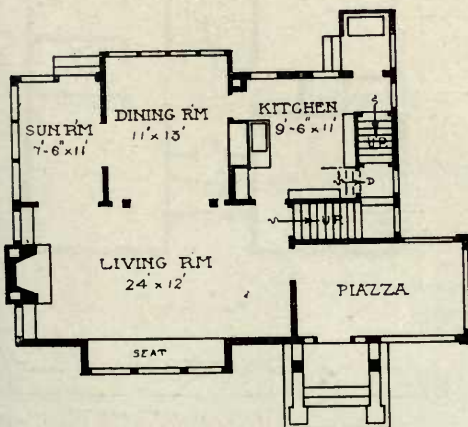
The exterior is an interesting combination of brick and cement. The outside wall is brick, cement from grade to lower story sills. Cement above running up to the gables. Estimated cost, \$4,990.

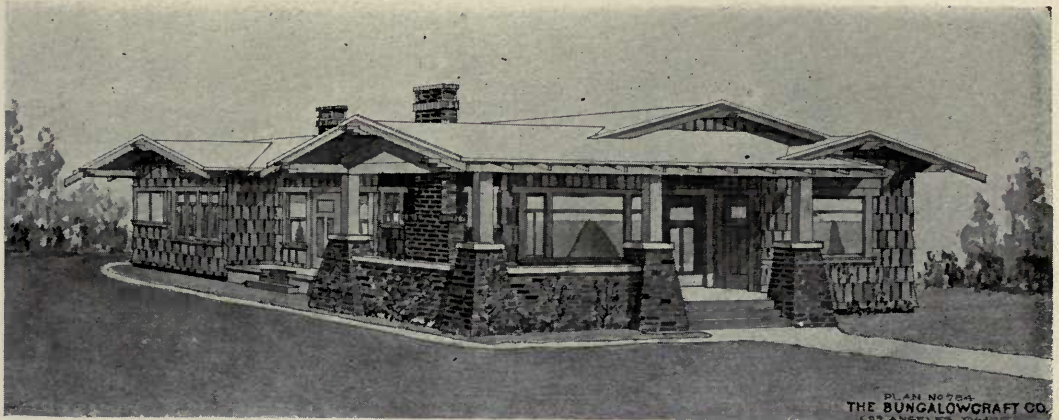


Chas. S. Sedgwick, Architect.

DESIGN B 526

An Attractive Cottage for Wide Lot



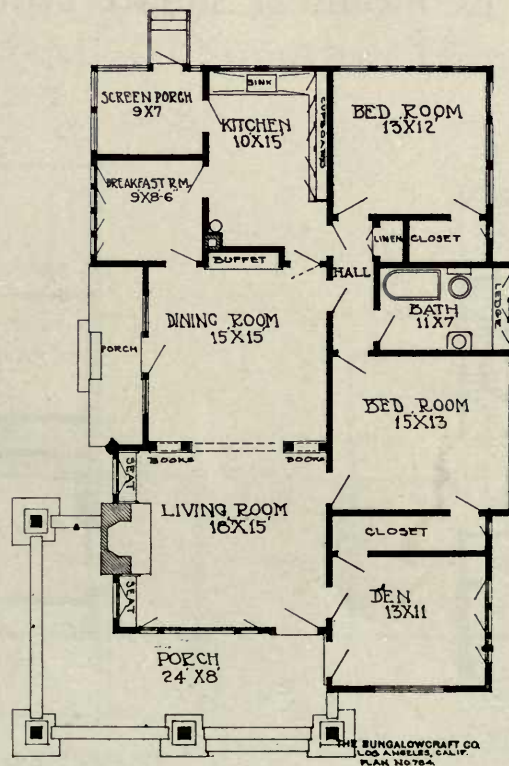


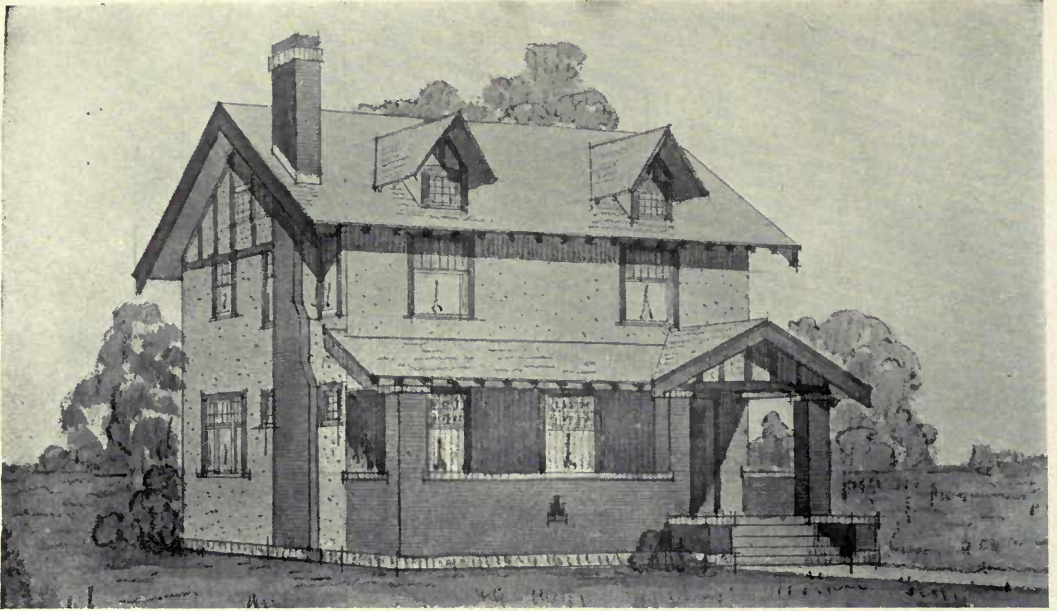
PLAN NO. 784
THE BUNGALOWCRAFT CO.
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Bungalowcraft Co., Architects.

DESIGN B 528

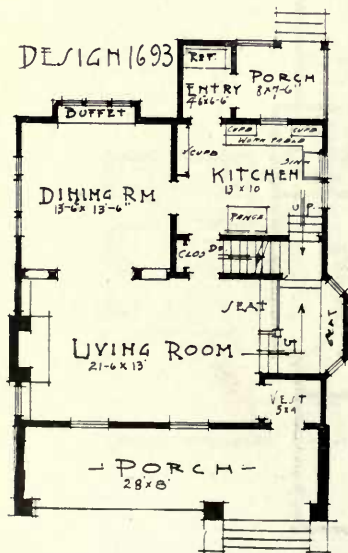
A Chalet Bungalow Home



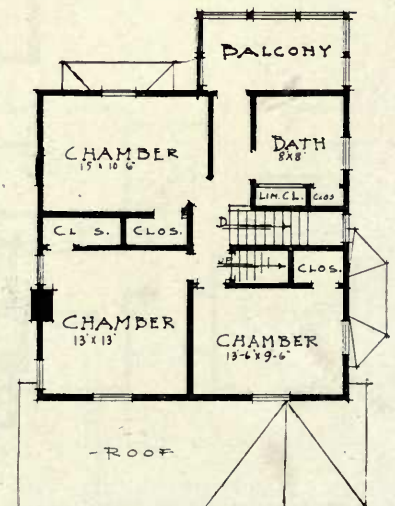


DESIGN B 529

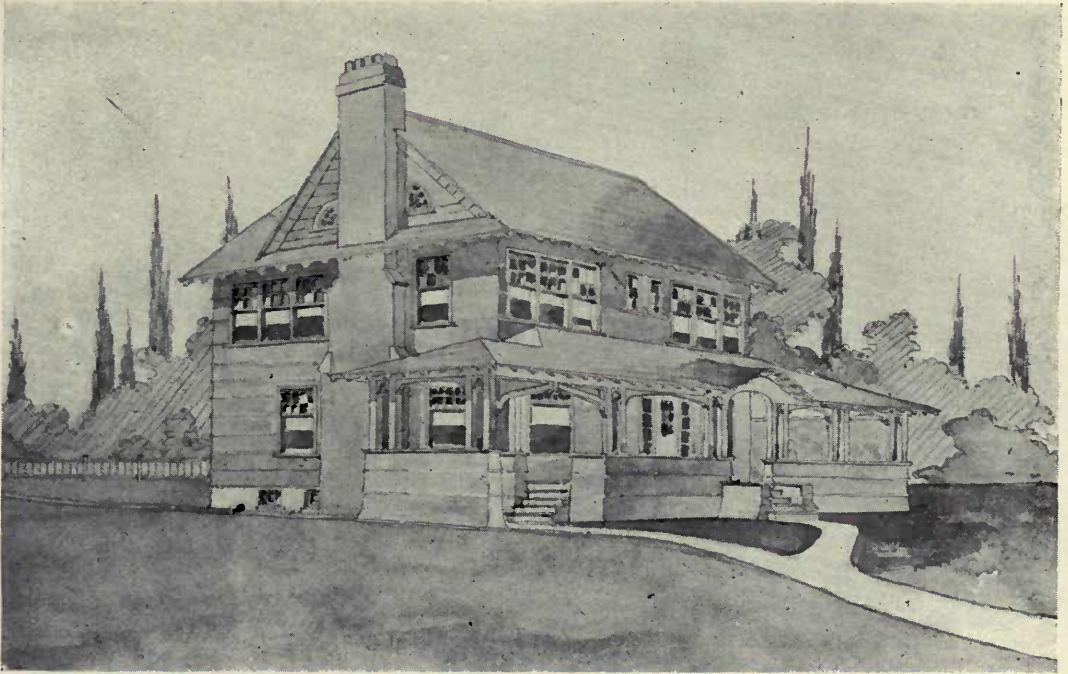
An Economical Square House



FIRST FLOOR PLAN



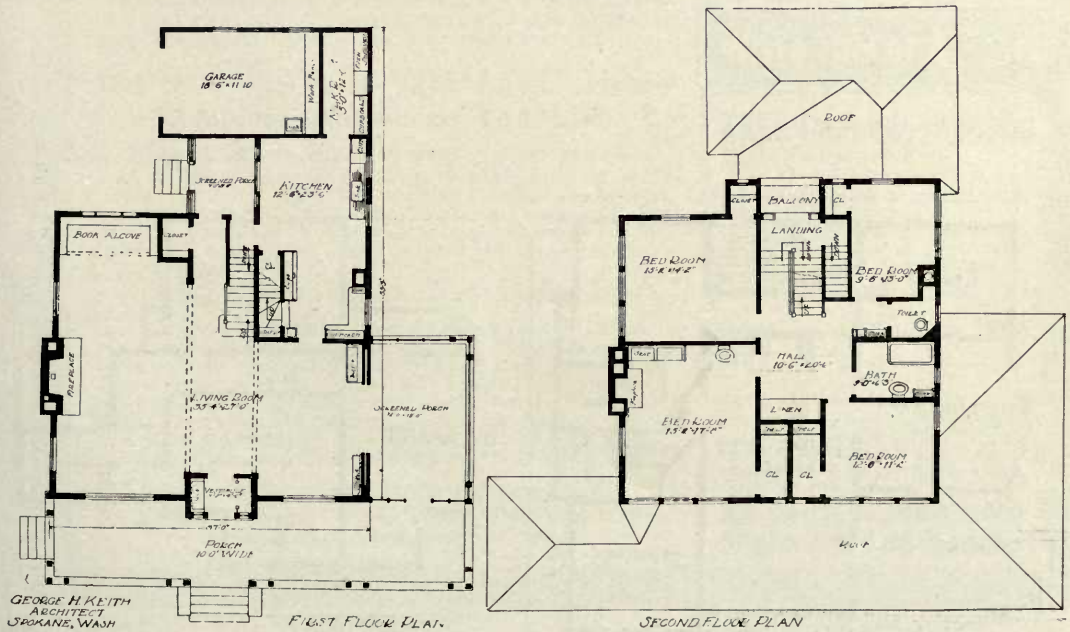
SECOND FLOOR PLAN

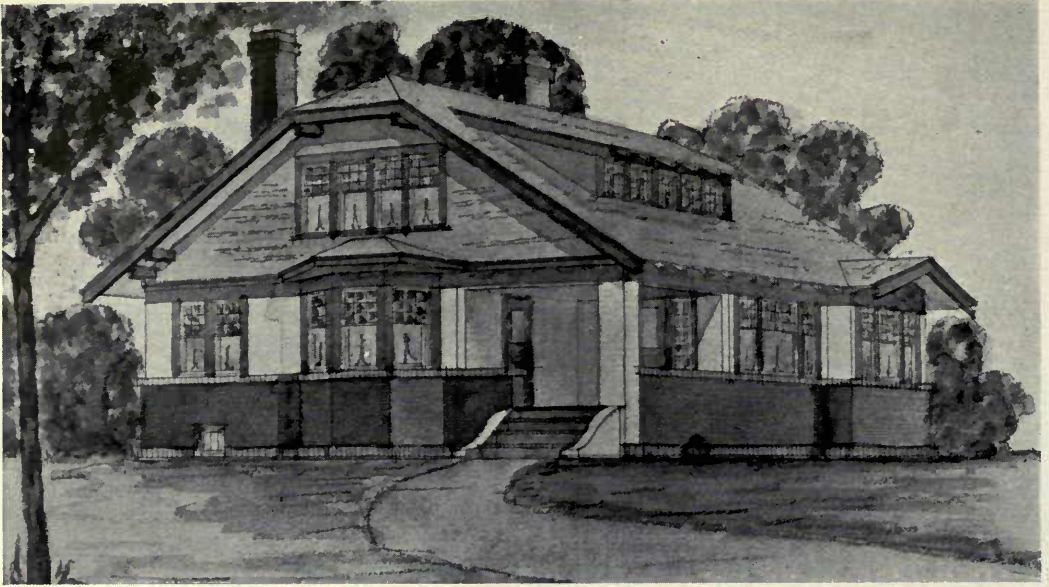


George H. Keith, Architect.

DESIGN B 530

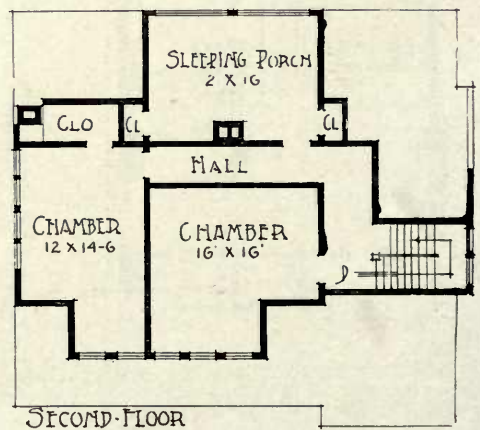
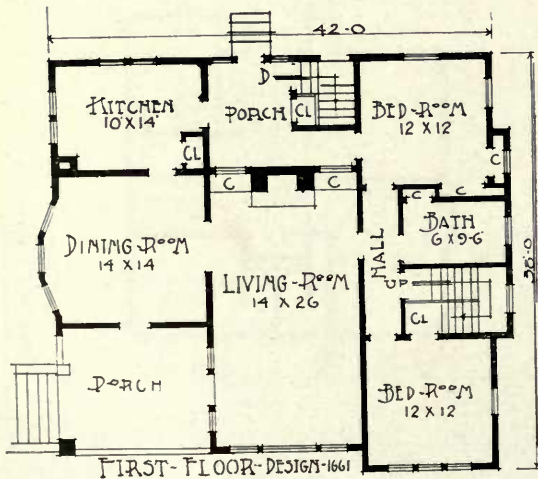
A Model Suburban Home





DESIGN B 531

An Interesting Cottage Design



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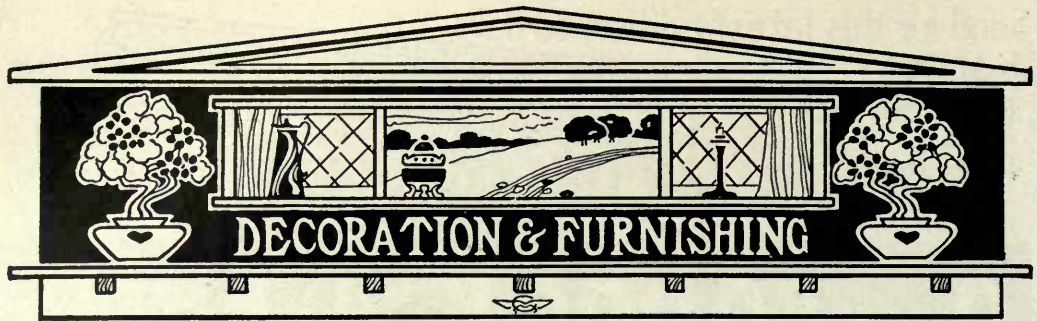
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Lightening Up the Neutral Scheme.

IT has been suggested many times in these pages that the most desirable color scheme for the house of moderate size, whose rooms are visible from each other, is a neutral one, in tones of either gray or brown, the former being best adapted to our southern states, where sunshine is continuous and brilliant, and where the suggestion of warmth is unnecessary. In our northern latitudes the tones ranging from clear yellow through buff and tan to golden brown are pleasant to the eye, serviceable as regards fading, and charming backgrounds for all sorts of furnishings.

The drawback to all these neutral schemes is their monotony. The eye craves the note of positive color, not necessarily vivid, but characteristic. And it is the drawback of the neutral color scheme that it is so good a background that it is assumed that anything will look well with it, and so a heterogeneous jumble of colored objects is introduced. A blue lamp, a mulberry Van Briggles jar, red and gold Kaga vases, and emerald green Coalport tea services, and each and all admirable against a golden brown wall which is immensely kind to their individual merits, but when all of them are associated with the one wall and with each other the result is a bit incongruous.

In brightening up a sombre room we are not necessarily restricted to the use of a single, positive color. Provided that they have an agreeable relation to each other two colors may be used with admirable effect. Take, for instance, that very beautiful combination of brown and a low toned blue. It is immensely improved

by the addition of orange, which contrasts beautifully with the blue and has in itself a certain amount of brown. The clear yellow and vivid blue of Italian faience may also be contrasted against a brown background. Another contrast of color is that of green and yellow, such as we find in spring flowers, which is delightful in combination with the yellowish tones of brown, which are best described as tawny. Still another combination, which is unusual, though often met with in Chinese embroideries, is that of a light, dull toned green and an apricot red. This is very delightful in a room with much brown oak woodwork and walls of rather a grayish brown or tan.

The one positive color that seems almost hopeless is red, that is the tones which are obviously red. But the off reds, the salmon and orange reds, can be worked into a brown scheme if used in moderation. A judicious touch of black does wonders and so does the deep ivory of a plaster cast. Dull gold tones red down, witness the soft brilliance of Kaga porcelain.

With a gray scheme you must rely entirely upon contrast, and perhaps the things which look best are those fabrics which have a good deal of pattern and combine many colors in a well balanced whole. There are cretonnes which are never seen at their best until they are associated with gray walls and rugs. So, too, are the cleverly blended pinks, greens and mauves of some Chinese porcelain jars which seem to have been planned to adorn a rather high mantel shelf, painted a French gray. If the gray used had a bluish tone the verdure effects in tapestry or in cretonne are much at home. For a single color to be used with a gray



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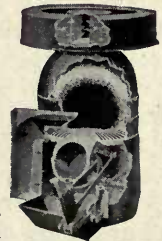
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scheme, pink is far and away the best, not rose pink, but that subtler shade which suggests the bloom of the peach and can be toned up into mauve or mulberry, and while it suggests the soft coloring of a pompadour brocade, is yet more positively charming.

The gray dining room, which is increasingly popular, demands either pink or lavender flowers, while the golden brown walls and dark wood of others are happy in association with those deep pink roses which have a suggestion of yellow in their tone.

The touch of black which is so helpful in the brown room in giving the needed accent to the chosen color combination is a little too positive for the gray room. The same effect is gained by the use of dark wood, mahogany or one of the darker shades of oak.

Available Wall Papers.

The word available is used advisedly because so large a proportion of the papers on the market are utterly impossible for the average house, either from the size and character of the design, or from the strong contrasts of color.

One such paper is in shades of brown and olive, one of the elaborate arabesque designs, such as William Morris loved, with the flowing lines composing it so carefully adjusted and the different tones of color used so well balanced that the effect is rich and harmonious. It would be admirable for a hall with large wall spaces.

The familiar foliage papers in greens and grays are now duplicated in brownish tans. They need the foil of dark colored wood and of a plain fabric in rose, blue or green for curtains. One of them would be excellent for a two-thirds treatment in a bedroom with deep ivory above the molding, curtains of old rose linen and a rug of brownish tones with touches of rose.

The Background for Chinoiserie.

With the fancy for everything Chinese comes the necessity for a proper setting. The thing which is absolutely correct is a pure white wall, against which the vivid scarlet and gold or brilliant black of the

lacquers and the delicate or vivid tints of the porcelains will be relieved, and a white pannelled room is ideal. Failing this, walls of old gold grass cloth and woodwork of bright black are admirable. As few people have many articles to display it is well to assemble them together in a small room or even in an alcove, whose decoration will be a trifling matter.

The Trail of China.

The trail of the Chinese is over all the smart furnishings and reproductions of Chippendale's Chinese designs may be expected any day at bargain prices. As set out in various exhibition rooms it seems a bit incongruous with very modern looking photographs in silver frames on desks and dressing tables. It is well to study the harmonies when one indulges in period furnishings.

The style has its inconveniences, as the proper way of dressing these very charming beds is to have a box spring and round bolster covered with brocade in a Chinese design, sheets and blankets spending the day in a closet. It is possible that a bedspread of cretonne in a Chinese design might be substituted for the brocade without sensible damage to the decorative proprieties. Certainly a stiffly upholstered bed smacks a little too much of the state bedrooms of palaces to appeal to the general taste.

Glazed Chintzes.

This distinctly English material grows in favor, although it is used less for whole rooms than for the covering of a single large chair or couch and perhaps for loose cushions to wicker chairs. It is immensely decorative, some of the brightly colored designs suggesting the watercolors of Paul de Longpré. One design and it must be confessed a very ugly one is copied from an old chintz used in Dickens' house at Gads Hill. It has stripes of chocolate brown alternating with others of clustered blue and pink flowers and its appeal is sentimental rather than esthetic.

One use for these chintzes is as window shades, as they are as transparent as stained glass. The chintz is, of course repeated elsewhere in the room and it is a simple and decorative way of furnishing the windows of country houses.



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ANSWERS TO QUESTIONS ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Remodeled Home.

W. R.: "We have remodeled our home and I enclose a rough sketch. The living and dining rooms are furnished in mission, early English finish, brown rug in living room and green in dining room. I had thought I would paint the floors brown,—inclose color. I have found this color looks well kept with an O'Cedar mop. The east and north bedroom is furnished in Circassian walnut and will have the same color floors (with yellow rag rug), as will the back porch, but I can't decide how to finish the woodwork. Would you paint it to match the floors? The walls will be finished with wall-board, tan or some shade of brown. I would like so much to finish the woodwork now, but after the nails have been counter-sunk didn't just know if the window and door frames would have to be torn away to put in the wall board. Would they? etc."

Ans.: It will not be necessary to remove door and window casings in order to use wall board. If necessary, you can put what is called a "stop band" up against the casings for a finish. You will have to use paneling wood strips where sheets of wall board join, to make a nice job. If the old ceiling has simply been oiled, that will not interfere with painting over, but varnish would have to be removed.

We approve of the brown floor paint, but think your sample too dark for the bedroom. Why not use a water green paint on the northeast bedroom floor, with yellowish wall and a rug in yellows, and cretonne curtains, green and yellow? This makes a very pretty bedroom. Paint the woodwork deep cream. No, do not paint the floor of south bedroom white or even cream. This floor best be covered with matting and your small rugs on that.

Why certainly you can paint the furniture. We think it would be difficult in your section to do without shades, and heavy curtains to draw, are always ugly. Nothing is prettier than ruffled muslin for bedrooms, and voile or sheer scrim with cluny edge for living room.

French doors would make it more cheerful. We cannot direct you about framing in your porch for glazing, that is a carpenter's job.

Placing Furniture.

M. K.: "Would you be so kind as to help me in deciding about the woodwork and furnishing of my new house? Now all I have in furniture is good, but have only a mission dining room set, mission davenport, two mission rocking chairs, one golden oak desk and rocking chair. The architect wants the dining room woodwork painted grey, but I would like it and the hall mission, and the living room grey, and as I expect to do my own work or only with assistance of one maid, I don't want much light woodwork. He also wants a French door from hall into dining room. There is a French door from living room into sun room; that is the only window as it is a narrow house, only 21 ft. 6 in. wide. Will you please tell me what to do with my davenport and desk, and what else to get. I do not want the place crowded. What color shades, etc. House is red brick, with grey sun room."

We quite agree with you about staining dining room and hall to match the furniture. If you get the right kind of shade, grey will not be so bad for the living room, though we would prefer a dull olive and green; the same in the sun room. Then have the remaining furniture you need for living room in wicker, stained olive green and upholstered in cre-



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Build a house that ten years from now will not have depreciated to a fraction of its real value. Build with the thought that poor construction will not endure; that it costs more than good construction—more in the long run; often more at the outset.

Herringbone

Metal Lath

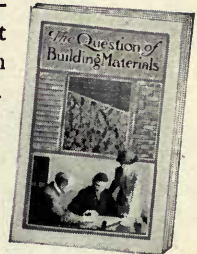
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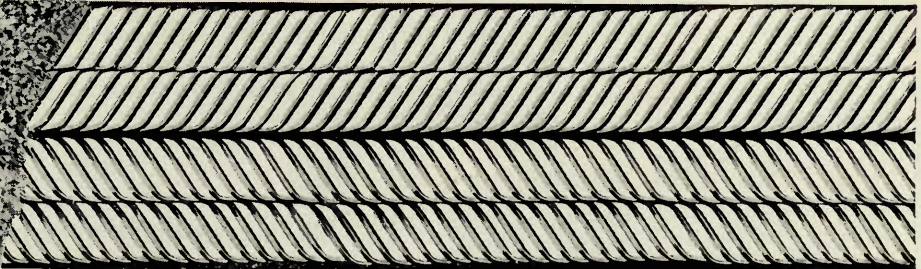
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It is full of illustrations of beautiful Herringbone houses and facts of value to the prospective home builder. Let us help you as we are helping hundreds of others in the choice of the right building materials. Mention your architect's or builder's name so we can co-operate through him.



tonne, rich colors. This will brighten up the room and it will need it, heaven knows, with no light but that French door. You cannot use any curtain on that, except thin white net, that you can push back and forth on small rods fastened top and bottom on the sash.

We see no place for the davenport except along the stair wall, and put the piano over by the French door. We do not understand your markings. You seem to have something like a fireplace on both south and north walls of living room. Two or three wicker chairs and a wicker table would be all you need. Yes, by all means have an arch from living room into hall using your green portieres there. Perhaps you could use that end of hall next dining room to sit in so as to get some good of it and in that case a French door there and some wicker furniture would make a pretty nook of it. Your shades best be terra cotta red on outside and cream inside. Grey shades make a house gloomy.

Mantels and Wood Trim.

L. K.: "Would greatly appreciate it if you would give me some ideas on how to arrange my living and dining rooms and reception hall. Please tell me how to prepare the raw floors for waxing. Also what is the best way to treat the bedroom floors? Shellacing? How is this done?"

"I have a massive set of golden oak furniture for dining room. What color scheme would you suggest for the rug? We will leave the rooms with the white plastered walls for the present.

"For the living room the mantel is of black walnut, beautifully carved. It was given to me by a relative and I only have the upper portion and intended to have the fireplace built of green tiling with two posts for support to the mantel; but perhaps you could suggest some better way for the lower part. The chandelier is a hanging green dome and is situated in front of mantel as on plan, etc."

Ans.: We wish you had told us whether your living and dining rooms are on the north or the south side of the house, as that makes all the difference in the world in planning the color scheme.

We do not see how we can tell you much about it, for if the rooms open on the south you should use cool tones as grey or green or blue; if on the north or east, then tans, creams, browns or terra cottas. We will try to advise you about the woodwork.

First: The mantels must be the same as the rest of the woodwork. Now, as white woodwork does not go at all with golden oak furniture, we think you best stain the woodwork in dining room, living room and hall, all the same, with walnut stain as you have the nice walnut mantel. You best send for booklets of good floor finishes and they will tell you all about finishing your woodwork and floors; how to shellac them for the first coat and then how to wax and polish them. But if your top floors have been laid before the rest of the work is finished, they will all have to be scraped before shellacing, or you will have muddy looking floors. Floors must be laid after almost everything else is done and covered with building paper or they are ruined by workmen tramping over them. They should have been shellaced right away, when first laid. That would have protected them and you could have cleaned them off with benzine before waxing. We fear you have not done this. This booklet will also tell you how to refinish your furniture. The bedroom and bath should have woodwork painted white. One of the hard varnish finishes is best for the bedroom floors.

We do not think the oak closet would look well in the hall unless you could divide it and make two low bookcases. It should be stained about the color of the woodwork. We are afraid the hall tree will look pretty old fashioned but as there seems to be no coat closet, perhaps it would be a necessity.

Tile or brick must be used to face the fireplace. We cannot say what the support should be without seeing a drawing of the shelf.

By all means replace the green dome in living room with a shower of four small shades, bell shape of clear glass.

We are returning your plan and have marked places for some of the furniture as requested.

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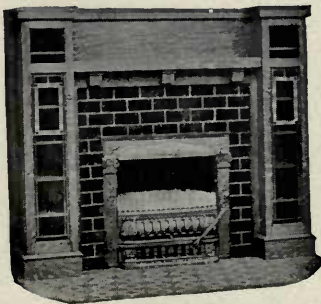
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The Sunday Problem.

 S long as the present Sunday schedule continues, one of the difficulties of the servantless household will be to reconcile the Sunday service and the Sunday dinner.

In some parts of the country a cold Sunday dinner finds acceptance, generally in places where the week-day dinner is the rule and everyone comes home to it. In fact, it is quite the rule in the older New England towns. The writer has eaten a great many of these cold dinners and their tendency is to godliness rather than to gaiety of spirit.

Many people solve the problem by having dinner at night as on other days, and this method has the advantage of not deranging the digestive habits of the family. It also leaves a long afternoon free for rest or pleasure, but it has the objection of going counter to the cherished tradition of the best dinner of the week on Sunday noon.

Since the midday dinner, and a hot dinner, seems to be a part of the established order, how achieve it and have time for other things?

Of course, a great deal can be done the day before. Soup can be made, strained and thickened and reheated. Spaghetti can be boiled, packed in a dish with layers of grated cheese ready for browning. Vegetables to be served in a cream or butter sauce can be boiled, and any one of half a dozen cold desserts made ready.

The thing that is the principal difficulty is the roast, since custom ordains a roast dinner, lamb, beef, or poultry. Yet it is possible to manage in this way. Roast the meat either on Saturday afternoon or early Sunday morning, giving it perhaps

fifteen minutes less than the usual time. Take it out of the pan and cover it closely so that there can be no hardening of the outer surface. Leave the pan with the drippings untouched. Half an hour before dinner set the pan in a very hot oven till its contents are thoroughly melted, put the meat on the rack again and let it heat through, basting it twice. Give it twenty minutes, make the gravy and serve. Not one person in twenty will be able to distinguish it from freshly roasted meat, and the loss of flavor is almost nothing as compared with that incurred in the steam closet of a hotel kitchen.

The case of poultry is a little different. A good sized turkey cannot be reheated in twenty minutes. It can be roasted earlier in the morning and the gravy made ready to be reheated. The turkey can be left in the gas oven with the heat turned off and will not get so cold but that twenty minutes of active heat will bring it to the proper temperature.

A chicken is easier to manage. Draw it and stuff it on Saturday and cook it very slowly in a good deal of water on the side of the range, or over the simmering gas burner, until it is perfectly tender. Take it out and cover it closely and let it stand till the next day. Rub it all over with butter and brown it in a very hot oven, putting a few spoonfuls of the broth into the bottom of the pan after it is well colored. Make the gravy from the broth, adding the chopped giblets. A chicken done in this way is delicious and the soup is a valuable asset. The slow cooking brings out the flavor and there is absolutely no waste.

If it is possible to make the family feel that they have dined without a roast,



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Mr. Shaw shows a beautiful illustration of artistic BEAVER BOARD walls and ceilings in his Fresno, Cal., home. His experience is that of many others:

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BEAVER BOARD WALLS AND CEILINGS

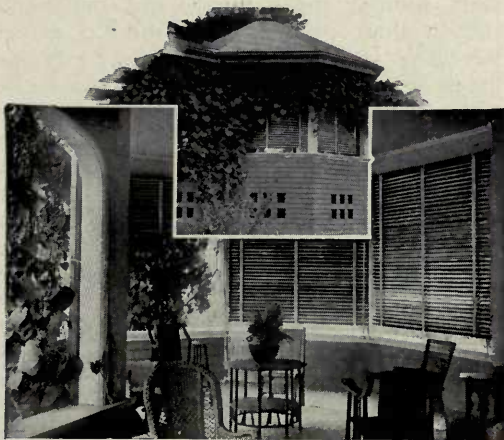
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will make your porch a shady, airy summer resort with such perfect privacy that you can eat, sleep and live in the health-giving open air. The upper slats can be adjusted to admit light, while the lower slats are closed to shut out sun and gaze of passers-by. Easily lowered and raised.

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did not stop there. They were used by the Berkey & Gay Furniture Co., Grand Rapids, one of the largest makers of high class furniture, on the furniture that went into this hotel. The same practical materials which were used for this work can be obtained from dealers handling our goods.

Ask for our "Modern Wood Finishing"—a beautifully illustrated book showing all of the popular finishes in their actual colors; and giving a complete treatise on the art of modern wood finishing. Simply write your name and address on the margin of this ad and mail it to us.

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THE BRIDGEPORT CO.
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NEW YORK CHICAGO BOSTON

steak or chops are easy to cook and serve. The baked potatoes that most people like with them are easily managed by boiling them for about twenty minutes earlier in the day, finishing them in a very hot oven in time for dinner.

The noon dinner on Sunday is one of our American fetishes. Sunday was meant for something else than the digestion of an unusually heavy meal and it seems hardly worth while to attach a religious sanction to indulgence in the pleasures of the table. But, such is the general feeling about it, that the best thing to do is to make the obligation as light as possible and not to allow it to interfere with the real uses of the day.

One way to solve the Sunday dinner problem is to let Uncle Sam do it by the parcel post. There are people who have regular customers, to whom they send Sunday dinner hampers. Corrugated paper boxes holding a peck or half-bushel are best for a Sunday dinner hamper. If produce is carefully cooled the night before and packed tightly in such a container the next morning the corrugated paper will keep it fairly cool for the half-day's journey. Such boxes cost from five to eight cents in lots of one hundred, freight extra.

Keeping Up One's Interest.

The writer knows an old lady, who at eighty-one is still young, despite the fact that she has had a life filled with all sorts of trouble except material ones. And she accounts for this perennial youth by saying: "You know I've always been so interested." Does it not give a clue to a good many of our difficulties? So often we are not interested. Indeed we rather cultivate a bored attitude, thinking it superior. Never was such a mistake. Every department of the household life, to put the matter on its lowest plane, feels the influence of such an attitude. Servants have no motive for doing their best because they can expect no expression of appreciation. All the spontaneity of childhood is checked and its enthusiasm chilled by being met with persistent indifference.

A Preserving Point.

Many people have experienced difficulty in keeping canned fruit, done up

with half a pound or less of sugar to a pound of fruit. This difficulty can be obviated by preserving the fruit pound for pound, with a heavy syrup and adding enough water at the time of using to thin out the syrup, cooking it for a few minutes.

The process may be reversed with fruit which has not had enough sugar to make it palatable, as is the case with much of the canned fruit sold. The fruit can be cooked slowly with added sugar until the juice is thick and syrupy. Peaches and pears are specially responsive to this treatment.

The Fallacy of Labor-Saving.

This is the age of labor-saving utensils. Not a month but sees some invention marketed, which is to transform the average house into a palace of leisure, a place where "it is always afternoon." But does the average labor-saving utensil really save labor, or is it only an additional care? Does it not in many instances substitute for a muscular exertion, almost mechanical, and beneficial rather than otherwise, a mental effort which is something of a strain? If the meat grinder has to be taken apart to be cleaned every time it is used what is the advantage over ten minutes' work with a sharp chopping knife? Why grind your own coffee when the grocer will do it far better, and without charge? Almost everyone of our readers has on the upper shelf of her kitchen closet some expensive kitchen appliance which she has put away because it was too much trouble to use it. Most of us keep the attachments of our sewing machines in a drawer that is rarely opened.

A great many of the labor-saving appliances have their special value in the very large family or the small institution, whose activities they assist effectively. For the average household the need is not so much of new appliances as of ordinary ones of good quality kept in order. Frequent sharpening of knives and oiling of wheels, good and varied brushes and cleansing powders and fluids and plentiful towels and cloths make work easy and pleasant, and are inexpensive as compared with most of the appliances.

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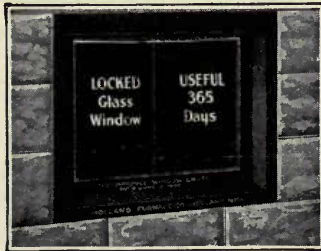
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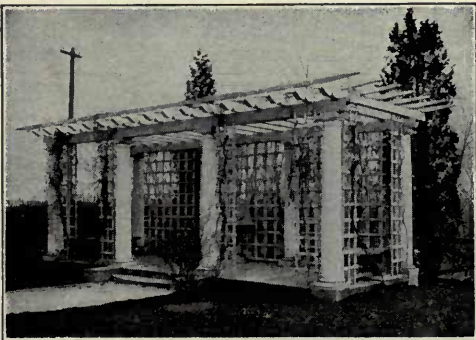
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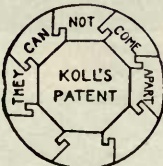


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(At right—one of the refrigerators. Below—the A-S Refrigerating Machine.)



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No complex parts. So simple in operation that any intelligent person can run it.
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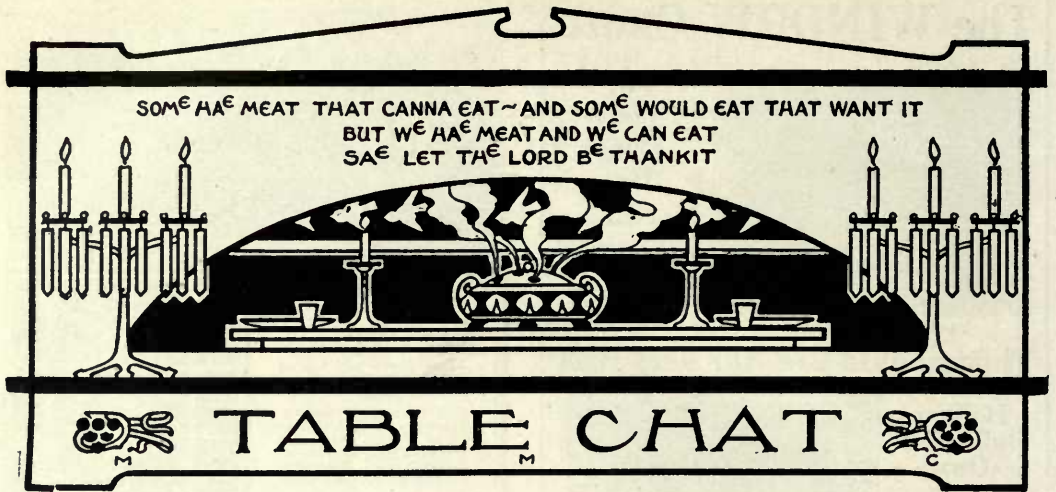
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Nevelties for the Country House Tea Table

SOMETHING rather new is the To San china. The ground is yellow with a slightly brownish tone and the entire surface of the pieces is covered with a design of

pieces costs \$12.00. Plates are 65 cents and a rather large bowl for nuts is \$3.50, the ladle costing 35 cents.

The plain scarlet or green Kaga, with an effective decoration of silver deposit,



Pale Green of Celadon; Teapot of Wedgwood.

leaves outlined in light wood brown. The quality of the porcelain is very fine with a mat surface, tea pot, sugar bowl and cream pitcher very graceful in shape, rather high for their circumference, the cups rather large and shallow. A service of six cups and saucers and the large

a chocolate service of pot and six cups costs \$6.00, the scarlet being much the best investment, as the green is rather crude. At the same price, or a little less, are delightful services of pale green celadon, for either tea or chocolate. Apropos of chocolate services, it is well before buy-



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TABLE CHAT—Continued

ing to be sure that the pot is large enough to fill its quota of cups. I have seen pots sold with six cups which would hold enough liquid for four. On the other hand, there is a standard blue and white Japanese set in which the chocolate pot is large enough for a second filling of its high and narrow cups.

brown jug, while the few touches of green in the cretonne were carried out by the mass of ferns on the oval table in the window. The china used was bluish gray Canton.

Perhaps more often than any other the color scheme of the dining room is green, and then the center of the table may be



Table Decorations of a Country House Dining Room.

In Harmony With the Coloring of the Dining Room.

Our illustration shows a country house luncheon table, whose color scheme was arranged to harmonize with the dining room. The room had white woodwork and delft blue walls, with effective curtains of cretonne in tones of blue, cream and russet. (Note, by the way, the excellent hanging and proportion of these same curtains.) The furniture was walnut. The center of the table was occupied by a great bunch of tawny hued chrysanthemums in a dull blue pot and loose flowers outlined a long oval inside of the plate line. On one of the smaller tables used for serving was a similar bunch in a blue and white ginger jar and on the other a mass of autumn foliage in a

covered by a mat of shining green, out of which tall glasses holding white or pink roses may rise. Scarlet carnations also look well on a mat of green. August brings the glowing orange of the nasturtiums and marigolds, the tawny yellow of dahlias, the golden browns of wall flowers and coreopsis, the most satisfying of all colors. Then, too, the August flowers are so generous of their beauty, so profuse in their blossoming. One does not have to scrimp but can revel in masses of splendid color.

August is the opportunity of the owner of blue china. Blue of any shade is at its very happiest in combination with orange or russet or tawny browns, and one gets such delightful effects for the tea table or the formal luncheon. And



Stained with Cabot's Shingle Stains
Davis, McGrath & Shepard, Architects, N. Y.

Stain Your Bungalows

Don't paint them. Stain them all over, roofs, siding and trimmings with

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The gloss of paint does not harmonize with the bungalow idea, but the soft, deep colors of our stains suit perfectly. They are not "painty" but rich and transparent, bringing out the grain of the wood and increasing its natural beauty. They cost only half as much as paint and only half as much for labor to apply. If your bungalow is in the woods, where skilled labor can't be had, you can do your own staining with perfect results. Our stains are made of the strongest and finest colors, ground in linseed oil, and specially refined Creosote "the best wood preservative known."

Cabot's Stains are sold all over the country. Send for stained wood samples and name of nearest agent.

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You can secure four times the usual amount of heat by using a

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These grates each heat two or more rooms on one or different floors in severest weather, and they will heat an entire residence with two-thirds the fuel of a furnace.

If You Have No Fireplace you can secure the effect of an ordinary open grate by the use of a *Mayflower Open Franklin*. Many people use them in preference to the ordinary open fireplace.

Catalog "K" shows the Ventilating Grate. Send for this, and also for catalogs of Mantels, Franklins, Andirons, or anything else you wish in the fireplace line.

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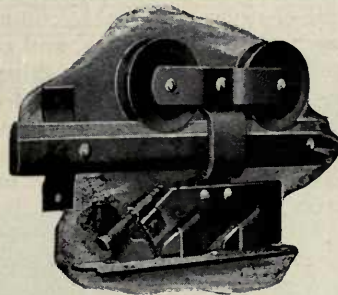
When you purchase, ask your dealer for the *Guarantee Tag* which goes with every indoor Gaumer fixture. It entitles you to *refinish without charge* should the fixture show discoloration or corrosion under any ordinary conditions.

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House
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No. 11 is designed for the average homes, but we have "a hanger for any door that slides."

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Richards-Wilcox Mfg. Co.
Aurora, Illinois

TABLE CHAT—Continued

the effect of the more sombre tones is equally good in the green dining room that is so popular in country houses. A very delightful sort of foliage to go with almost any of these August flowers is the euphorbia, an annual with no flower to speak of and exquisite green and white leaves, which in the mass give an indescribably beautiful silver effect. The fine thing about the euphorbia is that it sows itself and once you have it you have it always.

Swedish Enamel Ware.

Swedish enamel ware, thin and white, with the narrowest possible line of blue is specially adapted to the sort of impromptu housekeeping done in the mountain or seashore cottages which one hires for a month or two of the hottest weather. It can be had in plates of many sizes, cups and saucers, tea and coffee pots and almost anything but covered vegetable dishes. The cost is more than that of the other sorts, but it is as very nearly indestructible as possible and very light.

For the Out-of-Doors Tea Table.

The out-of-doors tea table should be pictureque rather than dainty, and centre-pieces and doilies of brown linen are shown in great variety. The best looking are embroidered in white. Others have an edge and a pattern of a more or less elaborate arrangement of dots in dull green or old blue. Anyone who has the skill with the dyepot, which is now not unusual, can make an effective tea cloth by dying a piece of table damask or well covered design gray green, yellow, old blue or old rose, whichever harmonizes best with the china used. The edges may be hemstitched, or the circle edged with heavy linen lace before dying.

There is a fancy now for plain colored china. In the always satisfactory self-colored Japanese pottery are several new colors, a deep mauve, a vivid red and another approximating the color of an American Beauty rose. The dull greens and blues and a clear yellow are familiar, as well as the pale green of celadon. If a decorated ware is preferred, there is one whose prevalent colors are old ivory and deep olive. The shape of these Japanese pieces makes them equally suitable for tea or coffee, and there is gen-

erally a choice of pots, high and narrow or low and squatty. Another ware specially effective for this use is the Italian faience, sometimes called lettuce ware, as it is suggested by and copies the delicate greens of softly curving lines of that vegetable. The variety of pieces is small, but it is possible to get together a tea service and a salad set. Some old pieces, mayonnaise dishes and the like, show the green leaves in combination with flowers in a soft pink.

Intended for out-of-door use is a coffee set, consisting of a nickel tray with a pierced edge, a nickel and glass percolator and four high and narrow handleless cups, each in a pierced nickel holder. There are also a sugar bowl and cream pitcher of china to match the cups.

The sets of tray and coasters have many uses. They have bottoms of fire-proof, vitrified tile and edges of metal. Many of them copy the designs of Swedish porcelain, low tones of blue and green on a cream white ground.

The Informal Luncheon.

A good salad is an essential part of the informal luncheon which is such a delightful way of entertaining small parties of friends at one's country home. It is unfortunate, that in the country, it is difficult to get celery, but a salad made entirely of chicken and served with an abundance of crisp and tender lettuce is just as good, if a little more expensive. A very satisfactory, substantial course for such a spread is chicken salad, a devilled egg, two bread and butter sandwiches and three or four olives, supplemented by relays of bread and butter. All this can be served on a single plate with paper napkins and forks. In some parts of the country, small melons are available at this season and half of one chilled and filled with ice cream is a much liked dessert course, with some simple sort of cake. Layer cakes are messy to the last degree and are inappropriate, plain but reasonably rich loaf cake, generously iced, or the little cakes, called petits fours in French restaurants are good and there is an extremely good cake made with the whites of eggs, and intelligent co-operation will divert the yolks to the making of mayonnaise for the salad.



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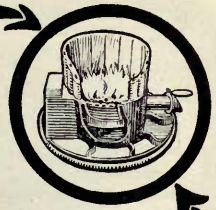
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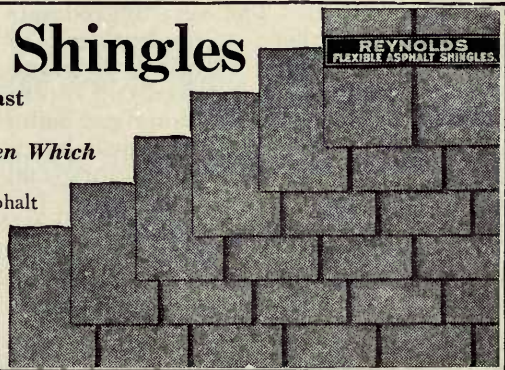
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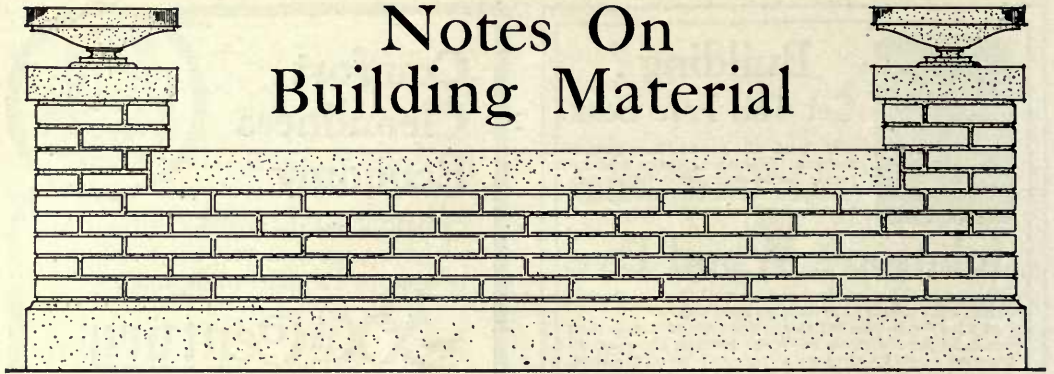
"How to Build It"

A Practical Handbook on
Construction Details, \$1.

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Notes On Building Material



Making and Laying of Composition Flooring.

IT has been stated that in Germany the art of laying these floors is far ahead of American practice. Some interesting information on this subject is given by the U. S. Consul of Hamburg, Germany, on the German use of flooring compositions of magnesium chloride.

"According to my information, there should be neither expansion nor contraction of the material from any cause whatever, after a flooring of magnesium chloride is once laid. The very ingredients are such that there is no buckling or cracking due to heat or cold: In Hamburg the composition is mixed and spread where the building operations are being carried on, the prepared dry meal being delivered in bags from the factory and the lye water made on the spot. It is impossible to state the precise rule for the composition of the meal or for the lye solution, these being the manufacturers' secrets and each manufacturer claiming particular merits for his own formula. These formulas are not patented.

"The mixture of meal and lye water is made in a mortar box, and when a thickness of not more than two inches is proposed it is spread and smoothed with a hand trowel; when a thickness of four inches is desired, the material is tamped and then smoothed. The amount of lye water used in mixing the meal depends upon whether the flooring is to be simply spread or tamped; if spread the ordinary practice seems to be to use from 4 to 6 buckets of the lye water to one sack of meal, the sack apparently containing from 50 to 60 pounds.

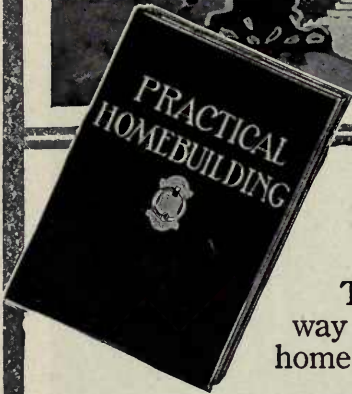
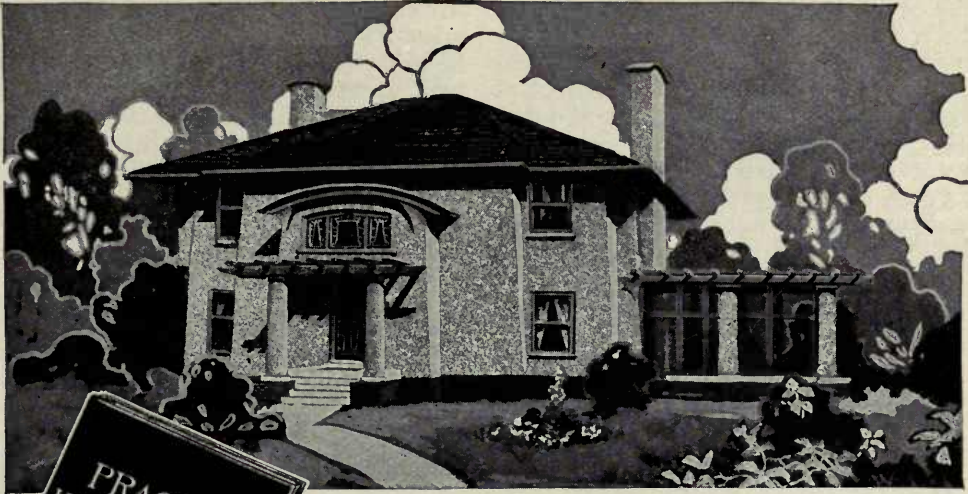
"These floorings were first utilized in large office buildings in Hamburg, and probably elsewhere, as a basic flooring for linoleum and also for the addition of artificial wood-marble flooring. These wood-marble floorings are substitutes for wood, and the panels are polished like hardwood floors; that is to say, smoothed with steel shavings and given a coating of wax. When linoleum is applied, it is glued to the magnesium-chloride foundation with a linoleum cement, which is said to be composed of copal resin and putty.

"In Germany linoleum is never tacked to wood or artificial stone flooring, as is usual in the United States, but it is invariably glued in place, an ordinary flour paste being used when it is applied to wooden floors. Linoleum thus laid is washed afterwards with soap water and when dry given a coating of wax, exactly like a hardwood floor. This treatment is the ordinary practice in the large office buildings in Germany, even in hallways where thousands of people pass in the course of a week.

"The magnesium-chloride flooring was first considered a particularly excellent foundation for linoleum, and it is only in comparatively recent times that it has been found possible to color it and to lay it so attractively that no linoleum covering is necessary. It is laid tight against the side walls, making the entire floor waterproof."

The Forest Products Exposition at Chicago.

The Forest Products Exposition was the most complete, comprehensive, attractive and result-producing of any pioneer industrial exposition ever given in this country.



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as a base for interior plaster and outside stucco construction; but it is much more than an advertising booklet.

It begins with the selection of a building site; takes up grading; excavating; basement walls and foundations; different types of roofs; as well as the construction of the walls.

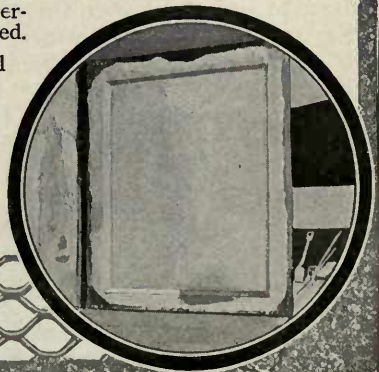
It contains comparative figures; numerous photographs and floor plans of houses, together with cost; directions for over-coating frame houses and photographs of the results obtained.

"Practical Homebuilding" is a mine of helpful information along the very lines that most interest home-builders.

Send ten cents to cover cost of mailing and ask for Booklet 659.

North Western Expanded Metal Company
965 Old Colony Building Chicago, U. S. A.

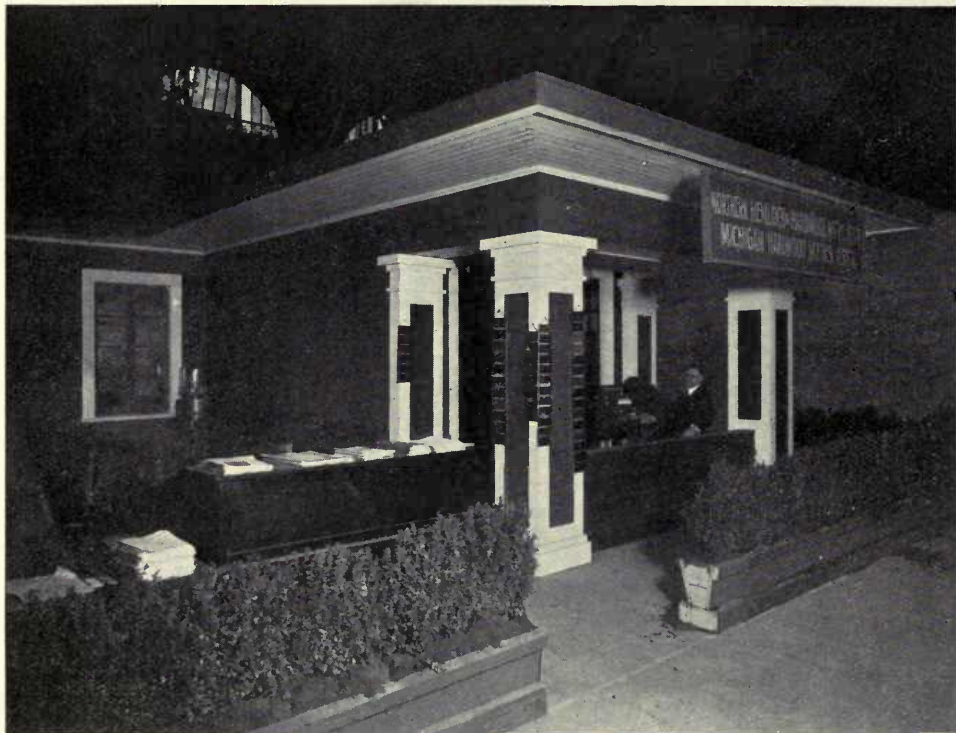
This photograph shows a plaster panel on a base of Expanded Metal Lath after it had been subjected to a temperature of 1929° Fahrenheit. It proves the wonderful fire-resisting qualities of plaster on a metal lath foundation.



NOTES ON BUILDING MATERIAL—Continued

The exhibit of the Northern Pine Manufacturers' Association centered in the showing of white pine for exterior uses, or in other words for an "Outside Covering" in home-building. To attractively do this there was created a miniature interior garden, with pool, fountain, flowers, grass, shrubs, walks, colonnade, pergola, French window effects, a tea house and all surrounded by a balustrade with

Rothenberg. The large room in a somewhat later period of architecture, in dark Flemish, was designed by Mr. Louis Smetana, Architect, and was one of the original rooms for the Yellow Pine Manufacturers' Association House, exhibited at the Louisiana Purchase Exposition, St. Louis, in 1904. The exterior with entrance, porch and circular bay, was designed by Roth and Study, Architects,



Bungalow of Northern Hemlock and Hardwood Manufacturers Association at Forest Products Exposition.

arborescent entrance. Then there was shown an attractive miniature house, with pleasing entrance, and an artistically designed interior. Into this setting was interpolated the practical part of the exhibit, showing white pine of today, with some transparencies and pictures in addition to the wood itself,—together with some glimpses into historical New England.

The Nuremberg House was shown by the Yellow Pine Manufacturers' Association. Nuremberg House is built in the fourteenth century style of German Architecture, of which many remarkable examples are to be found at Nuremberg and

who chose that type of house which offered every possible use of wood in its construction, so that the engine structure, from foundation to peak of roof, might be built of southern yellow pine. The walls are covered with rough siding up to the window sills, and from that point on, are of half-timber work, held together by wooden pins. The roof is of heavy hand-split shingles laid in irregular courses. The possibilities of yellow pine for more elaborate work is shown on the wood carvings on both the interior and the exterior where much of the spirit of the Gothic carvings has been obtained. The



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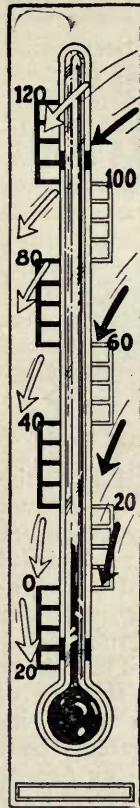
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are as attractive as they are durable. Surfaced with chipped slate or crushed granite, forced into a substantial coat of pure, rubber-like Gilsonite. Beneath this durable, unfading surface is high-grade wool felt, saturated through and through with pure asphalt. Flex-a-Tiles can't crack, warp, rust or rot, and are cheaper to lay than other roofs. Before you roof, get the whole Flex-a-Tile story.

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Manufacturers also of Asphalt Paint, Asphalt Roofing in Any Finish, and Utility Wall Board

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Chicago, Illinois

interior of the circular bay has been painted white to illustrate the use of southern yellow pine in colonial house interiors.

Scenic attractiveness distinguished the exhibit of the West Coast Lumber Manufacturers' Association, with headquarters at Tacoma and branch department at Portland, which consisted mainly of a four-room bungalow, open as to sides and roof. The uses of fir and cedar in floor, ceiling and panel construction were splendidly set off in the interior woodwork. A living room was furnished entirely in western hemlock.

Explains Proper Use of Metal Lath.

"The question is often raised as to the permanence of stucco when applied over metal lath. In every locality there are to be found contractors who are doubtful of the value of metal lath, and who prefer not to use that material through fear of a failure that would injure their reputation as successful builders. There have been, and no doubt will be, failures of stucco on metal lath, but in every instance that we have investigated, these could have been avoided by using proper material in a proper manner. There have also been instances of failures of brick, steel and wood constructed buildings, yet no one would think of condemning the use of those materials on that ground. Why not give stucco on metal lath an equal benefit of the doubt?

"Failures of stucco that can be traced directly to the metal lath used are due to one of the following reasons: In order to save a little in the cost of the lath, a light weight (27 gauge) lath unprotected by painting or galvanizing is used. This material is so very thin that the least bit of corrosion will destroy it. Nothing lighter than a 24-gauge painted lath weighing not less than 3.4 pounds per square yard should be used. The painting insures the material reaching the work in first-class condition, as well as protecting it after it has been plastered.

"One of the best means of protecting metal lath is to have it completely imbedded in the stucco. For this reason a lath that does not cover well on the reverse side is apt to cause a failure on account of being attacked by corrosion. Expanded metal lath has a small mesh

which is so shaped that the plaster flows over and around the strands, completely imbedding them. Two-coat stucco work seldom proves satisfactory because it is so thin that it is bound to crack, yet this cracking in two-coat work is often blamed upon the metal lath."—*Rock Products*.

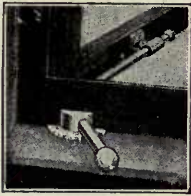
Green Brick Invented.

For a long time brickmakers have been trying to work into their patterns a green brick, one that would stay green and not "go green," but had met with failure. Recently the manager of the Sacramento Sandstone Brick company hit upon a process that will produce a green shade. While practically every other color had been possible in brickmaking up to that time, green had defied the science of the chemist and ingenuity of the inventor, until the manager of the California company turned the trick. Many bricks, both clay and composition, have "gone green in the wall," but this new brick has been found to stand every test to which it has been subjected, both acid and bleaching. Now that a green brick is assured, contractors will have one more color to work into wall designs.

EDITOR'S NOTE.

We desire to correct a rather misleading item which appeared in this Department in our July issue on "Sea Air an Enemy of Concrete." Sometimes things escape the chief editor's eagle eye and errors creep in unawares. We endeavor to present all sides of the building proposition with candor and fairness and therefore, in all fairness, we take issue with this "newspaper" authority on the permanence of concrete under the atmospheric conditions to which the item referred. Anyone who has traveled along the Pacific Coast will recall how extensive is the use of concrete for the lovely seashore houses and cottages, a use which certainly would not continue and increase if the use of Portland cement for exterior work on sea coast buildings was not proving over these many years most permanent and satisfactory. This fact alone is sufficient to refute the broad statement made in the article in question and which this publication does not endorse.

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We have been in this business of planning Homes for many years, and our bungalows for any climate are admittedly beautiful and models of convenience.

New edition "HOMES, not HOUSES" just issued, 128 folio pages with 249 illustrations showing artistic and convenient bungalows (running mostly from \$1,000 to \$2,500) inside and out. \$1.00 postpaid. Sample pages free. Smaller book showing 38 small Bungalow Homes, inside and out, 25c., post paid.

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See that your home is built right by supervising the construction yourself. With the aid of this book you can do it to perfection and accomplish far more satisfactory results than from the occasional and brief visits of an architect.

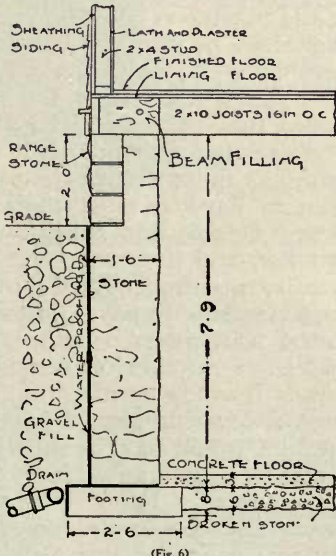
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CHARMING Moorish beauty and dignity of appearance of Metal Spanish Tile gives an air of distinction to the home graced by this wonderful new and practically indestructible roofing.

It has taken home-builders of America by storm, for it is the modernization of the wonderfully beautiful roofs of historic Spanish edifices.

The art of making this roofing, left behind by fleeing Moors driven out of Spain centuries ago, until 1910 could not be made practical for the modern home, despite its alluring beauties.

After years of experiment, we have hit the solution. That is why today we are able to offer American homes the amazing attractiveness of

Metal Spanish Tile Roofing

Its scores of vital, practical advantages cost no more than common roofing, yet mean tremendous economy—it needs no repairs and outlasts several ordinary roofs because of its practically indestructible metal construction.

It is absolutely wind, weather, storm, fire and lightning proof.

Easy to apply. No soldering, no special tools—any ordinary mechanic can apply it. Interlocking system by which tiles dovetail into each other makes the roof absolutely water tight and provides for expansion and contraction perfectly—summer and winter. It is guaranteed non-breakable.

HOME-BUILDERS—Simply send us today the dimensions of your building and we will tell you by return mail exact cost of all material. Our new book on beautifying the modern American home by use of Metal Spanish Tile is yours for the asking. A postal will bring it. Address

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Domestic Hot Water.

“EWLY-WED” may extract some useful information from the following, which is designed to assist families in just condition as he seems to be in. In the first place you should ascertain the following information, as no definite type of hot-water-boiler will suit every district:

1. Is the water soft or hard? If the latter, does it destroy galvanized iron?
2. What class of coal is used—common or good hard range nut?
3. How much hot water is required? Making a special provision where there is a large family.
4. When size and position of cylinder or tank is settled, then select your kitchen range, with a suitable oven or ovens, and a fire capable of producing the required adequate supply of hot water.
5. If the cylinder or tank has to be fixed a long distance from the boiler-heating surface.
6. Use a copper boiler, if funds and water will permit; they heat the water much quicker than iron, and soon save the extra cost in economy of fuel.
7. By all means, make a hot closet for airing linen in conjunction with the hot tank, if possible; it is invaluable where there is a young family.
8. Select a boiler with plenty of heating surface on the underside from back to front. Top flues should never be allowed—they rob the under flue. By holding a lighted match above and below your hand when extended with relative power will be practically demonstrated.
9. Drill boiler on top, taking care to carry the cold pipe nearly to the bottom, and keep the hot pipe flush with the inside of boiler; on no account let this project even 1/16th of an inch through.
10. Give the circulating pipes between boiler and cylinder a good rise when taking a horizontal course; avoid sharp el-

bows, using bends or springs where possible. Pipes of one inch bore give a good service, using larger where the pipes furr quickly. Before screwing up see that the insides of pipes are clear. Provide cold supply to hot tank of good size to give a quick feed to taps, and fix safety valve, secondary circulation, and expansion pipe in the usual way.—*National Builder*.

The Abuse of Plumbing Fixtures.

All too often the plumbing manufacturer is blamed, and claims are made for defective material when conditions such as are set forth are responsible for the damage, says a writer in the *Architect and Engineer*. This letter is from a manufacturer's representative:

“The other day I was called in to look at a couple of tubs installed in a very fine apartment building. In this job were twenty-six (26) high-grade tubs. I was surprised to see the condition of the fixtures generally, as the tubs were most all covered with lime and mortar, left by the plasterers and tile setters. On at least three of the tubs it was almost impossible to see any enamel, and I am of the opinion that when this debris is removed the surface will be affected.

“The lavatories are also in very bad shape, as most of them show where the painters have cleaned their brushes on them. I took this subject up with the plumber, and he stated that after he set each fixture he covered both tubs and wash stands with paper, but that the plasterers, carpenters, painters and other tradesmen on the job removed the covering. It is my opinion that a more substantial covering should have been used; one that would have required more effort to remove, such as a tarpaulin or canvas covering. Paper is not sufficiently strong and too easily removed to be of any real value for this use. I next took the matter up with the general contractor and pointed out to him the shame of abus-

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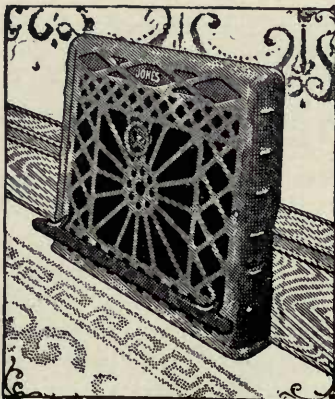
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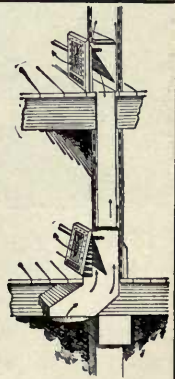
during the coldest weather may be secured by installing the "JONES" System of Heating, one principal of which is the heating of one room on two floors from the same basement pipe, insures not only a saving, but produces the results wanted.

Our improved "JONES" Side Wall Registers have been installed in over 350,000 of the most comfortably heated homes of the United States and Canada.

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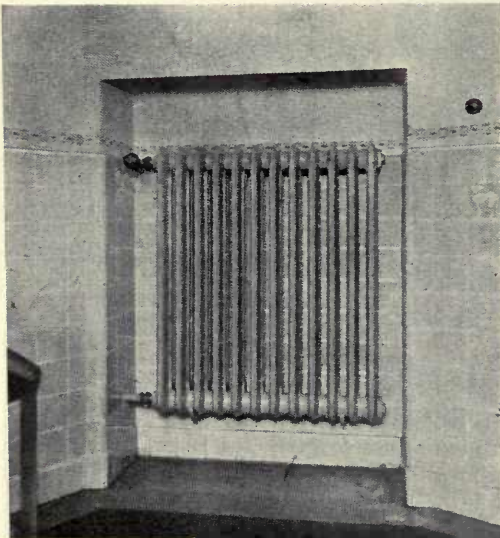
**The Northern Hemlock and Hardwood
Manufacturers Association**

Dept. K., - - - Wausau, Wisconsin

ing bath room fixtures in this manner, and he stated that it was something beyond his control, and was up to the individual or sub-contractors.

"I have no doubt but what more care will be taken on future jobs by the people whom I talked to in this particular case, but to take up each individual contract and attempt to guard against this abuse is something out of the question.

"On the same job I was walking over a hardwood floor and was cautioned by the man laying it to walk on my toes and not with the heels of my shoes, yet



Showing Neat Disposition of Radiator in Recess off Stair Landing. Radiator Is Hung on Brackets. Background of Tiling Furnishes a Surface Easily Washed of Any Dust Carried There by Air Currents.

apparently no care was thought to be taken about porcelain enameled lavatories and bath tubs."

This case was clearly one where the plumbing fixtures were installed before they should have been. The plastering and all similar work should have been completed before the fixtures were even taken to the job, and there would have been no possibility of such damage being done.

Doing Away With Stairs.

Why can't some contrivance be invented, so that a woman can get on a platform, touch a button, or a lever, and

be conveyed from one story to another as easily as being lifted up in an elevator? An arrangement of this sort, it seems to us, could be devised, to work automatically, without power of any sort other than gravitation, by a well thought out system of counterbalancing weights, and made easily controllable by a child old enough to think. Imagine the space now required for stairs, and their guards, and the big cost in connection with them. A great portion of the space occupied by them could be utilized for other purposes, if some scheme, such as we have here suggested was worked out to success. There are brains enough, scattered among our clever woodworkers, to dig out from the unknown, a complete and perfect scheme for such a plan as we have suggested.

World Cities War on Smoke Evil.

The close connection that exists between a pure atmosphere and the health of the community is being recognized more clearly by the public authorities of many of the larger towns and cities of Great Britain and other countries, and a distinct revival of interest in the subject of smoke abatement is to be noted on the part of the municipal health committees and of the general public.

The most notable events of the last twelve months in Great Britain in connection with the smoke abatement movement have been the decision of the health committees of fifteen of our largest and most important cities to make accurate measurements of the amount of atmospheric pollution within their respective administrative areas, and the introduction of a bill into the House of Commons to consolidate the existing laws, and to provide the local authorities with extended powers against the emission of black smoke.

The details of the method and apparatus to be used for the measurement of atmospheric pollution have been worked out by the special committee appointed for the purpose at the international smoke abatement conference held in London in March, 1912.

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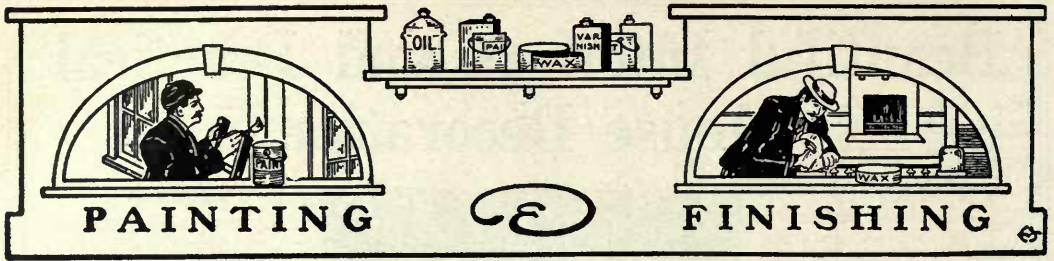
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Finishing White Wood.



N ORDER to preserve the light color of white wood or of any very light colored wood, it is necessary to avoid the use of oil in contact with the bare wood. The best thing to use on white woods is a first coater made from damar varnish thinned by adding one part of turpentine to four parts of damar. This will give a smooth surface and preserve the light color of the wood. But damar must not be used in any subsequent coat, as it is too soft. Use instead a very light copal varnish.

Usually white shellac is light enough for the first coat on light woods such as holly, maple, white and yellow pine.

When shellac is used two coats may be applied the first day, one the second, one the fourth, one the seventh, using it very thin. When about four coats have been applied the last coat may be rubbed with powdered pumice stone and water, not oil, rubbing very lightly. Rub every third coat. It is not actually necessary to rub shellac coats between coats, as the shellac will stick anyway. In this way you build up a perfectly filled surface and one that will show great depth of finish. But be careful in rubbing shellac varnish when you suppose it is dry enough, for while it may indeed appear dry, it may be simply set.

Ivory White Paint.

The very ordinary type of brownstone basement house which prevailed in many of the eastern cities in the early seventies is also susceptible of great improvement through the application of ivory white paint to the heavy storm doors, the vestibule and front entrance door—whether of oak, walnut or mahogany—these are infinitely handsomer and more distinctive if so treated, especially when complemented by the same finish on window frames and

coping. Frequently there is an iron grille at the area door, which can be effectively brought to this creamy tone.

The house so treated is lifted from the class of its uninteresting neighbors.

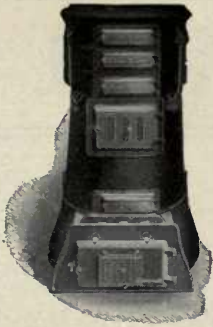
* * *

Acid stains should never be used for outside work, and the reason therefore lies in the necessity for using a mid-coat of shellac as a binder over the acid stain.

Shellac being a brittle, inelastic substance quite at variance with the exceptionally tough, resilient spar varnish, does not adapt itself to the varying weather conditions to which exterior varnish is subjected. A successful spar or exterior varnish must not only be water-proof in the ordinary sense of the term, but it must accommodate itself to the constantly recurring processes of contraction and expansion incident to changes in temperature and humidity. You can readily see that, no matter how well adapted the outer coat of varnish may be to meet these conditions, with an unyielding undercoat of shellac, a broken or checked surface results.

Where a color other than that of the natural wood is required, the desired effect may be obtained in one of two ways: Staining with a pigment oil stain, or, if the wood be an open grain, a paste filler of the desired shade will usually bring best results. Most of the oak effects in vogue for outside work are the result of using paste filler alone to produce the color.

Owing to the fact that exterior varnish is an extremely slow-drying material, it is found advisable to use a quicker drying varnish as a first coat over the oil stain or paste filler—a varnish a shade less elastic yet not varying enough from the character of the spar varnish to cause an unequal contraction.



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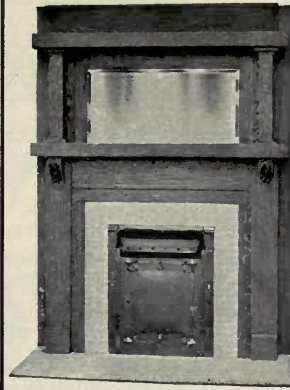
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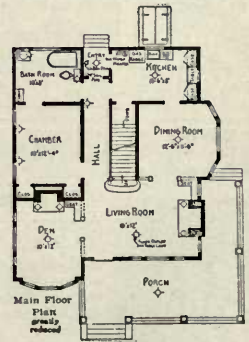
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The Architect's Corner

Asbestos Roofing.

Question.—Please give us some information regarding permanent roofs and we would like to know particularly about asbestos roofing which we have read about. We have a building to roof which will be about 60 feet long and would like your opinion relative to the proper pitch to give this roof.

Answer.—On a 60-foot building where prepared roofing is to be used, we would not recommend a pitch less than 5 feet to the 60 feet. This would be a pitch of 1 inch to the foot, which would be satisfactory for all ordinary purposes. You, of course, appreciate the fact that the greater the pitch the less chance for leakage.

Asbestos roofing is constructed of pure asbestos rock felts and asphalt. Thus being an all-mineral product it insures a practi-

cally indestructible roof, which requires no coating or other maintenance expense after application. This roofing is guaranteed not to rot, rust or disintegrate under the most severe weather conditions.

It is used on business houses and factories of all kinds, as well as barns, silos, sheds and other forms of permanent construction.

Joining Brick and Siding.

Question.—My house has brick veneer for first story and lap siding above. How shall the two come together?

Answer.—After the brick work has been brought to the correct height cut a piece of 2x4 the correct length and lay it in position to prove that it is not too wide at any point. Bed this piece with mortar to make as weatherproof a job as possible; tap it level and bring the front edge even with the face of the brickwork, placing small shims between it and the sheathing if necessary, and then nail firmly in place.

A small molding should then be fitted and nailed in place so as to break the joint between the brickwork and the 2x4. The siding is then applied in the usual way.

If it is required that the siding on the upper story come out to the face of the brickwork, one solution of the problem would be to cut off the studs at the first story ceiling line, put on a plate and allow the second story joists to project over them. The second story studs can then be set out to the proper distance so that the siding and brickwork may line up with each other.



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SPLINTERS AND SHAVINGS

Primary Economics.



ONE of the lessons lumbermen have learned during the last decade is that only a small percentage of their product is used in its original form and size. So small is the proportion that it almost is possible to give a list. That list would include barn boards, strips and boards used for long reaches of cornice and outside trim, a small percentage of the lumber employed for sheathing, and probably 40 per cent of the joist and dimension.

All of the remainder is remanufactured by the carpenter or planing mill and products, houses or parts of houses, composed of many small pieces, are made of the long lengths the mills ship.

A carpenter cheerfully cuts a 16-foot board into 4-foot lengths, cuts 18-foot 2x4 to make a 9-foot partition and, usually, buys 16-foot stock for cut-ins. This practice applies to finish, sheathing and dimension.

Lumber manufacturers know, retail lumbermen should know and the building trade should be taught that it takes a better quality of logs to make No. 1 stock 16-foot long than to make the same grade in 4-foot, 6-foot and 8-foot lengths. Usually the short lengths are materially

cheaper and if bought in the right proportion can be used with less waste.

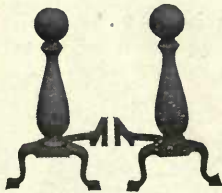
Short lengths have not appealed to retail lumbermen or to the carpenter. they are regarded as a bother, a nuisance, largely, we believe, because it has not been the custom to use them.

Milwaukee Has a Bureau of Quantity Surveying.

A recent issue of the *Quantity Surveyor*, states that Milwaukee, Wis., contractors are displaying much activity and interest in the matter of better estimating methods. Some of the most progressive men in the business are now arranging for the establishment of a Bureau of Quantity Surveying, where bills of quantities prepared by experienced men may be obtained by bidders in all trades when work is upon the market. This is actual progress, and will lead to the early adoption of even more progressive methods later on, when the quantities estimated upon will form the basis of the contract.

The Extension Division of the University of Wisconsin, Madison, Wis., offers a course in reinforced concrete for men in practice, enabling them to secure at low cost a comprehensive knowledge of the theory and practice of present-day building design. The course is open to all who have had a fair training or experience in the elementary principles of structures and who have a fair understanding of algebra, geometry, trigonometry, mechanical drawing and strength of materials.

Preparatory studies are offered enabling those to qualify for the course who have not had the necessary training in mathematics or in the elements of structures. Enrollments will be received any time, as the work of the University Extension Division continues without interruption throughout the year.—*Concrete and Cement Age.*



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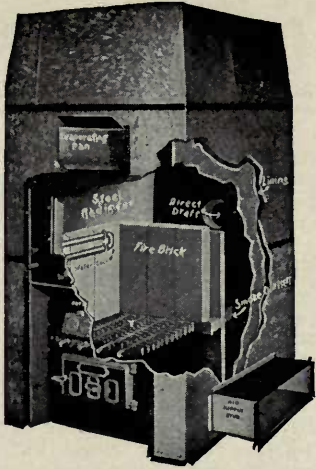
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New Booklets and Trade Notes



HE new catalog of the Morgan Company is a marvel of handsome design and superior press work. The new catalog retains the old name—*The Door Beautiful*—which is even more appropriate than ever. In this new book the Morgan designs are shown in larger and more effective detail with a very telling new feature introduced as a header for each design and incorporated with it, is shown an architectural study of the type of exterior for which each door is appropriate and in harmony with. For instance, on page 12, appears a craftsman style exterior door with side lights, as the entrance to a plaster dwelling; and above is the related design of a long, low-roofed plaster exterior, plainly reproducing in the entrance door the enlarged design below. Moreover these little architectural head pieces are full of suggestion in themselves, and are both distinctive and artistic. We commend this catalog to our readers.

* * *

A pamphlet issued by the P. & F. Corbin Co. illustrates and describes in an interesting manner some of the newer specialties in building hardware. Among these is the concealed transom lifter, the only portion visible being the bronze metal T-handle and plate, attached to the door casing at a convenient height. Any finish can be applied to it. It is noiseless and does not get out of order, and thus eliminates the ugly fixture so long an eyesore. The Corbin automatic exit features are among the new improvements, opening doors from the inside even when locked against entrance. Perhaps the best of all is the new Casement Concealed Operator, a device which opens and closes casements without interfering with curtains or screens, with the operating portion all concealed within the sill and only a small handle set on a small plate just under the sill, visible.

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* * *

It is always a pleasure to note in these columns the titles of books along household lines, likely to be helpful. The last to come under our notice is Mrs. Rorer's *New Cook Book*. It is rather elaborate and expensive for the average family, as might perhaps be expected from the head of a cooking school, but it has many excellent features, among them a good many economical meat dishes which are a little out of the usual. There is a very exhaustive list of the vegetables, fruits and nuts which are not exactly common, with directions for their use. But the strongest point of the book is the very exact instruction given as to the chemical changes in the cooking of different foods, their relative digestibility and their composition. It ought to be of great assistance to those who are trying to achieve that Ultima Thule of domestic economy, the balanced ration. The book is none the less interesting that Mrs. Rorer has a number of hobbies which she rides with great vigor and enthusiasm. Taken as a whole it is very suggestive.

* * *

Edwards Metal Roofing is set forth simply and plainly but very exhaustively in their new booklet, sent out by the Edwards Manufacturing Co., Cincinnati, Ohio. Among the 300 or more different roofings on the market, a product must have strong merit to keep its place, and this the booklet is prepared to show.

* * *

The United States Incinerator Co., Buffalo, N. Y., send us an interesting booklet illustrating and describing some of their specialties. Among them is their *Perfect Gas Incinerator* for the sanitary disposal of garbage and waste products.

The Fly-Rid claims to have perfected every demand upon successful operation. It withstands continuous hard use, is simple in construction, is operated either with natural or artificial gas and so controls the heat as to prevent radiation yet secure the maximum efficiency. Booklet sent on request.

* * *

The products of the Mesker Bros Iron Co., St. Louis, Mo., are described in an illustrated catalog which shows many of the improvements constantly being made in Metal Window Frames, Wire Glass Windows, Steel Doors, Frames and Sills, also Stairways, for use in commercial buildings. Special designs and prices to meet every condition are gladly submitted by the Engineering Dept.

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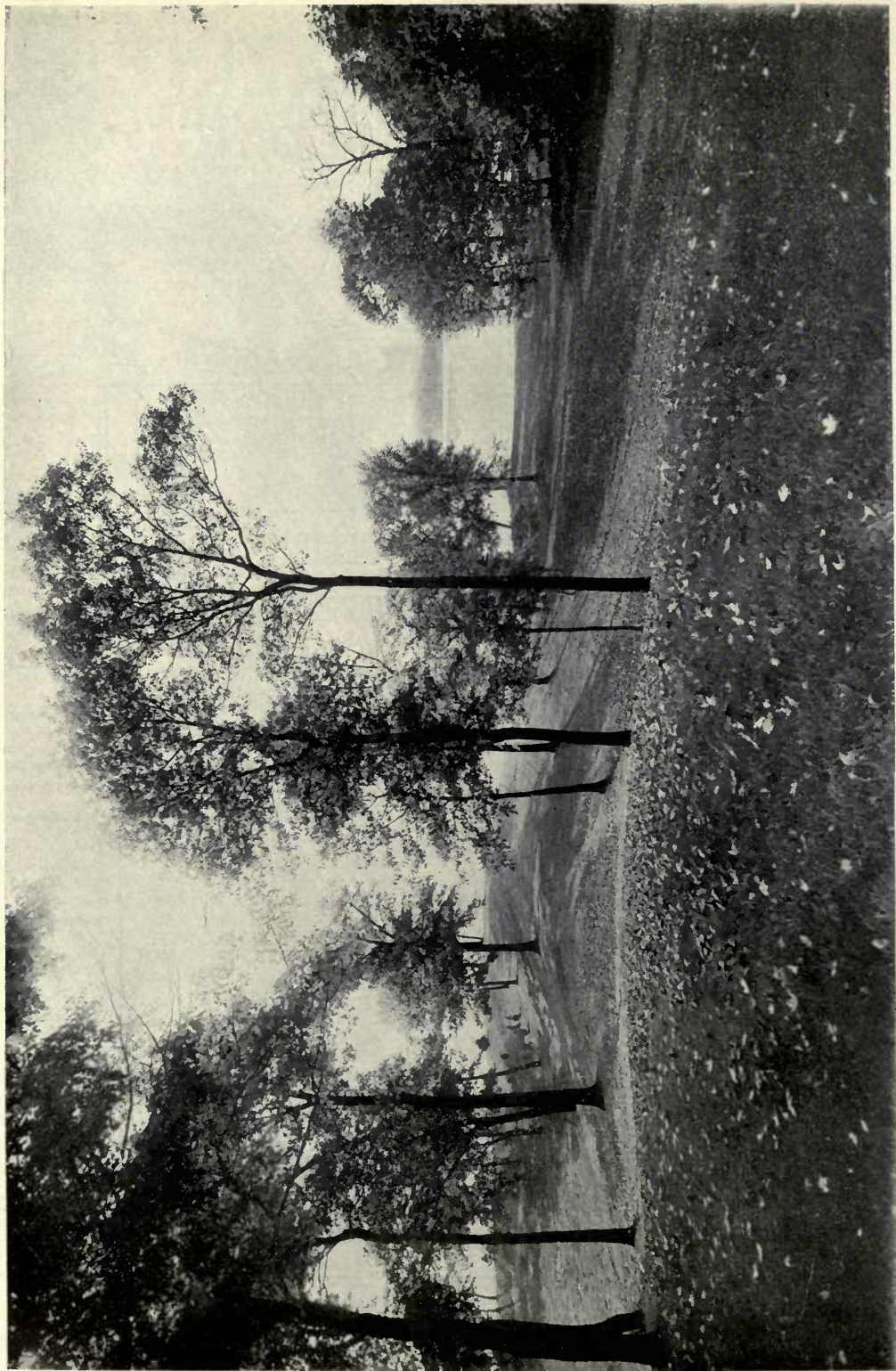
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MINNEAPOLIS, MINN.

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A Minnetonka Country house, showing Lawn with wide, sunny spaces. See page 191.

KEITH'S MAGAZINE

VOL. XXXII

SEPTEMBER, 1914

No. 3

Making Rears of Houses Attractive

Margaret Craig

VERY definite attention is being given by architects nowadays to the rear of a house as well as to the front entrance.

For a great many years the front veranda and lawn have been almost exclusively used for the social out-of-door life of the home-makers, but of recent years the front entrance is becoming simpler and more formal, and the family have chosen other quarters for more secluded entertainment.

The rear of a house can be made quite as attractive as the front of a house—only in a different way.

Flowers and walls lend their share in making the closed-in area mysterious and alluring to the outsider as well and contribute an infinite amount of privacy and quiet. The high board fences that formerly hid a space of unkept lawn are fast disappearing.

Hedges, trimmed or left to grow in their natural state; brick walls, punctu-



The Chimney of Red Brick is Quite the Dominant Feature.

ated by interesting posts and inviting gates; every variety of vine-covered lattice and of cement retaining walls are taking the place of these uninteresting board fences.

The first illustration is the rear of a white cement bungalow in Pasadena.



This Rear Door Opens Upon a Mass of Blue and White Daisies.

The chimney made of red brick is quite the dominant feature. It is very broad in its foundation, but by broken lines gradually tapers to less than half the width. The wall of the terrace or balcony is also of red brick, and is topped by a white window box filled with green asparagus and flowering plants, the whole effect forming a pleasing color scheme.

The roof of this bungalow is of red tile and gives a very pretty touch of brilliant color that harmonizes also with the scarlet flowers in the box. At one side of this terrace and at the corner of the yard is a picturesque pergola made of rough branches of the eucalyptus tree.

The second illustration is also the rear of an attractive cement bungalow, built in a somewhat different style.

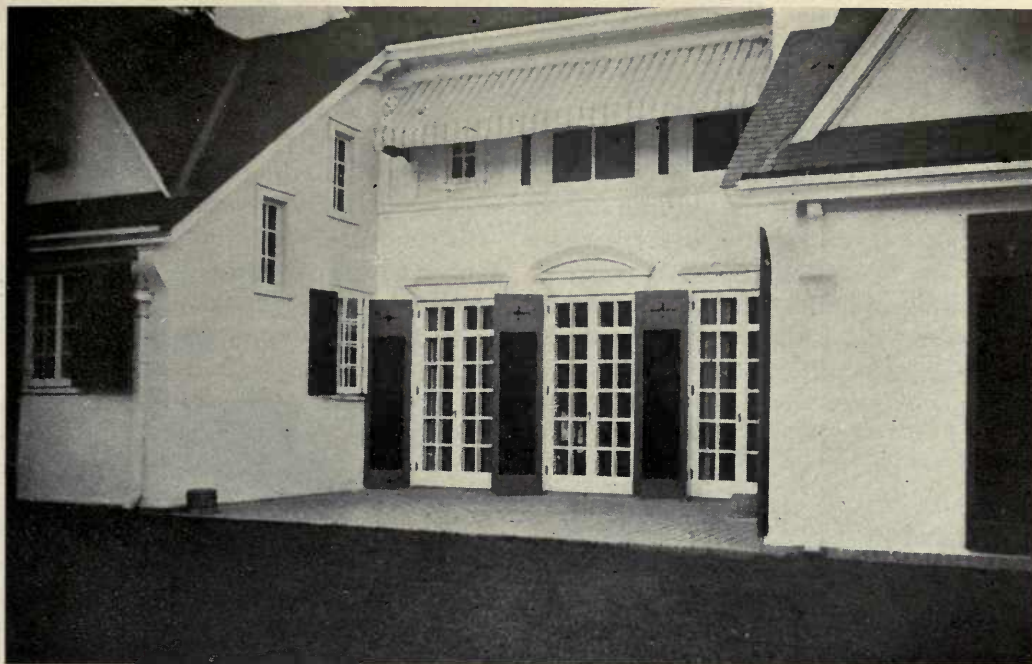
Flower boxes are used similarly to line the top of the cement balcony wall. The cement pillars are built at intervals in this balcony porch and they support the rustic branches above, that form in this way a charming pergola effect.

French doors lead out upon this little porch, and a semi-sheltered out-of-door resting place is thus obtained.

The modern house builder eagerly searches for variety in the lines of the rear of the houses, and they find that balconies, sleeping porches and terraces of unnumbered variety help in breaking up the former monotony.

A back yard when made a thing of attention can afford one of the most delightful parts of the premises. Summer houses and arbors, tennis grounds or retreats for the book-lovers; corners for children with a sand-pile and swing can inexpensively be built.

Kitchen gardens do not detract if there is enough space at one side, and regular rows of swaying corn, or evenly planted fresh, green lettuce give a note of comfort, especially in the present time when

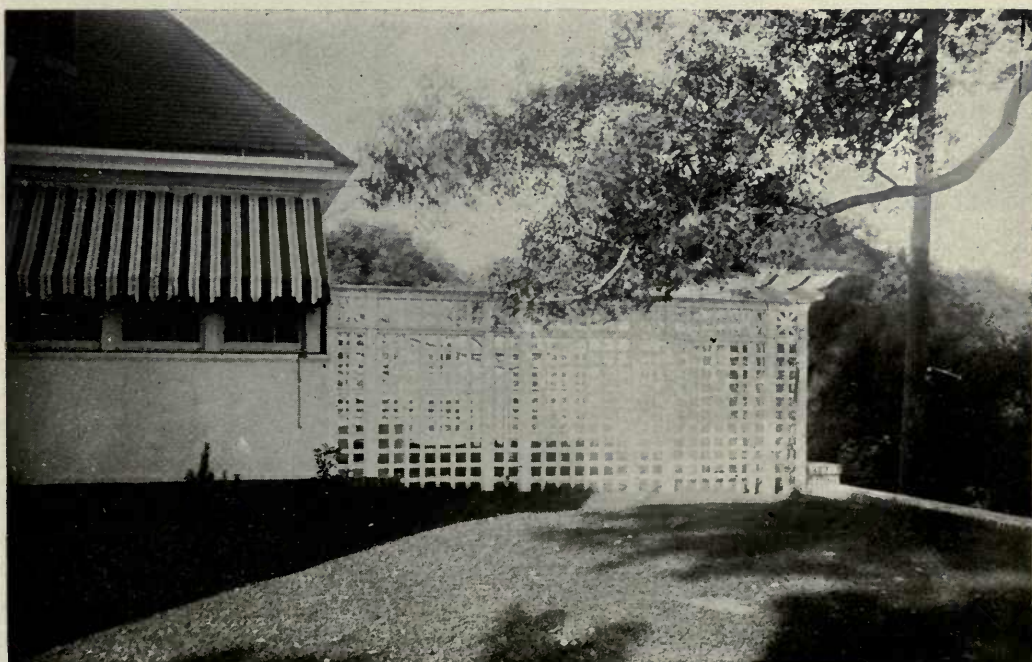


Three pairs of French windows open out on the brick terrace.

so many people are motoring and homes are deserted.

Why not have a back door as inviting as the front door, only in a different way?

In the three illustrations of back doors one is screened with a white lattice, another sheltered with flowering vines, and the third made most inviting with its



A Back Door Screened with White Lattice.

good lines, and by the mass of white daisies and blue flowers that set it off.

Terraces slightly above the level of the ground, or more pretentiously built in the style of the Italian villa, are usually most pleasing at the rear of a house. Balustrades following the outlines of the terraces are very decorative in these white villas.

When, in addition, the grounds are laid out elaborately with circular fountains,

clothes reel, and forming a minor little yard that gives extra seclusion and does not detract from the broad space of the rest of the yard. Screens are often made of a variety of stone or brick, and with a gate swinging to break the space, are made more interesting.

In countless yards the garage has not a note of improvement. Detached, and unrelated, except by a similar tone of paint, it calls attention that it does not



Cement Pillars with Pergola Roof of Rustic Branches.

and wrought iron fences and white board seats, a beautiful picture is formed.

In the illustration the terrace porch is simple in construction and is in reality only a space between the two wings of the house paved with brick. The three pairs of French windows open out upon it, and it very easily forms a half-sheltered out-of-doors room that can be made very comfortable with easy chairs and tables.

Lattice is often used in cutting off the service part of the house, screening the

deserve. However, the architects have realized this obvious defect in the grounds of the homes, and suggestions of a relation to the house are being observed. A tying to the grounds and house is often obtained by a pergola extending from the house to the garage, or an interesting fence or wall, if the house is of stone or plaster, unites the two. Barns in former times so popular, had a size and dignity of their own that little garages cannot claim.

What the Decorators Are Doing For the Children

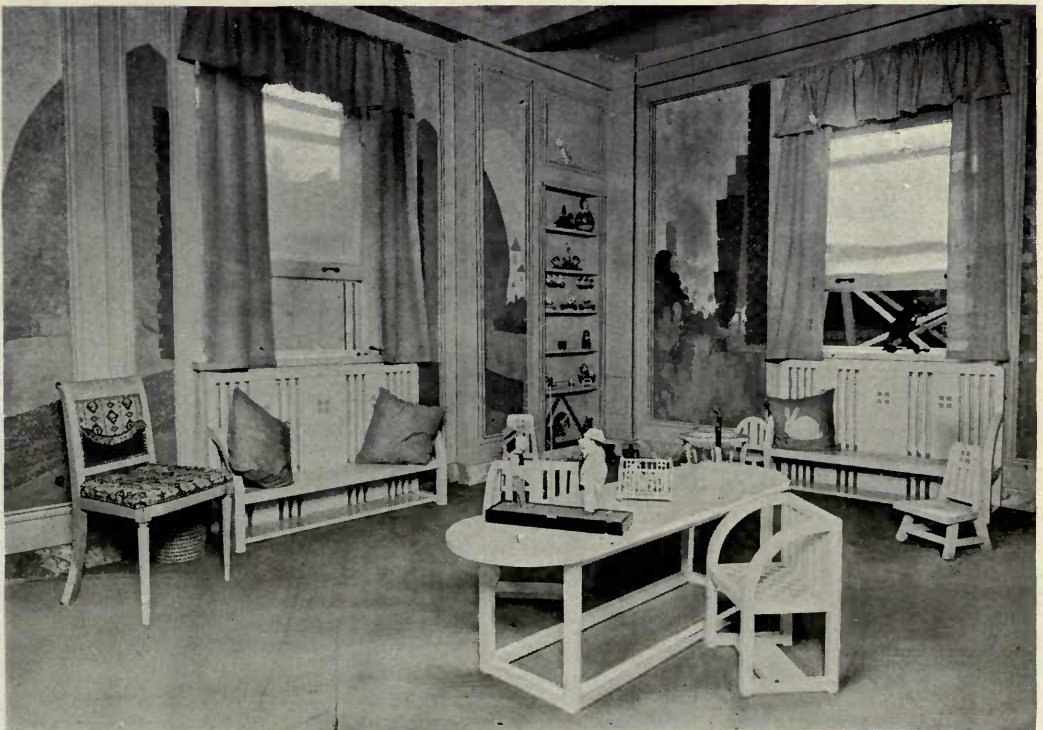
Eleanor Allison Cummins

IT is interesting to note the application of the theory and practice of decorative art to rooms intended for the special use of children. More and more we are coming to the idea that the child needs a special environment, moral, mental, and material, that he may develop the best that is in him, along the line of least resistance. And it is with the material environment that the decorators are concerned.

Mrs. Helen Speer, a New York decorator, who has specialized in children's rooms, makes her appeal to the child's imagination. In one of the New York hotels she has worked out a decorative

scheme which is extremely interesting. A large, square room has been set apart, where the children whose parents are abroad on business or pleasure, are cared for under the supervision of a trained kindergartner.

Woodwork and ceiling are white, and the walls are broken by built-in shelves for books and toys and divided into panels by mouldings. Seats are built under the windows and the best part of one side of the room is occupied by a real house, large enough to hold two or three children at a time, this being the House of the Three Bears Who Lived in the Woods.



The House of the Three Bears who lived in the Woods.

Courtesy of Mrs. Helen Speer.

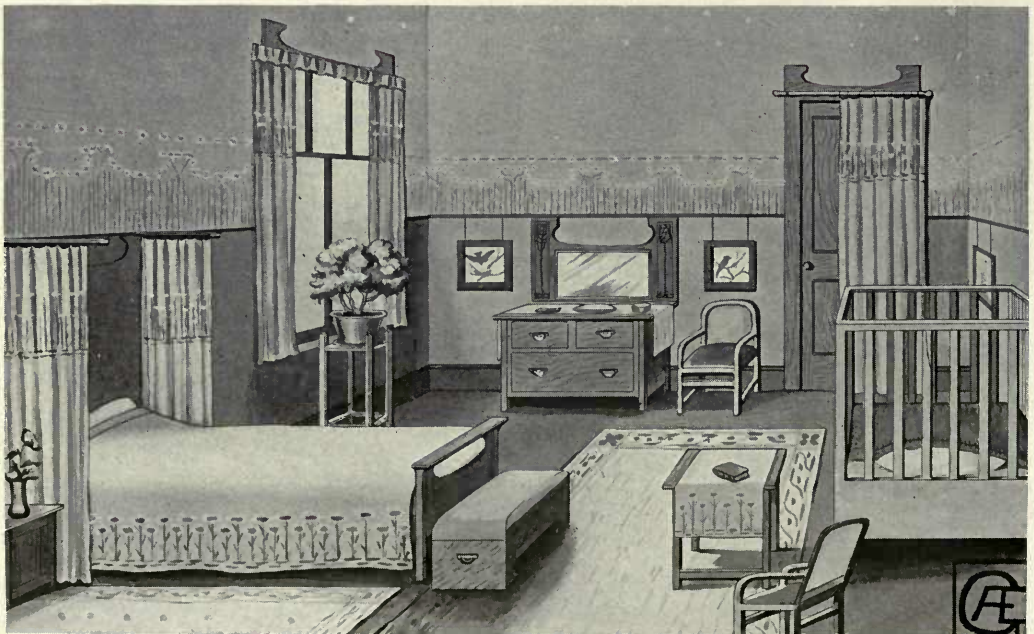
The floor is covered with light blue denim, heavily padded, and the quaint furniture all of which, with the exception of some wicker pieces, was made from special designs, is white enamel with a stenciled decoration of blue squares. The chairs have wide seats and slatted backs narrowing off toward the top, and the long play table which occupies the center of the room has an oval top. Utility, as well as beauty, has been considered, and nowhere in the room are there sharp corners on which a child might hurt himself. The blue stencil is repeated on the crash window curtains and a printed linen with a pattern in blue is used for the cushions of some of the chairs.

Wherever cupboards, doors, windows, or "The House of the Three Bears" have left a wall space are charming landscapes, tall, quaintly shaped trees, picturesque chateaux and glowing garden beds, in which the various characters of Mother Goose's Melodies disport themselves, and our own Mary and her Little Lamb are not forgotten. The work is cleverly done

in poster style, and is redeemed from any suggestion of the grotesque by the pastel tones of the color scheme, gray blues, blue greens and purplish pinks, which is specially pleasing and restful.

The same decorator has planned a children's room for another New York hotel, which is to have a painted ceiling representing birds flying across a summer sky of shimmering blue with fleecy clouds. The furniture, rugs and woodwork are to be gray, the walls a lighter tone, with inset panels of scenes of child life against landscape backgrounds. In the very center of the room is a bird house with a circular seat built around it. Positive color is supplied by curtains of cretonne in the China aster colors, and the windows are to have long boxes filled with pink, purple, and white asters.

While this decorator finds her inspiration in the works of Maeterlinck and in folk lore, and makes her appeal to the child's imagination, Miss Louise Day Putnam is more concerned with her intellect and with her unconscious absorp-



Birds and Flowers Form the Natural Setting for Childhood.

tion of definite knowledge. She considers the walls of the room merely as a background and gives them a restful, neutral tone of soft brown or gray. In one such room she has used a wainscoting about three and a half feet high, painted ivory white and broken here and there by open cupboards for toys, not closed, so that the child may insensibly acquire habits of or-

of brownish gray, some of them containing touches of the yellow which was utilized for the curtains and chair coverings. These prints, which can be had in a great variety of subjects and colorings are works of art as well as wonderfully accurate transcripts from nature and are of great educative value. Framed in brown wood, with mats of a tone between those



The Frieze of Blue-Birds Flying About Among Tall, Slender Grasses and Pink Blossoms.

der because the appearance of the room is spoiled by disorderly open shelves. The furniture was also ivory white, the rug in two or three tones of dull blue and the wide casement window had curtains of a warm golden tone, and this gold was repeated in stripes on the blue covering of two winged chairs.

The distinctive feature of the room was a series of Japanese prints, clever studies of birds and animals on a ground

of the ground and of the frame, either singly or in groups of three, and placed with reference to the divisions of the wainscoting against the neutral tone of the wall, they gave the room distinction as well as interest. Their variety of coloring and subject adapts them to use with almost any color scheme and in any sort of rooms. The cost is slight, seventy-five cents each, the size of the print about eight by thirteen inches.

connection with flowered cretonnes of brilliant coloring, the furniture being of simple design and painted an olive or greenish blue, either reproducing the darker tones of the design, or contrasting agreeably with its brighter colors. But in every case pictures, ornaments, all the contents of the room have been planned so as to make part of a harmonious whole, each detail having its share in a coherent impression.

It is obvious that in choosing materials for the decoration of a child's room care should be taken to avoid anything like subtlety. Color should be clear and brilliant, design simple and obvious, and

whatever suggestion is made should be cheerful. There is a deplorable tendency toward the grotesque in much of the work done for children which must seriously interfere with the cultivation of that artistic sense which is such a help to the enjoyment of life. In a world full of beauty, why dwell upon the ugliness which is the reverse of the medal? The effort should be to correct, by the use of graceful forms and restful coloring, the restlessness which is the bane of our strenuous age, and by the objects associated with the child's daily life to prepare him to appreciate, with the gradual unfolding of his intelligence, all that is best and finest.

Porches For Outdoor Sleeping

Margaret Campbell



UTDOOR sleeping is no longer a war measure restricted to the fight against tuberculosis. Sensible people, who have noted the beneficial effects of a fortnight's camping out, have decided that they might as well have the advantage of this rare restorative for tired nerves during the yearly grind when they are most in need of the healing magic that "knits up the ravelled sleeve of care."

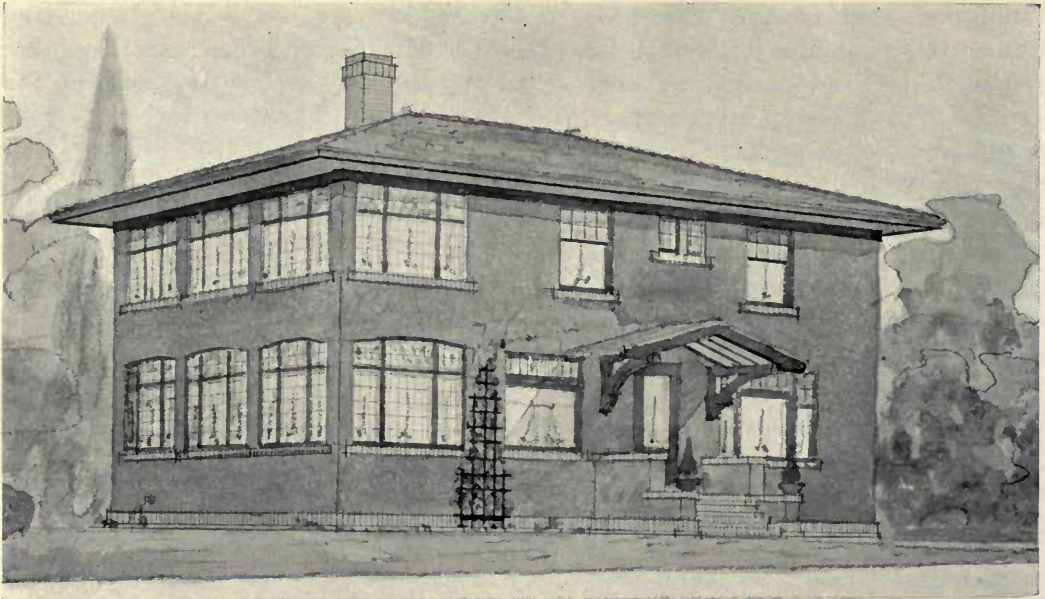
In fact we have reached the time when we smile tolerantly at the vision of our forefathers carefully sealing up their sleeping rooms against the winter air and canning a bit through the daytime, so that the sleepers might not breathe any of the dreaded

air of the night. Our ancestors generally managed to live to a hale and hearty old age in spite of breathing canned air and preserved germs during the night, because their waking hours were spent in active exercise in the open air; but our modern working or professional class, who spend their days in dusty mills or in illy-ventilated offices, have little chance for fresh air except at night. Even the most conservative of us now throw wide our windows, but those who have accustomed themselves to the luxury of out-

door sleeping complain that they feel smothered within walls, regardless of the number and size of the windows. Indeed, the question that puzzles the progressive

*"Come, Sleep, O Sleep! the certain knot of peace,
The baiting place of wit, the balm of woe,
The poor man's wealth, the prisoner's release,
Th' indifferent judge between the high and low."*

—Sir Philip Sidney.

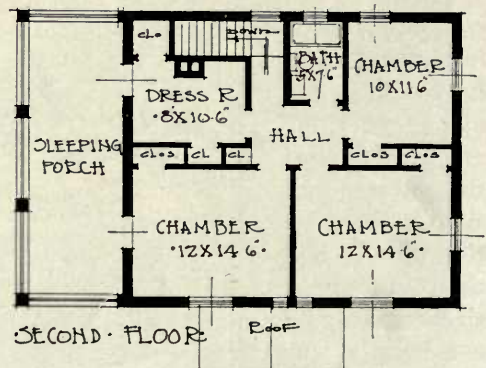
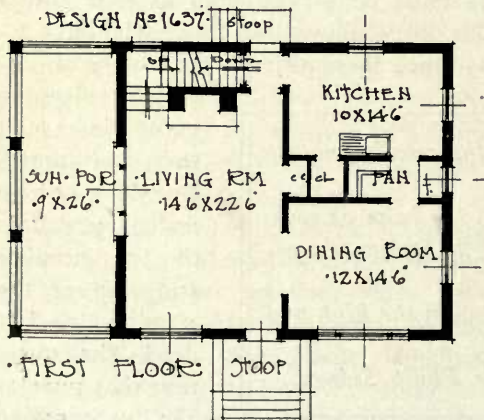


Where the Sleeping Porch is an Essential Part of the Plan.

householder is not,—“Should I build a sleeping-porch?” but rather,—“How shall I build my sleeping-porch?”

If the house is just being planned, the matter is simple enough, for every architect is ready with designs of infinite variety to suit the most wayward and exacting taste; but if the house has already been built the matter cannot be disposed of so easily. In the first place, care must be taken that the porch will seem an essential part of the house plan and not an afterthought or a meaningless excrescence.

In one instance, where the house was built on straight, severe lines the problem was solved by building on the south-western side an addition consisting of a sleeping porch above and a sun-porch below, both of which could be used for outdoor sleeping if desired. The result harmonized perfectly with the design of the house and really added two rooms since the sun windows removed in the summer, made a pleasant dining-room, while the screened porch above was used as a playroom for the children by day and a sleeping room by night. Such an arrangement will al-



The Floor Plans of the Above Design.

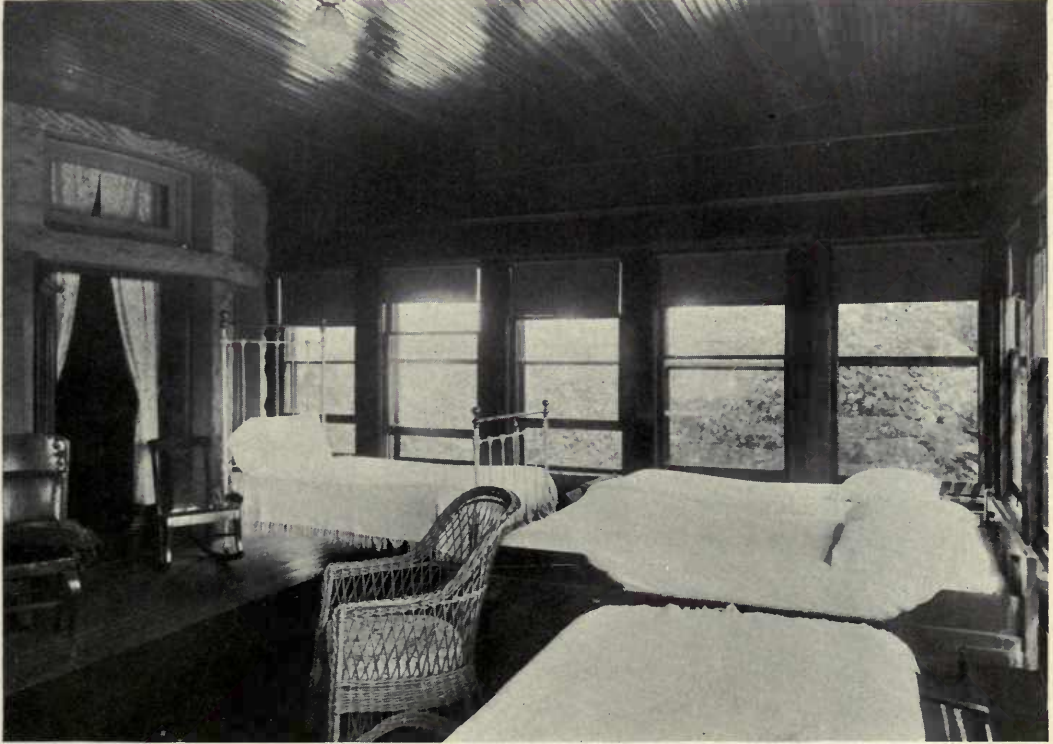
ways have this advantage, the floor will not be so cold because you do not have an open space below it.

A woman who is an ardent devotee of outdoor life showed me a sleeping porch on her summer home that held an unusual charm for a lover of nature, and was surely simple enough in its conception. A wide side porch was completely curtained with English ivy and climbing roses. The

twitter coming from the nests as they swayed in the scented breeze?

Of course some precaution against storm was necessary, for the stars will not shine every night, so a rain-proof curtain was adjusted on spring rollers and the ropes controlling it so arranged that they could be manipulated without the sleeper rising from her couch.

If the plan of the house will permit, it is often well to construct a sleeping-



Large Sleeping Porch Built Over the Porte-Cochere of a Stone House.

breeze rustled merrily through the leafy screen and at one end the vines were looped back to afford a glimpse of the river valley and the blue mountains beyond. Not bad for tired eyes on a moonlight night. Several of the feathered tribe went to housekeeping in the vines and paid for their lodging with a sun-rise concert that was the last word in trills. Can you imagine insomnia troubling anyone there on a June night with the roses nodding through the lattice and a drowsy

porch above a side entrance. One such porch recently constructed, with pillars to harmonize with the front porch, performed a double service, the lower part forming an admirable porte-cochère and the upper portion the sleeping-porch.

We illustrate the interior of this sleeping porch, showing its connection with the stone wall of the house. The porch is 18x20 and contains five beds with ample space besides. It is ceiled with Georgia Pine finished natural, and has fifteen

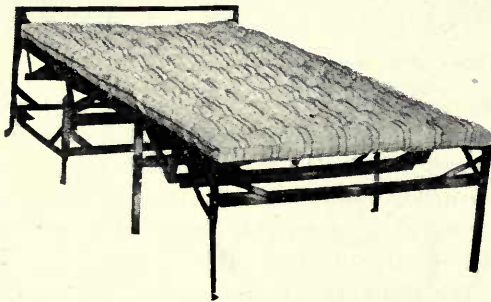


A Dormer Window Converted Into a Sleeping Porch.

windows sliding both top and bottom and fitted with shades and screens. It is electric lighted and the birds singing among the tree-tops in the early morning—is pleasure or pain, depending on the point of view.

There is always this in favor of constructing the sleeping-porch on the side or back of the house,—it is usually farther removed from the dust and noise of the main thoroughfare and affords a greater sense of seclusion.

In the accompanying illustration a com-



An Inexpensive Iron Cot for Sleeping Porch Use.

modious sleeping-porch was easily formed from the deep dormer window that is an essential feature of the sloping roof. This same house has two dormer windows at the back, both of which might be used for sleeping purposes. The porch is closely screened and is provided with windows which can be adjusted when desired. Its enthusiastic owner assured me that the only extra expense due to fitting up this dormer as a sleeping apartment was the finishing of the floor, which had to be covered with heavy tent-canvas, painted to make it rain-proof, and the canvas curtains and porch blinds which served as wind and rain shields.

If you are living in a house which contains a stuffy corner bedroom, too small to properly ventilate, would it not be sensible to tear out two walls, screen it, and enjoy all the comforts of camping-out at home, with none of its discomforts? It is worth trying. It will do you more good than a trip to a sanitarium.

Color Scheme of the Panama Pacific International Exposition

ULES GUERIN, director of color of the Panama-Pacific International Exposition, has treated the buildings, terraces, esplanades and even the parking as if the ensemble were in reality the 625-acre canvas which he has imagined it to be, in preparing his color scheme.

Starting upon the principle that simplicity is one of the canons of the art of

which he is a distinguished exponent, he decreed that no more than eight or nine colors should be found upon the palette from which he should paint the fair. Then he took into consideration the climatic and atmospheric conditions peculiar to San Francisco, and went to work to produce what critics and his fellow artists pronounce the most pleasing combina-



"The Miner."

tion ever achieved at any of the great international expositions. Every shadow upon the Marin Hills across the bay was taken into consideration in the calculations which resulted in the choosing of an imitation of the natural Travertine marble for the basic or key color of the buildings. This is a pale pinkish-gray buff which may be called old ivory. It is not garish, as a dead white would be, especially in the sunlight. Also, it harmonizes with the other colors desired, and, most important

of all, it does away with a certain "new" effect which pure white would give, and which is deadly to art. After many experiments, this was decided to have many advantages to recommend its adoption as the keynote of the scheme later determined upon, and M. Paul E. Danivelle was secured to make the composition to be applied as a stucco over the exterior walls. The buff is deepened in places to enhance the "antique" effect generally desired. This is especially noticeable where the ornamentation is carried out in the Travertine, the shades in these instances being deepened to a rich brown.

Then, briefly, the eight other colors are:

1. French green, used in all lattices, flower tubs, curbing of grass plots (where it complements the green of the grass)

and in some of the smaller doors of the main structures.

2. Deep cerulean blue, for recessed panels, background of ceiling coffers, as in the archway of the Palace of Machinery, and in the vaulted ceilings.

3. A peculiar pastel pinkish-red for flag-poles. This is always topped with gold, and the beholder is never sure at first that he approves of it. But with all its vividness it grows upon him until he decides that the poles could not consistently be of any other color.



"The Mother of Tomorrow."

4. A pinkish-red with much brown in it, which is used as the background of colonnades, and predominates with the interior of the principal courts.

5. Golden burnt-orange, used for capitals, smaller domes and architectural mouldings. This rich tint is found also in much of the statuary.

6. A real terra cotta, which characterizes all the domes arising from intersections. The roofing material is made from crushed bricks and rocks and is known as "tile color." It is found much combined with copper green or that dull and harmonious tint of corroded copper.

7. Gold. Whole groups of statuary surmounting the great court and dominant towers are covered with gold leaf.

he has painted a picture subdued, restful and rich. Even the walks, the very sand upon the driveways, the flags and pennants which will wave over the buildings, the lights which will gleam from the great illuminating devices, must conform to the general scheme. No one must use other than cerulean blue. No red will be tolerated other than that which is popularly known as "Pompeian," in which brown and yellow take away all the curse



"Fire" by Aitkin.



"Water" by Aitkin.

8. Verde Antique. This color is a mottled green, with pale yellow and black streaks appearing to simulate the corroded copper. Verde Antique is found in the urns, vases, fountains and the conventionalized architectural ornamentation.

With these colors named, the artists, though they be legion, must content themselves. No decorator may go outside of the bounds prescribed by Jules Guerin. And none wants to. Each realizes that

of carmen or crimson. The "French" green and the copper green only will be admitted in the general color scheme.

Thus is seen the great advantage of having a one-man idea. Perhaps no other exposition in history ever was so carefully

planned in this particular. No court of one color will be at variance with a dome or palace or tower of conflicting tone nearby or in the distance. All will be harmony to the eye.

The splendid mural paintings which will adorn the walls of the courts and the panels over entrances will embody these same leading colors. To execute these mural decorations M. Guerin has secured a staff of the leading artists of the world.

Nations of the West

Over the arch of the setting sun, which is to surmount the western entrance to the great court of the sun and stars at the Panama-Pacific International Exposition, will be placed a magnificent sculptural group, representing the "Nations of the West," which will be a companion to the group representing the "Nations of the East," over the arch of the rising sun, at the eastern entrance.

The "Nations of the West," a composition by the three noted sculptors, Messrs. Calder, Lentelli and Roth, depicts the great exploring, colonizing races of the Occident. The central feature of the composition is an old fashioned wagon, drawn by oxen—a typical "prairie schooner," such as the westward-bound pioneer of the last century used for their immigration into the far west. In front of the wagon are "The Mother of Tomorrow," symbolizing the matron of the coming race, while two boys, "The Hopes of the

Future," and a female allegoric figure, "Enterprise," surmount the wagon. All of these figures are by A. Stirling Calder, acting chief of sculpture for the exposition. They are masterpieces, especially "Enterprise," which is full of life and vigor, energetic daring and ambition.

The wagon and the oxen are by Frederick G. R. Roth, who also designed the pedestrians, representing a German, an Italian, an Alaskan and an Indian Squaw, vivid types of North Americans. Leo Lentelli designed the four equestrian figures, which represent the Latin-American, the Englishman, the Frenchman and the Indian.

Beneath the group will be the legend by Emerson:

"There is a sublime and friendly Destiny by which the human race is guided—the race never dying, the individual never spared—to results affecting masses and ages."



The Group Representing the Leaders in Discovery, in Blazing the Way Through the Wilderness, and in Navigating the Seas.

Mine Own House

Myrtle Middleton Powell



AND I would like to add to the above bit of nonsense that the houses people build are, according to the judgments of their friends, queerer still. Did you ever build a house or know of a friend building one without being besieged with a storm of "whys" and "wherefores?" "Why did you do this?" or "Why did you not do that?" "Why did you have your library so small or dining room so large?" "Why did you front north instead of east?" and on *ad infinitum*. If you have a well developed sense of humor—and you shouldn't be trying to build a house if you haven't—you will probably be able to answer all such queries and defend your actions in each instance without losing your temper.

*"The people people choose for friends
One's senses quite appall;
But the people people marry
Are the queerest folks of all."*

One is reminded of the anecdote of the man who had spent the night with an old-time friend, owner of a newly-

built establishment. Having objected to a number of things in the construction of the house, the guest, on leaving, informed his host that the trees he had planted were entirely too small. "Oh, well," answered the log-suffering host, "Let us hope they will have grown to good size before you come again."

My own answer to such objections and objectors is that I built my house to suit myself. That anybody with the money can go forth and buy a mere house, but that, in my opinion, the house has never yet been built that will suit in every detail any two families that ever lived. So I consider it a wonderful privilege



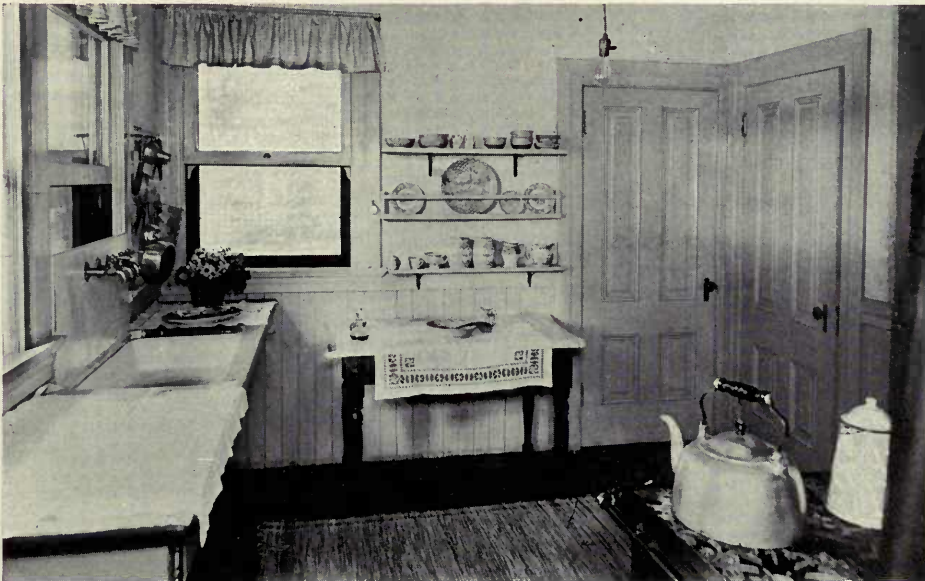
The House That Suits Me.

to have the opportunity to plan and build a house according to my own ideas and ideals.

That quaint old-young New England philosopher, Henry David Thoreau, has set down some interesting observations on this subject in "Walden," or "Life in the Woods." He says, "There is some of the same fitness in a man's building his own house that there is in a bird's building its own nest. Who knows but if men constructed their dwellings with their own hands, and provided food for them-

house is and are actually, though needlessly poor all their lives because they think that they must have such a one as their neighbors have. As if one were to wear any sort of coat which the tailor might cut out for him, or, gradually leaving off palm-leaf hat or cap of woodchuck skin, complain of hard times because he could not afford to buy him a crown. Shall we always study to obtain more of these things and not sometimes to be content with less?"

I am always sorry to see people who

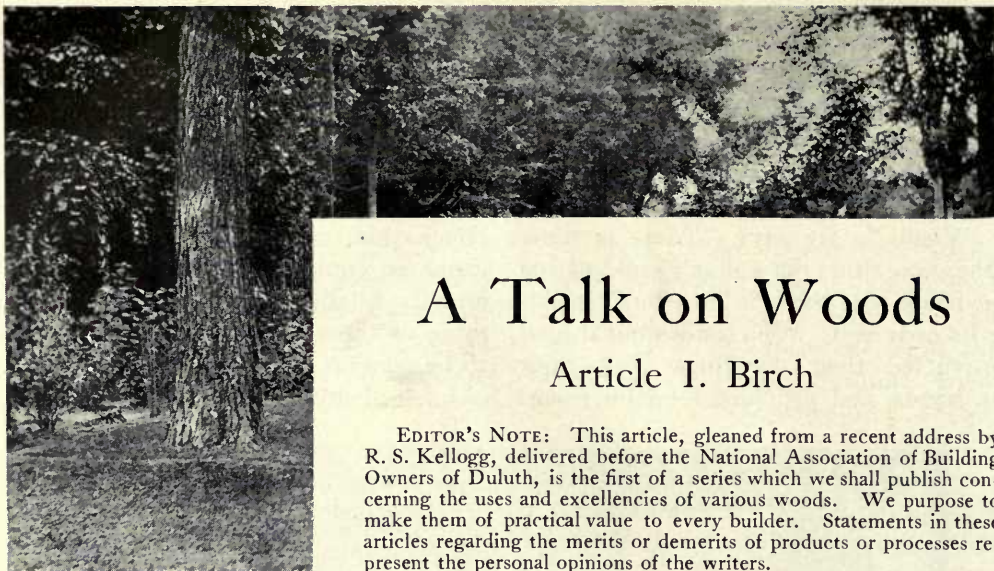


The Kitchen Where I Work and Dream.

selves and families simply and honestly enough the poetic faculty would be universally developed, as birds universally sing when they are so engaged? But, alas; we do like cow birds and cuckoos which lay their eggs in nests that other birds have built and cheer no traveler with their chattering and unmusical notes. Shall we forever resign the pleasure of construction to the carpenter? What does architecture amount to in the experience of the mass of men?"

And again the same writer, "Most men appear never to have considered what a

could build a pretty nice house if they only would, waiting for the time when they can "afford" a better one, and in the meantime missing the joys of the one they might have now. Also, having had the experience, I know of my own knowledge, that the house for which you have planned and studied, and thought of day by day and dreamed of by night, and have finally achieved in all the glory of pine and paint or of brick and mortar means more to the owner thereof than one bought in the market place and selected from a job-lot of miscellaneous offerings.



A Talk on Woods

Article I. Birch

EDITOR'S NOTE: This article, gleaned from a recent address by R. S. Kellogg, delivered before the National Association of Building Owners of Duluth, is the first of a series which we shall publish concerning the uses and excellencies of various woods. We purpose to make them of practical value to every builder. Statements in these articles regarding the merits or demerits of products or processes represent the personal opinions of the writers.

BIRCH is one of the most widely useful woods. A recent tabulation of factory reports shows that Birch is used for nearly 200 distinct purposes ranging from automobiles to zither bodies.

More than half of the total output of Birch is used in the manufacture of furniture and fixtures, and for mill-work. The latter includes all kinds of interior finish, veneered doors and high grade flooring. In fact, it is in the field of interior finish that Birch finds its highest and most appropriate use. Employed originally as a substitute for Mahogany, Birch is now appreciated for many sterling qualities of its own.

There are as many styles of Birch trim as there are designers who wish to produce an unusual or particularly appropriate effect. My own preference is for the simpler styles which offer the fewest possible angles and corners to collect dust and at the same time give the largest uninterrupted surface to display the figure and sheen of the wood itself. For the same reason, my choice is for the softer hued stains which bring out the qualities of the wood in harmonious fashion, rather

than for more brilliant colors or paints which completely obscure the natural beauty of the wood. We paint iron and brick for protective reasons as well as to give a more pleasing effect. When we work with wood, it should be our purpose to enhance and not obscure its characteristics of figure, color and grain.

The perfecting of veneering processes, and especially of rotary cut veneer, enables us to get at a reasonable price, a combination of large sizes and beautiful figures in panels that would be altogether impossible were we restricted to solid lumber. Moreover, the well built up panel is stronger and much less likely to warp or check than is a solid piece of wood of the same or even much greater thickness. Veneered panels may be obtained in almost any size desired, and where appropriate they provide a wonderfully effective means of interior finishing.

Wherever a particularly rich effect is desired to harmonize with finish and furnishing, nothing is superior to a selected Red Birch floor. It is as strong as maple, sufficiently hard to stand service, and of unusual beauty of figure and

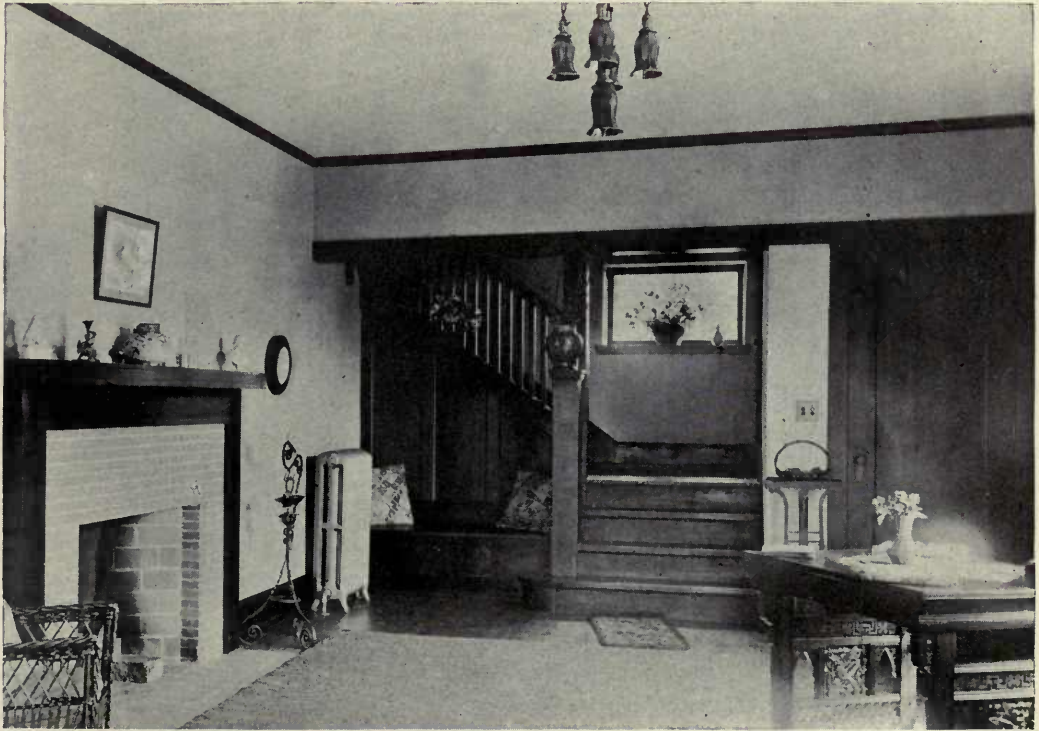
color. Such a floor finished natural is not out of place in the most palatial structure.

Among the most useful developments of modern lumber manufacturing is the production of high grade hardwood flooring. This flooring is manufactured to exact sizes from selected, thoroughly seasoned stock, and is as carefully handled as the interior finish. In fact, a beautiful and durable hardwood floor is an impor-

to choose from. One of the most pleasing to me is a single panel Birch door stained silver gray, but other styles have many admirers.

Stains.

Reliable stains of nearly any shade desired may be purchased in shape for applying. Samples and color schemes are freely supplied by the manufacturers. Care should be exercised, however, to make sure that the stains selected are of



Stairway in Minneapolis Residence Treated in Birch.

tant part of the inside of a building, now that carpets have been replaced by rugs.

Hardwood flooring is made from kiln-dried stock, is stored in dry sheds and shipped in closed cars to prevent the absorption of moisture.

Recent years have seen a great advance in the manufacture of artistic doors, which are at the same time simple in design and reasonable in price. Here again, progress has been made by the use of veneer. There are many styles of doors

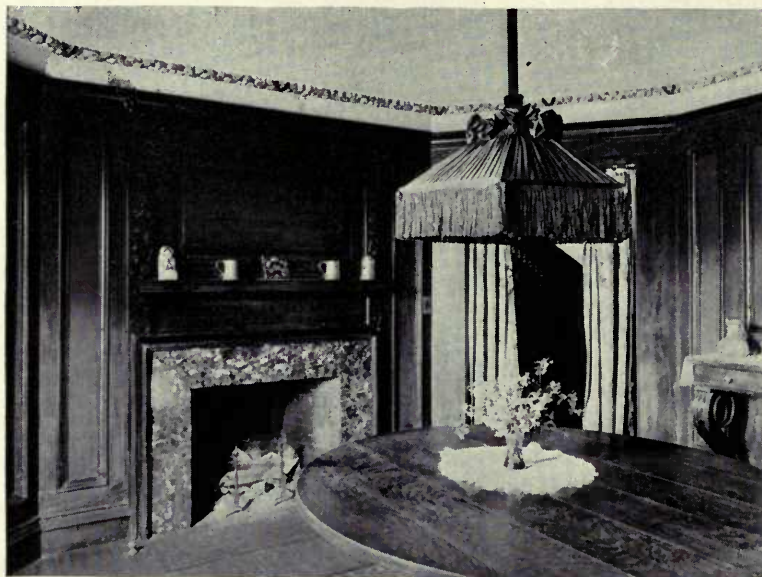
tested quality. Care should also be exercised to have the wood thoroughly seasoned, surfaced and cleaned before applying the stain. Since Birch is a close-grained wood, it is just the right density and texture to form a superior base for white enamel, and it is largely used for this purpose.

Stains are designated as spirit, oil, or water stains, according as the medium in which the color is held in solution is alcohol, oil, or acid.

Varnish magnifies the natural appearance of the wood, and this makes it especially important to have the surface smooth and free from defect, dirt, and dust before the varnish is put on. Varnish works best at a temperature of about 70 degrees and in a dry atmosphere.

I recently saw an excellent silver gray produced on Birch by one coat of acid stain followed by sand papering, finished with one coat each of white shellac and wax and then rubbed.

colonial hall and stairway in white enamel, the living room in silver gray, the dining room in one of the many shades of brown, the bedroom in white enamel or natural, the den to suit the owner's particular fancy—all offer suitable opportunities for the use of Birch. Among the stains which I like best on Birch are silver gray, walnut, fumed oak, natural and mission brown. These are colors which harmonize well with general schemes of decoration, and are not



An Effective Use of Birch Paneling.

The demand for conveniences and economy of space has resulted in a wide variety of built-in work all the way from kitchen to bedroom. Built-in book cases, china closets, side-boards and ward-robres are considered among the necessities of the modern residence. We have all seen beautiful examples of built-in work that harmonize perfectly with finish and furniture which are also the ultimate of convenience and utility.

The reasonable cost of Birch places it easily within the reach of the builder of the modest cottage or bungalow. The

likely to get on anybody's nerves. However, I have no quarrel with the user of Birch who prefers an entirely different selection. The wood will take and hold permanently any stain of the right kind that is properly applied.

One of the best features of this wood is that it combines so well with other woods. I have seen excellent combinations of maple or oak floors with Birch trim, and of Birch veneered doors with a trim of other woods or white enamel. Your own observation will furnish a multitude of instances of this sort.



"Homes We Have Built" Series

EDITOR'S NOTE:—Contributions to this series desired. Address Editor for further particulars.

A Made-Over House

By Katharine O. Adams.



IN the spring of 1910 we (a family of four), were boarding in a downtown hotel, when a business friend who had just completed a magnificent home invited our inspection of it. His house fronted a park of fifty-seven acres in one of the best residence sections of the city. During this visit, when we all enthused over the surroundings, location, view, etc., our friend called

attention to a rather disreputable looking cottage situated a block from him, occupying a valuable corner lot on a paved street, and which he assured us could be bought "for a song," as the owner had gotten stuck on a mortgage, which, combined with sewer and paving assessments, had proven too much for him to carry.

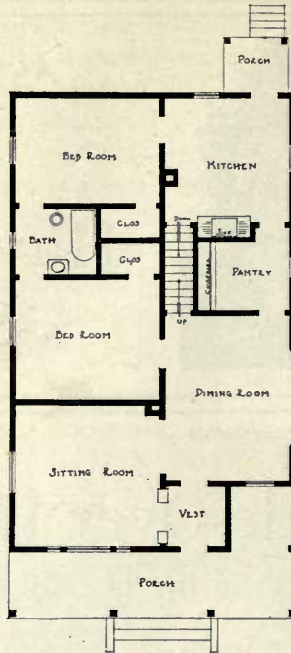
We went at once to look over the



The Cottage after all Alterations were Completed.

property, interview the owner and consult regarding the possibilities of the cottage. We agreed that as it stood it was impossible, but the lot 50x179 feet in size, and valued at \$2,500, was certainly a bargain when included in the purchase price of \$2,939.

The purchase left our treasury quite depleted and aside from some outdoor planting, our improvements the first year consisted largely of the architect's drawings of our ideas. We had these drawn up fully in detail for the house as we wished it, complete, so that such work as we might do piecemeal would work in satisfactorily in the completed job. Then, too, we were anxious to see what could be done and felt that alterations were enough of a problem to demand expert attention when the end in view was a permanent home of which we might feel



Floor Plan of Cottage before Alterating.

proud among our more aristocratic neighbors.

Plan No. 1 shows the house as it was when we moved in. The second story was not even floored. This the man of the house did at odd times during the first year. The stair leading to the second story was a veritable step-ladder which, on account of the location of the kitchen chimney, could not expand in its natural direction to comfortable proportions. Then the pantry, a great box of a thing with only open shelving to give it the name, was but another room to take care of, according to the lady of the house. There was only

a small cellar and no heating plant.

We doted on big living rooms, fireplaces and hot water heat. Our bargain gave none of these; so that taken altogether, our alterations promised to be both radical and expensive.



The Cottage as we Bought it.



The Cottage as we Made it.

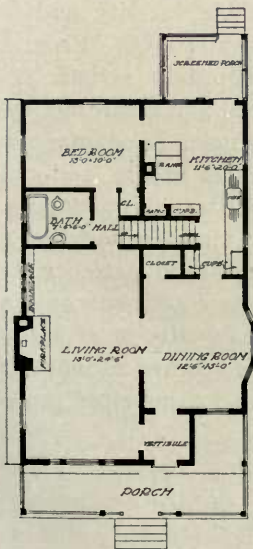
The greatest joy of the *pater familias* lay in working in closets in every available nook, planning a sleeping balcony and building in shelving and wardrobes to suit his own sweet will.

The end of the second year saw the completion of the new stairway and the two south bedrooms. These opened the way for the big, new living room and fireplace as the partition between the original

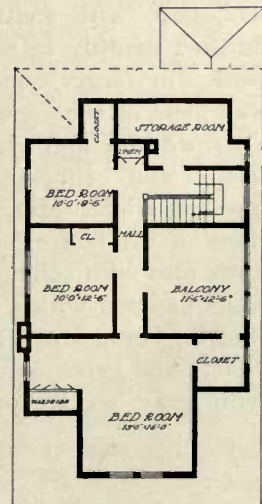
living room and the front bedroom was torn out and the fireplace and outside chimney built in, the opening into the dining room centered, some gingerbread woodwork eliminated and new windows and bookcases built in. The woodwork, which was of fir stained to a brindle yellow, was then given two coats of

paint and one coat of enamel in an ivory tint; the walls were papered in a design of brown and green oak leaves with a deep cream ceiling in the living room, and in the dining room a dado of plain gray green paper below the chair rail and a gray green foliage design above. The ceiling of this room was the same deep cream as the living room and with the dull red of the mission brick of the fireplace, the new lighting fixtures, hangings and rugs made truly a house transformed.

The front and north dormers, the heating plant, a new back porch (screened in) and a railing to the front porch made up the final improvements of the third year. The sleeping balcony of dreams became a reality. It fronts



Plan of First Floor after Altering.



Plan of Second Floor after Altering.

to the north and is large enough to accommodate two full sized beds so that the whole family may sleep outdoors if the mercury mounts to unseemly heights. The mistress of the house luxuriates in a bedroom 13x16 which has in addition a sewing alcove, a built-in wardrobe and a closet 6x6 containing a window. She scorns the sleeping balcony holding that her own domain with windows to three points of the compass is much more breezy and comfortable.

is the most popular room in the house.

All of these additions and alterations amounted to a little over two thousand dollars in cost. It would probably have been considerably cheaper and certainly less bother and annoyance for everyone concerned if the work could have all been done at once so as to have had only the one cleaning up after the workmen.

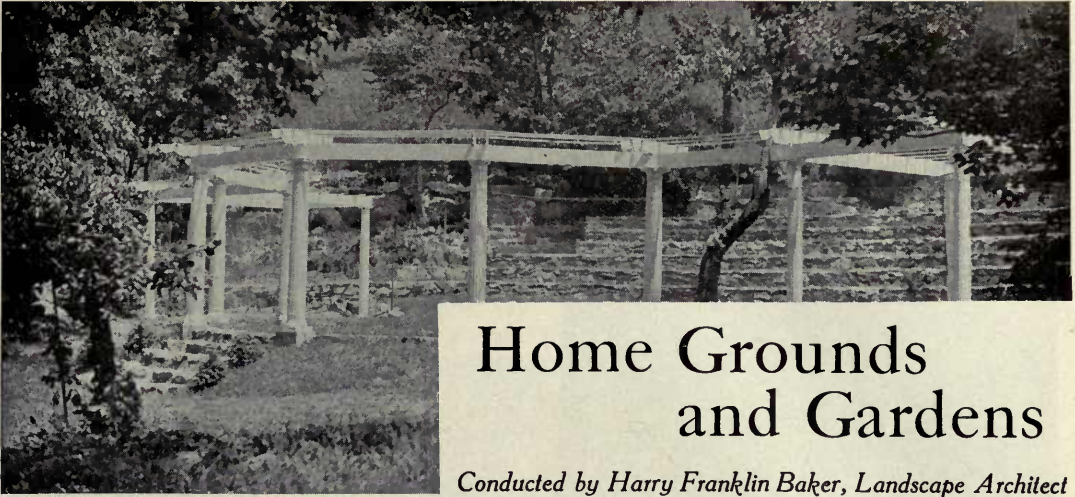
However, all's well that ends well, and our investment now shows a very attractive home with all modern conveniences



Where We Read and Talk Together of a Winter Evening.

The chambers of the small daughters, both with southern exposure, are finished daintily in white enamel woodwork, the larger one having a flowered wall paper in pink and the smaller having a striped blue and white wall with a butterfly and chrysanthemum Japanese toweling frieze. Milady's chamber at the front of the house has the white woodwork also with ceilings of white and side walls papered with a satin striped paper showing occasional dainty bunches of violets and green leaves. The first floor with gray as its predominating color

and in a most desirable locality and is conservatively valued at \$6,000. From a very unpromising beginning artistic results have been secured and meantime we have lived in the house, have made a home nest for the little family and are prepared to enjoy the fruits of our labors. Optimism is the chief virtue in tackling a proposition of this kind and patience its great second. With these and with only a little spare cash, occasionally most satisfactory results may be secured in what at the outset seems almost a hopeless problem.



Home Grounds and Gardens

Conducted by Harry Franklin Baker, Landscape Architect

Making and Keeping of Lawns



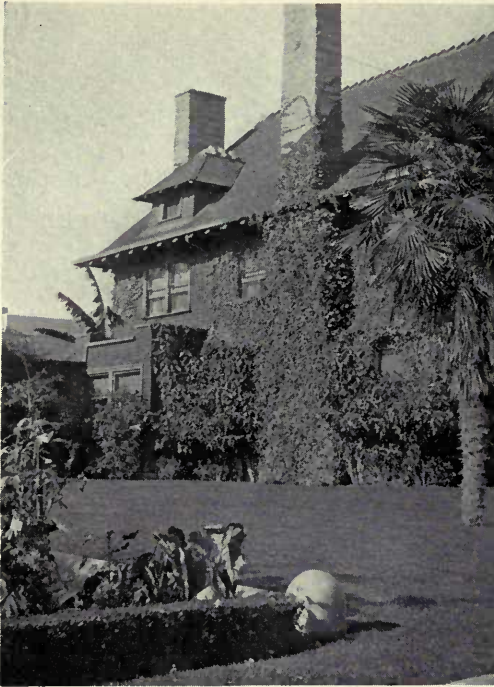
WHATEVER else the average householder has in the way of improving his grounds, there is always a lawn. It may be a bit of green sod just in front of the door with a house set close to the street—or it may be a broad velvet sward with the shadows of trees and sunlit spaces—but we all have lawns. There is also a wide diversity in the appearance of these lawns—some giving abundant evidence in their thick, luxuriant, well kept surface to constant and well directed care; while others bear mute testimony either to neglect or to unfortunate circumstances. There are few things more dismal looking than a ragged, weedy, patchy lawn; it at once conveys an unfavorable impression. But it is by no means child's play to make and maintain a fine lawn.

The following excerpt from *The Country Gentleman* on the care of lawns is so practically helpful, that we reproduce it in these columns:

"By midsummer one can readily see the portions of the lawns and grassplots that

need repairing. It is not always possible to do this in the spring. Portions that were thin in spring may build up by midsummer, but they are just as likely to dwindle down until they become bare and unsightly, in which case now is the time to do the work. It is also a good time in which to make any extensions to the lawn or to make a new one.

"It used to be thought that the lawns must be made early in the growing season. Modern practice has disproved this. The one thing to be kept in mind when starting grass, either in patching up the old lawn or in making a new one, is this: Is there time before freezing for the grass to get a good root system to prevent freezing out over winter? The season matters nothing. Good lawns have been made as late as the first week of September in Central Pennsylvania, where the ground does not freeze before the first week of November. Six weeks of favorable weather will give grass a sufficient root system to carry it over any ordinary winter south of the St. Lawrence River.



A Carpet of Green, Velvety, Turf.

But the more time additional the better.

"There are many causes for the failure of grass to do well in spots; indeed, there are few lawns that do not lose some grass every year. Our American climate is not the best for lawn growing. The seasons

are too variable. In England, where the finest turf in the world may be seen, the climate is steadily moist, and the grass does not have to contend with the extreme heat of midsummer and the extreme cold of winter. Grass in England acquires immense root systems; sod a foot thick is not unusual.

"Before patching up the lawn, take precautions to preserve over summer the grass that you still have. Cutting too short in the hot, dry weather of midsummer is hard on the grass. The cutting bar of the lawn mower should be set to cut not less than two and a half inches from the middle of July to the first of September, and three inches is not too long. This will make the grass give some shade to the roots, and the greater evaporation from the larger surface of the grass blades will cause the roots to go deeper for moisture.

Improper Watering of Lawns.

"Many lawns are spoiled by improper watering. After a new lawn has been carried through the first season by means of the hose, when needed, water should be used sparingly. You seldom see grass by



What Can Be Done With Limited Space.

the roadside permanently burned out, as it is in many lawns. The reason is that grass in the natural state sends its roots down deep for moisture, and none but a terrible drought will then affect it.

"Unless you are absolutely certain that the trouble is not in the soil, it will be well in patching the lawn to remove the earth from these places and to put in new soil. For this purpose nothing is better

patches with seed of Kentucky blue grass or such a mixture as will suit the grasses already in your lawn. Make the soil as fine as possible. Sow the seed and rake it in. Give a dusting of air-slaked lime and roll or press hard. Moisten the space with a fine nozzle so as not to wash the soil and keep it moist until the grass appears, when water should be gradually withheld until the new grass depends en-



Shadows and Sunlit Spaces on a Fine Lawn.

than chopped-up sods from the roadside, to which you have added a quarter its bulk of well-rotted horse manure and a dusting of bone meal. If the soil grew good sod along the roadside it should also do so in your lawn—especially when fortified with fertilizer.

"If you can get absolutely clean sod you may have success in patching the bare places with this. But be sure the sod matches your own grass or your lawn will have a spotted appearance. No other grass will match in shading the color of the real Kentucky blue grass.

"If the proper sod cannot be had fill the

tirely upon the rains, if they come with proper frequency.

"The young grass should be cut as soon as the lawn mower—set to two inches—will catch it, and should be kept mowed to that height during the first season in order to make it stool out and thicken. In case of a prolonged drought, when artificial watering must be resorted to, give a good soaking and no more until the soil is dry an inch from the top. If the seed is good and the soil and work are up to standard the new grass should be an inch high ten days after sowing."

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 533 JUD YOHO, Seattle, Wash.

B 535 BUNGALOWCRAFT CO., Los Angeles, Cal.

Design No.

B 537 CHAS. S. SEDGWICK, Minneapolis, Minn.

B 538 JOHN HENRY NEWSON, Cleveland, Ohio

Design B. 532.



N this design we have the porch running across the entire front of the house, with the entrance direct into a spacious living room.

A large open fireplace in one end, with book cases on either side and high casement windows above, opposite a wide, open stairway, makes an attractive, home-like, room. There is a good sized coat closet opening off this room.

The dining room, with its triple bay window and built-in buffet, is unusually large for a house of this size; both dining room and living room have beamed ceilings. There is no pantry, but a narrow pass between the dining room and kitchen provides a double door which keeps the

odors from the kitchen out of the dining room. The kitchen is small but very convenient, with built-in-cupboards and work table.

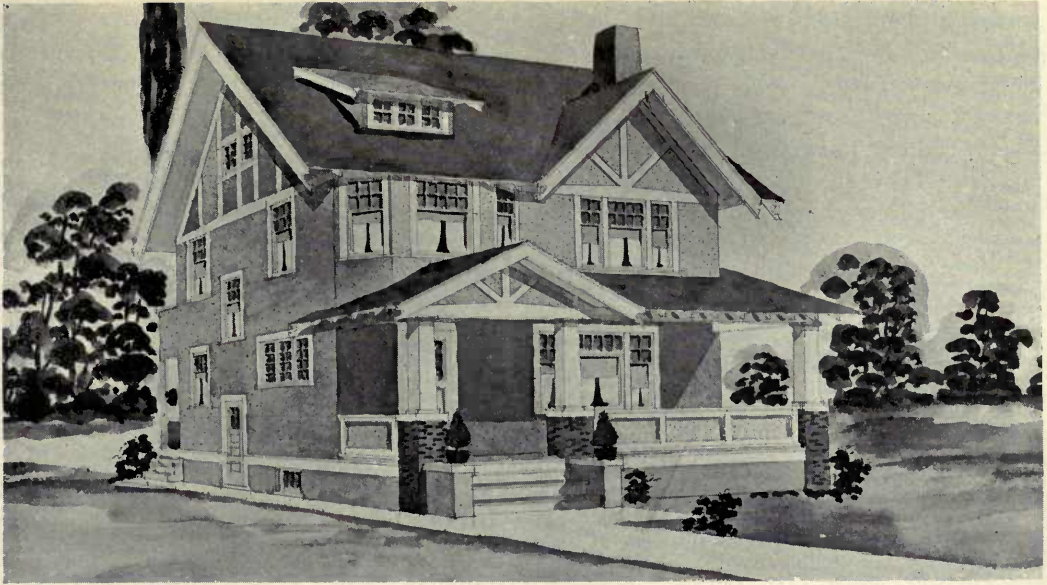
There is a small rear porch and entry with a place for a refrigerator; the second floor has four large, well arranged chambers, each with ample closet space and a good sized bath. The rear balcony provides room for airing bedding over rear porch. There is a full basement which contains hot water heating plant, laundry, fuel, and vegetable room.

First floor is finished in hardwood, second floor in pine for white enamel finish, with hardwood floors throughout. The exterior is cement plaster over metal lath with half timber in the gables.

Cost Estimates of Designs Shown in This Issue

MATERIALS AND LABOR	DESIGN NUMBER						
	B 532	B 533	B 534	B 536	B 537	B 538	B 539
Excavation at 30c per cu. yd.....	\$ 60	\$ 65	\$ 75	\$100	\$ 50	\$ 60	\$ 48
Mason Work, to include Foundation Walls, at 20c per cu. ft.....	185	225	215	250	165	185	175
Cement Floors at 45c per sq. yd.....	45	48	60	70	30	42	31
Hollow Tile Walls.....	145	300	225	175	115	140	125
Chimneys and Brickwork at 65c per hour.....	145	300	225	175	115	140	125
Tile Work and Slate for Roof.....	145	300	225	175	115	140	125
Tile Floors and Wainscot.....	145	300	225	175	115	140	125
Lumber.....	675	450	720	750	525	590	575
Millwork.....	725	505	680	675	530	675	610
Exterior Cement Plastering at 90c per sq. yd.....	280	250	390	400	280	335	320
Interior Plastering at 26c per sq. yd.....	360	250	390	400	280	335	320
Painting.....	275	205	315	275	200	235	225
Carpenter Labor at 45c per hour; Common Labor at 30c per hour.....	550	415	650	650	475	615	585
Hardware (Rough and Finish).....	275	165	290	240	190	220	210
Electric Wiring.....	60	50	65	60	35	50	48
Galvanized Iron and Tin Work.....	90	60	105	90	70	100	80
Heating (Air or Water).....	415	150	175	500	150	420	400
Plumbing and Gas Fitting.....	275	260	285	360	260	275	275
Miscellaneous.....	35	25	75	50	20	80	25
Cost.....	\$4,450	\$3,173	\$4,385	\$4,845	\$3,245	\$4,112	\$3,892
Contractor's Profit, 10 per cent.....	445	317	438	484	324	411	389
Total Cost.....	\$4,895	\$3,490	\$4,823	\$5,329	\$3,569	\$4,523	\$4,281

This table is computed on the basis of prices of labor and material now prevailing in Minneapolis and vicinity.



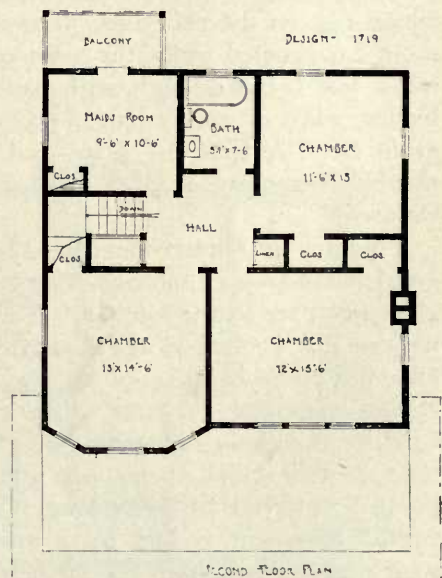
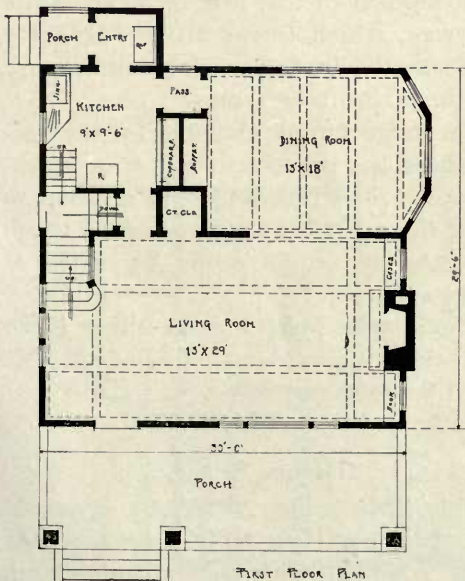
DESIGN B 532

A Popular Type of a Two Story House

Design B. 533.

This bungalow is entirely new and original in design, the exterior being composed of several very simple elements

combined in such a manner that an unusually effective appearance is obtained at an exceedingly low cost. The use of clinker brick for the porch and step balus-



trades, and for the massive exposed fireplace chimney, together with the re-sawed cedar siding, lends greatly to the pleasing appearance. An unusual departure is the cement paving of the porch floor and the concrete steps leading to the same. The true bungalow style is adhered to in the rustic posts supporting the rough exposed girder which carries the gable and in the rustic brackets and beams which support the verge boards of the roof.

As will be seen from the floor plan, the interior is conveniently arranged and five good-sized rooms are provided without loss of space. A small reception hall or entry leads to the living room through a cased opening five feet wide. As one enters, the first thing that greets the eye is the handsome tile fireplace on the opposite side of the room, with high, art glass windows on either side. The living room, as well as the dining room, has a beamed ceiling.

Between the living room and the dining room is an archway with pedestals 5 feet 6 inches in height containing china closets with art glass doors on the dining room side. The beam across the opening is supported by short square columns, which rest on the pedestals. The dining room has paneled walls, the wainscot being 5 feet 6 inches high with panels 20 inches wide of rotary cut 3-ply slash-grain fir. A grooved plate rail with moulding is provided at the top of the wainscot.

A pantry is rendered needless by the provision of ample cupboard, flour bin and shelving space in the kitchen. It will be noticed that cooling closet is provided to eliminate the necessity of an ice chest, where preferred. Better diffusion of light for the kitchen is insured by glazing the rear door which opens upon a latticed porch 5 feet wide by 7 feet long. Access to the basement is had by a stairway which leads down from the kitchen.

Between the two bedrooms is a small hallway. The door to the bathroom is glazed with opaque glass to better light the hallway.

Design B. 534.

An impression of dignity and a livable quality are conveyed by the excellent placing of the openings and the substantial character of the porch extending across the entire front. The arrangement of the second story windows at the angles is unusual and results in a unique design which is pleasing yet practical in every detail.

The exterior construction is intended for siding or shingles on the first story extending to the sills of the second story windows, with a belt course of cement plaster above. Provision is made in the low hip roof for storage in the attic.

The floor plan shows all the essential features of a livable house, with large rooms well arranged. The placing of the dining room in the front of the house is a practice coming more and more into favor. The cosy den contrived in the rear of living room will be appreciated by the man of the house.

Economy as well as convenience has been studied in this arrangement of the stairway, which leaves all the desirable space in the front portion of the house for the main living rooms.

The large family chamber on the second floor has the extra comfort of a fireplace which is provided with a dump to carry the ashes below. A sleeping porch over the den could easily be added at slight expense.

The interior finish may be either Birch or Oak, with hardwood floors and soft wood finish above.

Estimated to cost \$4,800.00.

Design B. 535.

This little home, 26 feet by about 40 feet, has just been built near Los Angeles, complete with standard plumbing,

*Jud Yoho, Architect.*

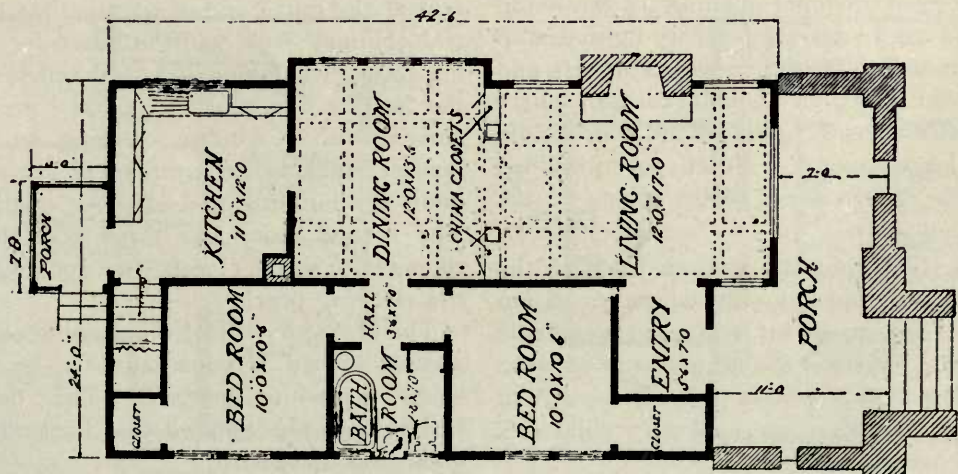
DESIGN B 533

Novel Idea For A Bungalow

electric wiring and fixtures, screens, cement walks and everything ready to move into, at a cost of \$1,200. The exterior is all of wood; side walls weather boarded and roof shingled.

The inside walls are plastered and tint-

ed. The inside trim is of yellow pine finished in stain and wax. There are five well arranged rooms of fair size with good closet room. A scuttle in the rear porch ceiling affords access to storage room in attic. There is only one chimney which



is located so that it may be used for kitchen or dining room and in Southern California one small stove, burned a part of the day,—morning and evening,—affords ample heat for the coldest day.

This little house with cellar and furnace is well adapted to any location or climate, and, as this was built in Vermont, it cost \$1,750.00. The floor plan shows clearly the convenient arrangement of the rooms, but of course the small picture does not show the many built-in features, nor the handy kitchen equipment of closets, cupboards, and bins.

Design B. 536.

This design gives us a house on the bungalow lines which provides the much desired sleeping apartments on the second floor. The house is considerably larger than would seem at first glance, being 33 feet across the front by 46 feet and 6 inches deep.

The rooms are unusually large and airy. The living room, 15x20 feet, has a large open fireplace with built-in bookcases. To the rear of this is the dining room, 13 x22 feet. The kitchen is well lighted and a complete pantry with work table and cupboards has been carefully planned for the convenience of the housewife.

There are three good chambers on the first floor, each with ample closet space. The front chamber opening off the living room has a separate lavatory lighted with a window. The other two chambers and the bath open off a small rear hall where a stairway leads to the second floor. Note the large amount of closet space provided by the arrangement of the rooms on the second floor.

A stair from the kitchen leads to the basement and laundry where provision has been made for fruit and vegetable rooms. There is also located a good sized drying room,—a boon to the housewife in rainy weather,—as well as a children's play room.

The floors throughout are maple, with fir finish, stained and waxed in the living and dining rooms; the remainder in pine, finished natural or painted. The exterior is of "rough cast" cement plaster over metal lath with shingled roof stained as moss grass.

The large porch across the front could be easily screened or fitted up as a sun porch in the winter at a very slight additional expense.

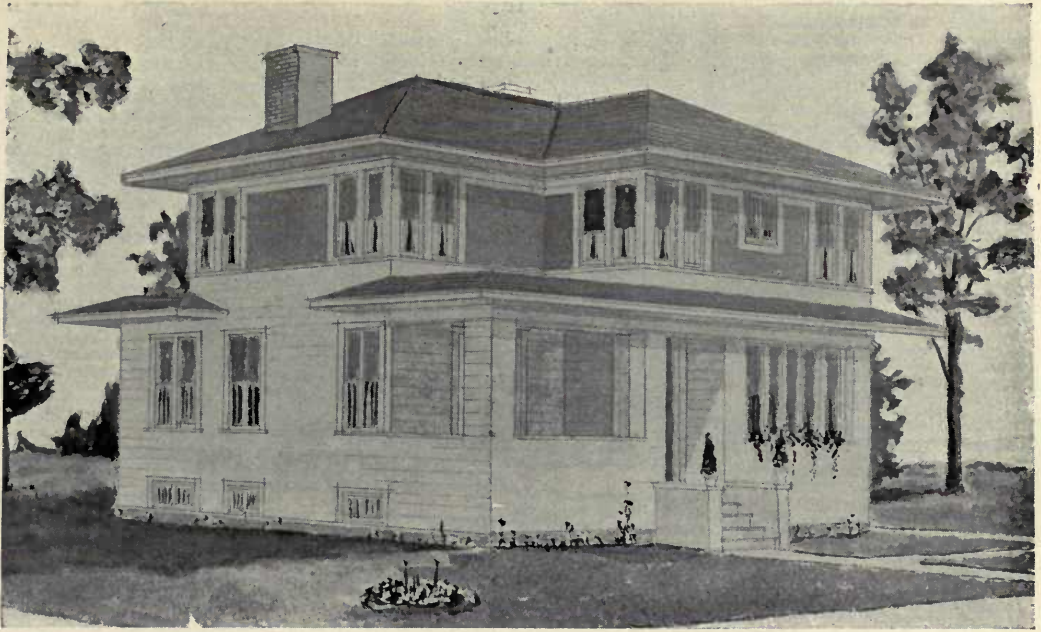
Estimated to cost \$5,329.

Design B. 537.

Here is a design for an economical cottage, regular in outline, with modern, up-to-date features, making a very desirable home that can be built for a small sum of money, varying from \$2,800 to \$3,200, not including heating or plumbing. The width is 30 feet, and the depth, exclusive of the porches, is 26 feet 6 inches. It is arranged for an east front.

The piazza is 9 feet by 14 feet 6 inches on the southeast corner, glazed and screened in and with a pergola porch entrance. The piazza is under the main roof, forming a portion of the house proper, with a glazed-in sleeping porch above it. Sliding, glazed windows open from the living room and dining room upon the piazza. The living room is 20 feet by 14 feet with two wide windows in front and a projected Dutch window with seat at the north end of room. One central chimney with wide fireplace for living room, accommodates the kitchen and the furnace flue, also. The stairs are inclosed, with a window opening on the landing, making an economical arrangement for building and also for heating. The second story has three good bedrooms with ample closets, two opening on the sleeping porch.

The first story is in Norway pine or fir, stained brown Mission, and the second story in white enamel. The floors throughout are hardwood. There is a good, full, basement.



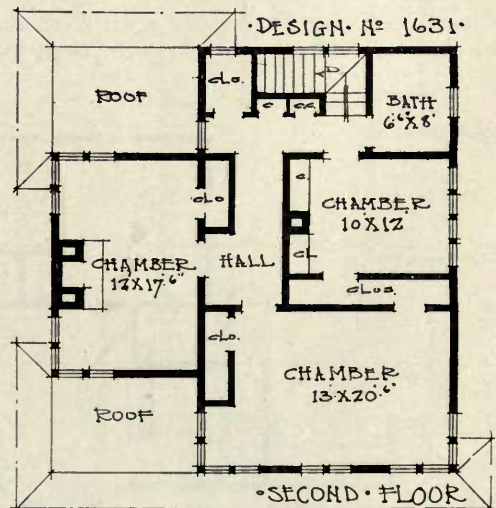
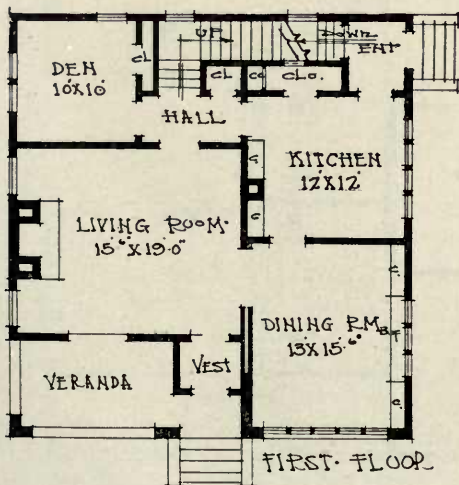
DESIGN B 534

A Pleasing and Practical Residence

The exterior of this cottage is designed to be cemented and finished with a rough "pebble dash," white trim, and the roof shingles stained green or brown to suit the taste of the owner.

Design B. 538.

This dwelling was designed in sympathy with a rough and rugged environment, and has something of an English feeling in its composition. With other



*Bungalowcraft Co., Architects.*

DESIGN B 535

A Snug Little Bungalow

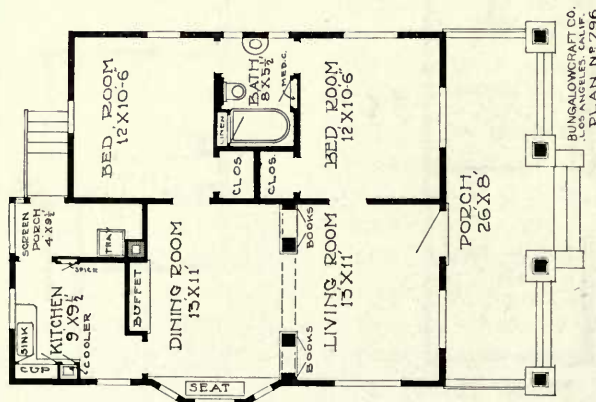
surroundings the details of rafter ends, brackets, etc., might be slightly refined; the general design would tie itself to any landscape. The walls of first story are tile with stucco finish, second story frame construction, shingled.

The plan is similar to many of its type with a center hall, large living room at one side, a square dining room at the other and a kitchen with a butler's pantry at the rear. The kitchen connects through the hall with the front door. Closet off living room could open from the kitchen, if desired, or the space taken for

a rear grade entrance to the kitchen and basement. The second floor contains three large bedrooms, a linen or sewing room, and an unusually large bathroom with a linen cabinet. There is a basement under the entire house. Exclusive of heating and plumbing, the cost is estimated at \$4,523.00.

Design B. 539.

In this design we have a very practical arrangement giving the maximum amount of floor space with the minimum amount of money.



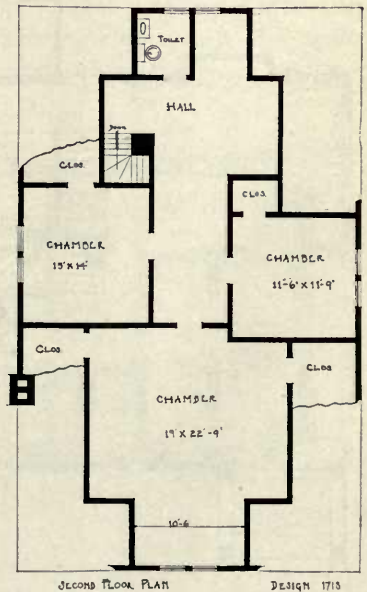
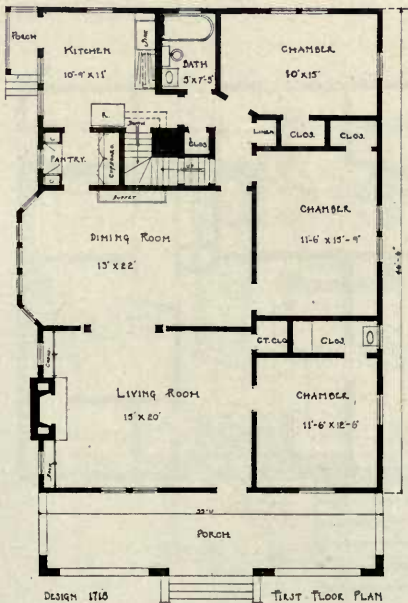


DESIGN B 536

A Good Two Story Semi-Bungalow

The reception hall, so common in houses built ten years ago, has been done away with, the space being used to make one large living room across the entire front. A large brick fireplace has book-cases on each side and casement windows

above divided into small lights. The vestibule is in the corner with a good sized coat closet. A cased opening separates the living and dining rooms. The kitchen is very complete with built-in-cupboards, and work table space beneath,





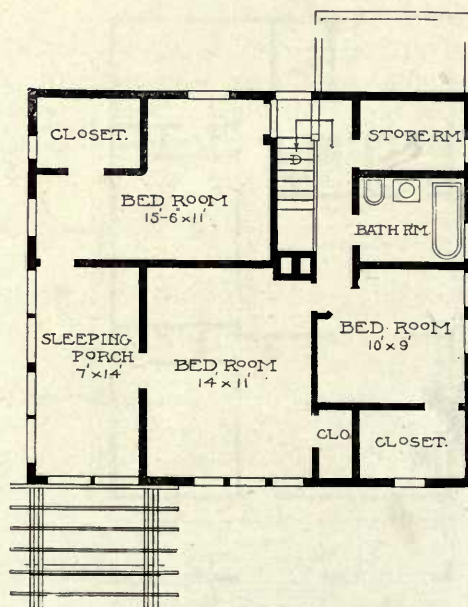
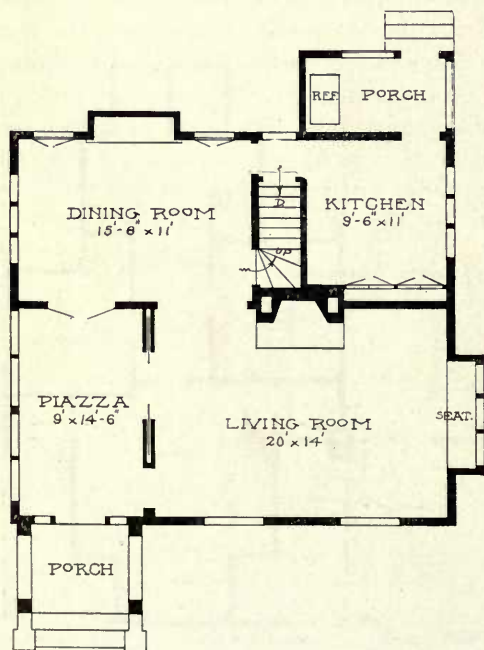
Chas. S. Sedgwick, Architect.

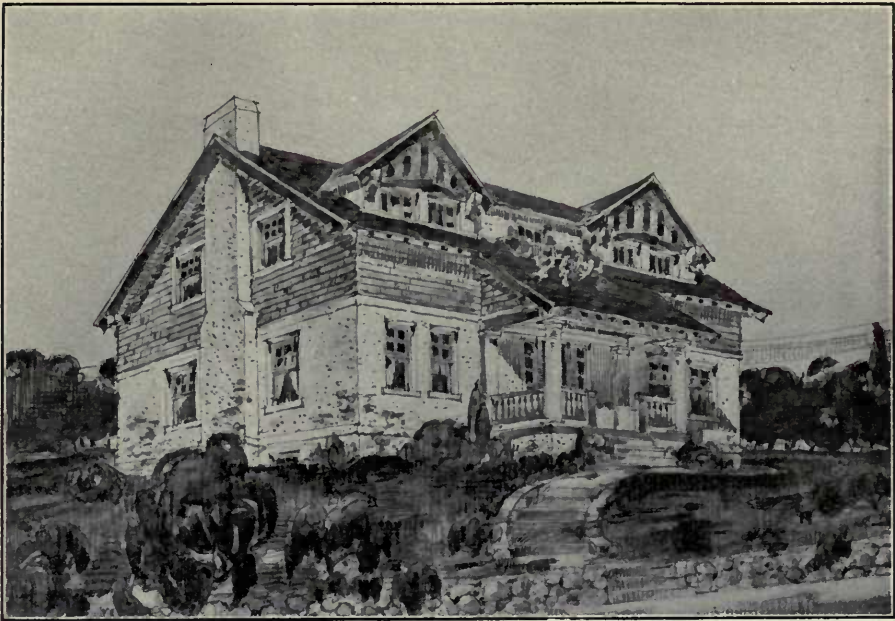
DESIGN B 537

A Picturesque Cottage

thus eliminating a separate pantry. The rear entry is arranged for filling the ice box from the outside. A combination stair leads to the second floor with basement stairs and grade door underneath.

On the second floor are four well arranged chambers, each with good closet space. There is a bath with a built-in-linen closet and an open air balcony with two French doors leading from front chambers. The



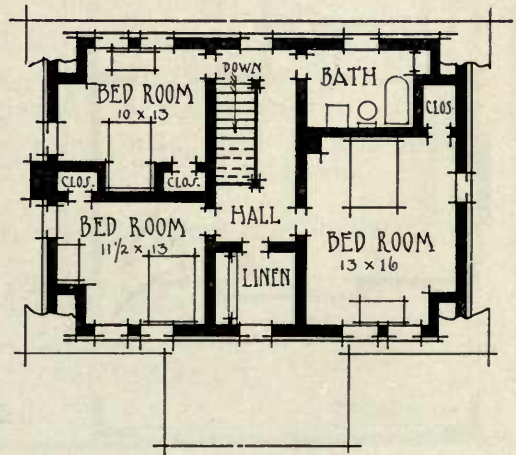
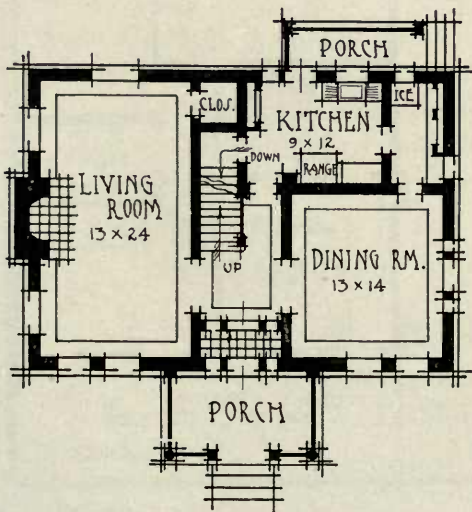
*John Henry Newson, Architect.*

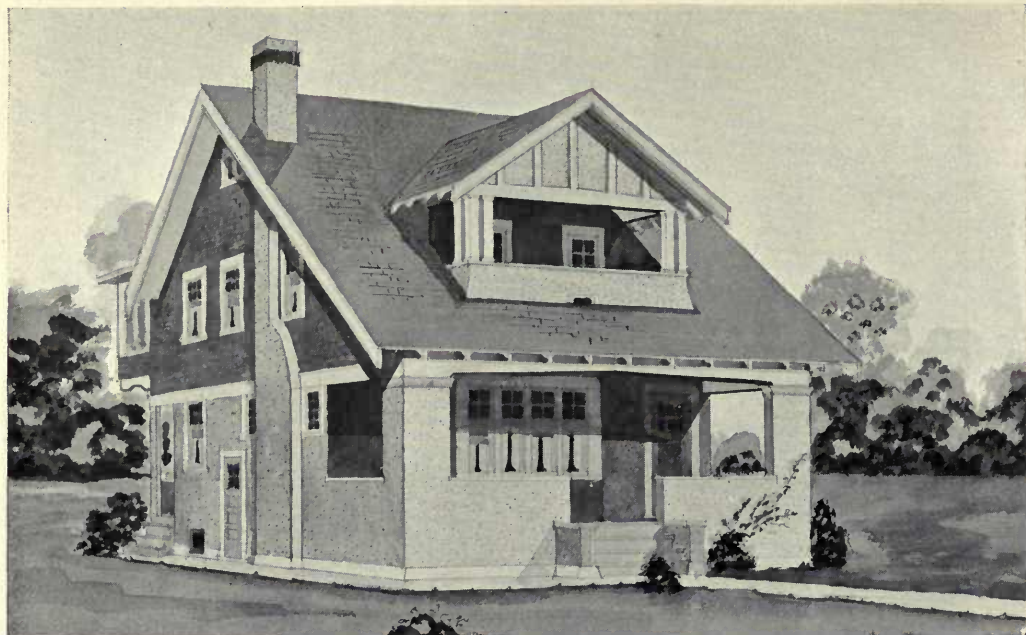
DESIGN B 538

A Shingle and Plaster House

sleeping porch built on at the rear is large enough to accommodate two single beds. There is a full basement with good laundry, vegetable and storage room, furnace and fuel bins. A hot water heating plant has been included in the estimate. The floors throughout are maple, with birch finish in the living and dining

rooms. The kitchen and the entire second floor are in birch, finished natural. The roof is of good pitch affording a good circulation of air in the attic which is reached by a scuttle in the ceiling of one of the closets. The cement walls are tinted a light tan color with the wall shingles a light brown; the roof shingles



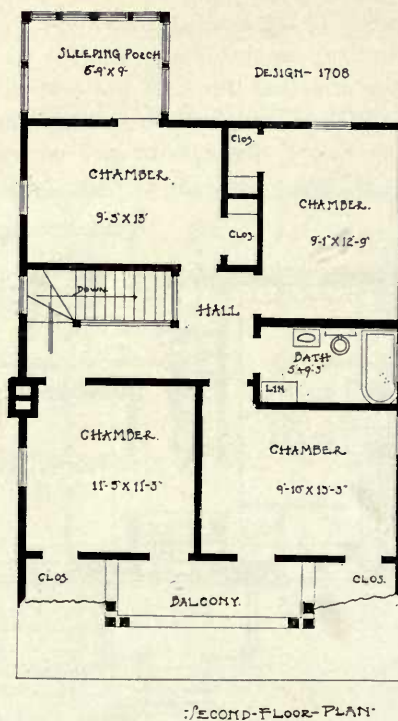
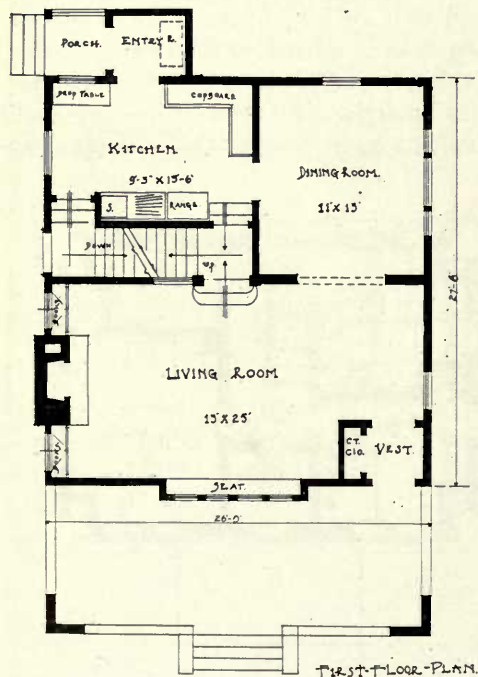


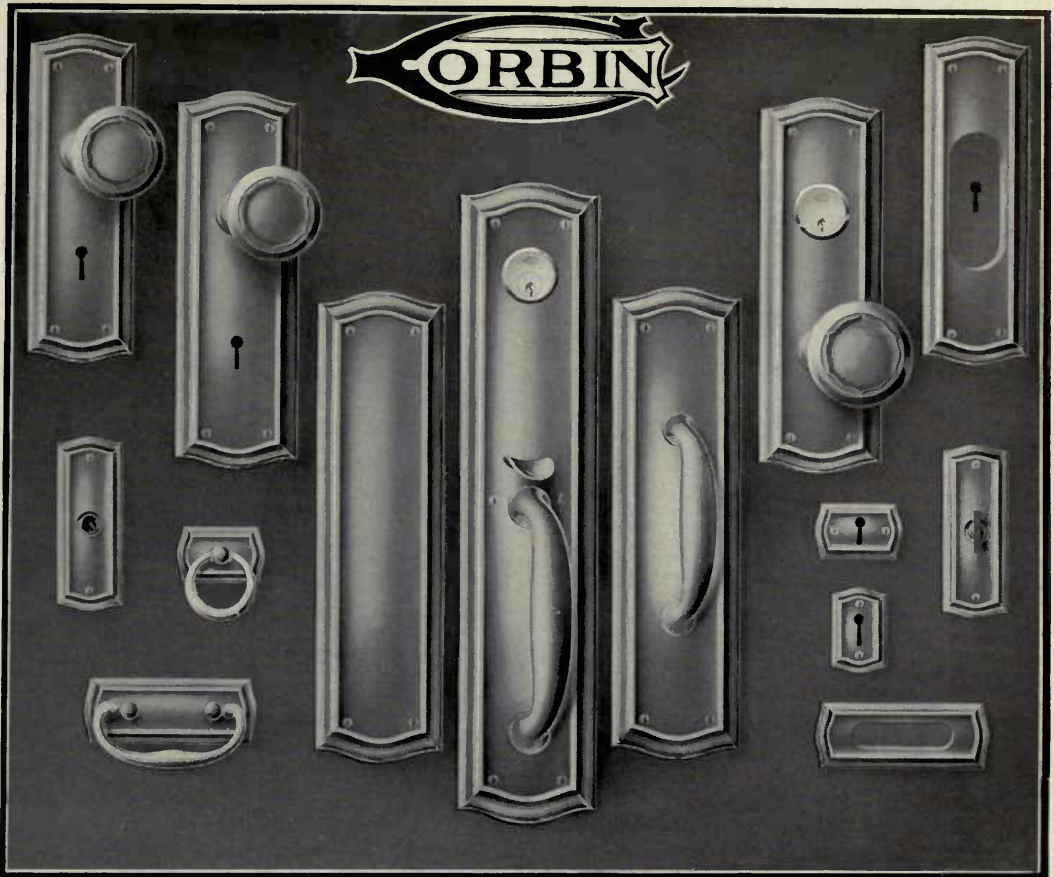
DESIGN B 539

A Combination of Cement and Shingles

green. The panel in the gables of the dormers are of cement plaster. Without

heating and plumbing, figured at \$675.00, the estimated cost is placed at \$3,600.00.





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Desirable Things in Wicker.



AN entire room furnished in wicker is only suitable in a summer cottage, and even there it is doubtful whether desks, bookcases and large tables of wicker are worth their cost. They are apt to look incongruous and they are very expensive, as a rule. But to fill in and give variety to furnishings of a more substantial sort, nothing is quite equal to well made wicker chairs and settles.

Of all the sorts available nothing has quite the distinction of the chairs, hour-glass tables and *chaises longues* of Chinese canework. To get them at their best and cheapest you must order them at one of the regular Oriental shops. They are comfortable and have a sentiment about them lacking to the product of our own factories. Then, too, they are cheap, even after they have paid duty. An hour-glass chair can be had in New York for \$4.50, probably for a good deal less on the Pacific coast, and it is a very commonplace chair indeed that you get for that if you choose our native product. The Chinese deck chair, or *chaise longue*, with its comfortable slant and its wide arm rests, is a most effective piece of furniture, costing, I think, \$14. There are comfortable arm chairs of generous proportions, and various tables and tabourettes. For the loose cushions needed, nothing is any better than Java or Persian prints, especially the latter, with their lovely faded blues and reds and faint yellows, although some of the Chinese patterned cretonnes are charming.

There is a special sort of garden furniture made in Switzerland, comfortable in shape, with curving outlines, the seats and backs made up of heavy reeds in par-

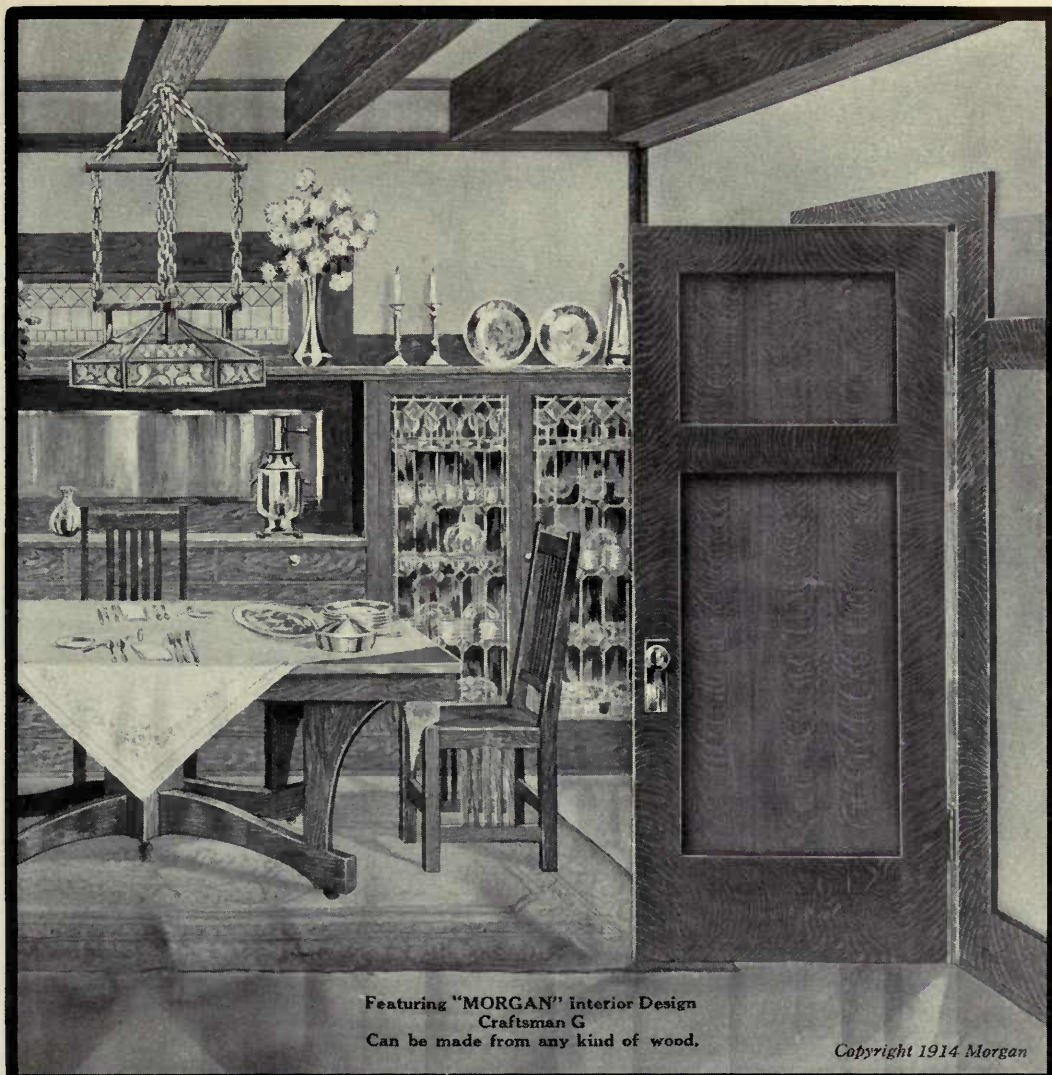
allel lines. This has been copied by an American manufacturer, and is sold very reasonably. There are two finishes, ivory and baronial brown, and the latter is of a tone to harmonize with the ordinary brown oak used for living rooms and libraries, while the ivory would be charming for a bedroom. A *chaise longue* costs \$16.75, a settle \$12.75 and a low-seated arm chair \$6.75.

American copies of the square, finely woven reed pieces of the German secessionists are also to be had, and would probably outlast either the Chinese or the Swiss and emerge unharmed from much rough usage. Roughly speaking the cost is about three times that of the Chinese cane and two and a half times that of the Swiss, an arm chair of no great pretensions costing \$16.50. This style of reed furniture can be had in a great variety of colors, and can be finished to order in any desired tone.

Still more expensive is the French cane furniture, in the natural tone with inwoven lines of bright or delicate color. It is extremely fresh and dainty, in the square Louis Seize shapes but, except to gratify a special fancy, it does not seem worth the high price asked for it.

Upholstered Furniture.

Looking through the stocks of upholstered furniture, one is struck with the simplicity of everything. Tufting is very little seen, and the eye is gratified by unbroken spaces of beautiful fabric, with no fussy detail to distract the attention from the outlines of the frames. The best sofas have low, perfectly straight backs and arms of moderate size. The fashion of loose cushions seems to be passing and the stuffing of the seat is permanently attached. Very little wood



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shows everywhere, and the backs are overstuffed. The exception is the French period furniture, upholstered in light colored tapestries. A few years ago gilt frames were popular, but they have given place to old ivory or to French gray.

Silk velour is a popular covering and a pleasing variation is achieved by laying it different ways of the goods on the back and seat. A dark shade of old rose is very charming in this material.

The high backed winged chairs are a desirable investment, giving distinction to any room. Materials with a pronounced pattern are shown to be used on them. One beautiful French brocade has a very broad stripe of old blue and a narrower one of old rose and this striped ground is overlaid with a conventional pattern in yellowish gray, the pastel tones of the pattern and the lustre of the silk blending into a delightful whole.

Another tapestry, and one that is comparatively inexpensive, has three-inch brocaded stripes, old blue, old rose, green or yellow, alternating with a flowered stripe in delicate colors on a ground of grayish cream. This costs \$2.75 a yard, fifty inches wide.

Two Typical Cretonnes.

Month by month the taste for cretonnes becomes more firmly established, and designs are more striking and colors more brilliant. One used to cover a set of couch and easy chairs for a living room had a wide stripe of tan color almost covered with a confusion of flowers in low tones of every conceivable color. Separating these stripes was a band of black which served as a background for a stripe of knotted ribbon in mulberry red.

Another striking cretonne had a ground of a small pattern in two shades of gray, with large medallions of a vivid Marie Louise blue. Framing these medallions and trailing across them was a profusion of pink and yellow roses. The roses and the blue were repeated in a nosegay border intended to be used with a gray paper of the same design as the ground.

Colored Madras Curtains.

Cream white Madras curtains are now made with stripes and borders in floral patterns in delicate colorings, and the effect is so subdued that they might very well be used in rooms furnished in light colored cretonnes, the Madras taking the place of long cretonne curtains. Some of the prettiest have the design in green only. In Madras by the yard there are some very good designs and colorings, which are useful for casement windows in rooms where no other patterned material is used, notably in lavender tones. The worst of these colored curtains is that they are prone to fade, but when they begin to look badly they can always be bleached out, and look as well as ever, although with a difference.

Rush Mats and Rag Rugs.

A rush mat in oval shape, four by seven feet at \$2, is within the reach of almost everyone, and looks extremely well in a simply furnished bedroom. Other sizes are to be had; but a medium sized one for the middle floor, with smaller ones at the front of the wash stand and the bureau look better than a single large one. It is certainly a great gain not to have a rug under any part of the bed. These rush mats are made of a tough vegetable fibre, of a pleasant greenish tone, and the flat braid, woven of many strands is sewed round and round until the desired dimensions are reached.

The braided rag rug is again used and various color schemes are produced by the careful choice of the rags. One very good looking one has a center made from rags torn from cretonne in pink and green on a white ground with a border of plain, light gray. Rugs of this sort are also made from flannel rags in plain colors harmonizing with the color scheme of a room, and are sometimes ornamented with embroidery done in heavy wool.

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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert. Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Woodwork.

E. C. M.: "Some time ago I purchased from you a copy of 'Interior Beautiful,' and as I have a house about ready to be finished, I wish to take advantage of your correspondence department and secure some suggestions regarding interior decorations. I enclose copy of first floor plan. The stairway is open, panel work with railing above. Would like suggestions on wood finishing, fireplaces, curtains, rugs, furniture, etc."

Ans.: Your floor plan has the possibilities of an unusual and charming interior, inasmuch as you are free to choose, and unhampered by present possessions. The scheme we would like to see carried out here would be,—living room woodwork fumed oak, Jacobean furniture which is very like Circassian walnut only a trifle darker. However, fumed oak would be almost equally desirable. The Jacobean is newer, also costs rather more. The walls we would hang in a bronzy green paper with rug in rich rose-red or mulberry introducing olive greens and soft reds into the other furnishings. The French doors between should have leaded glass and no draperies.

The same woodwork in stair hall, but in den and dining room we would use a silver grey stain on woodwork. The den will be a gloomy place if dark woodwork is used there, but a delightful effect can be had by treating den and dining room in harmony. We would have a blue and green and rose tapestry paper on walls of den, with grey wicker furniture upholstered in blue and green and rose cretonne. Rug, plain green center with blue and green border. The dining room wall soft grey with rich, deep blue rug and rich blue leather chair seats. Furniture finished in silver grey. On oak, this stain does not have so very light an effect, but

is soft and beautiful and a relief from the ubiquitous brown. The dining room curtains should be a frosty pattern of all over lace with rich blue side hangings.

The fireplace facings should be grey brick in here. We would like the window sash white, also the sash of the French doors between these rooms.

Placing of Furniture.

B. A. H.—"Enclosed find floor plans for our new home which is nearing completion. The house stands on a corner with roads to the south and east.

"The woodwork is gum or hazel wood throughout the house with quarter-sawed oak floors except bath room and vestibule which have tile. The finish of the woodwork is soft brown, waxed.

"We have the following furniture which can be used on first floor: Black walnut and quartered oak library tables, three oak rockers, one has seat covered with figured red cretonne, one willow rocker, two rockers stained mahogany, Morris chair stained mahogany with green cushions, couch mahogany with dark green covering. Would like the English white oak furniture, waxed for dining room, window seat in this room. In living room had thought of two wicker or fibre rush chairs and settle stained brown, leather chair, also black walnut table. Would a couple of pieces of mahogany be all right here? Fireplace terra cotta tile with hazel wood shelf and cove."

Ans.—With regard to placing your living room furniture, the mahogany and the black walnut pieces can be used together there, but we should put the oak table and the oak rocker together in the den. We suppose you mean by "leather chair," a large stuffed easy chair and this would be admirable with the other furniture. We would use a mixed green and



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brown leather. If the coverings of couch and morris chair are good, let them remain. If the mahogany rockers have upholstered seats use new covers of small figured green and brown tapestry on them. Put the red cretonne rocker in den, also other oak rocker, and if the red cretonne is good enough to stay, do the other pieces to harmonize.

Have a gray tapestry paper, self-toned design on living room wall, with a green rug and the green furniture. Put a pretty wicker table in center of bay window, with large green fern, and your wicker rocker beside it. We do not think a settle needed in this room, in fact, we see no place for it.

We are returning your plan with places marked as we should use the furniture. In this room it would not be correct to use side draperies only at windows, but they can be dispensed with altogether if desired. We should want thin curtains of net or sheer ecru scrim with or without other hangings. There is a mixed green and brown, heavy net material that would be pretty with your things for outer draperies. In the den you can use curtains of cretonne or Sunfast material alone. The hall is really a part of living room and should be papered the same. In the den a red rug with red and green cretonne and a darker different, grey wall, would be good. We think your plans for the bedrooms are very good.

The Bearing of Room Exposures.

M. F. W.—Please give me a few suggestions as to the living room, sitting room and dining room. We are going to use a good quality of pine for the interior woodwork, and are thinking of using mission finish for dining room and living room. Now I wish you would please tell me what color or finish would contrast nicely with the brown mission finish in the living room, for the sitting room adjoining, and also give me your idea as to the color of tint or wall paper for these two rooms, in order that they will harmonize well together, also your idea of the furniture for each of these two rooms. As they are to be thrown together always, I want each of them to be furnished and finished, so that the colors will not "clash."

Now for the dining room, we are going

to have the wall paneled up to the plate rail, and I want your idea of paper to be used between the panels and above the plate rail. All of my walls I want finished in a color slightly dark, and I would appreciate your advice.

I hope I have not asked too many questions.

Ans.—You have "not asked too many questions," but we regret that you have forgotten our oft-forgotten injunction to correspondents to include the exposures of the rooms in their requests for advice. Not having these, our suggestions are necessarily given at random and can only be general in character.

The finish of woodwork should be the same in living room and room marked sitting room, though we should advise giving this room a lighter style of furnishings, as for instance, it would be a pretty idea to furnish this room entirely in wicker, natural, with cretonne upholstery in a design of dark pink and red roses and rich foliage. There is also another design showing bunches of deep pink hydrangeas with much foliage which would be very effective and less common. Let the wall have a pale, greyish green grasscloth paper and the rug be a plain green Saxony. Let the table and sofa be of wicker as well as the chairs, but on the table use a mat nearly covering the top, of green velvet and on this place a wicker electric lamp, the shade lined with rose cretonne.

Now these suggestions would give you a sort of pretty parlor, though not a formal room, but they would not do for a room with a north or northeast facing. You see the point. Instead of mission finish we advise a brown oak stain which is softer and not so dark. In the hall and dining room, however, especially if a southern house, we would advise ivory white woodwork. We would furnish the living room mostly in fumed oak; the one or two brown wicker chairs would not be amiss. It is impossible to go on with suggestions without knowing the facing of the rooms.

A Bungalow Interior.

"Will you please advise me in regard to the enclosed bungalow design? My idea regarding decoration is brown weathered woodwork in den, living and

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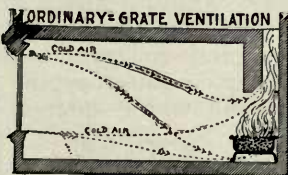
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dining rooms, as these open together. Walls of a good shade of tan in the first two, with a dull blue in dining room. I would like the hardwood floors to be light. The bedrooms, white enameled wood, also bath and kitchen.

The questions I would very much like to have answered by you are:

1. Do you approve my choice of tan walls with brown weathered wood in den and living room?

2. Brown weathered wood (probably oak stained) with dull blue in dining room?

3. Will light floors, natural maple or oak, look well with the dark woodwork?

4. Will you kindly suggest colors for the walls of the three bedrooms?

5. My idea of the brown weathered stain is that it makes rooms look more 'homey' and comfortable, particularly where one has various old pieces of furniture in rosewood, mahogany, mission, golden oak and etc., which must be used in living room, until such time as we can purchase new."

Ans.—Your ideas in regard to both exterior and interior treatment of your bungalow, seem to us very harmonious and well considered. Your feeling that the brown stain is the best harmonizer of miscellaneous pieces of furniture, is a principle we have long advocated. There is one suggestion we would make in regard to walls. A warm or yellowish tan would not be agreeable in these rooms which have south and southwest facing. We would advise grey rather than tan walls, or if tan is much preferred, let it be a tan very much greyed and not yellow. Then combine as much green with the furnishings, rugs, etc., as possible. The old blue walls will be extremely good in dining room and we would have a rug of mixed blue and green with blue predominating, also one of the blue and green bordered scrims at the windows. There would thus be a harmony between the rooms right through. The den would be very taking if furniture were re-upholstered in one of the new cretonne tapestries, a bold design in rich blues and greens on a greyish ground.

In regard to the floors, oak finished natural may be used, but maple is only suitable for the kitchen or bedrooms. You do not state if bedroom walls are

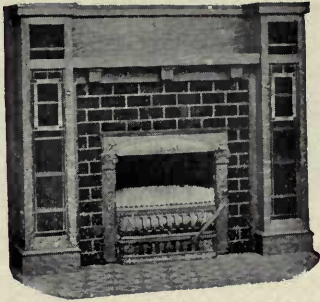
to be tinted or papered. We would suggest dull rose for the east chamber, cream or ecru for the north room and warm grey or dull blue for the west room, with white ceilings in all. Everything would depend upon the curtains, rugs and furnishings used with these plain walls in making attractive rooms. So many ideas and pretty effects have been given from time to time in Keith's that you cannot do better than study them. In the December issue three charming bedrooms for girls were illustrated, showing what could be done with plain walls.

Harmonizing Miscellaneous Furnishings.

F. A. B.—I have read with interest for the last two years, your articles on decorations, etc., and would like you to give me a color scheme for the interior of our house, as we want it to look nice and yet be in keeping with the surroundings. I am enclosing rough diagram of floor plan of our house which stands on a hillside facing south, the outside of which is painted white, with dark green trim, and black roof. There is a ravine on each side with running water, and we are surrounded by evergreen trees on three sides. We are having a road made on east side, following stream zig-zag fashion, which, when completed will go around the house and out on the west side. In front, we overlook the Fraser River about one mile away, with fields, hired men's cottages and barns between, and are not likely to have any buildings near us. Main road runs between high and low land, so that we have to cross the road to barns, etc. The house is finished with "selected" Douglas fir, locally grown and has brown stain, "dull finish" throughout excepting toilet, bath room and one bedroom, with south window, which is finished in cream enamel. The latter has brass grate and tiled hearth, and we think of having bird's-eye maple furniture in this room. Bath room and toilet we think of painting walls pale blue, as the linoleum is in blue and white squares, with nickel fittings. Room with west outlook has green linoleum, with wool mats and quarter-cut oak furniture.

Room with north window has fumed oak furniture. The other bedroom we think of furnishing in mahogany. The

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ANSWERS TO QUESTIONS—Continued

hall, staircase and drawing room, "which is not furnished," have polished floors same color as stain, front door and side lights, clear beveled plate glass, with leaded light under stairs. Living room has plate glass window with leaded light above, also piano window leaded. French doors open into hall, with leaded light. Clear, glass, beveled plate built-in seat, with closet, also leaded light, large open fireplace, with brass rim round opening and oak mantel, stained to match woodwork, with mirror and closet under mantel shelf with glass doors. The tiles are cream, cornice poles, candle stick and vases, fender, etc., are brass. In this room we have fumed oak dining chairs and table wicker easy chairs and oak desk. We hope soon to change this furniture to match Chickering Player piano, which is mahogany. Floor is polished. At present we have green table covers and cushion tops, curtains, "ivory net," and we were thought of changing to golden brown.

Ans.—The surroundings of your home are very romantic. The style of the house is not in keeping with them, though it

evidently is in line with your preferences for things "very neat and plain." Against all that background of dark firs and pines, a more irregular, deep cream exterior with warm coppery red roof would have been our choice. In regard to the interior, we fear with so much plate glass, so much brass trim and the cream tile of fireplaces, that the effect of the living room with its south and west exposure, will be glaring. We should do everything possible to soften this, and while the strong dark green of the sample enclosed is most undesirable, we should use dull but not dark, low-toned greens for rug and furnishing, with grey rather than tan walls. Do not bring any more mahogany in here with the brown fir woodwork, but replace the dining table and straight chairs with a library table in fumed oak, and a couple of upholstered easy chairs, with or without oak frames, retaining the wicker chairs, upholstering seats with a foliage cretonne in greens and blues. We should use paper on this wall, an allover indistinct design in two tones of grey.

The other walls can be tinted or papered as you prefer, the blue and green foliage paper on lower hall walls would be in harmony with the treatment suggested for living room and also carry out the feeling of the landscape. Use the "golden browns" in dining room. The little "drawing room" should have cream colored walls and rose furnishings and rug.

We have never seen linoleum used for bedroom floors. Only for kitchen and pantry, and sometimes bathrooms. If you cannot have hardwood floors and rugs, we suggest a good quality of plain matting and rugs. The living room should have a good rug, either plain reseda green or mixed dull blues and greens.

A cheaper Scotch rug can be used in dining room and the bedroom rugs either Body Brussels or Scotch, or the colored cotton rugs. The bird's-eye maple will be very pretty in south bedroom against a soft blue wall, and we would use pale tan or ecru for walls with the green rugs and golden oak furniture. We would use blue only on lower part of bathroom wall, as a wainscot, the remainder and the ceiling cream. These should be oil paint.

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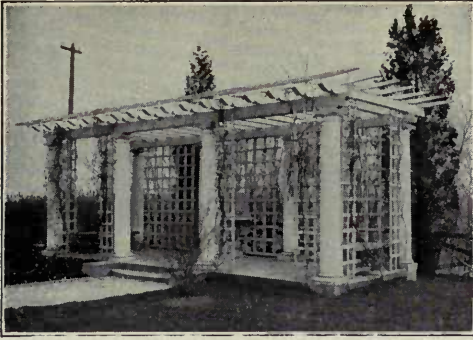
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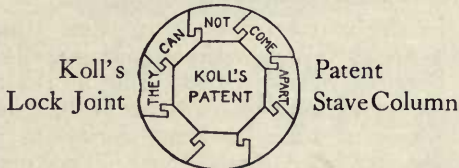


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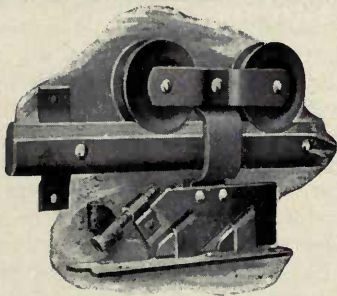
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Leaving Out.

A WOMAN who has a national reputation as a writer on domestic topics, and who is also a practical housekeeper of ability, was interviewed lately. Asked what she regarded as the secret of success in housekeeping she said: "Knowing what to leave out." She went on to say that no one could do all the things she had planned, or even those which seemed to her to be necessary. Something must be crowded out; the problem was to know exactly what it should be. In her own case it had been the gratification of an artistic taste; with some one else the curtailment might be along utilitarian lines. One thing was certain, something must be crowded out.

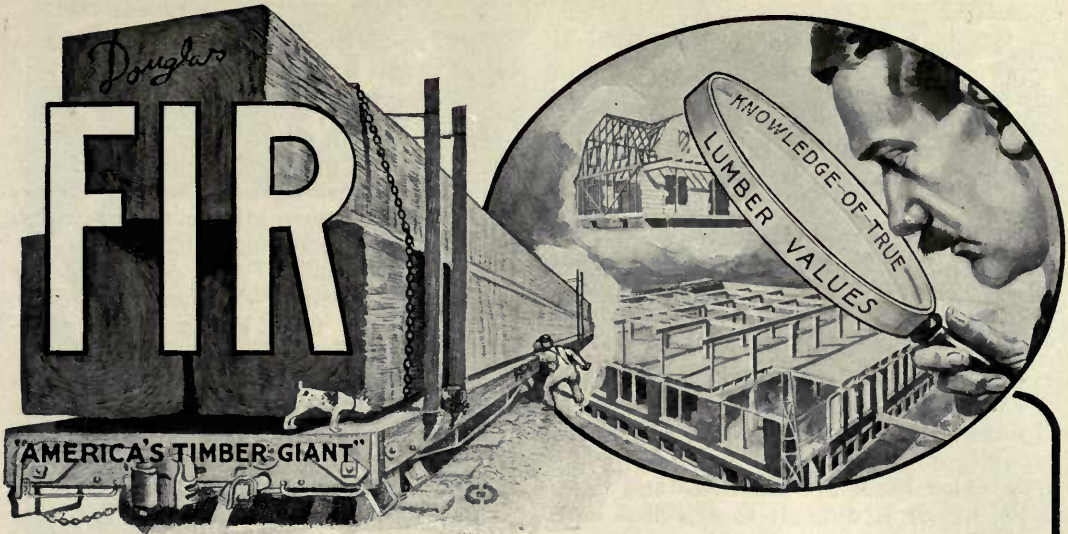
Just what to crowd out must depend largely upon the peculiar conditions of each household. It is quite safe to say the elimination should always be with a view to greater efficiency, and that it must never be concerned with essentials. Unnecessary curtailment tends to lower the standard of living, and works harm in many ways; curtailment of essentials is an economic crime.

Take the matter of washing, a horrible bugbear in most modern households. One must be clean, and that involves the washing of a good many pieces. But the elaboration of trimming which makes things hard to iron can be cut out. White skirts, soiled with two wearings, are luxuries, not necessities. Cotton crepe underclothes need no ironing at all, and are very soft and pleasant to wear. Underflannels and stockings last very much longer if not ironed at all, as the heat of the iron tends to destroy the fibre of the

wool or cotton. In most families the underclothes of small girls might be simplified with manifest benefit.

In the matter of cooking some things can be curtailed with advantage. Is it a horrible heresy to say that if reasonably good baker's bread can be had, it is a waste of time, and no saving in expense, to bake one's own? Too many people act upon the supposition that there has been no advance in the art of the baker in the last twenty-five years. Baker's bread was, in the writer's childhood, miserable. It still is in parts of the country where there is no foreign population. Europe eats baker's bread, and good bread at that, and wherever there is a large foreign population, there you find the crisp, thoroughly baked and moderate sized loaf. As for pies and cakes, which involve a weekly baking day, most people are better off without them. Experts have traced the great increase in cancer to an excess of starch in the diet. We all know the evils of too much sugar.

These are, of course, very material things. Other things must often be sacrificed to the needs of the household, things lovely and in every way desirable in themselves. More often the things that are best sacrificed are some of the social demands, which are apt to be so imperative in a small community. That curious bit of special pleading, "The Way Out" holds up the mirror to some of these small social tyrannies, most effectively. It is doubtless agreeable to play bridge, if you happen to care for cards, but the satisfactions of bridge are not to be compared with those of a domestic



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circle which is cheerful and happy just because you have crowded out bridge in the interest of its welfare.

It all harks back to the old matter of comparative values, or, as someone else has said, of having a nice sense of proportion. But one thing is certain, that no life, least of all that of the housewife, is roomy enough for every interest that knocks for admittance, and sometimes the most agreeable guest must stay out in the cold.

The Pros and Cons of the Laundry.

The public laundry is an indispensable institution but it has an extremely bad reputation. Some of it is perhaps deserved, for there are laundries and laundries, but it is difficult to see how with modern conditions any community can get on without it. As to the destruction of clothes in laundries, it is a matter of the relative merits of chemicals and elbow grease as destructive agents. When you add to violent rubbing on a board the corrosion of half dissolved washing powders, it would seem as if the advantage were on the side of the laundry with its liquid washing compound and mechanical rotation of the clothes in a huge cylinder.

The weak point of the laundry is when it comes to the washing of colored clothes and of delicate and elaborately trimmed underclothes and lingerie frocks. Colored clothes require individual treatment, and the more delicate clothes must be washed in the hands. Naturally attention of this sort is entirely outside the scope of the best laundries, to say nothing of the ordinary ones. Another point where there is room for improvement is in the folding of clothes. Perhaps a little united protest on the part of the patrons might effect an improvement in this respect.

It would seem as if the best way for the average small family of one or no servant, were to send the table and bed linen to the laundry and to wash personal clothing at home. In small families this plan might do away with the regular wash day altogether, and the clothes be washed a few at a time, as the weather, or other household exigencies dictated. In most families, especially in winter, wash day is a prolonged

agony, and getting rid of it would seem to be worth a sacrifice.

Balancing the Meals.

Many a meal, all of whose constituents are of good quality and well cooked, seems to be lacking in something. Generally it is because all the things which make it up are too much alike. It begins with a cream soup, goes on to rice or macaroni, and ends with farina pudding. And although each article is palatable the dinner is insipid. Or the meal may err on the score of lightness, not containing a single substantial dish. This is a very grave error. If every other dish is light, have a substantial dessert, dumplings, suet pudding, or something of that sort. On the other hand, do not add a suet pudding to a boiled dinner of corned beef and tuberous vegetables. Do not have two green vegetables at the same meal. And do not have too much proteid in one meal. If you have a white meat you may very well use some preparation of cheese for an entrée, or for dessert, but if you have beef or mutton use green vegetables and have a farinaceous dessert.

The Difference Between Cocoa and Chocolate.

Both come from the same plant and have practically the same flavor, but in the preparation of the ordinary chocolate of commerce, more or less sugar is used. The exception to this is the so-called bitter chocolate, used by French confectioners. It follows that in making candy or cakes, one gets the flavor of the imported article more nearly with cocoa than when chocolate is used. The difference in expense is a sensible one, to say nothing of the fact that the cocoa is in powdered form and need not be scraped.

"Pink" Salmon.

In view of the small catch and consequent high price of salmon, it is consoling to know, from no less authority than Dr. Wiley, that the pink Alaska salmon has the same nutritive value as the more expensive and darker colored fish. And, apropos of salmon, do all my readers know what a delectable sandwich the smoked Nova Scotia salmon makes, when shaved very thin and laid on buttered brown bread?

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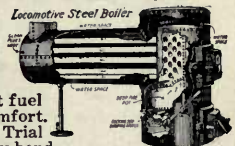


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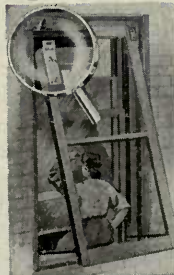
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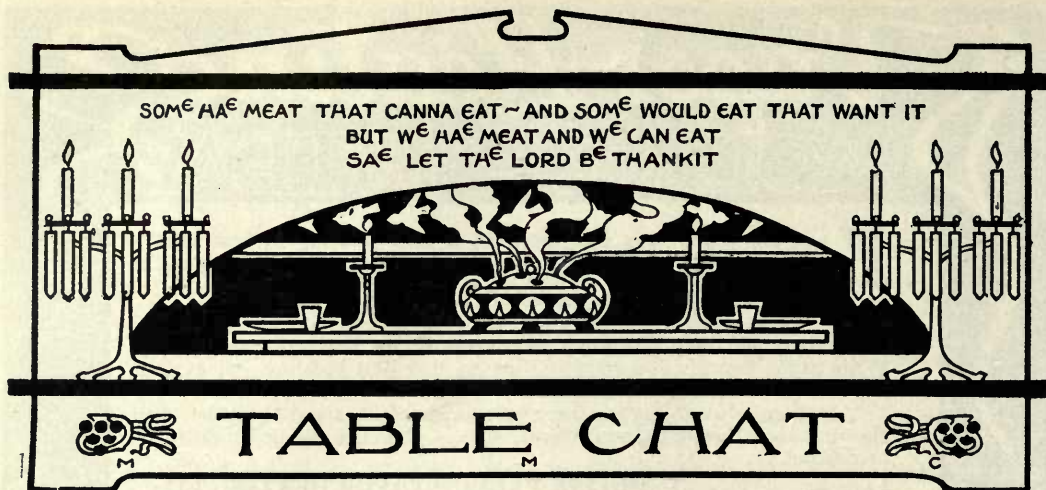


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Hot Weather Desserts

Serving Fruit in Sherbet Glasses.

ONE of our illustrations shows a pretty way of serving a fruit dessert, in this case a mixture of grape fruit, slices of banana and seeded white grapes. For ordinary use it is easy to omit the floral decorations on the stems of the sherbet glass, and in winter a twist of asparagus fern, tied with a ribbon could be substituted for flowers.

A combination for several sorts of fruit, sugared and chilled, is called a salpicon, and is a pretty and acceptable dessert, with or without an accompaniment of delicate cake. Sometimes French cooks sweeten it with a boiled sugar syrup, poured over the fruit before it is chilled, giving it a flavor of some liqueur.

Stuffed Vegetables.

Almost any vegetable which has reasonably firm outer walls can be stuffed and help to give variety to the table. As a general thing, the pulp removed to make the shell is used as a part of the filling. It should be highly seasoned and is much improved by a mixture of chopped meat. Sometimes a few oysters are an acceptable addition.

The most popular of all stuffed vegetables are peppers, and there is no better way of using up cold meat than to chop it finely and after seasoning it lightly to

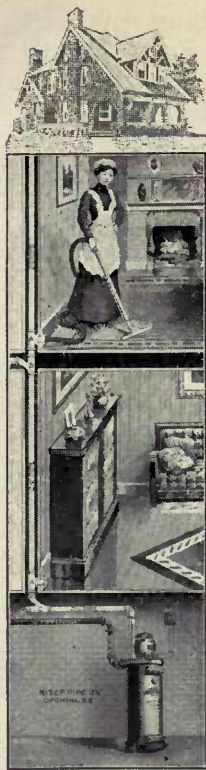
stuff it into a good sized pepper. It is an improvement to parboil the peppers and also to bake each of them in one of the sections of a muffin pan, putting a very little hot water in first. This prevents their drying up and burning. Rather an unusual filling for peppers is cold baked beans highly seasoned with tomato catsup. While not essential, a brown sauce is a great addition to stuffed peppers, and can be quickly improvised from bouillon capsules with a flavoring of kitchen bouquet.

Tomatoes can be stuffed with a great many different things, their own pulp mixed with bread crumbs, chicken or other chopped meat, and crab meat. With this last filling a Hollandaise sauce is passed with the tomatoes, and they are served as a separate course.

Stuffed potatoes are a nice course for luncheon, with an accompaniment of hot rolls, celery and pickles. The potatoes are first baked. Then the contents are scooped out carefully, mashed, mixed with twice their bulk of cooked sausage meat, the brown outside having been removed, liberally buttered, returned to the shells and set in the oven long enough to become very hot.

A Vegetarian Cookery Book.

While very few of our readers would care to adopt a purely vegetarian menu, many of them may find a new manual of



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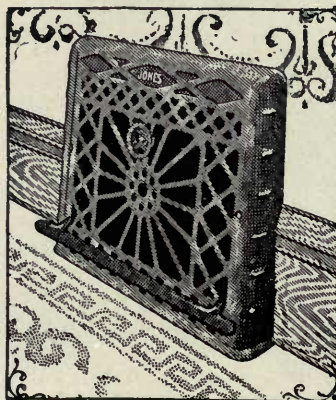
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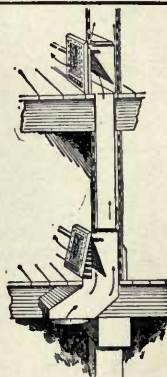
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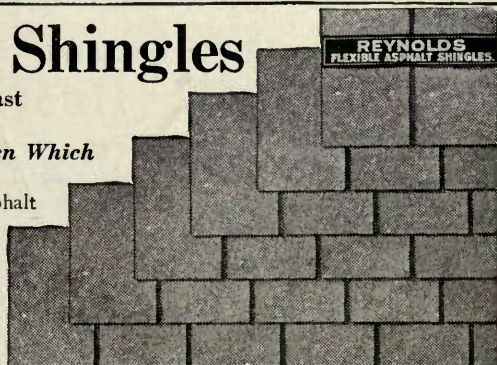


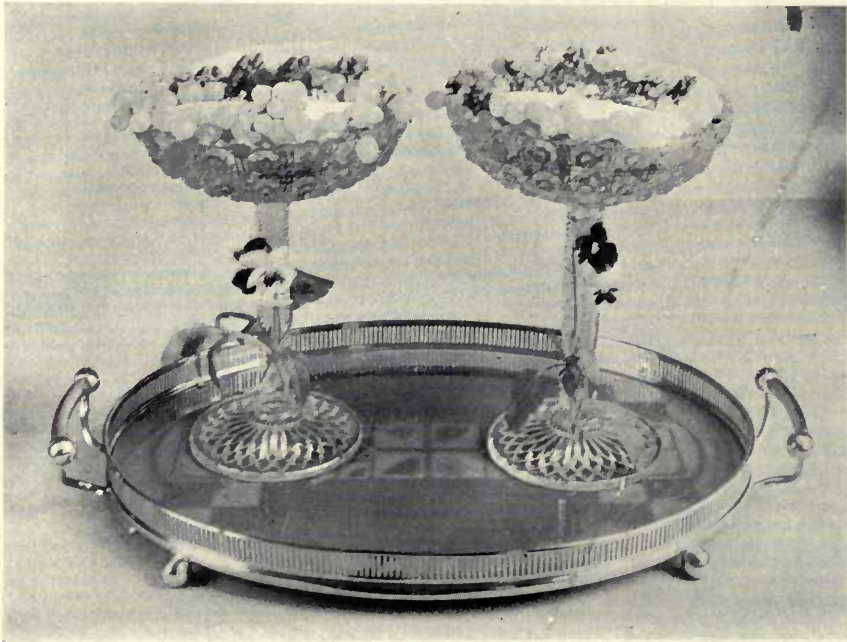
TABLE CHAT—Continued

vegetarian cookery helpful, if for nothing else in suggesting new combinations and ways of serving the common vegetables. This book is entitled "The New Cookery," the author is Lenna Frances Cooper, and it is put forth by the Good Health Publishing Co., Battle Creek, Mich. While it is to some extent written in terms of the products of one of the Health Food companies, it is not difficult to find equivalents for most of the unusual articles specified and it certainly suggests a greater variety than one would have thought possible. The brief scientific ex-

jelly or blanc mange, or for a rich custard, which can be turned out into sherbet glasses. The set of four costs twenty-five cents. A small brush should be used for greasing them, and a circle of waxed paper in each helps.

Royal Worcester Coffee Sets.

Charming after dinner coffee services are shown in plain colors, deep pink, turquoise blue and cowslip yellow. The coffee pot, sugar bowl and cream pitcher are silver mounted and the set includes a long and narrow tray. Some of the sets



Fruit in Sherbet Glasses.

planations in reference to the various processes and the analyses of the constituents of the various sorts of food are simple and well expressed and the book as a whole is a desirable addition to the kitchen shelf which is devoted to literature of its sort.

The Old Fashioned Patty Pan.

It was small and it tumbled about a good deal, but delicious things issued from its fluted sides. Its modern prototype is also fluted, but it is much deeper and is set in groups of four on a strip of tin. While these pans are intended for cake, they are also useful for individual moulds of

are intended for use at sea and the saucers and the larger pieces are fitted into rings on the tray.

To the colors to be had in the plain colored Japanese tea services has been added an ivory white, which is especially pretty for a bedroom.

Green Stoneware.

A very good line of stoneware, which is supposed to be fireproof comes in a very good shade of dark olive. There is quite a variety of shapes in tea and coffee pots, some of the latter being fitted with percolators, and the casseroles are covered and unusually deep. They are less

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— can never pay for the loss of those things that are worth more to you than their mere physical value. Therefore, build *your* home as fireproof and durable as possible.

A Herringbone house costs little more than a frame one, but it is enduring, low in repair cost, an economy from every standpoint.



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makes walls that are fire-resisting, economical and durable; ceilings that never fall, crack nor show lath stains. Herringbone stucco on outer walls needs no repairs nor painting. It makes a warm house in winter, a cool house in summer.

For damp climates and wherever lath may be subject to corrosion, we recommend the use of Herringbone Armco Iron Lath. It is the purest iron made, therefore resists rust indefinitely.

If you are interested in building a home that will resist fire, decay and time, and cost little if any more than wood

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It is full of illustrations of beautiful Herringbone houses and facts of value to prospective home builders. Let us help you as we are helping hundreds of others in the selection of the right building materials. Mention your architect's or builder's name so we can co-operate through him.

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Makers also of Self-Sentering, the concrete reinforcement that makes forms unnecessary



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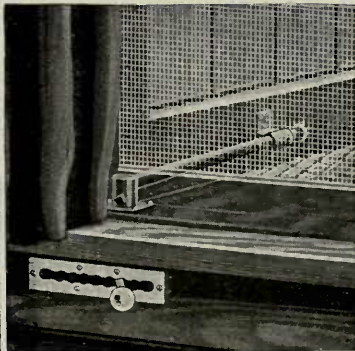
No other window can prove more satisfactory than the Casement, you know that—then demand that your casements be practically equipped.

Holdfast Adjusters operate and lock positively from the inside. No flies.—No trouble and absolute permanency. Get our "Handbook".

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CHICAGO



picturesque than those of red clay, but would probably appeal more to the general taste, and are probably more durable.

A casserole, whether glazed or unglazed, should never be set over direct flame, and its length of life is increased by putting it over the fire in a large pan of cold water which is brought slowly to a boil.

Warm Weather Suggestions.

Cooking over a hot stove is to be avoided as much as possible during the summer months and a menu of uncooked foods is always welcome. With the great variety of cold desserts, frozen or merely

Mix and spread on thin slices of bread cut in odd shapes.

Sardine Sandwiches: Drain the oil from a can of sardines, remove the skin, mash to a paste and add some finely chopped pimientos. Flavor with lemon juice. Spread between thin slices of bread.

Cress Sandwiches: Cut thin and shape the desired amount of bread needed. Make a filling of eggs. Chop the whites of the hard-boiled eggs very fine. Mix the yolks very smooth with mayonnaise and spread on the bread with small pieces of water cress.

Fruit Jelly: Two large grapefruit, six



Stuffed Tomatoes Stewed in Baking Dish.

chilled, it is a simple matter to have something of this sort which is especially palatable. We suggest several kinds of sandwiches that will be good for a picnic lunch at home.

Filling of fruit: Chop figs and nuts and add equal amount of cream cheese.

large oranges, four lemons. Cut all in thin slices, add one pint of water to each pound of fruit. Let the mixture stand twenty-four hours. Bring to boil; add eight pounds of sugar. Boil till it jellies. When cool, spread between thin, shaped, slices of bread.



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consisting of *Electric Washing Machines; Ironing Machines; Ironing Boards; etc.*, especially adapted for use in the laundry room of *Residences, Apartment Buildings* and moderate sized *Hotels, Hospitals, Sanitariums* and similar Institutions. Can furnish individual machines or complete outfits. Our appliances are the best that can be had—there are none better.

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When dolly is given her bath the floor usually gets its share of the "scrubbing".

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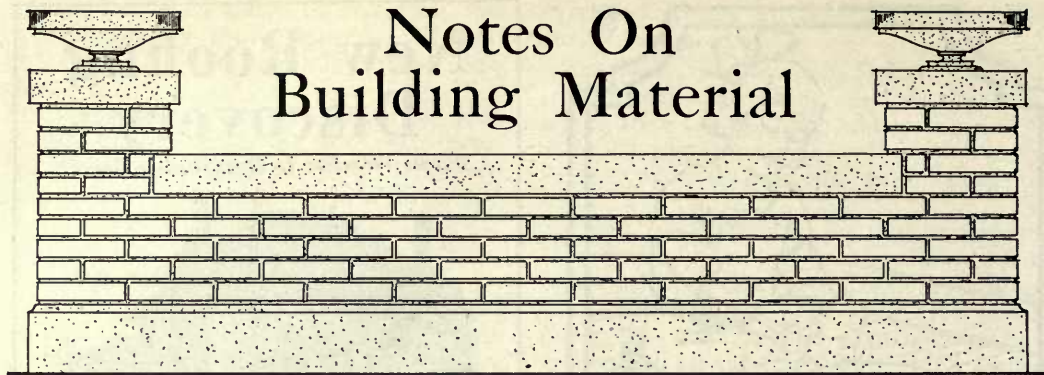
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Notes On Building Material



Dampness in Walls.

DR. George Metson writing for *The Builder*, gives a number of methods for keeping the water out of the building, particularly about the basement floors and foundations, from which are extracted the following:

"One of the most important points to observe in building operations is that of keeping dampness out of all parts of the structure. The dampness may be caused by (1) there being no damp-proof course, (2) the damp rising from the ground, (3) the damp earth against the walls, (4) rain soaking in through porous parapet walls and copings, (5) driving rains against walls, (6) burst pipes or leaks in roofs, and other causes avoidable by a proper state of repair being maintained. Beyond this last cause, which should never obtain at all, to attempt after the building is occupied to remedy any of the other five omissions or faulty construction is a costly operation. For example, the cost of inserting a damp-proof course into a wall constructed without one being as five or six to one, according to the material used, as compared with the cost of putting one in at the time of erecting the building.

"The second heading mentioned as a cause of dampness in buildings is that of dampness rising from the ground.

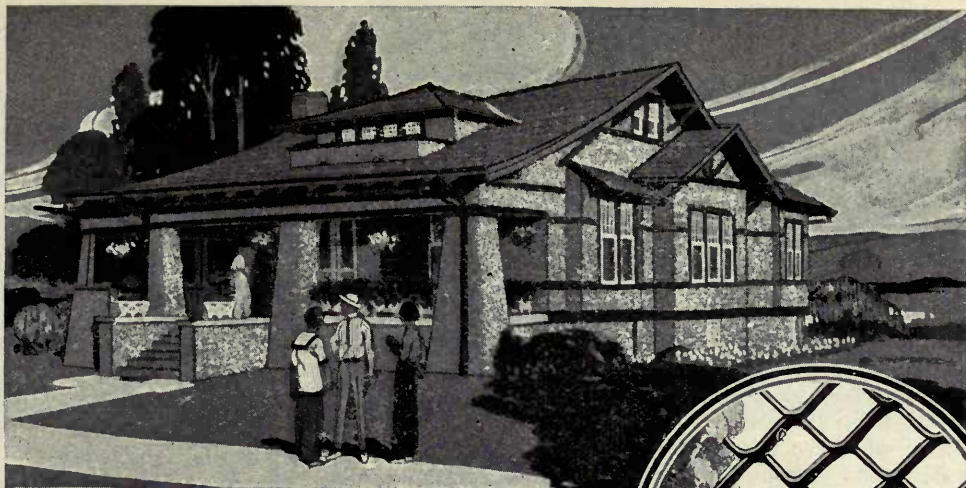
"To overcome this cause of dampness the model by-laws provide for a layer of good cement concrete rammed solid, at least 6 in. thick, to be put over the site to seal the ground air.

"The number of voids in soils, as also their power of holding water, varies; but it may be said that all contain in smaller or larger quantities certain volumes of

'ground air' at the surface and 'ground water' below. As the latter rises or falls, according to the heaviness of the rainfall, so the 'ground air' in the pores, so to speak, of the soil rise and fall, being on occasions expelled from the ground; also this ground air is drawn from the soil beneath a house on account of the greater warmth of the rooms over the site; also a rising temperature or a falling atmospheric pressure may extract or draw out such ground air.

"There are now on the market several substances, powders or pastes with which it is claimed to make Portland cement waterproof, some being mixed with the water, others with the cement. Where these claims are substantiated and such material is used in the jointing of these slabs the filling up of the vertical joints would not be objectionable. It is necessary to lap the joints, and in order to insure a continuous non-jointed course the two parts forming the lap can be heated, thus forming a secure and perfect waterproof joint.

"Asphalt as a damp-proof course is perhaps the best of all materials used for that purpose (excluding sheet lead on account of its greater cost). It is easily laid, is elastic to a certain extent, and yet able to withstand great pressure. There is also an entire absence of joints, and this is a particularly good advantage, as the joints in all other damp-proof courses are their weak points. At the same time care should be taken to see that the asphalt is from a reputable firm, as some are much too brittle, while others squeeze under a comparatively small load, nor yet can some withstand the heat as the better material can, and others are



Drawn from a photograph—New Orleans, Louisiana.
Architect—W. R. Gilbert, New Orleans, Louisiana.

Plans in Booklet
described below

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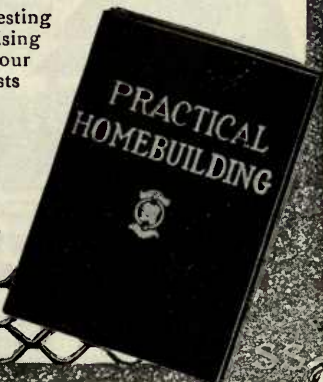
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Kno Burn Expanded Metal Lath has a mesh construction that becomes an actual part of the wall as soon as the plaster has set around it—as the illustration shows. It never fails to "grip." It can't rot away. It expands and contracts to exactly the same extent as the plaster that covers it. Its features of excellence are protected by patent. Whether for outside stucco or inside plaster, Kno-Burn makes the plaster stick. Ask your architect.

"Practical Home-building" will tell you a great many interesting thing about how and where to build. It is not merely an advertising booklet. It is a treatise on house construction that will hold your interest from cover to cover. It contains plans, comparative costs and many interesting photographs.

Send ten cents to cover cost of mailing and
ask for booklet 659

North Western Expanded Metal Company
965 Old Colony Building Chicago, U. S. A.



merely a mixture of coal-tar, pitch and sand.

"Before any asphalt is laid the brickwork should be levelled, and it must also be dry and brushed clean, leaving the joints well flushed up with mortar. The course of brickwork to receive the asphalt damp-proof course should be laid with the frog downwards; in all other positions it is generally laid uppermost to insure it being filled up. The asphalt course should be of an even thickness, $\frac{1}{2}$ in. or $\frac{3}{4}$ in. as may be specified.

"The use of a course of vitrified bricks set in Portland cement as a damp-proof course is by no means a good one, as even the best of these bricks are porous, and this being so, dampness can rise through them. Even where the brickwork for some few courses below the damp course level are of these bricks, a proper damp-proof course should be inserted.

"It is possible that in basement floors the floor may be below the standing level of water, when, in addition to preventing the water entering the side walls, it may be desirable to make the basement practically a water-tight tank; and in cases where great pressure of water is found it may even be necessary to reinforce the concrete over the site in order to prevent it being lifted by the upward pressure of the water.

"The provision of a damp course is in most towns a necessity, the building by-laws requiring one, and some of the materials in most common use for this purpose are a double course of slates in cement, sheet lead, hard blue bricks, glazed stoneware slabs or tiles, asphalt, asphalted felt, etc., such damp courses laid costing from about 10c per foot superficial for bituminous sheeting (in rolls) to 40c per same unit for thick sheet lead.

"The chief point to observe is that the damp-proof course covers the whole of the wall."

Terra Cotta Tile Walls.

"Hollow tiles may be used for building primary bearing walls, which may be defined as walls that may be used to receive directly the loads from floors or roofs in addition to their acting as partition walls, provided the proportion between thickness of wall and free height between the floors does not exceed fifteen (15) feet and the load including the weight of the construction does not exceed three hundred and fifty (350) pounds per square inch of net sectional area of tile, and shall be of the thickness specified by this chapter for brick walls. Hollow terra cotta tile may be used for exterior walls, but when so used the thickness and height of the work must conform to the dimensions required for brick walls in this chapter, but in no case exceed four stories in height in any building. The thickness of the walls shall be calculated as the outside dimensions of the tile and each tile shall be full thickness of wall. The thickness of the plastering is not to be included as a part of the thickness of the wall. Walls having a thickness of 4 inches may be used when the height does not exceed five (5) feet. The quality of the workmanship as specified for terra cotta columns shall apply to terra cotta tile walls."—*From Handbook for Architects and Builders.*

Economical Use of Oak Flooring.

As rugs are used almost universally in homes and offices, an economical plan is to have the center section of the room laid with oak flooring of a cheaper grade, and to employ the better grade in the border. After the rug is laid, all parts of the room will have the same appearance. —*From Lumber and Its Uses.*

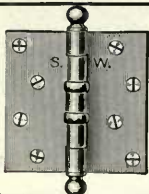
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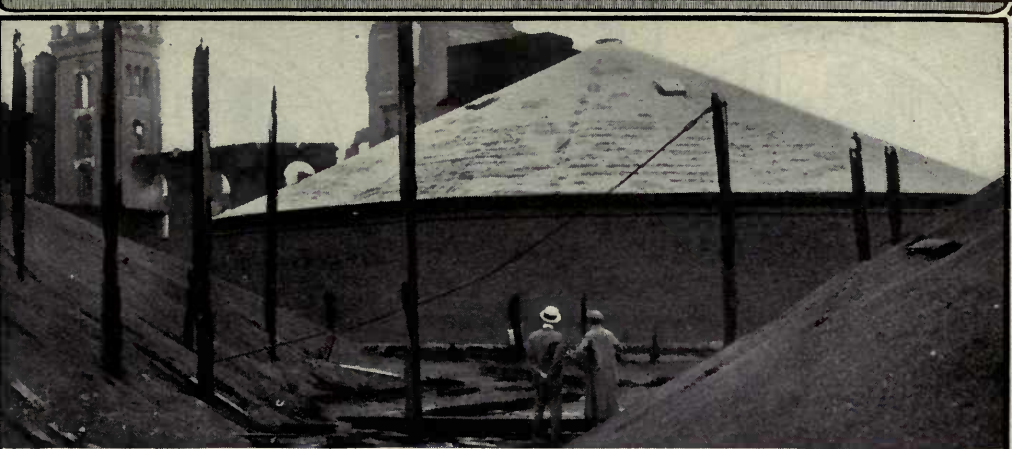


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Hints for Exterior and Interior Finishing.

The Exterior.

KEEPING in mind the general suggestions given above—to have an eye to natural surroundings when deciding on the exterior color schemes of the house remember that the color scheme should not be too assertive. An abundance of white, grays, soft greens and brown of various shades will always harmonize with nature. Red needs an abundance of green as a background, and only the duller shades should be used. In the case of brick, concrete, cement and stone dwellings, the color scheme is in a sense automatic, being determined largely by the color of the materials selected. The frame house admits of greater variety of exterior color than any other material. In the shingle house the shingles are stained or oiled. The clapboard house is painted. A general rule to follow in treating the exterior is that the color or tone selected for the walls should cover all the walls and should harmonize with the roof so that the house will become a color unit in the landscape.

A house which is set closely among trees should not be painted green or olive. Colors contrasting with the surroundings are better for the body of the house, but it may have green trimmings and roof if desired.

A house with spangled upper stories, as a rule, should be painted on the lower story a lighter shade than the shingles, which may be Indian red, dark brown, dark green, or some olive shade. The body should harmonize, as, for instance, light or dark olive with Indian red, cream with browns, the grays with dark green or dull red. Pure white with green trimmings is one of the prettiest color schemes for a suburban house set against a green background.

A good color scheme for the Colonial type of house is a warm buff with white trim.

The most careful attention should be given to the architecture of this important exterior feature of the house, for the doorway, by its very character, either invites or repels. A broad, inviting doorway suggests hospitality, and, no matter how unpretentious, it should harmonize with the general architectural scheme.

The living porch should open from one of the family rooms and should have an exposure that will give plenty of air and sunlight. Such a living porch can be made to serve the purpose of a dining room; but a large number of the modern suburban homes are now planned with a special dining room porch opening off the interior dining room, where an out-of-door meal may be enjoyed throughout the fine weather. Another feature of the modern suburban dwelling is the sleeping porch, built on the second story, opening off one of the bedrooms, or from an upper hall.

The door, wherever used in the house, should receive careful attention in the beginning. This will obviate later troubles of sagging, shrinking, cracking, etc. For the entrance, a single door may be used, or a double one; it may have one panel, or many, either of wood or of glass.

The new fireproof doors made of hollow steel are unusually desirable for the entrance door, and may also be used very satisfactorily throughout the house, particularly where their function is to separate one part of the house from another.

After the site and style of the house have been determined, the general plan of interior decoration should be evolved.

The Interior.

In general, if the interior of the house is designed along severely simple lines, stain and soft, dull finish are best for the



"He lives down on the river road, in the shabby, weather-beaten house on the left. You can't miss it."

Shabby and weather-beaten! A striking landmark, no doubt. The porter at the railroad station didn't mean to give the place a black eye, but that is what he did. Too bad the owner hadn't used

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woodwork, and either plain or two-toned walls, with stencil frieze of appropriate design. When the house is of less pronounced style of architecture a wider choice is allowable. Paneling in hall and dining room, finished in some good, dark stain, is always livable, and combines well with white or ivory woodwork used on doors, stairways, moldings, etc. If the house is small the best general treatment for the interior is white woodwork.

A rule which should always be followed in all types of houses in the country is that the standing woodwork and walls of adjoining rooms must show no contrast, but harmonize well. An excellent plan is to select varying shades of the same color for the standing woodwork of the different rooms. For instance, one room may be stained in dark brown if it is well lighted, and adjoining rooms may have woodwork that is lighter brown or even silver gray.

The ceiling color is also very important. It must show a tone lighter in shade than either walls or woodwork, but harmonize with both.

There is something homelike, permanent, and comfortable about the presence of much wood in a room, and more and more of it is now being used as we grow in appreciation of our native woods and their decorative possibilities for country homes. The use of beams, wainscots, paneling, in country homes is suitable and decorative, and such wonderful stains have now been perfected by the various manufacturers that charming effects can be brought out of many of our native woods, undreamed of by the average home builder. Our common gumwood is a splendid substitute for Circassian walnut, and the Louisiana red cypress or common chestnut is a splendid wood, full of color, highly figured, and almost as durable as oak. Then there are maple, beech, birch, ash and pine, all of which are excellent if properly treated with stain. The hall, living room, dining room and library can stand a good deal of woodwork and it can be of a dark tone, because the character of the room implies solidity. Such rooms should, therefore, be finished in strong fibred woods like oak, chestnut, cypress, ash

or elm. For bedrooms, reception rooms or drawing rooms, where dainty furnishings are required, woods of a finer grain should be used, such as red birch, maple and gumwood when finished in a silver gray tone.

For the floors some good hard wood should be used and polished until it glows, never to the slippery point, for this is neither safe nor artistic.

The Builder.

Painting Metal Ceiling.

It is best to paint sheet steel ceilings with a gloss finish, for the reason that they look better with such a finish, and distribute the light better, although some do not hold this view, arguing that the gloss does not distribute the light evenly over the room. The manufacturers of such ceilings, however, prepare the sheets for such a finish, that is, for the glaze effect. After the sheets are stamped they are dipped in a thin liquid composed of a little zinc white to varnish thinned down with benzine. Not enough zinc white is added to make the finish opaque, though this is hardly material since the finish is applied by the painter, who would much prefer a different prime coat, one quite dead or flat. A coat or two on this will make a finish. If the sheet steel has not been primed or coated at the factory then it is for the painter to cleanse it of grease and dirt, with benzine, or with some alkaline solution. When dry there should be a coat of raw or boiled oil given, adding a little drier to the raw oil. While the makers of steel ceilings who prime the sheets use a primer with a pigment base, zinc as a rule, yet it is still true that the best primer is the simple pure oil, raw or boiled. Of the two pigments, zinc, if any base is to be used, is better than white lead, which will cause rusting. After priming with the oil and after it has become dry, any desired paint may be applied, though usually, as stated, a gloss paint is given preference, though many prefer a soft, rather flattish effect.

Repainting Iron or Steel Work.

Select dry weather for this work, as freezing or wet weather is very bad. Free the surface from all scale and dirt, rust, etc., a wire brush being a very useful tool for the purpose. If any rust, etc., is al-

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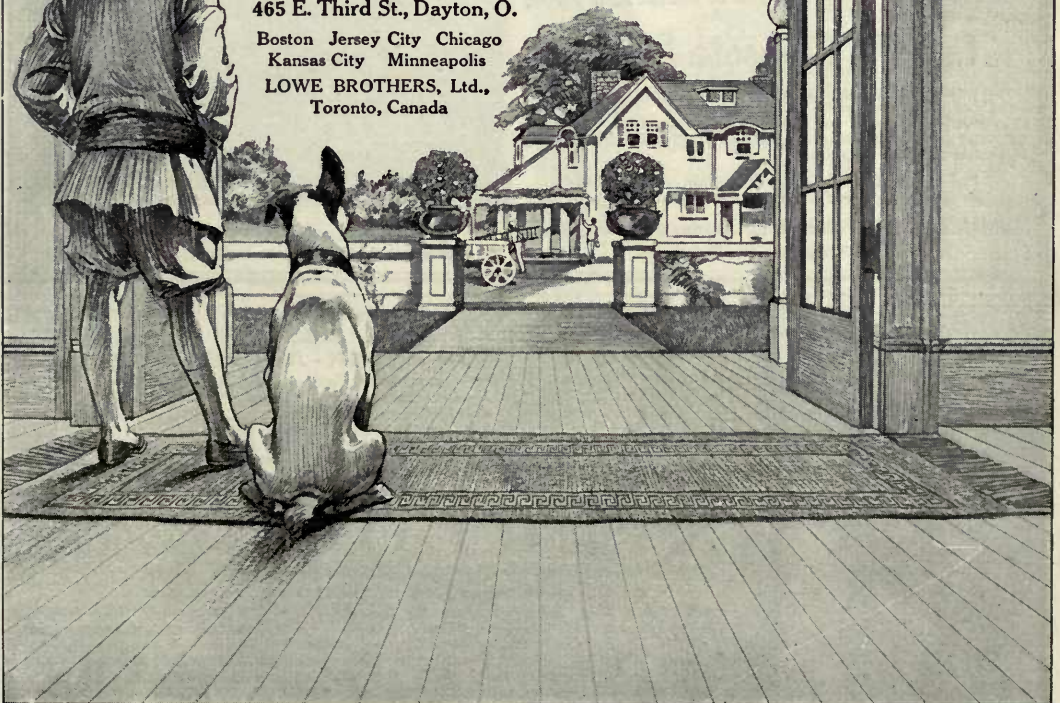
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PAINTING AND FINISHING—Continued

lowed to remain under the new coat of paint you may be sure that it will show up later on. If the work is in fairly good condition, the bad places may be scraped and touched up with paint, matching the old paint as well as possible, and when dry, giving the whole surface a coat of paint, or in some cases just a coating of raw or boiled oil will do, as in many cases the oil is the only thing that has left the

paint. This plan works equally well in many cases of woodwork, on houses, etc. Often a coat or even two coats of paint are applied when all that is really necessary is a coat of oil with a possible preliminary touching up with paint. When painting over old painted metal work a paint containing some turpentine is well, as this fluid penetrates well, getting the paint down into any possible pores of the metal, for of course it is necessary that the new paint adhere well with the old.

—The National Builder.

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The Only Real Stains

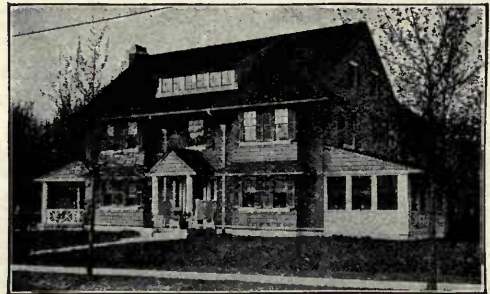
Don't judge shingle-staining by the crude and tawdry colors made by cheap builders and painters, which are nothing but coarse paints thinned with kerosene or some other inflammable cheapener. They give you no idea of the beautiful velvety coloring effects of

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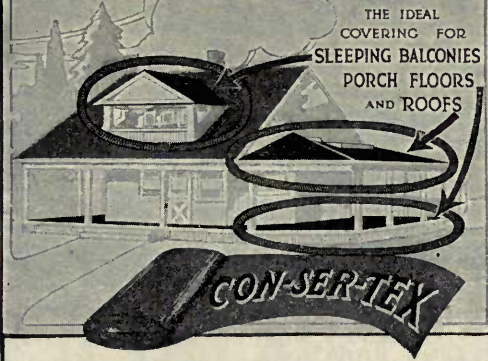
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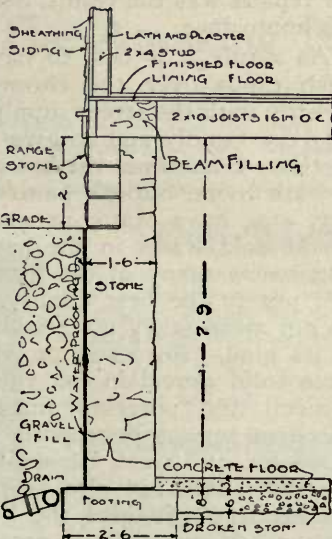
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(FIG. 6)

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OUR household plumbing needs repairs. It has given you good service in past years, but now you find you must renew much of it, or at least make extensive repairs and improvements. Recently the following repairs were made in a home of moderate cost at a minimum of expense.

The Piping.

Lead piping was much used in the past. Galvanized iron piping is now much in favor. Still lead has proved very desirable, and it is unnecessary to remove much of it when overhauling the piping system in an old house. Leaks usually develop near or at joints in the piping system, often they may be found where a branch line leaves. There is a reason for this, when the piping heats, as it will when the water in the kitchen boiler is heated it expands, especially is this found at the hot water boiler connections with the range, or in any joint of the hot water piping. The cold water piping also is subject to leaks at the joints; usually this is caused by the heavy pressure put upon it by the vastly increased pressure in these days of most city and town water systems. It is unnecessary to take out a long section of lead piping when a part containing joints gives way. Simply have your plumber remove a section covering the damaged parts, get pieces of galvanized piping cut and fitted together, and upon the ends of the lead pipe fit couplings which will allow the galvanized iron to be connected with the lead. A typical example of this is found where the pipe which leads from the hot water faucet in the kitchen sink runs down to meet the supply from the boiler and joins it at right angles. New sections thus added will allow the old straight lengths with no joints to last much longer.

Let us here sound a note of warning. Never allow a piece of galvanized iron, copper or brass piping to be too short to make a given connection, necessitating a short length, threaded at both ends, and coupled by what are known as "couplings" to the other sections. Many a time an error will be made in measuring, and a five or six inch or so piece will be added in the above described manner to save the small cost of an entire new length. A leak is very likely to develop at such a point, primarily because the short piece will have to be put in a vice to have the ends threaded to fit the couplings, and the pressure exerted by being in the vice and having the work done on it, will nearly, if not always strain the metal, because the piece is too short to stand the strain. Such a leak came under the writer's notice recently and before it was discovered a large amount of damage was done to the ceiling and side walls of the room below, and a large bill for repairs was the result, not to mention the annoyance.

As a rule it is best to have the small flush tanks over the closets connected directly with the street supply. Then they fill very rapidly and so give better satisfaction. Sometimes the hot water faucets in bath room, butler's pantry sink, laundry, etc., have "tank pressure" as well as the cold water in the bath room. If you renew many of the fixtures be sure and put in the best quality. By this I do not mean fancy material, but the best of its kind. For example, you need not have solid porcelain for your bath tub, a metal tub "porcelain lined," will give excellent service if properly cleaned and cared for, and wash basins, butler's pantry sinks, etc., can also be made in this manner and will give the best of satisfaction. If you have to renew your kitchen hot water boiler be sure to get a copper one. The writer has a copper boiler which has given twenty-three years

\$45 A Year Heats This 8 Room House With An Underfeed



READ THIS STARTLING LETTER

Baraboo, Wis.
Your UNDERFEED Furnace, which I have used now for five winters; is the one thing I have ever bought that is "all" that its makers claim for it. My home in Central Wisconsin is an open eight-room house, and \$45.00 is all I ever spent to warm every inch of it for a year. Besides being very responsive, it is very easy to care for. My ten year old daughter cares for it most of the time. Should I ever need another furnace it will be an UNDERFEED. 107 12th Street F. H. HORSTMAN.

If You Are Going To Build, Beware!

Your new home will be no more satisfactory than its heating equipment. All your comfort plans mean nothing if your heater is inefficient or too expensive to operate. Over 25,000 home builders have now adopted the clean, economical way of heating—the Underfeed way. Thousands

have written us such statements as: "Heats 12-room house for \$40." "A great fuel saver." "No repairs in 7 years." "For economy and heat, can't be beat." "Ten rooms heated for \$28." "Saved \$122 a season." Could you ask for stronger proof of merit?



Cut Coal Bills $\frac{1}{2}$ to $\frac{2}{3}$

The Underfeed principle is different from all others—and it's better. Coal is fed from below. All the fire is on top. Smoke and gases are consumed, making more heat with no soot, smell, smoke, clinkers or dirt, and few ashes. Cheap slack soft coal or pea and buckwheat sizes of hard coal yield in the Underfeed as much clean, even heat as *highest* priced coal in other heaters. Any kind or size of coal may be used. The Underfeed is adapted to warm air, steam or hot water in buildings of all kinds, large or small. Soon pays for itself through its fuel saving.

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—our latest and best style makes the Underfeed principle better than ever. It's the greatest advancement in heating systems in the last decade. The Williamson *New-Feed* Underfeed uses less coal—requires less attention and delivers more satisfactory results than ever before thought possible. The attention of a small boy *twice* a day for the simple, easy, firing operation and *once* a week for the removal of ashes is all that is required. Every possible objection is banished in the Williamson *New-Feed* Underfeed.

Our Startling Guarantee

We guarantee a saving over your present coal bills of a least one-half by means of the Williamson *New-Feed* Underfeed, when properly installed and operated. The burden of proof is on the Underfeed. It has satisfied thousands—it will satisfy you. If you are tired of paying big coal bills, or if you are building, send the coupon for full details. It will pay you well.

The Williamson Heater Co.

Formerly
The Peck-Williamson Co.
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Cut-out View of Furnace

MAIL
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I would like to know
how to cut my coal bills
from one-half to two-thirds
with an Underfeed.

Warm Air

Steam or Hot Water.....
(Mark an X after system interested in)

Name.....

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My Dealer's Name is

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of continuous service and is still in the best of condition. The galvanized iron boilers will not last and must be renewed at frequent intervals, costing much money. A copper one is a most economical investment. If you use coal in the kitchen, a late pattern kitchen range will also prove economical; so many improvements have been made lately that the coal saving will often pay for a new range in a remarkably short time, not to mention the comfort of using an up-to-date article. For example, the soot may be so easily removed from the new pattern ranges. Those of us who used to have "no end of trouble" with the old style can appreciate this.

It is false economy to use faucets which have become worn out. Such faucets injure the washers which control the complete stoppage of the water when the faucet is closed, and if the water runs uselessly away, enough money to install new ones is soon wasted.

When renewing washers on faucets be sure that soft ones which would be injured by the hot water from the hot water pipes are only used on cold water faucets. Plumbers are sometimes careless about such matters; also about putting the correct sized ones on. Only the other day I found a case where the difficulty was not an insufficient supply of water, but simply that the water could not pass out of a faucet with incorrect sized washers upon it. A large bill was saved in this instance, because it was first thought necessary to renew the piping, and three firms suggested such a proceeding, the fourth man however who made the examination, took the faucet apart first before making a further investigation. He did not have to look further. The others assumed the piping was too small to allow the water to pass readily through it. But the difficulty was in the faucet.

If you have a large range and find,—when you have a heavy fire in it,—that much noise is made in the hot water boiler in the kitchen, also that steam comes out of the different hot water faucets at such times, you can, with a minimum of expense, run an additional "expansion pipe" from the kitchen hot water boiler. You will be astonished to see how nicely this will stop the difficulty.

Heat Transmission and Insulation of Buildings.

In the course of his address before the American Society of Heating and Ventilating Engineers at its July meeting in Cleveland, President S. R. Lewis dwelt upon the application of the idea of insulation against heat and cold to our buildings. He pointed out that while we spend time and dollars as well as skill and genius in elaborating the heat-transmitting appliances and the fuel-consuming devices we give no more than a cursory investigation of the type of construction of building and no effort to influence its construction so as to reduce the heat losses. This he regarded as a crime against future generations. Continuing, he said:

There are instances available where 5 per cent of the cost of the building, expended on heat transmission insulation rather than on a larger heating plant, saved in fuel charges alone its cost within three years. The field this opens up is almost unexplored. We know, however, how much more efficient as regards heat insulation is an ordinary sawdust packed icehouse than an ordinary dwelling, and how much longer heat is retained in an ordinary fireless cooker than in any part of the best insulated transmission department of an ordinary heating plant.

Greatest Enemy of Good Ventilation.

We know that poor insulation of walls and windows is the greatest enemy of good ventilation, preventing proper diffusion of the fresh air. We know that tight windows or storm sash permit of very considerable fuel savings. We know that warm winter buildings are cool summer buildings. We know that a \$10,000 investment with a 5 per cent interest charge is better for the borrower than an \$8,000 investment with a 20 per cent interest charge. We seem, however, unable to get perspective enough to use this knowledge, else buildings with rattling windows and no storm sash, thin walls, cold attics and cellars, direct-indirect radiators, unduly high ceilings, single slab roofs, etc., coupled with the most elaborate and expensive heating plants, would cease to exist.

In our practice as engineers are we losing perspective in regard to the location in the room of the heat source? We

"Stays in as long as the house stands"

The Reason Why So Many "Minneapolis" Heat Regulators Are Sold Each Year—

Is because those sold thirty, twenty, ten, two years ago are all making good.

The "MINNEAPOLIS" HEAT REGULATOR

"THE HEART OF THE HEATING PLANT"

Insures an even healthful temperature in the home. Saves fuel and entirely eliminates the attention to drafts and dampers. It thinks and acts for you every minute of the day and night and is good for a life time of constant, accurate service. Used with any heating plant—hot water, hot air or steam. Guaranteed satisfactory.

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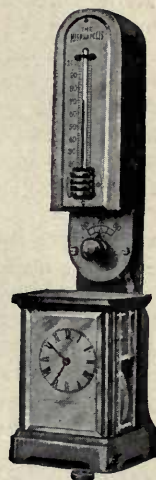
WM. R. SWEATT, President

Factory and Offices: 2725 Fourth Ave. So.,

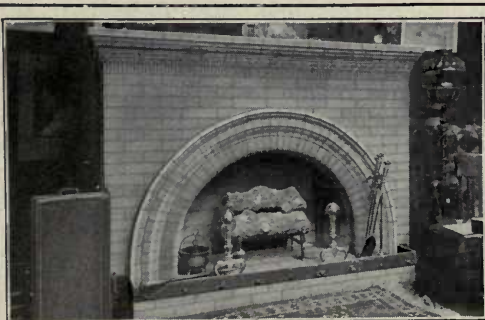
MINNEAPOLIS, MINN.



Model No. 47
1-day clock



Model No. 60
8-day clock



Do Without Smoke!

A smoky fireplace makes your living room unbearable. Nine times out of ten it's due to faulty construction. Then why not buy a

COLONIAL FIREPLACE

that is shipped to you with all moulded brick cut and fitted for setting up and full scale drawings that make erection simple.

Colonial Fireplaces are equipped with the Colonial Head, Throat and Damper that is adjustable to all weather conditions.

Colonial Fireplaces are economical both in labor saved when installed and in consumption of fuel. Our booklet "The Home and the Fireplace" shows a few of our many designs. Send for it to

COLONIAL FIREPLACE CO.

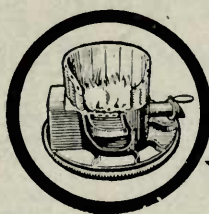
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CHICAGO

The Furnace that keeps Cold weather out doors

Study the heating problems of your new home and get the furnace that will give you real home comfort instead of compelling you to fight the cold from room to room.

XXth Century THE TROUBLELESS FURNACE

will give you all the heat you want at less cost in money and energy. Twenty years of furnace building experience is behind it. It burns any fuel evenly without waste. No gas, dirt or half-burned fuel. It is sturdily and scientifically built to last many years. Write for catalog No. 53 before you purchase any furnace. It will give you light on heating questions.



The
XXth Century
Heating &
Ventilating Co.
Akron, Ohio

learned, very early in our experience, that the heat transmission varies, among other things, in a certain proportion as the difference in temperature between the hot and cold objects varies. Is it then the best practice to place the hottest thing in a room against the coldest object? The dean of one of our greatest engineering schools agreed with me that in most instances the radiator location was far more a factor of the convenience of the occupants of the room than of their comfort. Granted reasonably tight windows and fairly well insulated walls, the radiator may be alongside the inside wall as satisfactorily as alongside the outside wall. May not the radiator be smaller—will not the piping be less expensive—will not the fuel cost be lower, if this procedure is carried out consistently?

Is it not a loss of perspective to cling to the idea that air for ventilation shall all have been heated prior to its entry to a room? Our belief in this is traditional. Is it based on truth? It has been demonstrated that unheated air may be introduced into rooms under certain peculiar ideal conditions, and that under these conditions the air feels better to us than air which has been heated. This process has proven good for street cars. Shall we not hope for the development of the process for buildings, so perfected that it shall operate continuously and effectively? I be-

lieve that it will surely follow the construction of properly insulated buildings, and that we cannot approach perfect ventilation until we build insulated buildings.

—*The Building Age.*

A Legal Decision of Interest to Builders. (From the National Builder.)

Plaintiff was in the employ of defendant as painter and decorator. He used a scaffold, consisting of a plank stretched upon ladders. Planks and ladders were furnished by defendant. There is evidence that in the course of the work it became necessary to use a plank of different length from any that had been furnished, and that defendant directed plaintiff's foreman to go to an employe of defendant in charge of another job and that such employe would furnish one. The foreman acted accordingly and the plank was so furnished. It was unfit for the purpose by reason of a knot near the center. This knot was somewhat obscured by lime, plaster, and dirt. The duty of defendant to furnish suitable plank for scaffolding was absolute, and could not be delegated. The evidence is sufficient that this plank was, in contemplation of law, furnished by defendant, and that defendant was negligent in not furnishing a suitable plank. The question of whether plaintiff assumed the risk of the use of this defective plank was for the jury. The test is whether the defect was known to or plainly observable by him, and whether he understood, or by the exercise of ordinary observation ought to have understood, the risk incident to its use. In view of the manner in which this defect was obscured by lime, plaster and dirt, the question of assumption of risk was one of fact.—*Rudolph vs. Wright*, 144 N. W. (Minn.), 430.



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50% Larger Wardrobe
capacity and you can
save from \$100 to \$300 in
building a home.

Send 50c. for Plan
Book which shows 22
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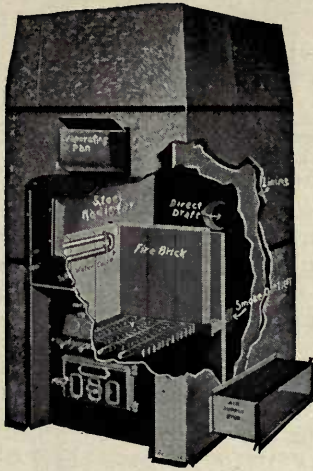
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Give service equal to the best PUBLIC UTILITIES PLANTS in cities. Vacuum Cleaning, Refrigerating, Washing Machines, Cream Separators, Churns, etc., driven from one engine or motor. SIMPLE, COMPACT, ECONOMICAL. Last a life time. Any size from a cottage to a palace. Send for bulletin 58 on any subject. KEWANEE PRIVATE UTILITIES CO., Formerly Kewanee Water Supply Co., Kewanee, Ill. Factories: KEWANEE, ILL., and LANCASTER, PA. Branch Offices: NEW YORK and CHICAGO. DEALERS EVERYWHERE



The Hess Furnace is a *Health* Furnace

IT is admitted that any heating method which moves and circulates the air rapidly brings about a more healthful condition in the home atmosphere than a method in which the air remains stagnant. *All* furnaces move the air more rapidly than hot water and steam radiator systems, but many furnaces fail in other essentials,

The Hess Furnace is peculiarly a *health furnace*, because, with *every seam welded*, it is impossible for gas or dust to escape, and thus vitiate the air.

Again, the very large expanse of radiating surface, *moderately heated*, in the Hess Furnace, is more desirable from a health standpoint than the small surfaces, *intensely heated*, of the ordinary cast iron furnace.

Humidity, or moisture in the air, has a most decided influence on health, and the Hess Furnace covers this point exactly, by a method of evaporating moisture which we have not seen in other furnaces, and which results in a moisture distribution equal to all health requirements, and which cannot be obtained by the ordinary water pan, as it is placed in other furnaces.

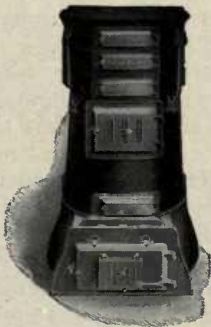
Our 48 page booklet on Modern Furnace Heating will interest any man who cares for home sanitation, and it is yours, free, for the asking.

A rough sketch of your house, sent with your inquiry, will bring to you a plan for heating it and an estimate of cost, *without expense or obligation on your part*. Why not send us the sketch?

HESS WARMING & VENTILATING COMPANY

917 Tacoma Bldg., CHICAGO

We have special terms for contractors. If you are a contractor please mention it. We make white enameled steel medicine cabinets, and family dishwashers, also.



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**Royal Round Hot
Water Heater.**

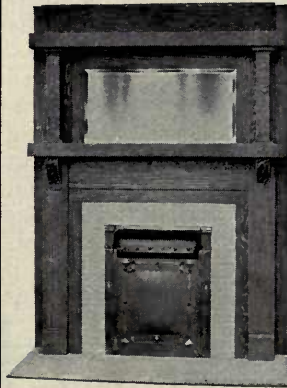
**Royal Sectional Steam and
Water Heaters.**

MANUFACTURED BY

HART & CROUSE CO.

UTICA, N. Y.

80 Lake St., Chicago



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**"From Factory
to You"**

For this Elegant,
Massive selected
Oak or Birch, Ma-
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Mantel.

**Beveled Mirror
18 x 36**

Price includes
our "Queen"
Coal Grate with

best quality enameled tile for facing and hearth.
Mantel is 82 inches high, 5 feet wide. Furn-
ished with round or square columns, as shown
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Dealer's price not less than \$35.00.

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We send our 100-page Catalogue, the finest
ever issued, free, to carpenters, builders, and
those building a home.

Hornet Mantel Company

1127 Market St., St. Louis, Mo.

SPLINTERS AND SHAVINGS

New Lines of Inquiry Promised.

From the Forest Service.

LUMBERMEN are now admittedly conducting their operations with a large percentage of waste, said to be largely due to market conditions which make close utilization unprofitable. There is no general agreement as to the actual causes of existing conditions and the responsibility for present undoubted evils. With rapidly diminishing supplies of timber to draw upon, wasteful lumbering has come to be recognized as a matter of serious public concern and an inquiry to discover the causes and seek for possible remedies is regarded by forest service officials as an urgent need. It is believed that the lumber industry itself recognizes the need and will welcome an inquiry conducted along constructive lines.

Lines of inquiry provided for by the plans of the forest service include the present lumber output and demand, the conditions known to the trade as overproduction, the effects upon production and market prices of speculation in timber and of carrying charges, producing and distributing costs, including freight and the charges levied upon the product by wholesalers and retailers, and the amount of waste under present methods of exploitation. Special attention will be given to means of utilizing low grades of lumber and by-products.

Time to Build Homes.

In discussing the prices of building materials and the cost of labor, a writer in a recent issue of the *Manufacturing Record* points out that as architects and contractors have more time just now to plan and carry out contracts than in periods of activity the present is the time to build. The man who wants a home and has money with which to build it can do it now to better advantage than when prosperity comes and at a much lower cost and with more care and attention on the part of contractors and mechanics.

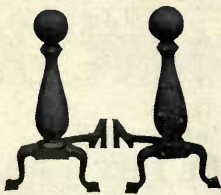
"Thousands and tens of thousands of men in this country are intending to build homes for themselves, but are waiting for what they think will be a more propitious moment, when everybody is an optimist rather than a pessimist. When they do undertake to build, every item will cost them more, and they will find great difficulty in securing as much attention in construction work and in the equipment of their homes as could be had now.

"This is preëminently the time when every man who expects to build a home, a store, or an office building, if he has the money, should do it. This is the time when every manufacturing enterprise which knows that it needs new machinery or the enlargement of its plant, and has the money available, should do the work now. This is the time when our municipalities should press as vigorously as possible all of their improvements, in order to get the benefit of the lower prices of materials now prevailing as compared with boom periods. Almost over night a change in business could be brought about, if people who are able to do this building and construction work would undertake it now."

What Makes a Beautiful Home?

By Henry Tyler, Landscape Gardener.

One has said, "A house is never a home until guarded by trees, seconded by shrubs, and tied down with vines and creepers." This tied down is significant. A house set up in a meadow is a dreary



BEAUTIFUL ANDIRONS

and many other articles
of attractive, dependable

Hearth Furniture

Basket Grates, Fenders,
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Fire Tools, Wood Holders.

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We also furnish tile for
mantels and hearths.

SPECIAL: No. 9191, Height 18½ in.

Design No. 9191 as shown	{	In Art-Black	Per Pair	\$5.75	{	FREIGHT PREPAID to Your Station.
		In Solid Brass					Brush Finish	16.50

FOR SAME DESIGN, 24½ in. high, quotation on request.

SUNDERLAND BROS. CO., 323 So. 17 St., Omaha, Neb.

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Don't Buy a Cat in a Bag!

When you decide on the roofing for a building, know what you are getting and what service you can be assured it will give you. Specify

UNDERFELT ROOFING

And get our Guarantee that it will give you absolute satisfaction or we will replace. It is your assurance against roofing trouble.

We know the Quality of Underfelt---we want You to.



McClellan Paper Company

"Diamond Mack Quality"

MINNEAPOLIS

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MINNESOTA



Are You Going to Build?

At the time you are arranging to plan that new home with your own architect, and naturally desire to study the ideas of other leading architects who specialize on residences of the moderate-cost type, you can get many valuable suggestions from designs and plans shown in eight issues of

Building Age

A National Building Publication with Monthly
Circulation of 25,000 among Builders, Architects, Owners.

The information contained in *Building Age*, both in the editorial and advertising pages, is of the keenest interest to home-builders, and will enable you to introduce numerous features in your new home, that add to the convenience, comfort and value, without material additional cost. *Building Age* also contains data that *should save you many dollars.*

OUR SPECIAL OFFER

The price of these eight numbers is \$1.60. We will mail a set to you for special price of \$1.00 if you order at once and mention KEITH'S MAGAZINE. Don't delay as the supply is limited.

THIS \$1.00 SHOULD SAVE YOU HUNDREDS

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For enclosed \$1.00 send the eight numbers, according to special offer in KEITH'S MAGAZINE.

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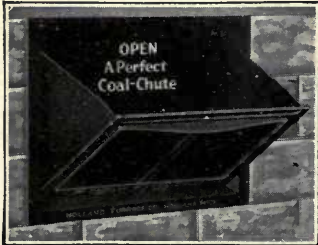
Address



intruder, but tie it into the meadow with proper planting and it begins to look as though it belonged there, and had a close and intimate association with the ground, thus rapidly becoming a part of it.

In planting your tree and shrubbery layout, one cannot be too careful to maintain a proper sense of proportion, and by leaving the center of the lawn free from plantings, you can increase the apparent size of your lot, can bring out the points needed to accentuate the beauty of your house, and with proper shrubs and vines can make a perfect landscape picture out of each dwelling place.

One should always remember that the exterior of a home is equally as important as the interior. It is seen first and last and by all the passing public. So whether your home be old or new, small or large, an attractive yard takes the leading part in making the charming home. Such a place will not only give you greater satisfaction, but will rent for more, sell for more, and command a larger loan.



**If You
BUILD
BUY
OWN**

Be up-to-date
and have the
**WORLD'S
BEST**

The WINDOW Chute

For Your Coal Bin

Thou-
sands in
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The Very
BEST

Write for
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HOLLAND FURNACE CO.

Holland, . . . Michigan

World's Largest Direct Installers of Furnaces.

King Christian of Denmark to Furnish Home in American Style.

King Christian has decided that the newest of his numerous residences shall be furnished in American style in every detail. He will not imitate the home of the American multi-millionaire. The style he has selected to copy is that of the simple and efficient equipment of the average American home. He has long been an admirer of the American arts and conveniences of home-making, and he has insisted that his newest house, which is situated on the Skaw, will lack none of them.

Terrazza.

The term "terrazza" refers to a form of cement floor in which the surface, instead of being merely the cement mortar, is covered with crushed stone, marble, granite, etc., and which is then rolled into the surface. As soon as it is set the surface is polished, exposing the face of the stone chips.

It is worked practically the same as ordinary cement floors except for the surface and polishing and rubbing down. This is done usually on large jobs by machines but on small jobs or in small rooms is polished by hand with a section of a grind stone weighing about 10 to 25 pounds. This, with the addition of water, works the surface down very rapidly.

Terrazza is practically laid off in patterns, using different colored stone chips for the different patterns, panels, borders, etc.

—From *The National Builder*.

HESS MEDICINE SANITARY CABINET LOCKER



The Recessed Steel Medicine Cabinet

The Only Modern, Sanitary STEEL Medicine Cabinet

or locker finished in snow-white, baked everlasting enamel, inside and out. Beautiful beveled mirror door. Nickel plate brass trimmings. Steel or glass shelves.

Costs Less Than Wood

Never warps, shrinks nor swells. Dust and vermin proof. Easily cleaned.

Should Be In Every Bath Room

Four styles—four sizes. To recess in wall or to hang outside. Send for illustrated circular.

HESS, 917 L Tacoma Building, Chicago
Makers of Steel Furnaces. *Free Booklet*

Vitralite

THE LONG-LIFE WHITE ENAMEL



IT may be, if you wait, a Fairy will flit into your home (whether it be old or new) and using a swansdown brush, decorate it with a finish white as falling snow, smooth as mandarin silk.

To be sure of this result tho, utilize Vitralite, the Long-Life White Enamel. It keeps its luster, surface and beauty with an indifference to the flight of time, whether used inside or outside, on wood, metal or plaster. Shows no brush marks, and is water-proof.

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Send for Booklet and Two Sample Panels

one finished with Vitralite and the other with "61" Floor Varnish, the varnish that made famous the words "*Test it with a hammer. The wood may dent but the varnish won't crack.*" "61" is heel-proof, mar-proof and water-proof, hot or cold.

The quality of P. & L. Varnish Products has always been their strongest guarantee. Our established policy is full satisfaction or money refunded.

Pratt & Lambert Varnish Products are used by painters, specified by architects, and sold by paint and hardware dealers everywhere.

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ESTABLISHED 65 YEARS

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New Booklets and Trade Notes



THE August issue of *Atlantic Terra Cotta* contains a number of very beautiful photographs of decorative work done in Terra Cotta. Among these we note especially the entrance of the Harrison Building, Philadelphia, Pa. This is a very attractive example of the use of gray Atlantic Terra Cotta with large blocks of plain Terra Cotta ashlar.

A more simple, but very effective design is the entrance of the Whittier Public school, Philadelphia, contrasting gray Atlantic Terra Cotta with a façade of face brick. The Atlantic Terra Cotta Company are pleased to furnish information and estimates of plans from architects' drawings.

The July issue of *The Pine Cone* contains a number of instructive White Pine facts which will claim the attention of all prospective home builders.

A little booklet comes to our table which gives a lucid explanation of *Vernon's Patent Noiseless Building Construction*. By means of diagrams it shows their method of preventing the passage of sound from one room to another or from a room overhead to a room beneath. This will be of especial interest to anyone planning a house for the use of more than one family.

The California Redwood Association of San Francisco, Calif., sends out an attractive souvenir booklet of the first annual "Forest Products Exposition." It is charmingly illustrated and the various uses of Redwood described.

The Trenton Potteries Company, of Trenton, N. J., issue a new booklet called "Class." The name, they tell us, is used in the sense of distinction and it most aptly describes both the character of the publication and the buildings illustrated therein. *Class* calls attention to the various products of Sanitary Pottery in public and private buildings.

The *Interlocker* is a small booklet issued monthly by the *Ohio Clay Company*, of Cleveland, Ohio, in the interests of the Denison Interlocking Tile. A recent issue contains a number of photos of interesting small houses where this excellent material was used in construction. The prospec-

tive home builder will be interested in an article dealing with the comparative cost of this construction, and the protection which it affords.

The Cleveland Builders Supply Company sent out a booklet descriptive of Caen Stone cement which is an admirable example of press work. It profusely illustrates the uses of this building material.

A correspondence school is being conducted from Far Rockaway, New York, on the *Economics of Home Building*. In their Foreword they tell us that their treatise is meant to appeal to those "who desire to buy the 'right' plot of ground, and build a substantial home at low cost." They aim to give the public the benefit of the experience of a real estate broker, an attorney, an architect and a builder. Howard and Callmann are the architects and engineers of the school.

Lumber and Its Uses, by R. S. Kellogg, is a book recently issued by the Radford Architectural Company, Chicago, Ill. It gives an illuminating and instructive discussion of the physical properties of wood, various grades of lumber and the standard sizes in which it comes. It is also a good hand-book for information concerning hard and soft timbers and the uses to which they are best adapted. The various methods of preserving, fire-proofing, painting and staining woods, are treated at some length. Those interested in wood as a building material, or in any of the commercial uses of wood will find this book helpful. It contains many good illustrations of the text, is carefully indexed and gives over a hundred tables concerning the uses of wood. This book of 352 pages, cloth bound, retails at one dollar.

The Detroit Heating & Lighting Co. send us their attractive booklet—*Light and Heat*—for Country Home Comfort—the booklet tells the story of how complete city service on the farm or in the village home is provided through an independent gas plant, which heats, cooks and lights, with perfect safety and at a minimum cost.

Handy Electric Wiring Devices, is Catalog 22, sent out by the Pass & Seymour Co., Solway, N. Y. The illustrations show the newest things in sockets, shells, chains and fixtures, in all the standard finishes, also specials, such as Verd Antique, Gun Metal, Pompeian Bronze, Roman Gold and many others. The catalog is very full and complete and of service to either the trade or private parties.

Boosting Business is the handsome booklet sent out by the Kawneer Manufacturing Co., Niles, Mich., with branch offices in all large cities. The booklet shows many attractive *Store Fronts* as the best way to *Boost Business*.



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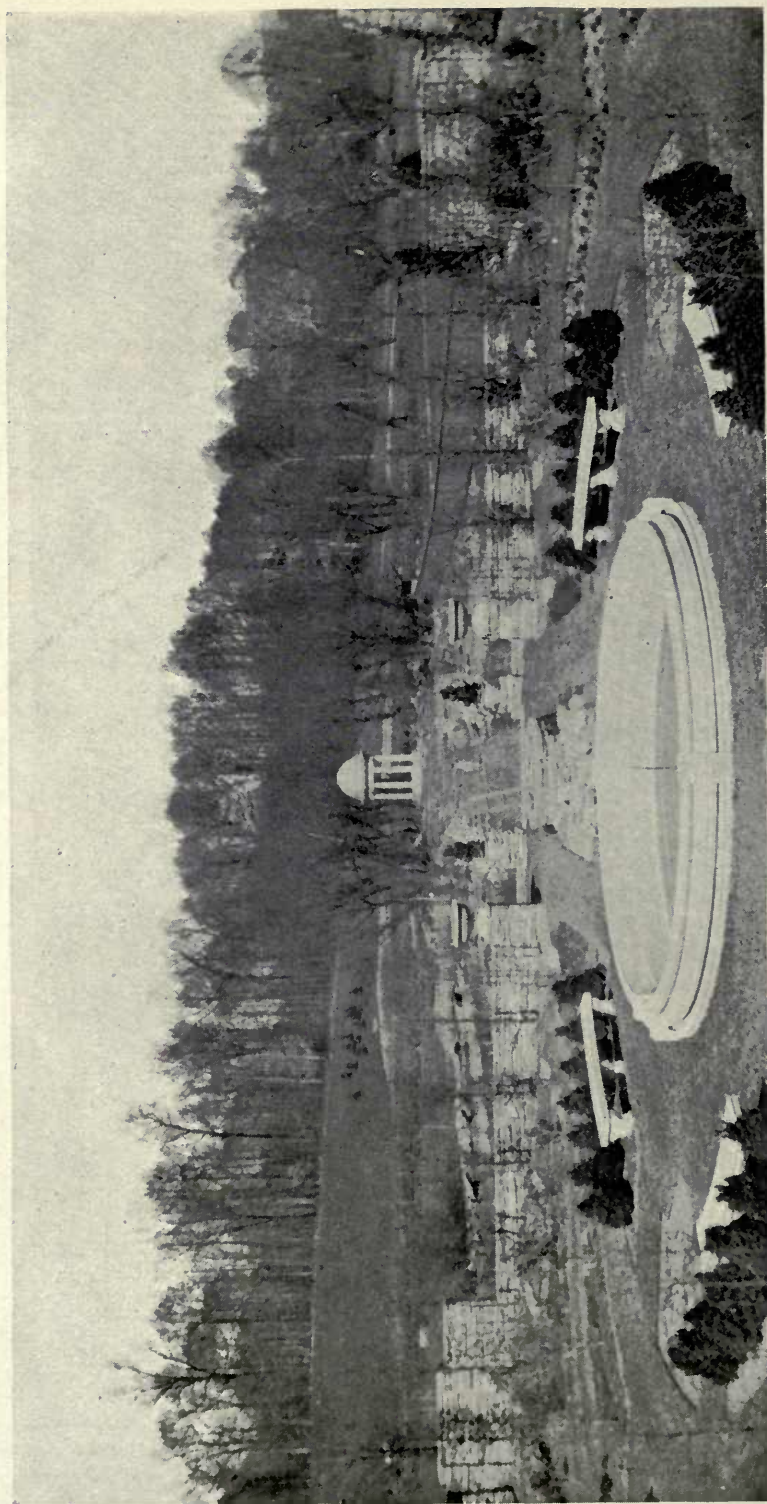
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View of the Castana Estate Showing the General Arrangement of the Splendid Gardens with the Swimming Pool in the Foreground and the Classic Temple of Love in the Background, Thrown Into Relief Against the Gloom of the Woods.

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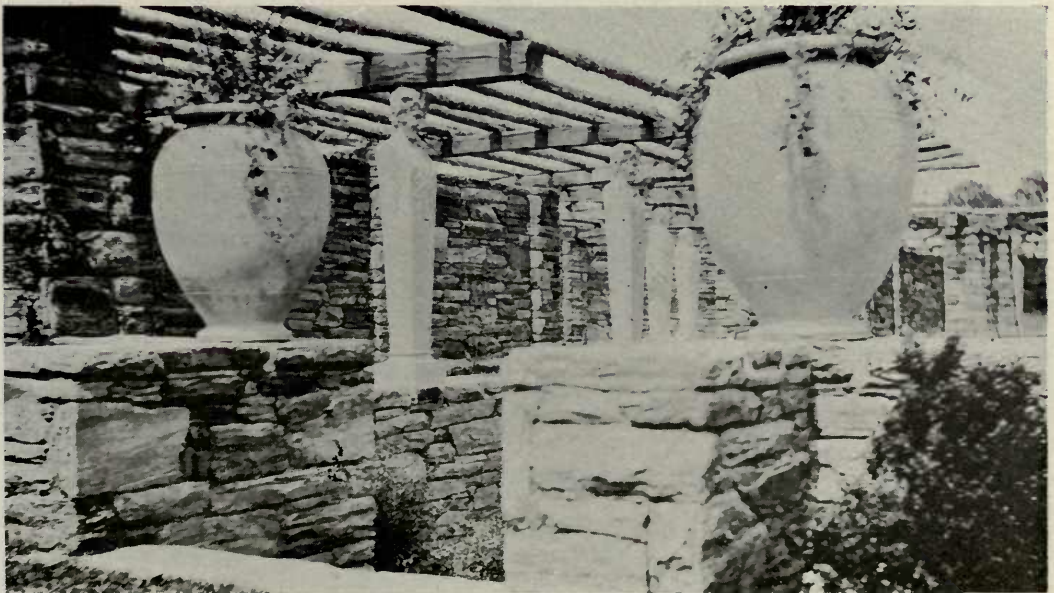
The Decorative Side of Concrete

Henry K. Pearson

MOST of us think of concrete in connection with pavements, foundations, fire-proof buildings and all the solid, heavy, substantial part of construction. It has all this, but it has another side, a side allied with the fine arts of sculpture and color—a field almost untried, but which has already yielded rich results from experiments therein. True, there have been occasional excursions into this field, individual experiments—but until recently, they have not been followed up on any scale of endeavor worthy of the attention of those interested in the creation of

beautiful objects for private grounds. Some years ago, this magazine gave an account of the decorative effects achieved by the casting of concrete plaster in gelatine molds on the beautiful California villa of Paul de Leongpre, the noted flower painter. The very remarkable reproduction of the traceried screens of the Alhambra in all their fairy-like delicacy and exquisite detail, were photographed and shown in this article.

This work was planned and accomplished under the personal and indefatigable supervision of the distinguished ar-



The Rustic Pergola Showing Figures Symbolic of the Seasons and Concrete Flower Urns.

tist himself, from designs to finished product, and was an individual experience we do not remember to have seen again attempted.

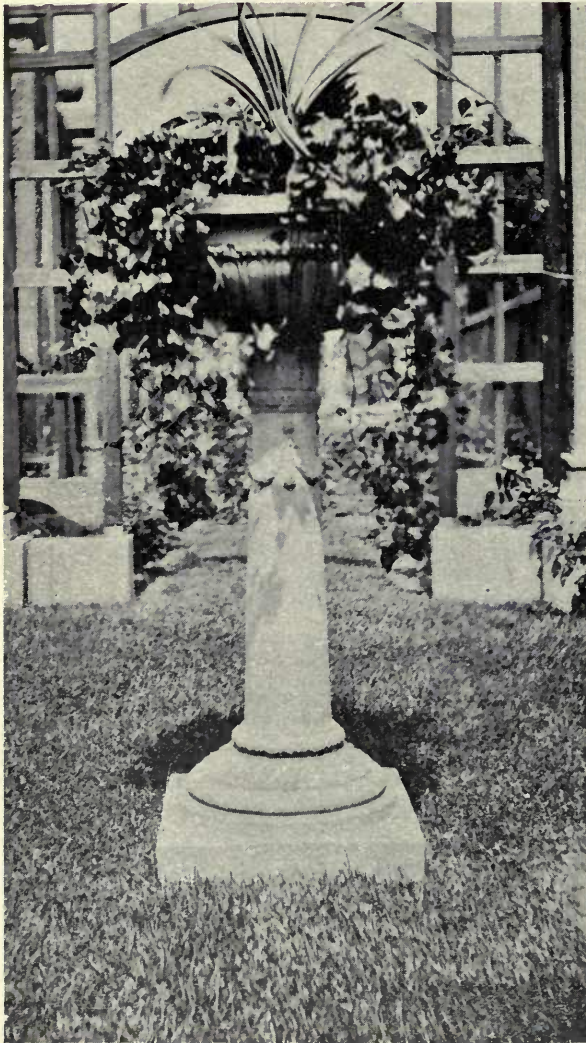
A great deal is now being done, however, in the decorative uses of concrete,

to the use instead of concrete of stone for the great statues that are to adorn the front of the new Boston City Hall.

We are indebted to the Pompeian Stone Company, New Jersey, for the beautiful illustrations here given, of the use of concrete in garden ornamentation. This firm, under the direction of its manager, Mr. Adolph Schilling, recently completed some of the finest ornamental concrete work in the country, for the formal gardens on the Costana estate, Rosemount, Pa., with the co-operation of the noted architect, Alex Mackie Adams, who furnished the designs. Only one or two of the marble subjects are here shown, most of the work being on too grand a scale for the ordinary home-builder.

One feature of the grounds is a smooth, velvety lawn enclosed by high hedges: its only decoration, the flower pots about three feet in diameter. These are arranged at each side of the lawn, and in the season filled with red geraniums, making a pleasing contrast with the green of the lawn and the old marble tone of the flower pots.

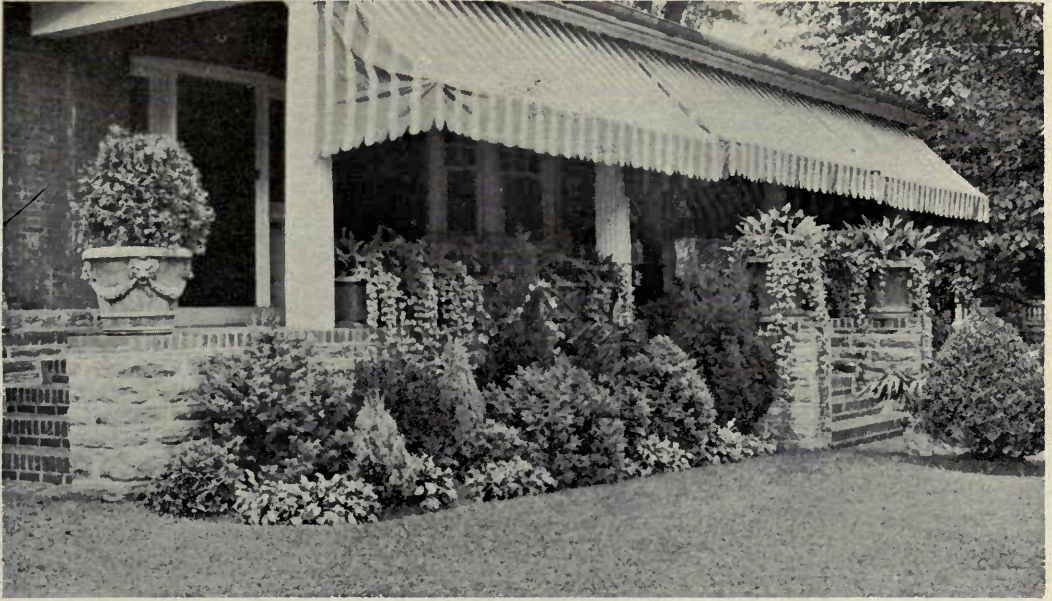
The plain work was cast in plaster molds and the ornamental undercut work was cast in gelatin molds. After casting, at the age of 10 days, the pieces were immersed in large tanks, holding an acid solution,



The Scarlet of the Geraniums Form a Pleasing Contrast with the Warm Gray of the Flower Pots.

several companies now devoting themselves entirely to the development of these possibilities. They have the active and interested co-operation of artists, sculptors and architects, and even the Boston Art Commission has consented

until the outer cement coating was removed. This treatment left a fine grain texture, similar to rubbed stone, and shows the aggregate to best advantage. The general color tone is a warm gray and ivory; it resembles in every respect

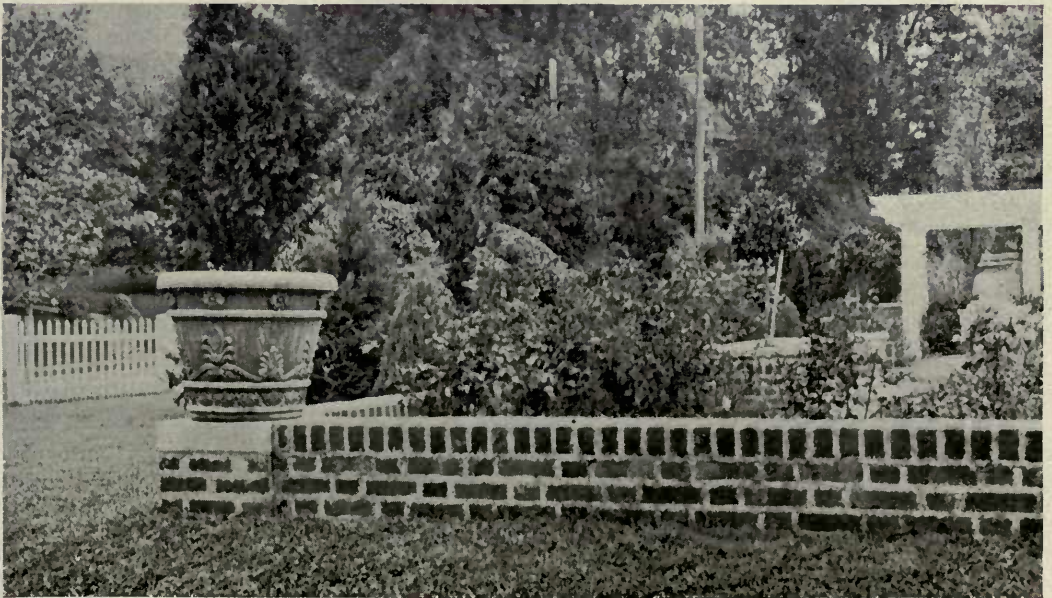


View of Veranda of Home of Edward E. Turner, Philadelphia, Showing Ornamental Use of Concrete.

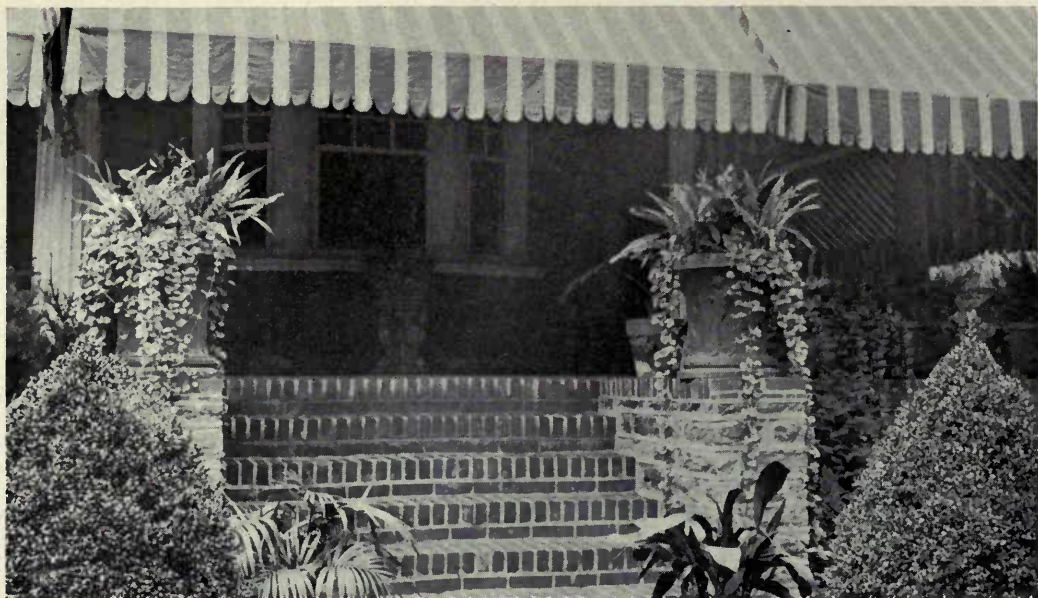
the time worn marble ornaments of the old gardens abroad.

This lawn is divided from the upper garden by a massive stone pergola, the broken levels of the walls being crowned at intervals by well designed urns and

vases of concrete filled with flowers, after the fashion of the garden walls overhanging the shores of the Mediterranean. The lower garden is bordered at its highest levels by a balustrade of unique design in keeping with the Gothic buttresses and



Garden of Edward E. Turner Showing Concrete Flower Urn in Foreground.



Entrance to the Home of Edward E. Turner, in Which New Color Effects Were Obtained in the Flower Urns.

wall effects. Our frontispiece shows the arrangement of these splendid gardens.

At the foot of the balustrade is a swimming pool extending the full width of the garden and flanked by sets of steps. These are embellished with some especially well designed urns and vases. Around the pool are placed four circular benches supported on crouching water fauns. At the extreme end of the cultivated grounds has been placed a temple of Love, with the beautiful woodland as a background. It forms a splendid terminal of this formal garden. It is of Doric order in design and the well finished details show an excellent example of the best in stonecrete craft. At right angles to the pergola is the rose trellis. The concrete work in this feature is of

particularly rich design and resembles verde antique bronze. This color effect was produced by immersing the concrete castings after they have been allowed to stand for about two weeks, in a solution of sulphate of copper. This immersion completely fills the pores of the concrete and forms an incrustation of the copper salts similar to the oxidation of copper and bronze.

Without making any attempt to show the features of these magnificent gardens, we illustrate some ornamental concrete work more nearly approaching the desires and ambitions of the average homebuilder with less pretentious grounds. The illustrations which follow are of concrete decoration used in the garden of Edward E. Turner, Philadelphia, Pa.



Detail of Flower Urn Shown Above.

This work also was executed by the Pompeian Stone Company, under the especial supervision of Mr. Schilling, and in association with the architect, Lawrence Veischer Boyd, of Philadelphia, who designed the garden of the estate.

The color effects obtained by Mr. Schilling are very interesting and suggest the great decorative possibilities in this direction. We give here some extracts from a paper read by Mr. Schilling before the National Association of Cement Users. The extracts, which relate to his methods of obtaining color, follow:

"To produce color effects, we may use the gray and white Portland cements either by themselves, or mixed in certain proportion, adding to them suitable pigments. But, in many cases, the natural colored aggregates, sand, silica, pebbles, grits, marble and granite will give excellent and more uniform results. The importance of mixing the pigment thoroughly with the cement before adding the aggregates, should be appreciated by anybody attempting to make concrete in colors.

"Concrete products with strength requirement should not be subjected to the coloring bath until the concrete has attained its required strength, as the filling of the pores in the concrete stops the action of its curing by the usual methods.

"Coloring by absorption is effective on surfaces of concrete after it comes out of the mold, or after being treated with acid or tools. Surfaces that have been colored by absorbing mineral or metallic colors become waterproof, and the action of the

weather on the metallic colors is the same as on real metals, increasing the beauty of coloring by the usual oxidation noticed on bronze and copper. Surfaces of concrete treated by this method become so hard and dense that they will take a uni-



Showing the Fountain Statue of Verde Antique, a Color Effect of Rare Beauty.

form dull or high gloss polish. I have treated such surfaces in the same manner as marble, granite and metal, under polishing or buffing machines.

"Products made by these methods, such as flour pots, vases and boxes, will hold

water after the second day of casting, and become so hard that when struck with a hammer they ring like a metal bell. I do not think waterproofing compounds are essential in obtaining this result, but consider the proper amount of water and thorough grading of the aggregates as all-important.

"I have obtained excellent two- and three-color effects by painting certain parts of objects before subjecting them to the coloring bath. The parts so colored would not be affected by the color in the bath.

"The artistic possibilities of such treatment are limited only by the color sense and taste employed by the craftsman.

"Coloring solution can be made to penetrate the surface of concrete six inches or more, if the object is placed in the solution in a very green state. It is rarely necessary to penetrate more than $\frac{1}{32}$ in. to $\frac{1}{8}$ in.; this thoroughly fills all pores, gives the desired color effects, and is less expensive.

"Every atom of coloring matter absorbed by the concrete reduces the strength of the solution; and as some of the coloring

matter used is quite expensive, good judgment in allowing only the necessary absorption of coloring matter is advisable from an economic standpoint.

"Aniline colors and the sulphates of copper and iron are the most suitable to make solutions in which to color concrete by the capillary method. The concrete to be colored can be treated after it is several days old."

In the Turner garden the concrete benches are natural Buff Stone color, while the vases and flower boxes are Verde Antique. The fountain statue is also Verde Antique. This color is a new effect in concrete and is obtained by amalgamating dissolved sulphate of copper with the concrete. The mixture results in a rich oxidation of copper and is absolutely permanent under weather exposure.

Some idea of cost is always of interest, and it may be said that the flower pots 24 inches high by 24 inches wide average \$15.00. The benches 20 inches wide and 5 feet long cost \$25.00. The cost of the fountain statue 3 feet high was \$45.00. Of course the same things in the uncolored concrete cost very much less.



A Bungalow in the Canadian Lake Country



WAY up in the big woods of Nova Scotia has been built the pretty bungalow which is shown in these pictures.

It is built on a high bluff overlooking Lake Kedgemakooge of which there is a lovely view from the veranda. The builder is one of a colony club who spend their summers in this paradise of nature where good hunting and fishing are still to be had. The club house is the place for social intercourse and meals if wanted, but our builder is quite independent in this regard, having his own well equipped kitchen and pantry. The Club House membership costs \$100, with annual dues of only \$5.00; these payments entitle the member to a water front lot, either on an island of the lake or the main land.

The colony is thirty-five miles from Annapolis and twelve miles from Caledonia—the nearest town—so that transportation of the lumber of other building materials is a large factor in the cost of building.

In this happy valley, labor agitation is unknown and labor and lumber are cheap. But the long haul and the distance from city sup-

plies offset these advantages to a great extent. Still this very attractive and very complete bungalow was built at a cost of less than \$1,800, including the membership fee, and the cost of a well and pump, \$115.

While there is no basement or heating plant, there is a good sized woodshed in the rear and the bath room is equipped with regular plumbing including a shower, also the kitchen. The cost of the plumbing was \$135. The bath room has a cement floor and is larger than ordinary. As to the porch, there is enough of that to make a house by itself, as it is 10 feet wide and 100 feet of it encircling the cottage.

The ground dimensions of this cottage, exclusive of the porches, are 26x28 feet. The room ceilings are the usual cottage height, 8'-6", except the living room which runs up into the roof 11 feet 3 inches.

The porch floor is painted a serviceable grey; all the other floors are matched spruce, filled and varnished. On these floors are laid native hand-made rugs of different sizes, costing from \$5.00 to \$8.00 each—and



The Forest Road, Thru Beeches and Birches.



The Bungalow in the Canadian Woods.

in this connection one is reminded that the name, Canada, is the Iroquois word for "cabin," kanoda, so that these woody cottages seem peculiarly at home in this country.

The charming and romantic background of natural forest is shown in the excellent photographs taken by the owner, although being taken just on its

est road winding through the tall spruces and maples whose interlacing boughs make a green and lofty arch overhead is picturesque and alluring.

Against the background of such a grove, the white cottage with its mossy green roofs, makes a charming picture.

One enters the cottage through a Dutch door, into a living room, its chief feature being the massive chimney breast built of round and oblong granite gathered from the lake shore in front.

The gleaming brass of the andirons and fireplace accessories is an exotic touch, and beside the glowing and fragrant birch logs across them, our owner is enjoying his favorite author with utmost content.



"Come, Sit Beside My Hearth."

Note: We are indebted to the courtesy of Mr. C. Robotham, New Grafton, Nova Scotia, for the photographs and information here presented.

The How and Why of Paneling

Evelyn M. Watson

ONE of the most effective ways of relieving the uninteresting plainness of walls and ceilings is by paneling. Wood paneling, because of the structural character of the material and its natural beauty, whether carved or plain, is unusually attractive; it gives the impression of permanence and stability which, being in the walls

Many will complain that panels seem to limit and bond the wall, giving the impression that the room is strapped or tied, but it may be argued that as many ships make a harbor seem larger and as many trees against a sky make a horizon appear farther away, so panels, correctly used, give the impression of size and perspective to rooms properly treated.



Broad Panel Strips Used with Good Effect in a Living Room.

themselves, is transferred to the occupants—and what family objects to such implied virtues.

Paneling has practically always been in favor. Earliest architects have used it and each age has added traditions and insignia of the times. Though perhaps during the time between the late Georgian and early Victorian days this pleasing mode of interior decoration was temporarily forgotten, it soon again declared itself—and why not?

Such a treatment will beautify otherwise uninteresting walls. When plain materials are used, like paint or cloth or leather, panels are practically needed. As soon as the room is paneled, directly it becomes distinctive and takes upon itself a certain individuality not possible with patterned decorations.

It is easy to make such rooms all different, no matter how large the house to be decorated. In the first place many kinds of paneling are available: the possibili-

ties are endless. Each room has its wall spaces and accordingly its opportunities. Each room has its outside and inside exposure, its relation to other parts of the house and its place in the color scheme of the entire house. Each room has its woodwork and its chief feature, a window, a mirror, or a cabinet. There is nothing monotonous about paneling if it is carried out correctly.

oration and art service departments to assist buyers in laying out the treatments for their walls. While in simple work bad composition is a glaring fault, in rooms where the paneling is to be elaborate, bad arrangement is doubly deplorable. In preparing the panel schemes, the laws of unity, of subordinating non-essentials and of accenting essential features should be carried out, and in all



The Space Above the Mantel Artistically Treated with Decorative Panels.

The materials with which to develop paneling are many; stucco, paper applique, and, most particularly, wood strips. There are, moreover, different styles of decorative strips, and different kinds of finishes and stains for these strips.

This brings us to the question of planning or laying out the panels. This should always be skillfully done and for this reason wall material companies maintain departments of design and dec-

there should be absolute clearness. Each panel or part of panel should be most logical.

The features of each room determine the paneling; such decorations, therefore, as are a unit with the room itself are necessary for correct paneling which does not dominate, but simply accents the values in the room.

The room should first be considered as a whole. A principal point of interest should be chosen, a fireplace, mantel,

mirror, an attractive wall space between two windows, or a rich cabinet. The chief feature of each wall should be regarded closely. If possible, try to focus the decorations in the room to one point of interest on one of the walls and subordinate features of the other walls.

The mind delights in putting like with like and so is pleased with panels of similar size and proportion and with similar width and arrangements. While there is delight in noting the likeness between members of the same order, there is as great pleasure in noting the contrasts between members of different orders. Contrasts between broad and narrow panels and between square and oblong ones are pleasing. Where the room is small and the treatment is difficult, little contrast should be attempted, but where the room is large and the wall spaces well proportioned, contrasts add much to the impression of symmetry and beauty in the room.

In paneling, the panel is the thing and the style or strip which makes the paneling is subordinate to it. Therefore, a wall simply cut in two is not advisable, as it makes the style the central figure.

Styles should on the whole, be broad. The broad panel strip, lattice, or batten is desirable because it gives not only the suggestion of richness but of permanence and adds to the impression that the panels have been especially prepared for, and built into the wall. There is a certain satisfaction, too, in knowing that the panels are a part of the walls and effects that were once possible only for the rich can now be secured in the homes of the blessed middle class. Even with papered walls "stripping" or latticing to obtain panels is a growing practice and more or less elaborate decorative strips, or styles, are used.

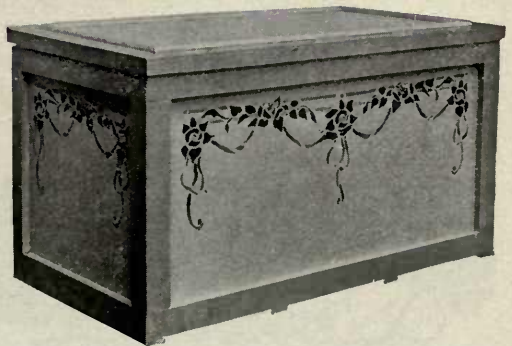
Panel strips may be enameled or stained to harmonize with the general treatment of the room and with its woodwork; but, however, finished, they should



Successful Treatment of Panels for a Dining Room Wainscot.

offer substantial lines, particularly if the contrast in color between the panel and the strip is striking. A dark wall paneled with narrow white styles or light wall paneled with narrow dark styles, is not pleasing. However, if both the style and panel are of similar tones the narrow style may be permitted. Narrow strips may be used with narrow panels.

With regard to the shape of the panels, builders should remember that, for some psychological reason, square panels are not pleasing. The oblong, on the other hand, is always restful and makes possible all sorts of combinations of lines. The oblong combined with the square, too, gives remarkable opportunities. It might be suggested in this connection that when it becomes desirable to make three panels of equal size and shape, the center one should be, in reality, a little larger if possible, otherwise it may look smaller. This

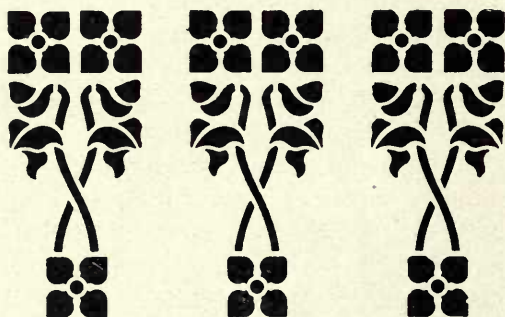


Stencil Applied to a Chest for Silver in the Dining Room.



rule, however, applies primarily when particularly wide styles are used and when the room is large enough to be viewed at long perspective.

In planning, if the ceiling is regular, it is not hard to lay out a consistent panel treatment, but when it is irregular, it is sometimes quite difficult. The best way is to find the lay-out of the largest possible regular figure and then treat the



Stencil Design for Either Panel or Frieze Decoration.

corners remaining as figures subordinate to the large panel. Coving, or lowering the smaller ceilings may be resorted to in extreme cases.

When it comes to decorating panels, the various period decorations may be carried out in greater detail than would be possible were the wall finished in an unbroken and unrelieved manner. In stenciling, the luxurious curves of Italian designs, French beauty and vivac-



ity, German richness, the torch and acanthus of the Greek, and the golden bee of Rome afford most correct and pleasing decorations, which truly become a part of the room itself and not mere ornaments added to it. Simple decorations may be formed by cut-out paper friezes, by wood appliqué and also by the box treatment, that is, by forming a panel within each panel and treating all that is outside of the inner border in one tone or gloss and all that is inside the border in another. Stucco ornaments, also, may be used with good effect.

Correct paneling, however decorated, brings out the beauty of the lines of the humblest furnishings. Although furniture may be very plain and modest, consider the difference that is made when it is put against a plain wall or a motley-papered one, and when it is placed to fit into the paneling at a focal point in the wall.

When built-in furniture is used panels are useful in bringing out the lines formed by built-in pieces, as in the case of a cabinet or bookcase. In a similar way, by a reverse treatment, the lines that are to be subordinate may be reduced, as that of an opening where a bed slides into the wall. Skillful arrangement of the paneling will produce the desired effect.

In craftsman homes where the structural members are used as decorations, there is an implied demand for panels; the ceilings themselves with their real or false beams are panels, and parts of the sidewalls are plain panels bounded by the structural woodwork.

Another factor that has encouraged paneling and led to its increase in favor is the use of wall boards. Wall boards embody the panel treatment. They are applied in panels directly to the studding and headers in new buildings, and over old material when remodeling.

Wall boards are put on so as to leave a small space at the panel divisions—

these spaces are covered with the panel strips, batons or lattices, as these styles enable the panels to change imperceptibly to the eye—so that the strains, shocks and vibrations that come with the settling of the building and with the expansion and contraction of the wooden parts due to vagaries of climate and temperature are less perceptible.

type of room; they have the soft pebbled surface that takes any kind of paint decoration nicely. Many of their possibilities and much of their effectiveness, however, are due to the fact that they are painted over, instead of papered, while paint borrows from them the advantage of a durable broad surface with a pebble mat finish and opportunities for



The Picture, Framed by the Panels, Is the Focal Point of Interest.

A word might be said with regard to painted walls. For sanitary reasons, if for nothing else, it is desirable to paint a wall surface, but the attractiveness and dignity of painted walls are greatly increased by the use of panel decoration.

Wall boards seem to answer many requirements of the modern home builder. They make wall painting possible in any

pleasing combinations within the panels.

Paneling, in the modern sense, has very practical reasons for being. It is not only logical and, therefore, beautiful, but it offers certain indisputable advantages; it is easy to decorate and easy to change. It is wholesome, durable and permanent, crackproof and, most of all, suited to the strain of wear and time.



The Effective Flower Room

Helen Ward Banks

STOCKS are among my most satisfactory flowers," said the Chatelaine.

"And I never can coax a blossom out of them," sighed the Guest. "How do you do it?"

"That way," laughed the Chatelaine, as the maid entered the breakfast room with a tray heaped high with late out-of-door blossoms. There were mignonette and a few "fall roses" and a bunch of purple violets and masses of stocks, dewy and sweet.

The Guest exclaimed and looked and sniffed in delight before the maid carried the tray through the room and out into the hall by a farther door.

But in spite of the joy of freshness and color and fragrance, down in the bottom of the guest's soul lurked relief that the flowers were not hers to handle. They were beautiful to have, but they took such oceans of time to arrange, and one never had just the proper receptacles for each style of flowers. It meant searching the house over for suitable vases, and filling them with water, and carrying them around in a vain search for a convenient place to sort and arrange and place the flowers.

There never was any place; if you tried the butler's-pantry, you interfered with the maid; if you chose the living room, someone came in and caught you untidy-handed; if you used the dining room, you spilled water on the table and dimmed the mahogany; driven to the porch, the wind blew over your vases and all the work was to be done again. Flowers are dear companions, but the labor

of caring for them makes them almost prohibitive.

Still thinking these thoughts, the guest followed the Chatelaine from the breakfast table out through the farther dining room door into the hall.

"This is my flower room. Sit here and talk to me while I do the flowers," the Chatelaine said, placing a chair in the hall opposite an open doorway.

"Oh!" breathed the Guest. "I begin to see why arranging flowers is only a joy to you."

"It is one of my daily tasks," answered the Chatelaine, "and I make it as easy as possible."

The open doorway looked into a lavatory about seven by five feet. A window was opposite the door, and under the window was a hinged shelf that hung against the wall when not in use.

The walls and floors of the room were white-tiled. Across one end was a marble slab, five feet long and twenty inches broad. The basin and hot and cold water faucets took up the middle of the room, but left good table space on the right hand and on the left.

Above the slab was a series of shelves five inches wide, running from the window to the angle of the wall. As they mounted higher, where they would not be in the way, these narrow shelves turned the corner and ran across the five feet of end space of the room. They were painted with white enamel.

On the shelves were more vases than could be counted; tall vases and short vases, opaque vases and transparent vases, squat open mouths and slen-

der stems. There were accommodations for all, from one choice rose to a bunch of country flowers.

"That's half the question solved," sighed the Guest.

On the floor beneath was a wilderness of baskets, all sizes, all shapes, colored all shades by diamond dyes. A water pot stood there, too, and a fibre pail. From a cupboard on the far side of the window, the Chatelaine took a piece of rubber tubing, slipped it over the cold water faucet and ran the water through it into her pail. Then she quickly sorted her flowers. Some went into the pail and were pushed back under the slab. With the rest she filled her vases. When she wanted to stand two or three flowers erect in a bowl, Japanese fashion, from the far cupboard she took a narrow strip of lead which she twisted into the shape she wanted. A pair of scissors hanging by the window was at hand to clip stems.

The vases filled, out from beneath the slab came a graceful basket. The Chatelaine lined it with tin-foil from the cupboard. Through the rubber tube she

moistened a box of sand, and with the sand filled her basket. Speedily were growing in it stocks and some feathery things, making the table decoration for

the day. The basket and the vases were carried off, and a basket of dewy violets sent to a suffering neighbor.

She hung the scissors in their proper place and restored tin foil and rubber tube and strip of lead to the cupboard. A sink, close to the floor, enabled her to empty the pail without lifting it. From a holder fastened to the wall she pulled a handful of paper towel, with which she wiped up what she had spilled. The moist wad of paper was tossed on the tray, with the left-over stems and leaves, and all carried into the butler's pantry. The room was left in complete order.

"How easy!" murmured the Guest.

"Every daily task may be rendered

easy," laughed the Chatelaine, "if we study out all the demands and have everything at hand before we begin."

"I shall plant more stocks next spring," decided the Guest.



The White-Tiled Flower Room with Every Provision for the Care of Cut Flowers.

Do's and Don'ts for the Home-Builder

James Edmund Jones



WING bedroom doors so that when partly open they do not expose the bed to view.

Make liberal allowances for switches for electric light. Most people spend money unnecessarily for extra switches after house is finished.

Put hot water boiler elsewhere than in kitchen which is usually quite warm enough. Indeed, most maids keep a door or window open and chill the rest of the house in their effort to keep cool. Don't place boiler in cellar as it radiates heat which may be economically used elsewhere.

Plan kitchen to face the east as light is required most in the morning. Allow plenty of window space in the kitchen.

Plan to fill ice-box through an opening from outside the house where there should be a tap to wash the ice and a drain to carry off the water.

Supply two-inch water-main from street as smaller pipe does not give sufficient pressure. See that pipe from the street is lead or galvanized iron, as ordinary iron rusts.

Place sink where drip-boards may be built on both sides. One for dishes to be washed and the other for dishes ready for drying. Place sink where light, both natural and artificial, is good so that dishes may be thoroughly washed.

Place laundry tubs at least two feet away from the wall where light is almost sure to be better. It is easier to keep floor clean and sweet and pipes are less likely to freeze. Besides the launderer can handle wringer, etc., to better advantage.

Provide drains in laundry and elsewhere in cellar so that floors may be washed off with hose.

Provide a root cellar under veranda or elsewhere, where there are no pipes. Do not concrete the floor as vegetables, etc., keep better. If you have such a cellar you can keep down the high cost of living by obtaining goods in wholesale quantities.

Install a coal-chute in one of the many modern improved forms. See that openings to clothes-chute are not any larger than necessary and are placed high from the floor, so that little children may not be in danger.

See that laundry windows are large—area them if necessary. Have exit from laundry convenient to back yard.

Have an outside entrance, as well as one to the cellar, from the kitchen.

Place a small light in a conspicuous place in the kitchen to indicate whether the cellar switch has been turned off.

Make sure that switches are not placed behind doors or in other inconvenient places.

Have plenty of base-board outlets to supply piano, library and den tables, etc., and arrange outlets in dining-room so as to give a choice between direct and indirect lighting.

In planning the shape of the bedrooms, place all your furniture and mark it on the plan. Don't forget the radiators but place them so they do not occupy valuable wall space.

Over the beds have wall lights which may be turned on and off by a chain when one has retired. Be sure to place lights

in bath room so that a man may see both sides of his face when shaving. Have medicine cupboards over the lavatories in the bathroom and elsewhere with mirrors in the doors.

There is usually some waste wall space in a bedroom where a small bookcase may be built into the wall for favorite books. This makes a guest's bedchamber especially attractive.

See that the picture mouldings are in-

upon which linen may be laid previous to distributing it.

See that the back stairs are properly lighted.

To minimize the up-keep in painting have only the amount of woodwork necessary to give a substantial appearance.

Have the best veranda at the back where privacy may be found, and have an exit to it from the dining room or living room.



Guest Room Made Attractive with Built-in Bookcase and Desk.

cluded in the original contract so as to reduce the amount of inevitable extras.

Have removable panel under the staircase or elsewhere to make a secret cupboard to store valuable goods when the family is away.

Have a small safe built into a brick wall.

Have electric lights in the clothes closets if possible.

Have a high-up medicine cupboard where poisons and medicines may be safely kept out of the reach of children.

Have at least one of the doors of the linen closets drop so as to make a table

If possible provide a stoop or veranda for maids.

An extra small gas range in pantry or elsewhere is convenient for preserving and for small suppers.

Provide dumb-waiter to carry coal to upstairs grates and to carry meals to members of the family in case of illness.

Provide extension carriers in closets so that seven or eight suits may be hung in the space usually occupied by one.

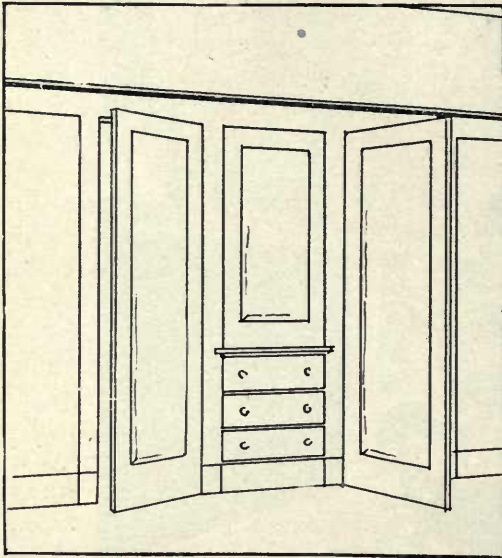
Have tin lined closet for storing furs, etc., and place it in a cool portion of the house where moths are not so likely to thrive.

Have two closets in parents' room.

Plan one bedroom at least to accommodate a cot as well as a bed, as this is most useful in case of illness.

Have a place to deliver milk without entering the house and see that it is so planned that the milk will not freeze in the winter.

Have a cold pantry off the kitchen, or if this is not possible, build a table in the porch outside the kitchen door where viands may be left to cool.



Full Length Mirrors in Double Doors.

Provide maids' sitting room and bath room if possible.

Put a grate in one of the sun rooms. If you wish to save money on fireplaces, finish in stucco instead of brick or tile.

Provide full length mirror in at least one bedroom on a closet door. If the closet has double doors a mirror on the inside of each will enable a person to get both front and back views at the same time by swinging the doors to catch the reflection.

See that the plumber supplies taps upon which washers may be easily replaced by the owner, who can thus save much in plumbing bills.

Have all the plumbing fixtures the same make, so that when repairs are needed there are no unnecessary trips by the plumber.

See that the sill-cocks project sufficiently so that water dripping will not disfigure the wall.

Place the number of the house where it can be seen at night so as to save unnecessary rings.

Make sure that treads of steps are sufficiently wide, so as not to be dangerous in wintry weather.

If you do not have a garbage incinerator, secure system which is underground in a concrete chamber that may be flushed out by hose by means of a drain, should the chamber become fouled by garbage escaping from pail. There is one on the market so contrived that the top may be raised by a movement of the foot; thus the garbage is protected from flies, and also from hard frosts which sometimes otherwise make it difficult to empty the pail.

Don't forget that even if you do not like a shower bath the man you want to sell your house to later may not buy it if the bath room is too small to hold a shower.

Avoid dust catchers of all kinds.

Let the front door bell ring both in the kitchen and attic.

Provide convenient place to store lawn mower and garden tools.

See that double windows are included at the outset as this is an inevitable extra. Provide sliding panes and not the inadequate small ventilators.



“Homes We Have Built” Series

EDITOR'S NOTE:—Contributions to this series desired. Address Editor for further particulars.

The Home We Built

Mrs. W. W. Smith



WE HAD been fostering a dream house as many another had before us, hoping some time in the future to build. We had only been married about five years, so it did not seem a fleeting ambition. When we

did sell our home in the early autumn we had to move in a week, so, of course, we wanted to build as soon as possible to avoid paying rent for a long time.

For some time we had been owners of a low lot near the home we had sold and



The Living Porch on the Home We Built.

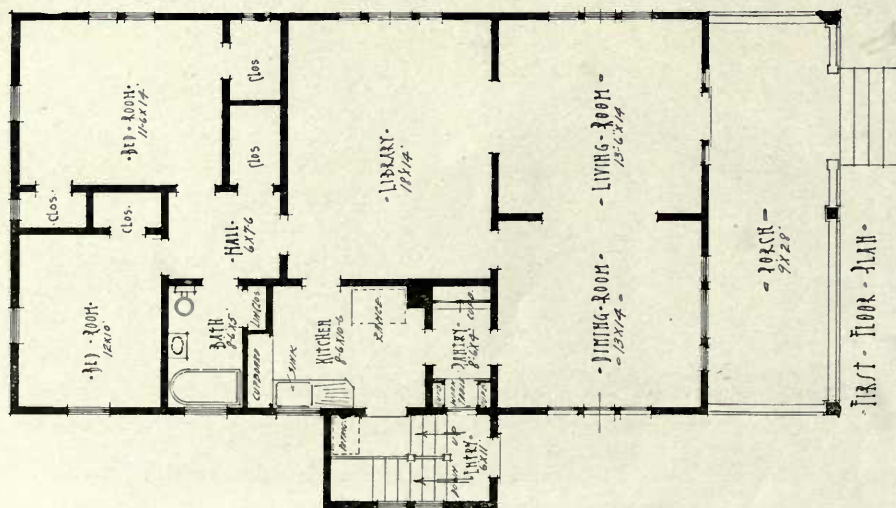


The Library and Living Room Are Practically One Room.

this lot we had filled. It was only fifty feet wide, and since it was both narrow and low, we got it quite reasonably. After it was filled and ready for us the total investment stood at about three hundred dollars. There is one restriction attached to a narrow lot: the house, to look well, must quite necessarily be rather

long with narrower frontage than a wider lot could have.

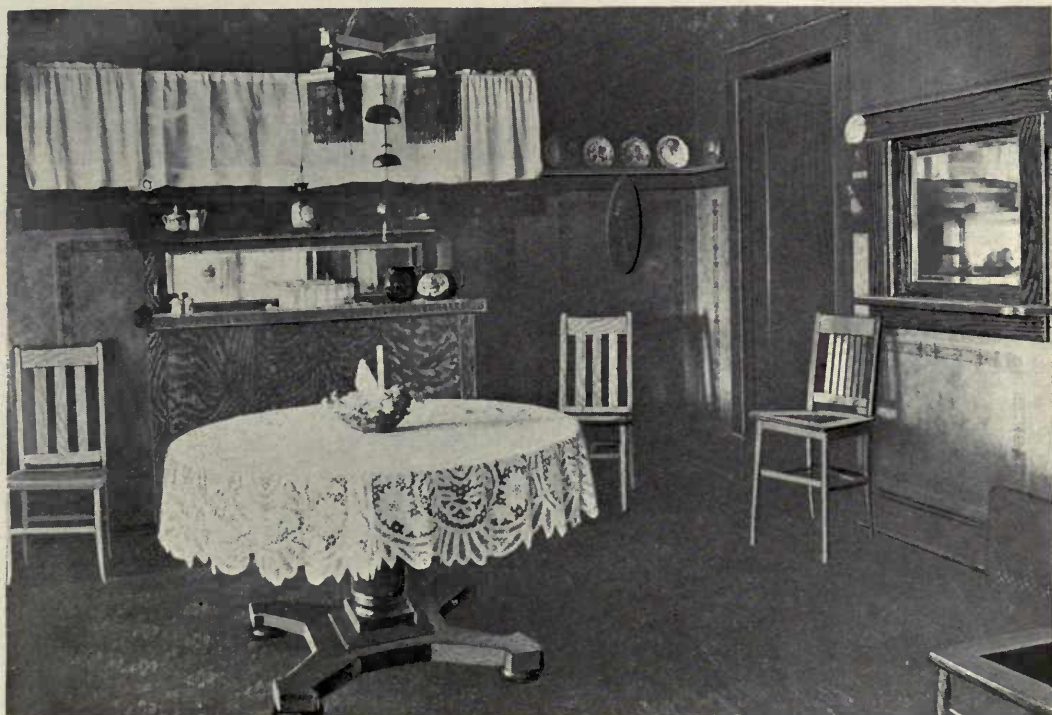
The house was not ready to plaster until well into the winter but we considered that rather an advantage than otherwise because men of the building profession were not so busy then. All that we had planned seemed impractical, now that the



eventful time had come, so we cast about for a new plan, but nothing suited. Finally, one morning when my husband started to work he said that if we couldn't find a plan that pleased we would have to make one because we would have to know at once what sort of a house we were going to build. I told him I would have the house ready to live in by evening and when he came home that night

within the last year one house was built just like ours on the exterior with a slight change in the arrangement in the interior, while five have had exteriors built just like ours, only on a smaller scale.

The house is 28x48 besides a porch 9x28 on the front. The rooms are all good sized except the kitchen which was small from choice. I had used both large



Showing the Serving Window Between Dining Room and Pantry.

I had a crude sketch drawn of the house we built. Of course he had to make a few changes; for instance, I had neglected to leave standing room for the partitions and the required space reduced the size of my rooms somewhat. Also, I had a hall of dreadful length with no outside light in it, but, with that exception, the arrangement was left as I had planned it. The exterior of the house was after the style we had long fancied for a home.

It has proved a source of satisfaction to our friends, as well as ourselves, for

and small kitchens and my permanent choice fell to the small one. This room, the pass pantry and the bath room are finished in white enamel and are well supplied with large cupboards. I selected a white kitchen against the advice of persons who should be authorities in the matter and I confess I was a little afraid I had made a mistake but after using the room nearly two and a half years I know I did not. The room is done, floor, ceiling, sidewalls and all, in blue and white and is a perfect beauty.

The three front rooms are finished in quarter-sawed oak and the entire house has the rub finish. The hall and one bedroom is birch stained mahogany and the other room is birch natural while the floors of the back rooms are maple.

Then there are the closets which I want to mention particularly. We decided to build a porch and the closets and then if we had enough money left we would build the rest of the house. And it paid. Two of the closets have little windows in them. The same number are large enough to put a cot and chair in, if it is ever necessary, as it was with us not long ago.

The back entry way is built with the platform big enough at the kitchen door to have the ice-box there, which is a great convenience.

The service window between the dining room and the pass pantry has saved me many steps, beside being especially helpful when having a dinner or something of that nature.

The kitchen in the middle of the house is a great improvement over the old way as it enables us to have our sleeping rooms all at the rear and the living rooms toward the front and middle of the house.

Two of the windows in our bedroom were made higher than is usual for the bedroom and I wonder we had never thought of the idea before. It makes it possible to use the space under the windows for bed space, chairs, sewing machine or whatever is needed besides giving the necessary light and air at the same time.

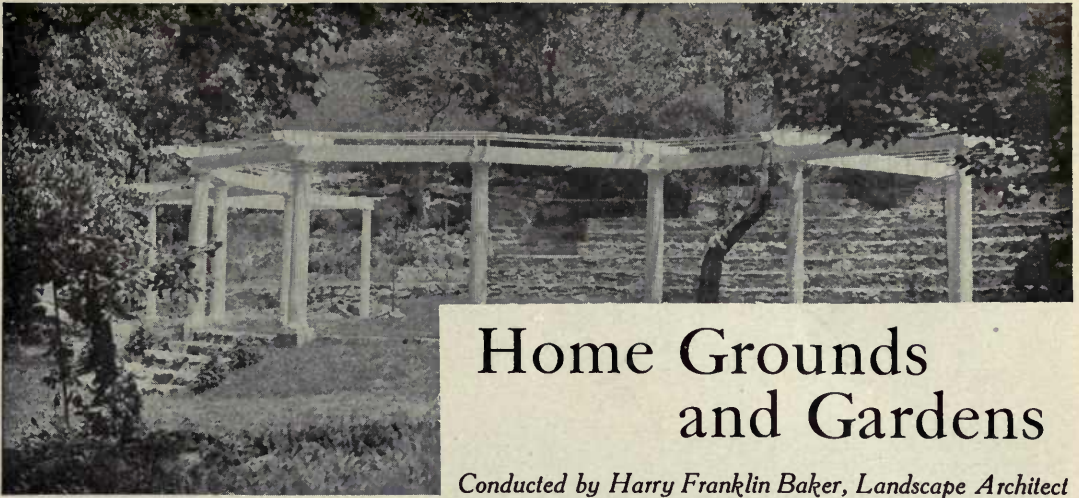
If more bedrooms were desirable the dining room could be converted into a bedroom and the library into a dining room as was done in a house that was built on the same plan as ours.

The basement is all finished. The walls and ceilings are plastered and the floors are cemented. There is a play room for the children, a large laundry room, vegetable room, manual training room, coal room, furnace room, a closet, a small room with lavatory and toilet and a nice sized hall.

The house is heated with a hot air furnace.

The cost of it complete, paper, painting, screens, etc., included, was a little less than twenty-seven hundred, making the entire cost of the home about three thousand dollars.





Home Grounds and Gardens

Conducted by Harry Franklin Baker, Landscape Architect

Some Ways of Beautifying the Home Grounds



ONE of the strongest reasons in favor of owning one's own home instead of renting, is the opportunity thus afforded of beautifying the grounds about the place you live. The renter—pitiful person—even if he feels the inclination, has not the free hand of ownership. There are many things he would like to see done, to make the premises attractive—but *cui bono*—what is it to him? Why should he labor and dig and spend of his substance to benefit another man's property? So he lives on in the bare and cheerless atmosphere of a renter's dwelling.

Of course there are exceptions — there are white blackbirds—and it does happen

occasionally that between landlord and tenant there is an *entente cordiale* which brings about an ideal state of reciprocal relations.

The tenant takes an owner's interest in the garden, the house and the grounds and the landlord gives him a free hand.

But we all know this seldom happens.

Does anyone ever imagine that the delightful little places—rose-embowered cottages with grass neatly cut and everything fresh and well watered—one sees in a ride along the carlines of city suburbs, are rented houses? Certainly not; you can tell the rented ones at a glance. They miss the atmosphere of personal thought and care.



This Entrance Gives the Grounds an Air of Seclusion and Dignity.

So then, if one would know the joy of creation—of making something charming and lovely out of barrenness and neglect—it is really necessary to own your own home.

Even if one has only a little yard, it can hold many beautiful things. Simple landscape gardening about the dwelling does more than copings and cornices to make it attractive. Here are a few suggestions for improving the grounds:

First: keep all the trees—if there are

a piece of green velvet stretched over a bonnet frame, is too artificial to be beautiful, perfect though it may be.

If the yard room is very small, nothing helps out more than porch or window flower boxes, filled with brilliant bloom and trailing vines. They lend a feeling of "green things growing" even if there is nothing else—geraniums and petunias, scarlet sage and the varieties of coleus, are wonderful in brightening up the place and are easily grown in the boxes. In



A Fine Tree Is Beyond Price and Should Never Be Sacrificed.

any—and if there are none, plant them. I would set my house a little crooked on the lot, if it would save cutting down a tree. A fine tree is beyond price, especially on the south side of the house. If you must raise your trees, then the American linden or basswood, and the silver leaf maple, are quick growers and beautiful. A rustic seat built around a fine tree makes an effective feature on the lawn.

Second: if you have quite an expanse of ground do not grade it level as a floor but preserve some natural inequality of surface. A lawn that reminds one of

fact, most of the up-to-date, new houses, have tin-lined boxes included in the plans, for placing beneath groups of windows, or along porch copings, or tops of walls. To be sure, these are expensive if you just hand over an order to the florist to fill them—but this need not be. A few dollars will go a long way, if judiciously laid out in the plants just mentioned and you install them yourself. Then "fill in" with nasturtiums and morning glories from seed. These are rapid growers, are tough, and make a fine show.

Where there is space enough, nothing adds more to the interest of grounds than

a pergola—provided it has some connection with something and is not just planted out somewhere with no object or meaning. The pretty pergola of the illustration divides the front lawn from the back yard, with a walk running through the center of it. There are all kinds and sorts of pergolas—from hickory poles with scarlet beans trained over them to classic columns of cement. A happy medium is the simple box column of the picture of wood with a simply designed cap, and painted white.

These are easily obtained all ready to set from firms that manufacture them. An excellent use of the pergola is as a connecting link between the house and the garage.

An ornamental gate or entrance goes far toward beautifying the home grounds. Such a treatment of the entrance as is shown in the photograph, at once lifts the place out of the ordinary and the commonplace and gives it a sense of seclusion and dignity.

The writer daily passes a moderate cost home whose charm is the subject of constant remark.



The Pergola Dividing the Front Lawn from the Back Yard.

Fortunately the house is set quite far back from the street—about 40 feet—and there is a lot frontage of 90 feet. The simple device of having the entrance walk start from the extreme corner of the lot line, and curving the walk round to the front steps, continuing the curve round the corner of the house to the side entrance—has given distinction to the grounds. This is increased by placing a square cement pillar to match the concrete house each side of the walk at the entrance with a little roof-shelter over it. A hedge continues the sense of privacy and seclusion.

These are only a few of the devices that add beauty to the home grounds. There are many other ways of giving interest which lack of space forbids me to mention in this connection.

EDITOR'S NOTE.—We are indebted to Hartmann-Sanders Co. for the illustration of gateway used in this article.



Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.

B 541 GEO. H. KEITH, Spokane, Wash.

B 543 CHAS. S. SEDGWICK, Minneapolis, Minn.

Design No.

B 545 JOHN HENRY NEWSON, Cleveland, Ohio

B 547 BUNGALOWCRAFT CO., Los Angeles, Cal.

Design B 540.

The ideal house is both pleasing in appearance and perfectly adapted to all the needs of its occupants, so that the home-builder is always on the quest of a combination of the utilitarian and the beautiful. This design will admirably meet these requirements for the average small family desiring a well-built and attractive home at moderate cost. It would look at home in almost any community or in any environment. An extra large porch suggestive of hospitality for the stranger and pleasant hours for the family runs across the entire front of the house. The brick balustrade provides seclusion and privacy that will be particularly appreciated where the houses must be placed close to the street, while the brick pillars and wide

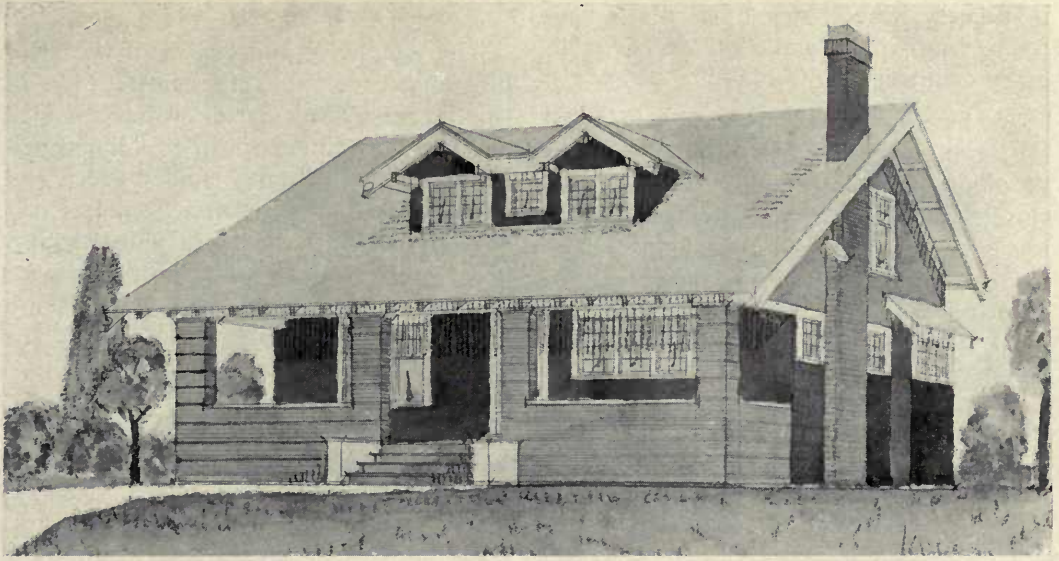
approach give a substantial and dignified air often lacking in small frame houses. The grouping of the windows is especially good, affording plenty of light and ventilation and yet providing good inside wall spaces for the placing of large pieces of furniture. The foundation is of concrete, the first story is finished with a drop siding of rough sawed Washington fir, stained a dark brown that brings out the red brick of chimney and porch, and in gables and dormers, the shingles are stained a mossy green. The low, sloping roof would be good with shingles stained brown or green or with red cedar shingles simply oiled to preserve them from the effects of the weather.

The interior is finished with hardwood floors throughout, with Washington fir in

Cost Estimates of Designs Shown in This Issue

MATERIALS AND LABOR	DESIGN NUMBER						
	B 540	B 541	B 542	B 543	B 544	B 545	B 546
Excavation at 30c per cu. yd.....	\$70	\$90	\$60	\$50	\$80	\$100	\$45
Mason Work, to include Foundation Walls, at 20c per cu. ft.....	215	235	200	180	225	260	225
Cement Floors at 45c per sq. yd.....	55	65	45	40	60	125	55
Hollow Tile Walls.....	.....	.....	.....	.....	.....	.....	.....
Chimneys and Brickwork at 65c per hour.....	345	185	180	145	500	300	200
Tile Work and Slate for Roof.....	.....	.....	.....	.....	.....	.....	.....
Tile Floors and Wainscot.....	.....	.....	.....	.....	50	200	25
Lumber.....	650	525	625	600	700	1,300	675
Millwork.....	615	650	650	575	760	1,400	700
Exterior Cement Plastering at 90c per sq. yd.....	.....	100	.....	125	.....	325	145
Interior Plastering at 26c per sq. yd.....	350	225	325	300	400	765	335
Painting.....	265	175	260	200	265	450	240
Carpenter Labor at 45c per hour; Common Labor at 30c per hour.....	595	475	615	550	675	1,075	650
Hardware (Rough and Finish).....	285	285	225	250	275	400	265
Electric Wiring.....	65	75	50	45	65	85	50
Galvanized Iron and Tin Work.....	91	70	80	80	65	175	85
Heating (Air or Water).....	460	400	145	150	510	700	325
Plumbing and Gas Fitting.....	270	275	265	425	350	600	235
Miscellaneous.....	25	40	30	25	50	100	25
Cost.....	\$4,355	\$3,870	\$3,755	\$3,740	\$5,030	\$8,360	\$4,280
Contractor's Profit, 10 per cent.....	435	387	375	374	503	836	428
Total Cost.....	\$4,790	\$4,257	\$4,130	\$4,114	\$5,533	\$9,196	\$4,708

This table is computed on the basis of prices of labor and material now prevailing in Minneapolis and vicinity.

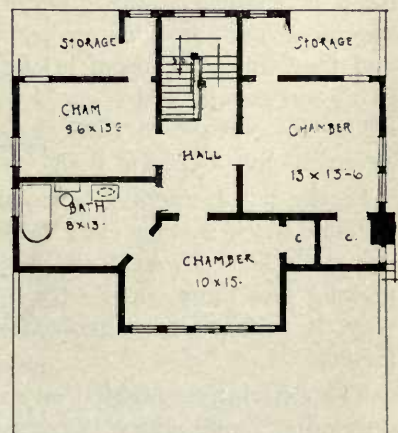
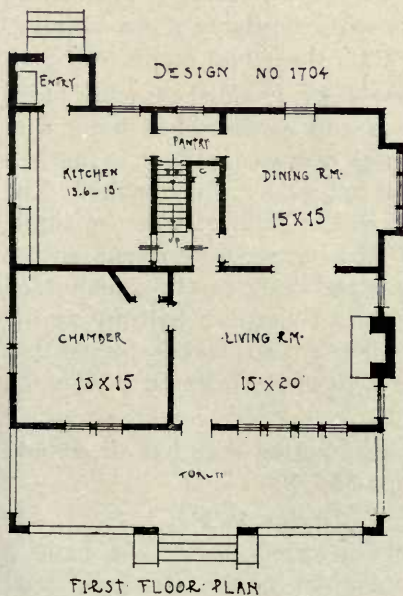


DESIGN B 540

A House Designed for Comfort

the living room and dining room, and the remainder of the house in pine, painted or in white enamel. The arrangement of the kitchen is especially good. It may be shut off from the rest of the house and yet affords access to the stairs, leading to second floor and the dining room through the pantry. The landing at the foot of

the stairs is an admirable place for the telephone, since it will save the housewife many steps while she is busy at her work and yet is easily accessible for all other members of the family. The living room has a big brick fireplace that welcomes you as you enter from the porch, and to the left is another big, cheery front room



that might, if necessary, be used as a bedroom, but would make an excellent library or music room.

We have not space to describe in detail the arrangement of the second floor, but the floor plan shows ample provision for closets, and storage space under the sloping eaves at the rear of the house. The front room, with its five windows and direct communication with hall and bath, is most desirable. In the basement are laundry, fuel and vegetable rooms.

This house, as described above, with hot water heat, is estimated to cost about \$4,355.

Design B 541.

This typical western bungalow of six rooms was built in southern Idaho at a cost of about \$3,900. The house is very complete in its built-in features, such as bookcases, china closets, seats, etc. Between the living room and dining room is a double cabinet, one side opening into the living room for books and the other into the dining room for china. This cabinet extends up about five feet in height, above which it is open to the ceiling beam running across at ceiling.

The hall, living and dining rooms are finished in curly fir and have hardwood floors. The balance of the house is finished in enameled pine. There is a full basement with hot water heating plant and there is ample room in the attic for two good rooms, which could be finished off at an expense of \$200 or less. The basement has a cement floor.

In the living room is a fireplace with pressed brick facings and hearth. The den could be thrown into the living room, making one large room with open stairway, if such an arrangement were preferred.

The exterior is shingled up to the window sills, above which is cement plaster on metal lath. Other materials could, of course, be substituted if desired.

Design B 542.

The simplicity and charm of the colonial spirit, pervades the entire plan of this house. The exterior walls are sided and may be painted white or colonial yellow with roof shingles stained green and pillars and trim white. The foundation is of concrete with boulders above grade. The wholesomeness of this design, with its lack of disturbing detail, will make a stately home, if happily placed in the midst of green lawns and trees.

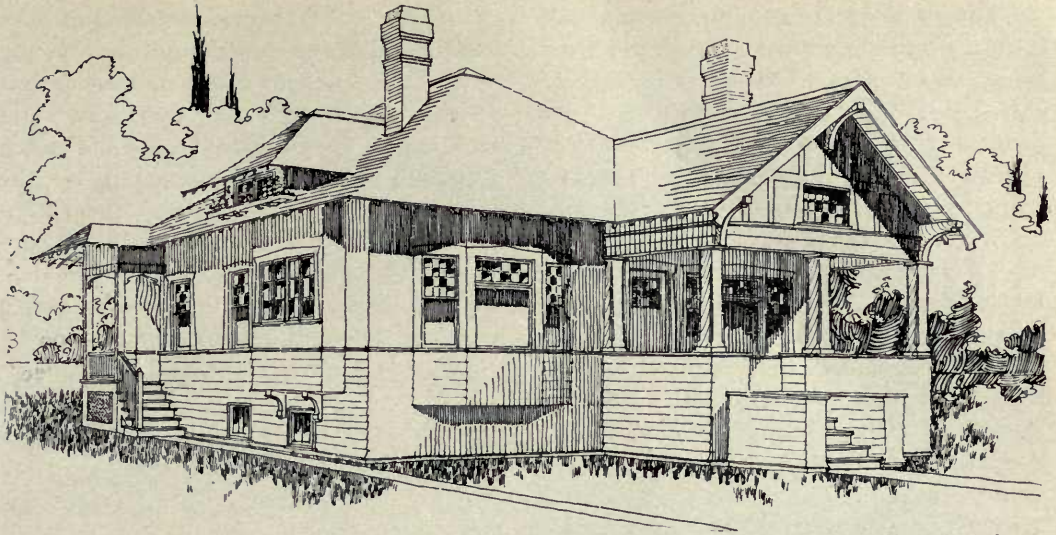
This same absence of fussiness and careful provision for comfort is present in the planning of the interior. In the living room the Colonial spirit is accented in the wide fireplace of brick with bookcases built in on either side. Columned openings connect the living room with the dining room, and this room in turn opens directly into the kitchen. In the dining room a sideboard is built in and stained and carved in harmony with the rest of the woodwork, while the kitchen is a marvel of convenience, the built-in sink, work table, etc., all within easy reach of the range. The large room at the rear might be used as a bedroom, a real convenience in case of illness, or it would make an excellent library, if finished to harmonize with the living room. Sliding doors separate these two rooms.

The first floor is finished with hardwood floors and hardwood in living and dining rooms, the second floor is finished throughout in pine for white enamel. The housewife will be interested in the ample closets off the big sleeping rooms on the second floor, and in the carefully appointed bathroom. The sleeping balcony at the rear of the house is so cleverly placed that it will be somewhat sheltered from wind and storm.

This house, heated with hot air, should be built for \$3,750.

Design B 543.

In our illustrated design we have a small rectangular house, the main part



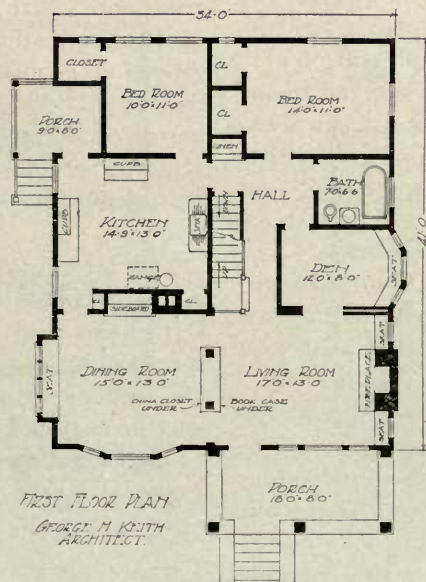
Geo. H. Keith, Architect.

DESIGN B 541

A Typical Western Bungalow

being 23 feet in width by 27 feet in depth, with a one-story bedroom on the right on the first floor. This is a good little plan and economical to build, regular on the outside and very simple in detail with wide projected eaves and low rooms. It is designed to cover the lower portion of the house with cement stucco to the top

of the first story windows and shingles for the upper portion of the walls. The shingles may be stained green both on the side walls and roof and all of the trimmings painted white or a very light cream color and this together with the gray cement on the first story will make a very pretty combination.



The front porch coming at one side with a vestibule entrance admits of front windows in the main living room, making this room very pleasant with a broad central fireplace and the dining room connecting it with a wide opening. The first story is finished in pine or Washington fir and stained with a birch floor and the second story finished in white enamel and birch floor.

It is estimated that, to build this house complete, including heating and plumbing, should cost about \$3,740. There is a good, full basement and a concrete foundation wall. There are many little conveniences about the house that make it attractive. The bedroom on the first floor will interest many and the second floor has four good bedrooms with bathroom, ample clothes closets and linen closet.

Design B 544.

Another design that will appeal to the man who is looking for the maximum of comfort at the minimum of expense. Brick is used in the construction of the first story and the gables and dormers may be shingled or sided as preferred. Heavy brackets effectively support the projecting eaves. There is a consistency and rhythm in the broad, free lines of the roof and the thoughtful placing of the dormers that is especially pleasing.

Careful attention has been given to the construction of the basement, which extends under the entire plan. The wall is of poured concrete running one foot above grade and the same faced above grade, with two courses of brick. The wall heights are 7 ft. 6 in. for basement, 9 ft. 6 in. for first story and 8 ft. 3 in. for the second story rooms with lowest wall height front and back of 6 ft. 8 in.

A roomy porch runs the width of the house and affords entrance directly into the big living room that also runs across the entire front of the house. There is a front and back stairway and good stairways to basement and attic. Ample

closet space has been provided on first and second floor and storage room in the attic. The kitchen, which is directly accessible to dining room, den, toilet and back stairs, opens upon a screened porch that will be much appreciated by the housewife in warm weather. Every convenience in the built-in work table, cupboards, etc., has been cared for. The den, opening from the dining room would make an excellent sewing room.

The second floor has four good, airy rooms, a complete bath and a sleeping porch, secured by carrying up the extended wing at the back of the house.

The estimated cost of building this house is \$5,030.

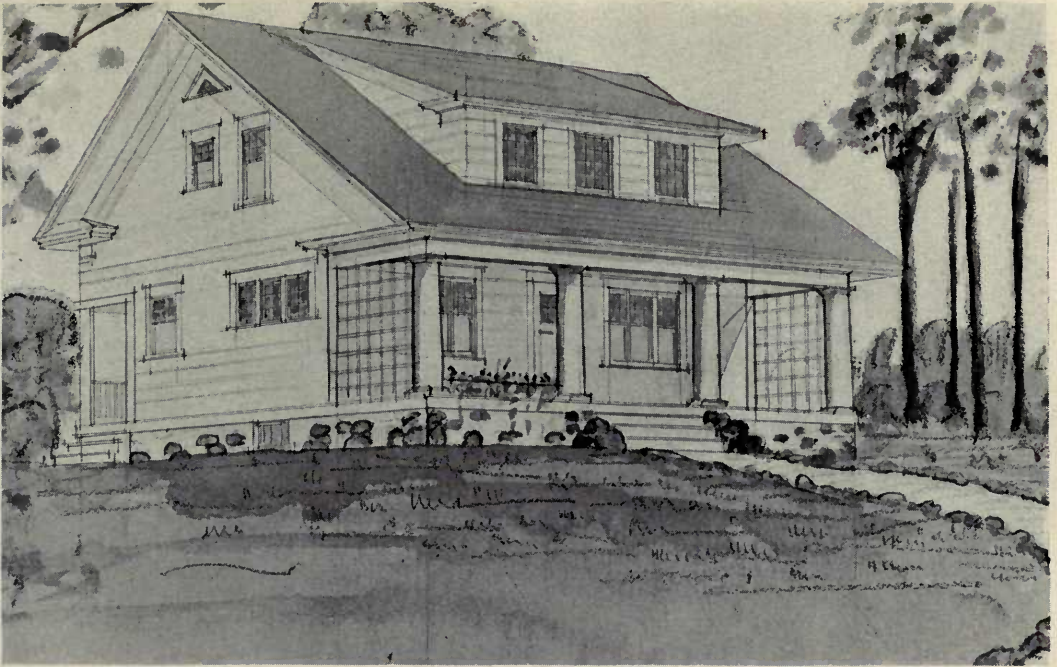
Design B 545.

The simplicity and dignity of the Colonial type is felt throughout this design. A wide brick terrace extends across the front of the house, only the portion in front of the entry being covered. The wide hall is entered from a tiled vestibule and opens into the living room, dining room, and sun room. A Colonial stairway leads to the second story from the main hall and a rear stairs continues from kitchen to third floor where the maid's room and a bath are located. At the rear of the main hall and just off the vestibule, provision is made for coat closets. On the second floor one of the front bedrooms has direct access to the main bath and the other is provided with a private toilet room, making it an admirable guest's room.

The interior throughout is finished in white enamel with mahogany doors. Bathrooms and sun room are tiled and rear porch on second floor may be used for outdoor sleeping, while porch beneath may be enclosed in glass and thus provide an additional room.

The Colonial spirit is present in paneling and trim throughout the house.

Estimated to cost \$8,360.



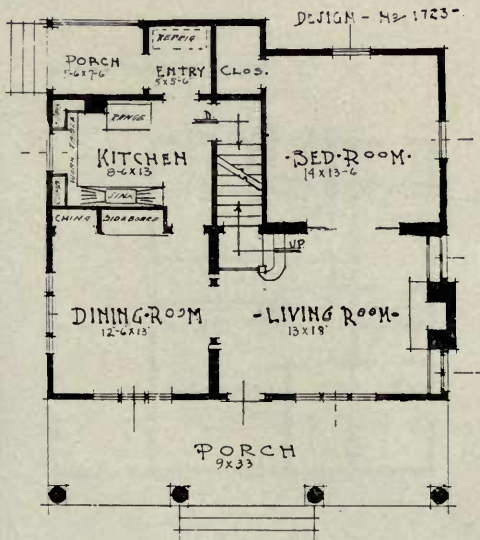
DESIGN B 542

A Cottage with Colonial Detail

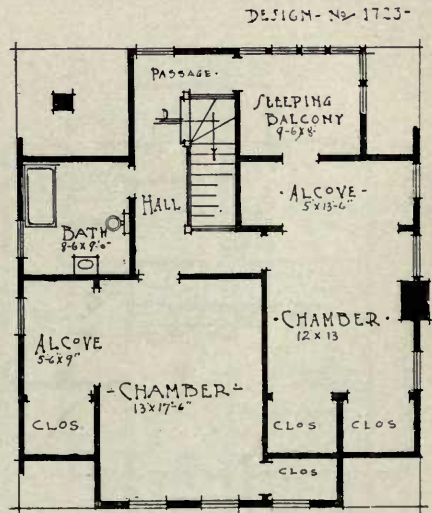
Design B 546.

This design is a happy adaptation of the popular combination of cement and shingles. The first story is of cement

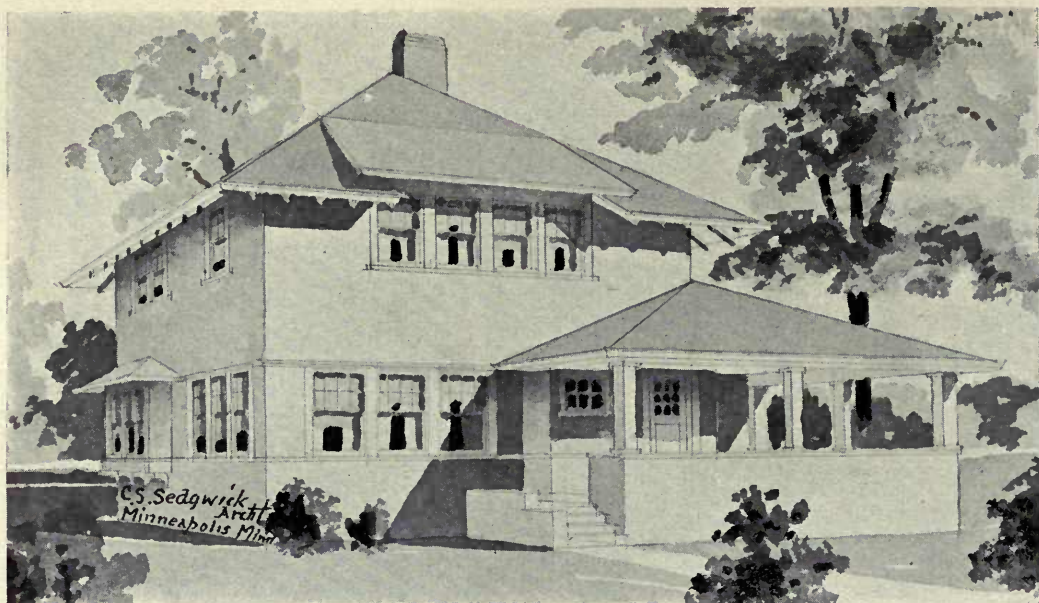
plaster over metal lath and cement was also used in the floor and steps of the porch. The wood trim is of pine or cypress stained dark and stained shingles



-FIRST-FLOOR-PLAN-



-SECOND-FLOOR-PLAN-



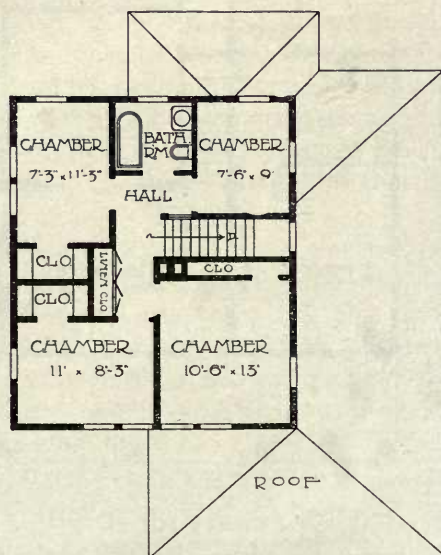
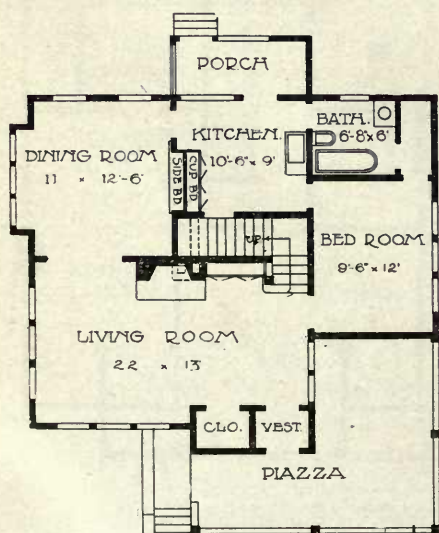
Chas. S. Sedgwick, Architect.

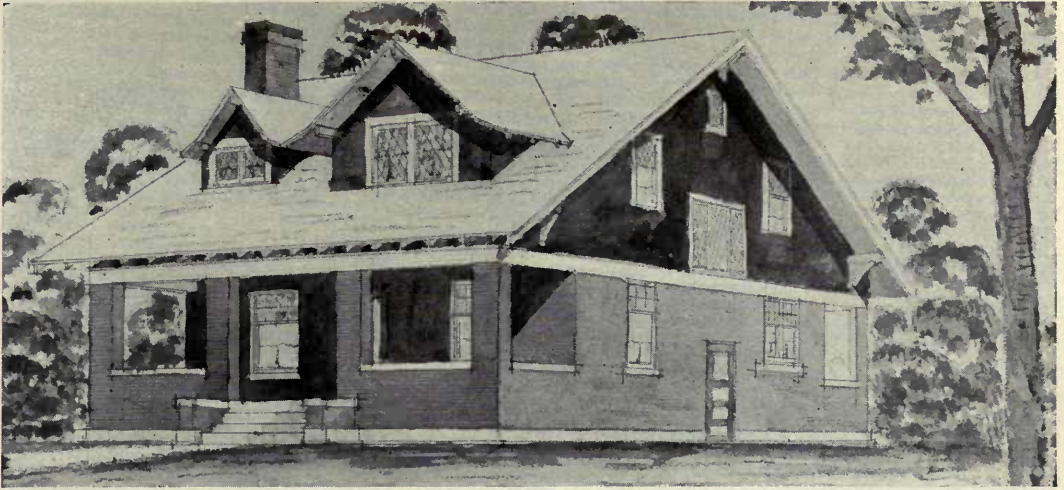
DESIGN B 543

A Good Design for a Small House

were used in the gables and roof. Attention is especially directed to the low, sweeping line of the roof and the big dormer which can be easily fitted up for outdoor sleeping purposes. Such an arrangement provides ample ventilation and yet

shelters the sleeper better than the usual exposed porch. The floors throughout the house are of birch except in the kitchen where pine is covered with linoleum and in the bath where tile is used. The interior finish of woodwork in living





DESIGN B 544

An Attractive Cottage

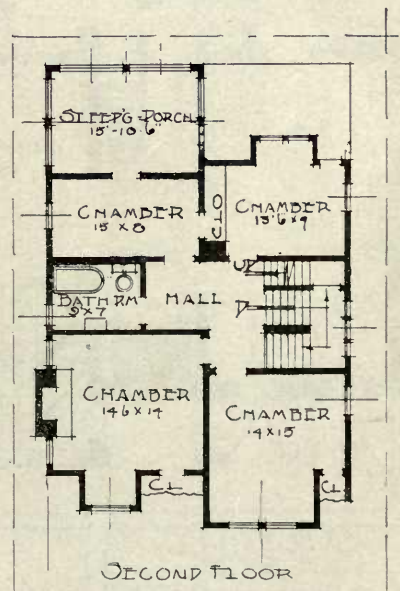
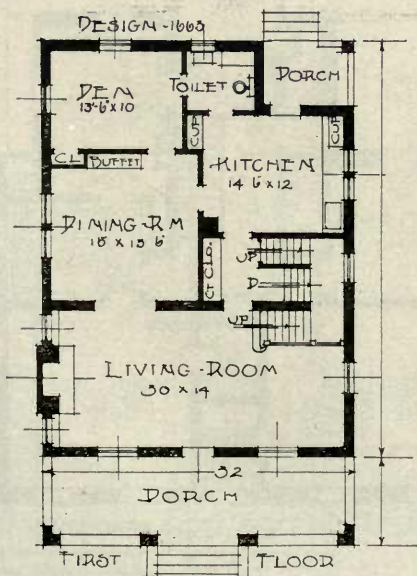
room and dining rooms is of birch and the remainder in pine for white enamel. The doors are of birch, stained mahogany.

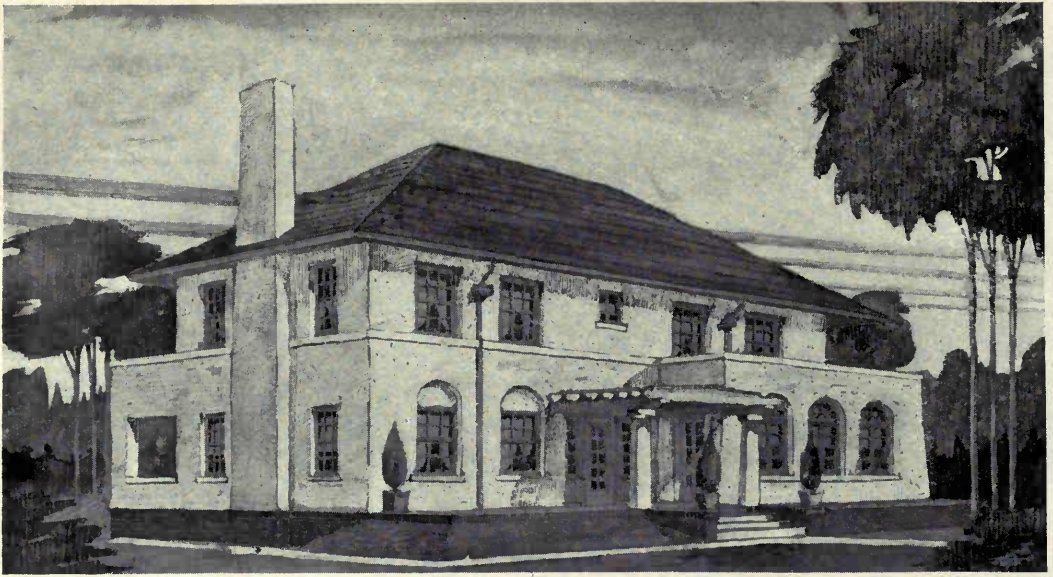
Entrance from the front porch is through a vestibule into the living room which extends across the front of the house. The end of this room is taken up with a wide brick fireplace with built-in

bookcases, at once expressive of ease and friendly cheer.

From this room you pass directly into the dining room and thence into kitchen and across the hall into the bathroom. On this floor there is also a large bedroom with plenty of windows and closets.

On the second floor there are two large



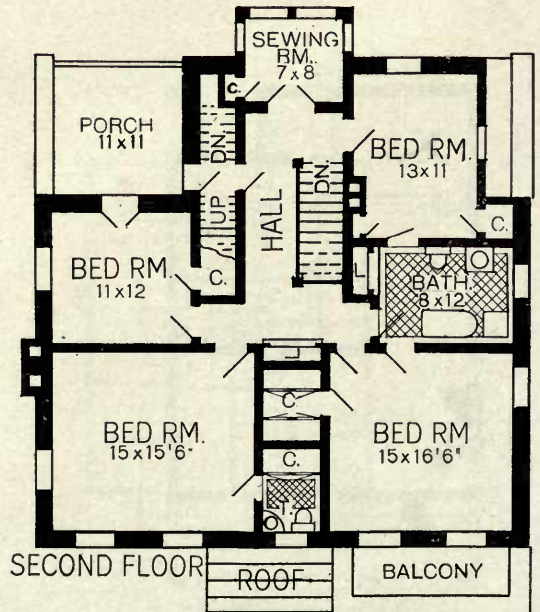
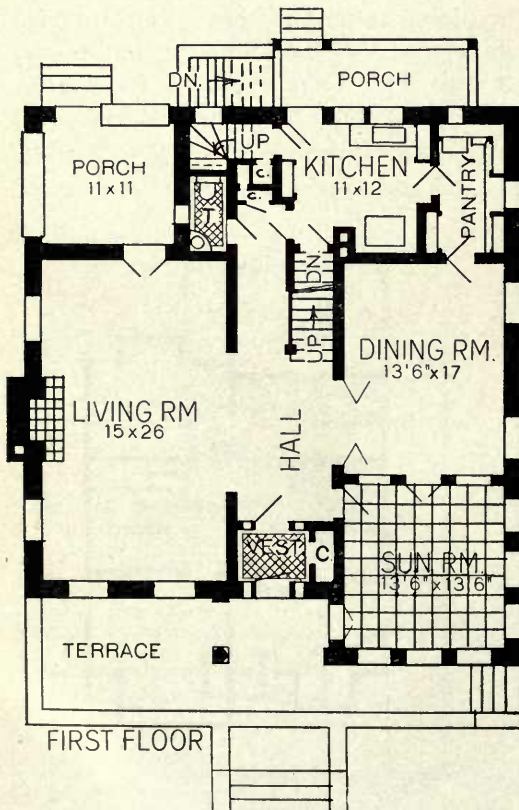


DESIGN B 545

A Modified Colonial Type

sleeping rooms, a toilet and a great deal of storage space under the low sloping eaves at the rear of the house.

This house, fitted up with laundry in





DESIGN B 546

A Cement Plaster and Shingle House

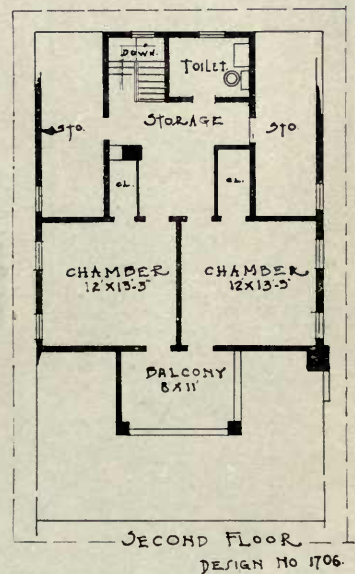
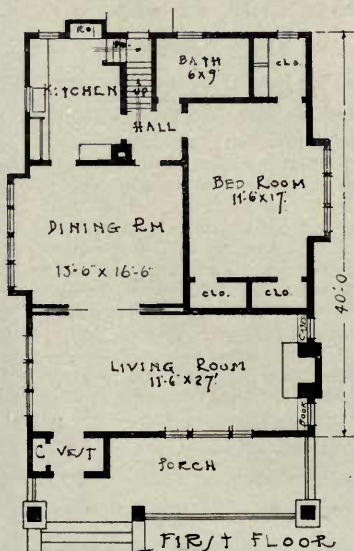
basement and hot water heat throughout, is estimated to cost \$4,780.

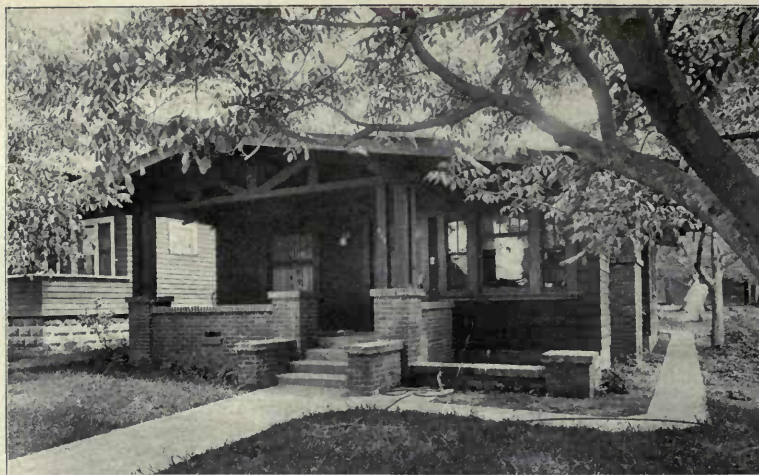
Design B 547.

The special feature of this attractive little house is the surprising amount of

room in a home only 26 ft. by 36 ft., exclusive of porch.

It would hardly seem possible that there could be five rooms of good size, well proportioned, well lighted and venti-



*Bungalowcraft Co., Architects.*

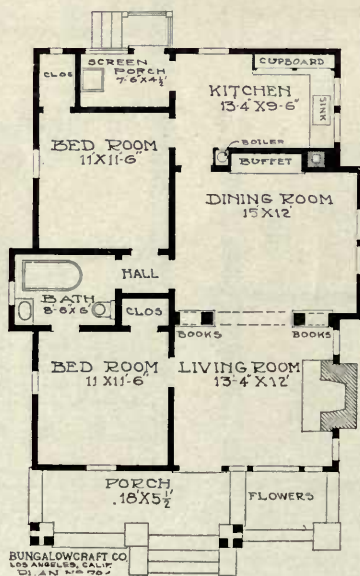
DESIGN B 547

A Big Little Bungalow

lated, with bathroom, enclosed rear porch and ample closets in a building of this size. The floor plan shows how well this was all accomplished and the very convenient arrangement of the rooms. This house was planned by a housekeeper with two little children and much successful study has been given to the question of

step-saving, a question which enters very largely into the problem of happy, healthy home life.

The architects advise that this house has been built in California for \$1,140—and that with good plumbing, electric wiring and neat fixtures. In Oregon, with cellar and furnace, it cost \$1,650.





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Breakfast Rooms.

 IN MANY houses there is an extra room on the first floor for which no very apparent use presents itself. It might with advantage be thrown into another room, but such an alteration is expensive, and it is left to some nondescript use, with no particular gain to anyone.

Unless its distance from the kitchen renders such use impossible, such a room may often be made into a breakfast room, in which the less formal meals may be served. This is a desirable disposition for the front basement room in the city house with an upstairs dining room, so common in the east. The practical difficulties of kitchen and dining room on two levels are much diminished by this plan, and the dining room proper can be kept in immaculate order during the greater part of the day, a matter of importance when the whole first floor is practically one room.

One of the advantages of the breakfast room is that it may be decorated and furnished in quite a different way from the room intended for formal uses. It may very suitably have its own tableware in harmony with its special color scheme, brass, copper or pottery being used instead of silver for the service of tea and coffee. In fact, one of its charms is that it permits the use of so many quaint and charming things of the sort that one usually associates with the country cottage and a somewhat *al fresco* style of living.

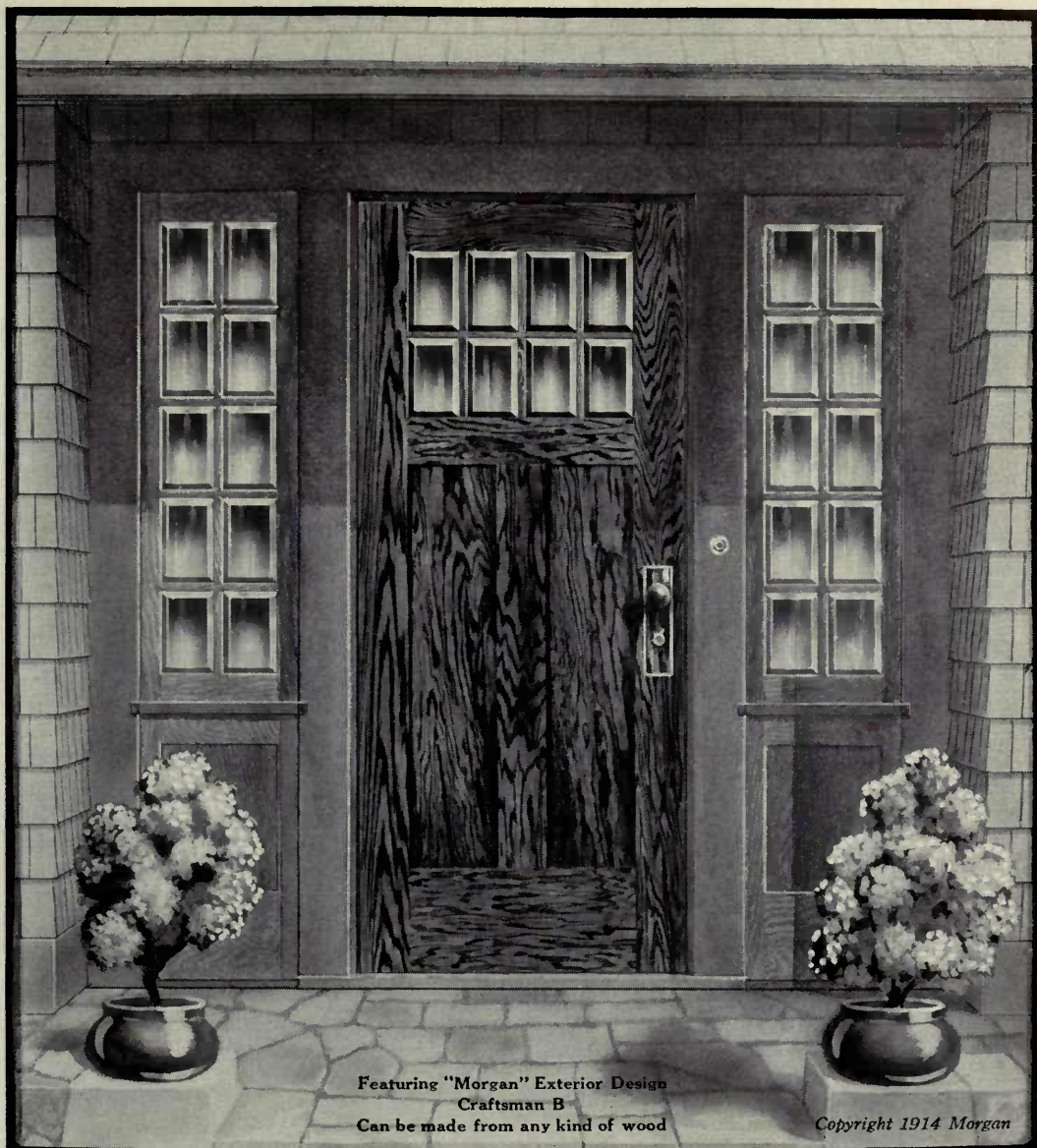
Blue and White.

For a breakfast room with a sunny exposure a scheme in blue and white is specially good. It is understood that, but for a possible touch of vivid scarlet,

orange or yellow, the color must be limited to the variations of a single tone of blue, and the china used must harmonize with the blue of the decoration. A perennially beautiful wall covering is the blue and white paper whose design is a very Japanese treatment of branches of fir trees, arranged in such fashion that they also suggest the snowy summit of Fuji, which dominates every Japanese conception. It is delightfully decorative and not expensive, and should be accompanied by white woodwork and a dark polished floor. If the room is high enough the paper may stop at a plate rail, with a plain white wall above it, on which a few blue plates and platters may display their charms.

With this wall one has a chance to indulge the fancy for white dining room furniture. Oak furniture of simple design can have the varnish removed and given two or three coats of white paint, followed by two of enamel, and present an admirable appearance, the chair seats being covered with some sort of a cotton tapestry in the right tone of blue.

The simplest sort of white curtains should hang at the windows. If a mantel above the fireplace is not practicable, a background for a pair of blue vases, a clock and candlesticks can be made by setting a brass rod in sockets a couple of feet above the shelf and running on it a strip of some white material, drapery silk or mercerized armure, letting it hang in rather scant folds. A wall with so much pattern is best left unadorned, but if pictures seem essential they should be blacks and whites in narrow black frames and with side margins.



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Gray Walls and Chintz.

Another effective, and perhaps more cheerful, scheme can be used in a room which does not get the sun, and looks well with either brown oak or mahogany, or even black furniture. The walls should be putty colored, the tone of rough cast plaster, which is such a delightful background, and although white woodwork will answer, brown oak is much more effective. This neutral wall gives an opportunity for the use of one of the cretonnes with a design of brightly colored birds and foliage on a white or ivory ground. Curtains and window seat cushions and possibly an easy chair cover of one of these charming cottons are decorative out of all proportion to their cost, but it takes a certain amount of courage to choose an effective one. Instead of pictures, have simple plate racks with plenty of bright china, plates, and platters, and pendent jugs and pitchers on the principal wall spaces, and use china for the table which in some way repeats the tones, or one of them, of the cretonne. If a rug is desired, have a plain gray or brown homespun, or one of East Indian ones in natural gray with a geometrical design of brown. By contrast with all this color, let the mantel decorations be very simple, just a circular or oval mirror in a dark frame and a pair of candlesticks.

Another good treatment, when white furniture can be used, is in green, using for the walls one of the tapestry papers in very low tones of light green. The woodwork may be either ivory or a somewhat darker green. Curtains and chair seats should be of an ivory white material with stripes of green and old rose, the rug a fairly deep green either plain or two toned in a very small pattern. The table china and that used for ornament should repeat the rose and green of the decorations, while casseroles, fern dish and tea and coffee pots may be of olive stone ware.

Effective schemes can be worked out in apple green, clear yellow, or red and white, and others equally good may suggest themselves to the clever amateur, but whatever color note is selected it should be at once light and cheerful, as it is a melancholy fact that most people



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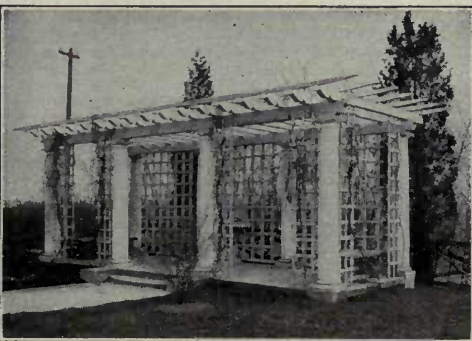
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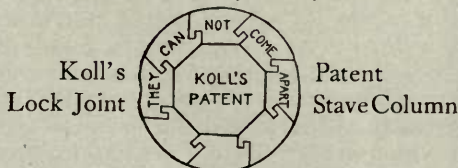


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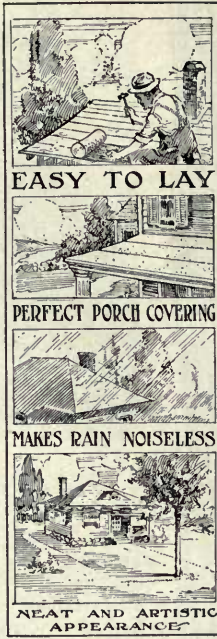
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DECORATION AND FURNISHING—Continued

do not arise from their beds in a happy frame of mind and need the assistance which is given by a suggestive environment.

The Fetich of the Oriental Rug.

It is an article of most people's creed that the Oriental rug is always the right thing in the right place. This may be true of certain sorts, of small pattern and indeterminate color, even of those which cannot be so characterized, but which have become with the process of years faded into a subdued harmony of neutral effect. But when a rug making a distinct color impression is chosen, it is essential to give much care to its setting.

As a rule rugs of this type, definitely red rugs like the Bokharas, the Turkish rugs in large sizes with much plain surface of red, blue or orange or those various sorts with a thick pile and a very considerable amount of bright red, to say nothing of many of the Persian carpets, are most at home in rooms of rather sombre coloring, with much dark furniture, brown walls and pictures and bric-a-brac of rich rather than vivid coloring. In such a setting the rug is the chief decorative asset of the room, and gets its utmost possible value.

On the principle which makes a mahogany gate-legged table incongruous an Oriental rug is not a happy choice for a room of distinctly French style. Oriental rugs were not used in the classical periods of French decorative art. If one objects to the typical Aubusson or Savonnerie, on the ground of its naturalistic flowers and foliage, a velvet rug of plain color may be substituted and be quite correct. In any case, only the lightest colorings of the Persian carpets will harmonize with delicate French tapestries and cretonnes.

Even in rooms without other definite color, a rug of vivid tones is not always desirable. The writer has in mind such a room, with low toned green walls, delicate Chippendale furniture and family portraits of merit and fine porcelains, all of which are absolutely negligible, owing to the presence of a large rug with a vivid scarlet centre, relieved only by a central figure and a palm leaf border in light colors on a white ground.

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LIGHTING FIXTURES

ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Suggestions for Walls.

L. C. G.—“Please suggest a decorative scheme for my new home, as to papering, draperies and rugs. I have most of the furniture which I will have to use. Floor plan enclosed. Light oak hardwood floors throughout the house, etc.”

Ans.—We are glad to assist you in your decorating. It is easy to advise when the foundations have been well considered as in your case. You have suited your woodwork to your furnishings and so many do not.

Considering these and the northeast facing of the living room, deeply shaded also by the porch, we should advise a soft ecru tint for the walls with ceiling the color of the sandstone fireplace facing. But we would combine with this that peculiar shade of soft mulberry which harmonizes with ecru tones in draperies and furniture covering. We should prefer two 9x12 rugs in this 14x24 room, in brown ecru and mulberry tones.

Notwithstanding the large east window of dining room, we would still carry wood brown tints into this room, but blended with light green. There is a paper in shaded coppery browns with pale green and rose tints blended through it, which would be perfect for wall of this room, and with the amber shades. Apple green leather for chair seats, apple green Sun-dure at windows and a rug in shaded greens would make a charming combination.

It is impossible to give detailed advice with this service for so many rooms; but briefly, we fear it will not be easy to harmonize the chestnut woodwork with white enamel furniture. The mahogany is not so bad, but still not good. A chintz paper having grey ground and touches of blue and rose coloring would be best for west guest room furnished in

mahogany. We should paint the woodwork white in the young lady's room. The north front room would be better with pale, plain ecru walls banded with Tudor rose border, than the yellow and rose color used in the furnishing. The cherry furniture should have a grey wall and gay chintz furnishings.

Finish of Woodwork.

E. D. W.—“I am a subscriber of your interesting magazine and desire to take advantage of your offer in your Decorating Department. The house is to be finished in hardwood oak on first floor and cypress on second floor. We do not wish to paint any of the woodwork. What would you use for a stain in each room? For walls, what color, etc.

1. Mahogany will be used in furniture for reception room.

2. Living room, mahogany piano, few pieces of mahogany, with the dark oak bookcases and some willow furniture.”

Ans. In reply to your request we will give you our candid opinion, though evidently it will not agree with your plans. First, your plan of using oak and cypress interior woodwork, all stained, no paint, with the furniture you itemize, cannot fail to give you an inharmonious and unattractive house. No amount of nice draperies or rugs can overcome this cardinal fault.

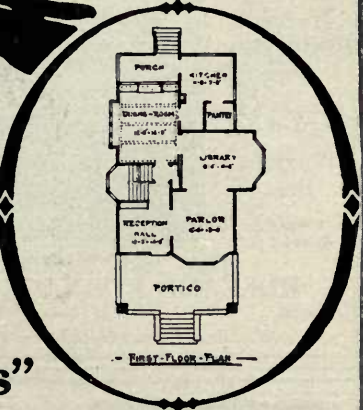
In the hall and in your living room you might use an oak trim as the furnishings of living room are of a mixed character. A medium brown stain will be the best finish. But in the reception room the trim should be birch with a mahogany stain. Not a red mahogany color, but a brownish cast which increases with age.

In the dining room you can of course have an oak trim if you decide on oak furniture. We advise the fumed oak



Architect F.O. DeMoney, Chicago

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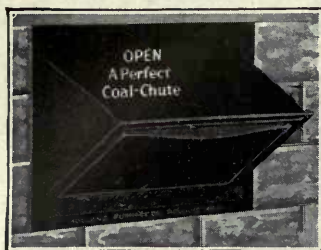
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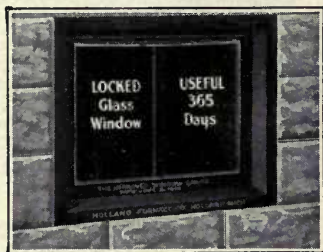
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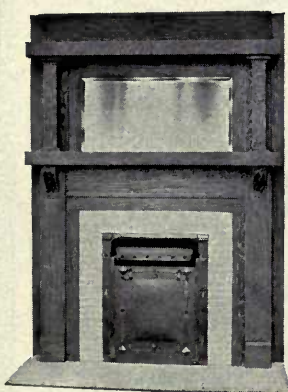
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18 x 36**

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those building a home.

Hornet Mantel Company

1127 Market St., St. Louis, Mo.

ANSWERS TO QUESTIONS—Continued

rather than the dark finish for both trim and furniture. For the chambers we regard cypress as an unfortunate selection. Both the bird's-eye maple and the white set will be terrible with it and the light mahogany worse. The rooms having mahogany furniture should either have white or ivory paint or else a birch trim finished natural for the light mahogany furniture and with the mahogany stain for the dark. The bird's-eye maple should have either deep cream colored paint or a maple trim finished natural; the white set should have white woodwork. We think it quite useless to try to suggest wall tints and furnishings till the question of woodwork is decided.

As your sketch shows the fireplace in center of wall between living and dining rooms, we do not think French doors could be used.

Sycamore Woodwork.

C. H. V.—"I have enjoyed reading your answers on 'Interior Decoration,' from which I have gained many helpful ideas. I am building a new home and would be pleased to have any suggestions you could give me.

"Shelf for fireplace, stair rails, and treads of quarter-sawed sycamore, stained mahogany, what would you suggest in regard to this? Should floors be of maple or oak if we use this trim?

"I have a green and cream rug for living room and one of green, tan, cream, and brown for dining room. I thought of having living room walls in light buff and dining room wall green to match rug. I would like the fireplace of green rough brick, but have not been able to find a place where we can get the green brick. Can you tell me where these can be purchased and how to finish the woodwork? The sycamore is beautiful stained green, but I am afraid of getting too much green."

Ans.—The essential point in your problem appears to be the finish of the woodwork. Sycamore is a very pretty wood and would take the different browns or a silver grey stain or a green, beautifully. But we should not finish with a brown or green. Grey stain would be very pretty with mahogany. Maple for the standing woodwork is not

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For Simplest and Grandest Homes

CHARMING Moorish beauty and dignity of appearance of Metal Spanish Tile gives an air of distinction to the home graced by this wonderful new and practically indestructible roofing.

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are combined to secure coziness, comfort, health and economy in

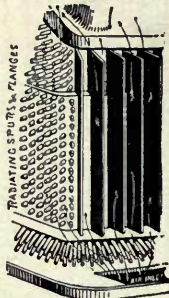
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The JACKSON VENTILATING GRATE

will pay for itself in three years by giving four times as much heat as the ordinary old-style grate from the same amount of fuel. Not only warms *Directly* by the fire in the grate, but warms *Indirectly* by drawing in fresh air from outside, warming it in the air chamber surrounding the fire and sending it into the room. Also heats connecting rooms and also rooms upstairs if desired. Any mason can set it up from our Complete Plans Furnished FREE. Better than a furnace for Fall and Spring—more cheerful, less attention, about half the fuel.

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1029 Williamson Building
Cleveland, Ohio



ANSWERS TO QUESTIONS—Continued

at all advisable. Maple is excellent for floors, especially bedroom, kitchen, etc. It would not harmonize with mahogany, if natural, any better than oak or pine. We should advise using the sycamore in living and dining rooms, staining it a brownish mahogany not too dark, or else a soft wood painted ivory white. Enamel is paint of course, but is considered a high class finish and is always good with mahogany. The stained sycamore will not darken the rooms if you make walls and ceilings light.

We would have soft ecru walls and cream ceilings. Do not have the buff tone, but ecru. Do not have dining room walls green, but the same ecru with a frieze of green leaves. We should discard the green overdrapery in den and get bright flowered cretonne. So much dark green will make your house gloomy. In cities the different kinds of brick can be had from the dealers. You might write to the Hytex Brick Co., and see if they would fill a small order. With ecru walls, we would prefer brick on those tones.

You could stain the sycamore in den green if you use the flowered cretonne for curtains and couch cover, but we think, on the whole, a fumed brown stain would go better with the furniture. As to the chambers, yellow and brown would seem too warm for a southeast room; dull old blue is very good with oak furniture.



Building? Get This Free Book

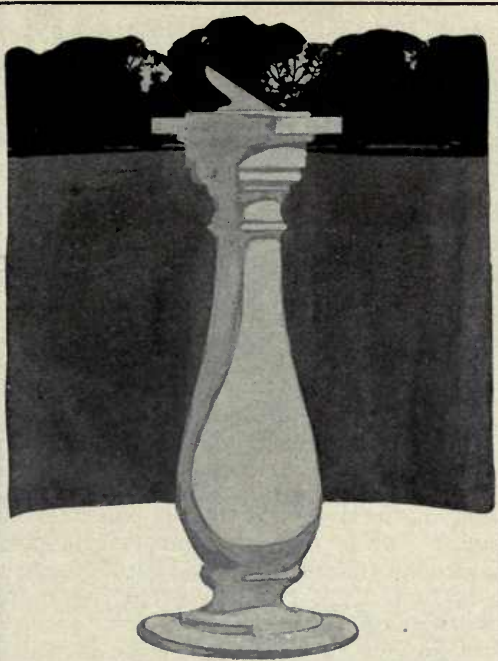
It tells all about the proper method of finishing floors and interior woodwork, and improving furniture. A big help in beautifying the home—new or old.

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Comes in 17 harmonious and natural shades. Makes cheap, soft woods as artistic as hard woods.

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Yesterday

we built of brick and stone. Today we build of concrete.

Why?

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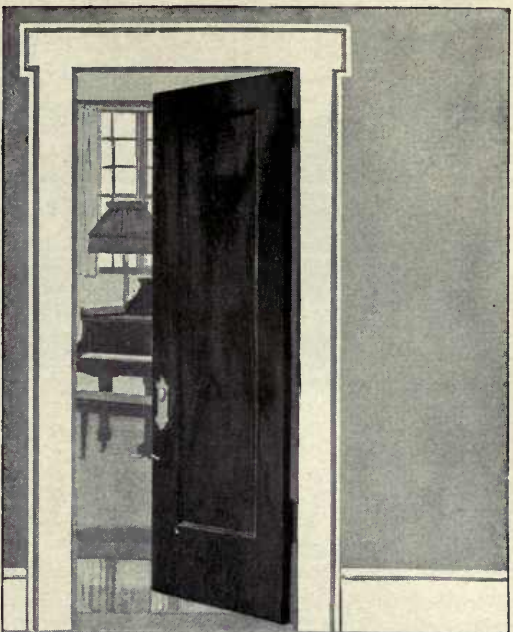
That, too, is the reason this advertisement was written about Atlas-White non-staining Portland Cement—the ideal building material for the ultra-modern home.

Pure white—strong as rock masonry, it is durable and stainless—needs no painting—no repairs.

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ATLAS PORTLAND CEMENT CO.
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Here is the recipe—a coat of Lowe Brothers Non-Fading Dark Mahogany Oil Stain; then one of

Lowe Brothers Mahogany Glaze

Finish with Lowe Brothers Inside Rubbing Varnish, natural gloss or with a rubbed finish. Used on birch, gum and various woods, Mahogany Glaze brings out a rich color and beauty resembling solid mahogany.

You can secure the striking effect shown in the picture with Lowe Brothers Mel-Jotone for the walls, Linduro Enamel for the trim and Non-Fading Dark Mahogany Oil Stain, with Mahogany Glaze and Varnish for the doors.

Free booklet—"About Interiors"

Full of good decorative ideas and practical information about Lowe Brothers finishes for every purpose. When writing ask for name of our local dealer, if you don't know him.

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LOWE BROTHERS, Ltd.

Toronto, Canada

See Sweet's Catalog 1914
edition, pages 1916-1917.



By "*The Economist*"

MODERN household economics are a vastly different thing from those of our grandmother. In the "good old times" economics meant economies. You made your own soap; you "put up" all your own fruit; you dried your own sweet corn for table use; you "sewed up" balls and balls of rags for rugs, and you scrubbed and sanded the floors.

Modern economics, mean the saving of labor, not the multiplication of tasks. Innumerable are the devices toward this end, though it must be confessed that one sometimes feels like the centipede with his thousand legs, when he gets so mixed up amongst them that he doesn't know whether he is going forward or backward. We have an uneasy suspicion at times that some of the devices so strongly urged upon the modern housewife are not economies of either time or labor—certainly not of money—and that it is easier to wash an extra dish than go to so much trouble to avoid washing it. Nevertheless it cannot be denied that modern household appliances have greatly lightened the labors of the house.

Take for instance, the new electric washer and safety wringer, specially designed for use in private home and so easily operated that it fairly deprives "washday" of all its terror.

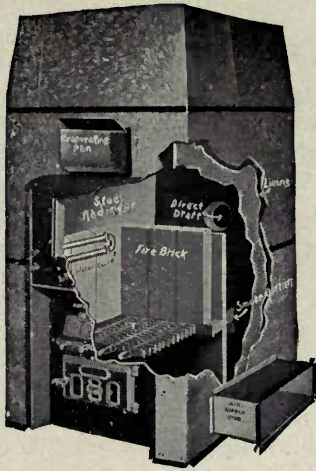
There have been many failures in the washing machines from time to time put upon the market, but this one is a real economy. Operated by electricity, one has only to guide its activities, and in fifteen minutes a small washing is cleansed, rinsed and wrung dry, ready to hang out.

The machine is made of metal, not wood, and perfectly sanitary; it washes the finest fabrics without injury. The same company manufacture a laundry stove which is a great improvement upon the old cast-off cook stoves, which formerly did duty in the laundry. Here indeed is an "Economic" worth while. *The Economist* has an intimate acquaintance with the laundry in a large, handsome city home, filled with handsome furniture, paintings, etc., above stairs, but with only a battered up old cook stove for the laundry work. And sometimes the wood would be wet, that was to be burned in it, and the laundress struggling with smarting eyes to turn out satisfactory work. Naturally, there was no electric flat iron provided but the ironing taken upstairs and irons heated over the kitchen range.

Here indeed was a case for the preacher of Household Economics, though the preacher's breath would have been



The Camp Cooker Ready for Use.



COMFORT INSURED

THE comfort in your home for several months each year depends absolutely on the efficiency of your heating apparatus. The efficiency of your heating apparatus depends upon the construction of your heater, and it also depends very considerably on the skill with which the heating arrangements are planned.

The *Hess Steel Furnace* represents many years of continuous manufacturing and study of furnaces, and is correct in principle and substantial in construction.

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set up the apparatus and hold it for sixty days test in winter weather. If you are then satisfied your banker will forward the money to us. If we do not satisfy you, the equipment may be shipped back, at our expense, and your money is refunded.

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HOUSEHOLD ECONOMICS—Continued

wasted, for it was "Ephraim joined to his idols." The mistaken, "penny-wise and pound foolish" policy that is difficult to broaden but prides itself on thrift.

Apropos of cook stoves—a novelty in that line is the collapsible camp cooker, which though made of cast iron, substantial and rustless—can be packed up into a space of 15 inches and if not exactly put into your trunk, at least easily stowed



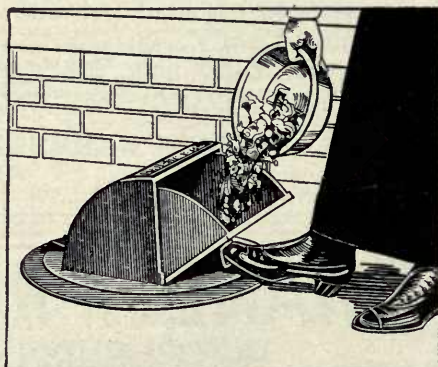
The Cooker Folded Up Occupies Just Fifteen Inches of Space.

among packages. This little joker when set up will do the cooking for half a dozen people when on an outing trip or a camping party. Without the top grating and with the ends closed up it makes a capital refuse burner for trash. It requires no tools, bolts or hinges to set it up but is easily got ready for use in a few minutes.

A real refuse burner and garbage receiver combined, well illustrates the difference between the housekeeping of this sanitary age and the old way of doing things. We have all seen this sight—

the overturned garbage can and the dogs to say nothing of rats. An improved feature of this garbage can is the removable, cast iron ash receiver below, which is quite separate and can be taken out by means of a bail and the ashes emptied into the can.

From time to time as devices come under observation which make for real improvement in the economics of the household, the Economist will endeavor to bring them to the attention of our readers, and so keep pace with the splendid progress in which new ideas and new devices are making in improved household conditions.



Garbage Receiver Device Showing Opening Device Operated by Foot.

EDITOR'S NOTE.—We are indebted to E. A. Jackson & Bro. and The Majestic Co. for the illustrations given above.



"CHICAGO" CLOTHES DRYERS And Laundry Room Equipments

consisting of *Electric Washing Machines; Ironing Machines; Ironing Boards; etc.*, especially adapted for use in the laundry room of *Residences, Apartment Buildings* and moderate sized *Hotels, Hospitals, Sanitariums* and similar Institutions. Can furnish individual machines or complete outfits. Our appliances are the best that can be had—there are none better.

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Many pretty one-story Bungalows and Cottages, Church Portfolio 50c. If you want the BEST RESULTS, consult a man of experience and reputation for GOOD WORK. If you want a small ECONOMICAL HOME, don't fail to send for these books.

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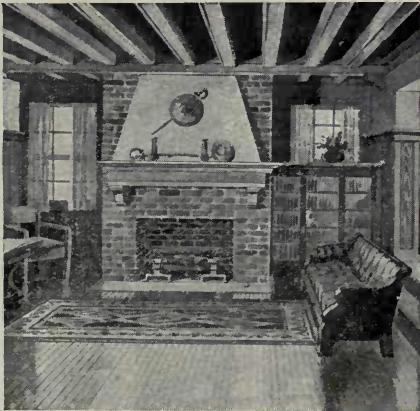


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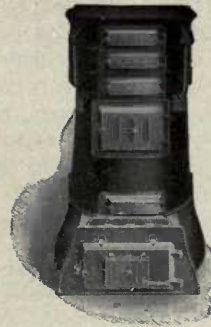
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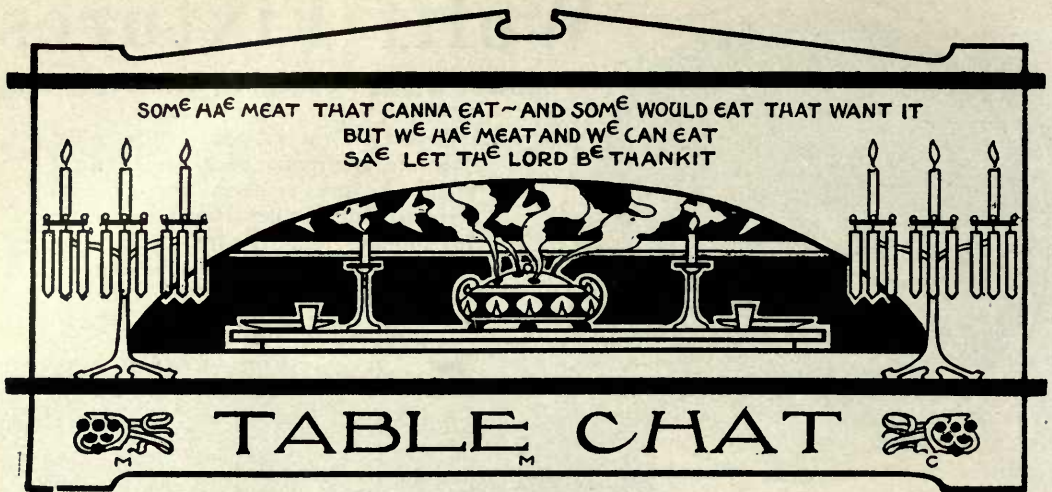
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Hallowe'en Suggestions

HALLOWE'EN is rather a juvenile festival, dear to the half grown boys and girls of the family, and a capital excuse for a children's party. The various diversions, bobbing for apples, reading the future by means of apple parings, melted lead, or looking glass, are known to most people, or to be studied up in any public library, but the supper table offers opportunities for the exercise of any natural inventive gifts which one may have. The associations of the day in this country are of Puritan origin; whatever

suggests the New England harvest time is in order. In the country there is sure to be a store of ears and stalks of corn for decoration and a choice of pumpkins of all sizes, which can be used not only for jack o' lanterns, but also to hold the various articles of food served. In the city one can hardly expect to manage more than a single pumpkin which can take the place of the electric light dome above the table, or with candles galore in its interior be suspended from the chandelier. Small squashes can, however, be pressed into the service and, with their

Brownies Attached to Scooped-Out Red Apples, Filled with Nut Goodies.





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"Vogue In Fire Places" is the style book of Fire Place construction. Nothing so comprehensive has ever been compiled before. It treats of every type of Fire Place—brick, tile, special artistic combinations,—of hearths, of mantles, of mosaics, of ceramics, of Fire Place accessories.

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Lorenzen Fire Places are shipped with a detailed blue-print that insures perfect construction. They are equipped with the famous Lorenzen-Colonial type face operating damper, that automatically sucks the smoke up the chimney and drives the heat out into the room. Every construction detail is explained. Any one that can lay bricks can make a perfect job.

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CHAS. F. LORENZEN & CO.

74 W. Washington St.
CHICAGO



Play BILLIARDS At Home!

This Captivates Thousands

Was it mother's sly idea to open the home to the Brunswick "Baby Grand" Table? Did she aim to dismiss dull care from father's brow? Or was it her plan to keep the boys home nights?

Both of these things have happened. And mother chuckles suspiciously and refuses to be interviewed.

Plan a billiard room in your new house. It is now as necessary as the library or the music room. And it takes such little space. Give your little steam "boyler" this "safety-valve" for his explosive energies.

BRUNSWICK

"BABY GRAND"

Carom and Pocket Billiard Tables



The Brunswick "Baby Grand"
Pocket Billiard Style

A cabinet mahogany masterpiece. The same as Brunswick regulation tables, only in sizes adapted to the home. Not a toy—yet sold at factory prices *on terms as low as 20 cents a day!*

Note the equipment—genuine Vermont slate bed, celebrated Monarch quick-acting cushions and fast imported billiard cloth.

A Size for Every Home

For homes that can devote a larger room to billiards we suggest the Brunswick "Grand"—the richest and finest home billiard table in the world.

Other Brunswick Home Billiard Tables include "Convertible" Models, which can be changed in a moment from full-fledged Billiard or Pocket-Billiard Tables to Library or Dining Tables, or vice versa.

30 Days' Trial—A Year to Pay Playing Outfit FREE

We give with each Brunswick Table a complete playing outfit FREE—balls, hand-tapered cues, rack, markers, spirit level, cover, cue clamps, tips, book on "How to Play," etc.

Mail the Coupon or a postal for new edition of "Billiards—The Home Magnet," a de luxe book that pictures these tables in actual colors; gives easy terms, factory prices and details of 30-day trial offer. Send today and book comes by return mail.

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Please send me free, postpaid, color-illustrated book

"Billiards—The Home Magnet"

and full information of your 30-day free trial offer.

Name

Address..... (329)

TABLE CHAT—Continued

pointed ends trimmed off, be scooped out and filled with nuts and candies and small cakes. Three half shells can be fitted together for a central dish for fruit. Wreathes of autumn leaves surrounding the central and corner dishes will add much to the effect, especially if the supper is served from a bare table.

The impromptu character of such a supper is one of its charms. Use wooden plates and paper drinking cups as well as paper napkins. These last can be had either in an autumn leaf pattern or with special designs of a sort suitable to the



The Witch's House, Made from a Large Orange Shell.

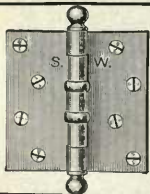
day. For individual bon-bon dishes small orange shells or scooped out red apples can be used, and as in one of our illustrations a brownie can be attached to each of them. The witch's house is more ambitious, windows being cut in the side of a large orange shell, through which the candles can be seen, the witch herself being cut from cardboard and painted in water-color. Charming candle shades can be made from orange crepe paper, decorated with a procession of black cats, silhouetted against the vivid color of the shade.

The food served should be of a simple sort, baked beans, sliced ham, pickles,

brown bread, pies made from the pumpkin taken out in making the jack o' lanterns and cake, the latter containing a coin, a ring and a thimble, and whose cutting is one of the events of the evening. As all these traditional viands are of a very substantial character, it is a good plan to have the supper begin rather than end the festivities, finishing up the evening with ice cream and cake.

Just How With Baked Beans.

The suggestion of baked beans for the Hallowe'en supper leads me to wonder if all my readers know just how to cook the genuine, Simon Pure Boston baked beans, which are really delectable. The beans and the bean pot are most important. The bean pot must be brown earthen, with a handle at the side and a closely fitting cover, with a white glazed lining, what the storekeeper will probably know as a pipkin. The beans must be pea beans and the smallest obtainable. To a quart, or two pounds of beans, allow a pound of salt pork, a solid chunk, lean and fat about equally divided. Soak the beans over night in the bean pot. In the morning set them on the range and let the water just come to the boil, but do not let them cook at all after that. Drain off the water and take out about a cupful of the beans. Pour boiling water over the pork and score the rind with a sharp knife. Put it into the center of the bean pot and dispose the beans you took out around it. On the rind place a half teaspoonful of bicarbonate of soda and three tablespoonsful of molasses, preferably Porto Rico, four, if you use corn syrup. Fill up the pot with boiling water, cover closely and cook in a very slow oven all day, filling up with boiling water from time to time. If you use a gas oven have the rear burner only all lit and turned down to the lowest point of ignition and the door of the lower oven open.

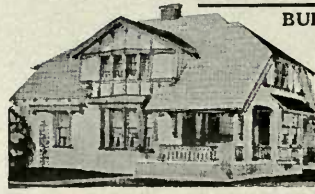


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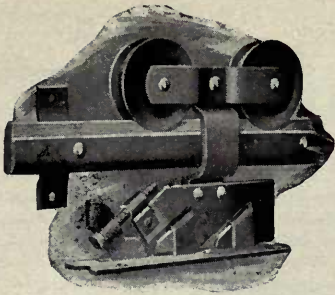


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A Handbook

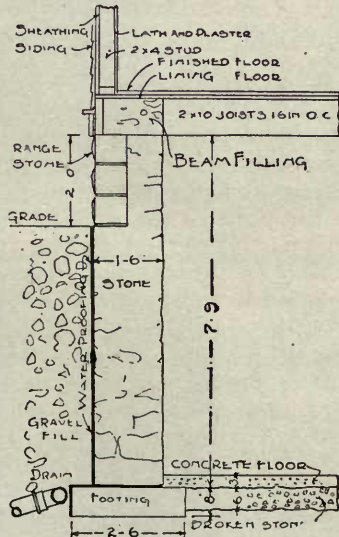
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WITH this book in your pocket you will not only be able to recognize faulty work but you can give intelligent instructions to the workmen and show them how to do it right.

See that your home is built right by supervising the construction yourself. With the aid of this book you can do it to perfection and accomplish far more satisfactory results than from the occasional and brief visits of an architect.

Revised Edition
Just Off Press

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(Fig. 6)

SECTION THROUGH BASEMENT WALL

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The United
Electric Co.

AS the human body has its own organs for removing broken-down tissues and poisonous gases and replacing them with fresh, pure air, so should the home be equipped with means for getting rid of dust and dirt and bad air and of purifying itself with wholesome air from outside. This need is perfectly supplied by the

TUEC STATIONARY CLEANER

For Health and Cleanliness

Permanently installed, out of sight in the basement, with ample piping connecting it with all parts of the house, the TUEC,—“The Heart of the Home,”—furnishes the vital force that means cleanliness and health and vigorous life. The

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Dirt, dust, disease and melancholy, household drudgery and the ills that follow it, are strangers to the home that is equipped with the TUEC. And there is a TUEC perfectly suited to the requirements of your building, no matter what its size or age. The cost is well within your means and less than your expectations. Installation can be made at any time.

Write today for the TUEC Book. No obligation involved

The United Electric Co.

10 Hurford St. Canton, Ohio



Notes On Building Material

Mixing of Mortar Colors.



HE demand for mortar colors is becoming greater every day. Not only are dealers and contractors taking to the artistic methods of laying brick in colored mortar, but building owners are realizing the attractiveness which may be secured through the use of the various mortar colors now available.

Believing that the retailers of mortar colors would benefit from information concerning the mixing of these materials, the Ricketson Mineral Paint Works of Milwaukee, Wis., is supplying them with this information.

"The amount of coloring needed varies with the materials used and the shade desired," says Mr. Frederick C. Bogk, secretary and treasurer of this company. "For mortar, the following is approximate: For laying 1,000 brick with spread joints in red, brown, buff or purple, use from 50 to 60 pounds of color to two and one-half bushels of lime and one-half yard of sand. For buttered joints, use 35 pounds of color. For dry black, use from

80 to 100 pounds. For laying 1,000 pressed brick with spread joints, using black pulp colors, take from 40 to 45 pounds of black pulp to two and one-half bushels of lime and one-half yard of sand. For buttered joints, use 25 to 35 pounds of pulp.

"Slaked lime should be allowed to cool not less than 48 hours before adding to the mixed sand and color in making mortar.

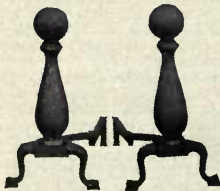
"Always mix the colors with dry material. The more thorough the mixture, the less coloring you will need."

How to Protect Our Homes from the Cold Blasts of Winter Through the Use of Storm Doors, Sash and Enclosed Porches.

By John Wavrek, Jr., in The Building Age.

With the approach of cold weather it behooves those of us who are not overly blest with this world's wealth to take into consideration the fact that we should save a penny wherever it is possible so to do. In the light of the present high prices of coal we should economize in that commodity by protecting our homes as much as possible from the cold blasts of winter.

In the first place I would recommend that storm sash be substituted for shutters or blinds wherever possible, as the advantage of the storm sash is very evident. As a means of ventilation a small metal ventilator may be placed in the bottom rail of the storm sash which can be opened and closed as may be required. The storm sash may be fastened by fitting it into the space usually occupied by the shutters or blinds. The sash may be hung on hinges or screwed fast to the



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PREPAID
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FOR SAME DESIGN, 24½ in. high, quotation on request.

SUNDERLAND BROS. CO., 323 So. 17 St., Omaha, Neb.

Danger and expense lurk in every weak ceiling

You could perhaps save a little by using "something else" in place of Herringbone, but the expense and danger of falling plaster or stucco would make that saving a future debt.

For your inside walls decide, now, that you will use

Herringbone

Rigid Metal Lath

**grips and holds—prevents
falling stucco and plaster**

Use Herringbone for outside walls, too, if you want a stucco house—a permanent, fire-resisting, cheap-to-keep-up home. Remember, Herringbone holds plaster and stucco, prevents discolored, cracked and falling walls or ceilings.



Herringbone is either galvanized or painted at the factory and the paint baked on. It goes into walls untarnished and can not discolor plaster or stucco.

For unusually damp climates we recommend the use of Herringbone Armco Iron Lath—Armco is the rust-resisting iron.

Write for Book on Building Helps

Your home can resist fire, decay and time, and yet cost little if any more than an all-wood house. Let us help you as we have helped thousands of others. Send for "The Question of Building Material." It is full of illustrations of beautiful Herringbone homes. It contains facts that every home builder should know. Mention your architect's or builder's name and we will gladly co-operate with him in planning a house that will stand.

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Makers also of Self-
Centering, the concrete
reinforcement that
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Trade Mark



The Ideal Window Practically Equipped

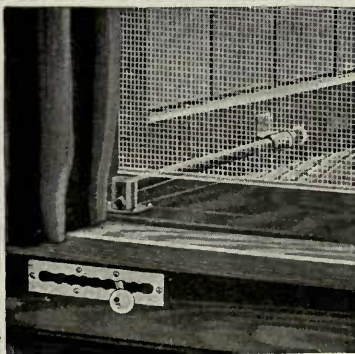
No other window can prove more satisfactory than the Casement, you know that—then demand that your casements be practically equipped.

Holdfast Adjusters operate and lock positively from the inside. No flies.—No trouble and absolute permanency. Get our "Handbook".

Casement Hardware Company

516 - 9 So. Clinton St.

CHICAGO



blind stop. In cases where the outside casing is $\frac{7}{8}$ in. thick the sash is rabbeted to lap over it. I would suggest the use of at least $1\frac{1}{8}$ -in. stock for the sash and the outside casing being only $\frac{7}{8}$ -in. thick—especially at the bay windows—the sash would project $\frac{1}{4}$ in. beyond the outside line of the casing. In order, therefore, to make a good job the sash should overlap the casing at the sides and head, while the fact that it is rabbeted makes it a practically air-tight job.



Showing Front Elevation of Enclosed Storm Porch.

THE NEW HOME and the GARBAGE CAN

Include it in your plans. No new home or bungalow complete without the **Majestic Built-In Garbage Receiver**. Keeps the can in the kitchen but out of sight. Saves hundreds of steps. Is handy, clean, odorless, convenient, and sanitary—fly and insect proof. Can is removed and emptied from outdoors.

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There is nothing like it. Absolutely sanitary because every time used a supply of disinfectant is automatically sprinkled over contents. Has vent pipe connection. Container is substantially built of cast iron. Can is durable galvanized iron sheeting. Investgate, get particulars and low price.

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Write at once for descriptive booklet that describes it in detail and explains its many advantages. It can be easily installed

in any house in course of construction or with little trouble can be built into any completed home.

Write Today

The Majestic Co., 501 Erie St., Huntington, Ind.

I submit some sketches showing a scheme of enclosing the front porch of the property.

This enclosure is made up in sections allowing of easy removal at any desired time and can readily be stored away.

In putting this work up the second time it will not require a carpenter, for all the parts will have been fitted previously and need only be screwed in place. The bottom or shoe rail could be left fastened to the porch floor permanently and also the rabbeted piece on the inside of the porch plate. All that would be necessary to do would be the removal of the screws holding the different parts in place. By adding these fixtures to your home many a ton of coal may be saved.

These parts can all be made up and completed at the planing mill and put in place by an ordinary carpenter, and can readily be removed during the summer; or the sash may be substituted by screens and the panels left in place permanently, giving extra space for the housewife. I know of many such enclosed porches where the women folks keep their flowers during the winter, thus making a very beautiful effect and heightening the value.



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TRUE CALIFORNIA BUNGALOWS



Building a Home? Is it to be an attractive artistic home? Are you including all the built-in conveniences which we have devised to make house-keeping and home-making a pleasure? Your carpenter can do all if you have our plans and details.

We have been in this business of planning Homes for many years, and our bungalows for any climate are admittedly beautiful and models of convenience.

New edition "HOMES, not HOUSES" just issued, 128 folio pages with 249 illustrations showing artistic and convenient bungalows (running mostly from \$1,000 to \$2,500) inside and out. \$1.00 postpaid. Sample pages free. Smaller book showing 38 small Bungalow Homes, inside and out, 25c., post paid.

The Bungalowcraft Co.

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Los Angeles, Cal.

**WALL AND CEILING HINTS**

from Experienced Users
No. 22. "BEAVER BOARD takes colors with pleasing effect"

"Our house is finished with BEAVER BOARD throughout and, if we can believe what our friends tell us, it is admired by all. Quite a number of small jobs have already been done in this town as a result of this attractive job of ours."

"Our home is finished in colors which show off on the surface of the BEAVER BOARD, producing a very pleasing effect, not possible with the other kinds of wall and ceiling material we have used." W. F. MACLAREN.

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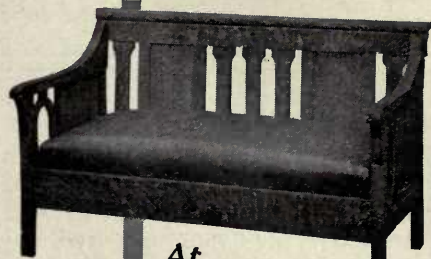
Booklet "BEAVER BOARD and Its Uses" and painted sample sent free.

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United States: 310 Beaver Road, Buffalo, N. Y.
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Home-like living room in the home of W. F. MacLaren, Digby, N. S., showing BEAVER BOARD walls and ceilings.

Buy Sterling Furniture**\$21.00****At Factory Prices**

Compare with anything offered at retail at 25% higher.

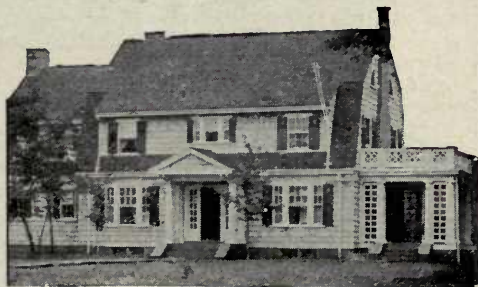
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Residence, R. J. Mebane, Greensboro, N. C. Architect, A. Raymond Ellis, Hartford, Conn. Most pleasing and durable covering; one color on side walls, a darker shade on roof.

Buy Good Shingles Already Stained

YOU save money, time and worry, and the bother and muss of staining on the job. We select Washington Red Cedar Shingles (no poor or wedge-shaped shingles), preserve them with creosote and stain them with colors made of finest earth pigments—no aniline dyes. Shingles are thoroughly dried, bundled and stamped.

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14 Grades—16-, 18-, 24-inch. 25 Different Colors.

They last twice as long as brush-coated, painted or natural wood; cost less and look better than any stained-on-the-job shingles you ever saw.

Many old houses are remodeled to look like new by using CREO-DIPT Shingles on side walls and roof. CREO-DIPT Shingles with their soft-color tones insure artistic effects that all good architects appreciate. Write for Free Booklet showing houses in all parts of the country and ask for Pad of Colors on Wood. Please give names of Architect and Lumber-Dealer.

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COMFORT IN THE HOME

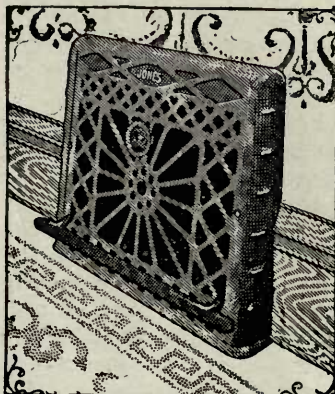
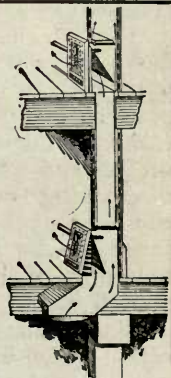
during the coldest weather may be secured by installing the "JONES" System of Heating, one principal of which is the heating of one room on two floors from the same basement pipe, insures not only a saving, but produces the results wanted.

Our improved "JONES" Side Wall Registers have been installed in over 350,000 of the most comfortably heated homes of the United States and Canada.

Send for Booklet, "HOME, SWEET HOME."

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Heating, Lighting and Plumbing

Faulty Heating is Effect of Flues.



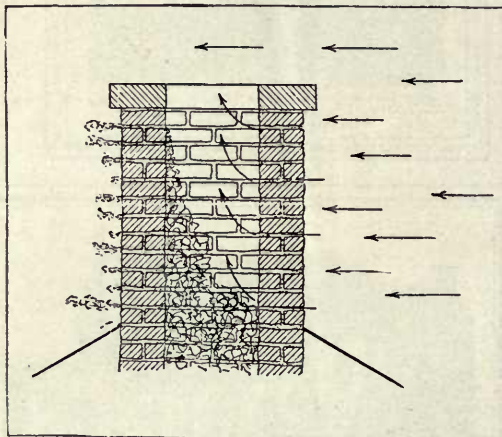
ANY of the chimneys with which heating apparatus is connected are apparently as good as any others to the unsophisticated, but to the expert they are poor chimneys indeed. In the mild weather of the early fall almost any kind of chimney will carry away the products of combustion from a fire of sufficient intensity to warm the air, circulate the water or generate the steam required to keep a residence, church or hall at a comfortable temperature.

When severe weather comes and the chimney must carry away the products of combustion from twice as much fuel as was burned earlier in the season, the lack of draft becomes apparent and the heater fails to do the work which is required of it. The owner seldom knows anything beyond the fact that he suffers from the cold and that the heater is not doing what it ought to do. He does attempt to find the cause, but complains to the man who sold him the heater and insinuates that he has been misled and that the heating apparatus he bought is entirely too small.

When it is explained that the furnace is doing as well as it can with a "sore throat" or faulty flues, the heating contractor is told that he is shirking his responsibility. In many cases it is necessary to resort to a great deal of persuasion to get the owner to realize that the mortar in the chimney has been eaten away by the gases, leaving the bricks with little to hold them in place or to prevent air from entering the chimney from the outside. He does not seem to understand even when told that instead of drawing the smoke away from the fire the chimney draws air through all of these cracks and kills the draft that a chimney of its height and dimensions should have.

The middle of winter is a poor time to rebuild a chimney, and a poor chimney will prevent the satisfactory operation of

any heating apparatus, whether it be one of the best that could be devised or a competition job for a building contractor. Many persons who have good chimneys and heaters complain of insufficient heat. Investigation will demonstrate that the fire is being run at about the same rate in the middle of winter as it was in the early fall, and that there are ashes filling up more than half the firepot and only a little fire on top.



Showing Effect of Air Currents Upon Draft in Faulty Chimney.

When the expert makes a visit and rakes out all of the ashes he has to be a little bit careful or he will not leave a sufficient amount of live coals in the fire chamber to start a good charge of fuel, and it may take him an hour or two to get the right kind of fire going.

However, when a good fire is going in the apparatus and the house is warmed, there is the answer in the fact that the heater will do the business if the family will attend to the fire and put on coal. Sometimes it might be well to advise the purchase of a decent poker, or slicing bar, or a shaker for the grate, and to provide a furnace scoop instead of a fire shovel to feed the fire with the fuel which it requires.

-If You Want To Cut Coal Bills $\frac{1}{2}$ TO $\frac{2}{3}$



Detroit, Mich.—I have been using the Williamson UNDERFEED Furnace for 7 winters. We are freer from dust or soot than with any other furnace we ever used.
C. E. SMITH, 15 Josephine Ave.



Danville, Ill.—My Williamson UNDERFEED Heater has been in use for eight years and heats a 9-room residence. My coal bills for the year have ranged from \$35 to \$38.
R. B. HOLMES.



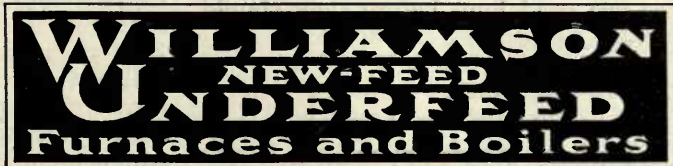
Chrisman, Ill.—Am well pleased with the UNDERFEED Furnace. Heats eight rooms, two halls, bath room and sewing room. Coal bill for 1913-14, \$41.70.
W. E. HOLDEN

There are over 25,000 Underfeeds in successful use today

Yes, Sir! Right Square in Two or Better—Read This Now!

When your coal bills climb and the temperature in the house has that "way down feeling," then you will remember that the Williamson Underfeed will give you *more* heat at *less* cost than any other heating system in existence. *Performance is proof!* When 25,000 users of an article—people who have spent their own good money for it—endorse that article, you can bank on its superior value.

The houses shown on the left, with the letters under each, are typical of thousands we have received. Shall we send you the names and addresses of over 2,000 Underfeed users—some right in your neighborhood—who *know* by experience that *clean, even, economical* heat is obtainable *only* with the Underfeed?



Cut Coal Bills $\frac{1}{2}$ to $\frac{2}{3}$

With the Underfeed, coal is fed from below. All the fire is on top, causing perfect combustion. Smoke and gases are burned up, making more heat with *no* smoke, smell, clinkers and very little ashes. You can use cheap slack soft coal or pea and buckwheat hard coal and secure same heat as highest priced coal. Every Underfeed is substantially built. Mr. J. C. Garland, Dubuque, Iowa, writes that his Underfeed has saved him \$70 a season for *nine* years. Adapted to warm air, steam and hot water systems in buildings of all kinds, large and small.

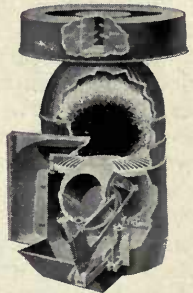
50% Saving in Coal Bills Guaranteed

Every Williamson Underfeed Furnace or Boiler, when properly installed and operated, is guaranteed to effect a saving of 50 per cent in coal bills. This is backed by a \$1,000,000 corporation. The strongest guarantee ever put behind *any* heating system is behind the Underfeed. You take no chances in putting in an Underfeed. If it doesn't make good *we* will.

Are You Going to Build?

If you are, then investigate the Underfeed. If you are tired of paying big tribute to the coal trust—if you want to slash your big coal bills in two then mail the coupon for the startling "show how" evidence. (46)

The Williamson Heater Co.
(Formerly The Peck-Williamson Co.)
464 W. Fifth St., Cincinnati, Ohio



Cut-out View of Underfeed Furnace

This Brings The Evidence

THE WILLIAMSON HEATER CO.
464 W. Fifth Street, Cincinnati, Ohio

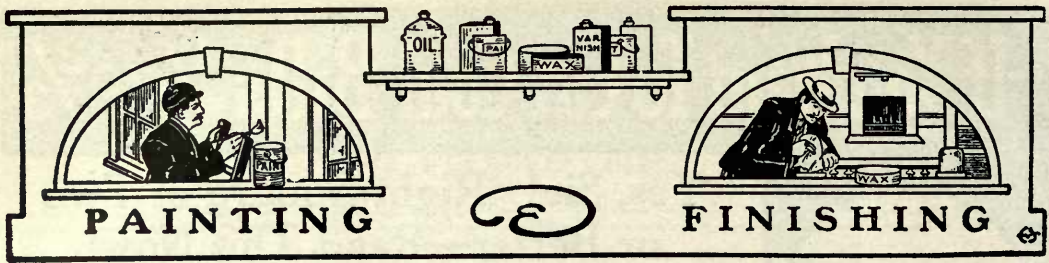
I would like to know *how* to cut my coal bills from one-half to two-thirds with an Underfeed.

Warm Air..... Steam or Hot Water.....
(Mark an X after System interested in)

Name

Address

My Dealer's Name is



Floor Finishing.

IF proper time allowance were given to floors after their finishing, it is safe to say they would wear 50 per cent longer and better under the usual procedure. But both contractor and owner are so desirous of getting the contract finished that the floors are used long before they should be, and the result is well known.

If the floor is of oak, it will be paste filled. In ten minutes from the time of rubbing in the filler it will have set. Then it may be rubbed off across the grain, using a tow pad or rubber. Burlap also does well. After standing twenty-four hours, sandpaper smooth and apply a surfacer, some grades of which may be bought ready made. Clean up, allow it to become dry, then polish with wax or apply floor varnish, as desired. Waxed floors look fine and are easily renewed as they need to be, but they do not give the wear that varnish gives. Nor should wax be used under varnish, as it will cause trouble. A good floor varnish, thinned a little each coat, excepting the last, makes a very durable floor finish. As ordinarily used, the wax makes a very slippery floor, one that is indeed dangerous to walk on, but there is a way to avoid this difficulty, and that is to use nothing but wax from the filler up, avoiding varnish or shellac. Or if shellac is used, then sandpaper it to give it tooth. Never finish bathroom, entrance hall or kitchen floor with wax.

Milk is a good thing to wipe up a varnished floor with. I recall one painter who told about a floor that he varnished for a family and that looked well after twenty-seven years of service. It was often wiped off with a milky cloth.

At a summer resort on the New England coast there were some piazza floors of rift southern pine which were finished with coal oil, a very extraordinary meth-

od, to be sure, yet it is said that the oil seemed to preserve the wood and make a very nice effect.

When you wax a new floor allow the wax to lie over night or twenty-four hours before polishing, but an old floor may be polished soon after applying the wax. Polishing may be done with a woolen cloth, but a weighted brush is the best tool to use. There are floors in French public places that are so highly polished as to show the images of the furniture standing on it, just as water reflects the trees standing at its edges. And some of these fine waxed floors have been in use for two centuries at least.

Water is usually fatal to a waxed floor, and should it be desired to remove the old wax then rub with turpentine.

Some finishers say that a hard pine floor should never be varnished nor shel-laced, but should be stained dark with a dark oil stain, wiped off, and when dry given a coat of equal parts of oil and turpentine, wiping dry. First wipe across the grain with the dark oil stain, which will take the oil stain from the hard parts and place it in the softer parts of the wood; finally wipe the surface dry with a dry cloth. Repeat this operation until the wood will take no more of it. A floor treated this way will neither scratch nor wear off in spots, and it is an easy matter to renew it. Such a floor is not slippery, but gives a footing to the walker thereon. Also it grows mellow and darker with age, and forms a fine background, as it were, for the furniture of the room.

Why fill a floor before waxing? For the reason that when you want to renew such a floor it is easier to remove the wax from a filled surface than from an unfilled one. When you remove wax from such a foundation you have just as good a surface as when the job was first done.

—*The National Builder.*

Dutch Boy White Lead

mixed with Dutch Boy linseed oil makes paint thin as paper, opaque as ivory—puts a metal mantle about your house. It preserves, beautifies; lasts without cracking.

Paint Adviser No. K. 28

tells about wood surfaces and suitable paint, how to estimate cost, etc.

**Free on
Request**



NATIONAL LEAD COMPANY

New York, Boston, Buffalo, Chicago, Cleveland,
San Francisco, St. Louis, Cincinnati
(John T. Lewis & Bros. Co.,
Philadelphia)
(National Lead & Oil Co.,
Pittsburgh)

The Architect's Corner

Proper Height for Ceilings, Doors and Windows.

Question: I would like to have your opinion on the following points in regard to the height that ceilings, windows and doors should be.

Our house is to be finished and furnished simply. No grandeur desired. Two-story metal tile hip roof, extension three or three and a half feet, rafter ends showing. The porches will have a very simply outlined Spanish Mission motif over them. The openings large and slightly arched. Pillar supports at the corners only. Upper story ceiling nine feet.

1. Will it do to have the first story ceiling 9 ft. 6 inches or should it be 10 feet?

2. What height should the top of the opening of the windows be from the floor?

I had thought of having the ceiling 9 feet 6 inches and the top of the window openings 7 feet 6 inches. By adding the casing and heading at the top of the windows this would give a distance between of about 1 ft. 6 in.

3. Should the outside and inside glass doors and the sliding door be 7 ft. 6 in. or higher. (I notice in many pictures these go nearly to the ceiling.)

4. Please state what you think these different heights should be.

5. Should the top of the opening of the arch of the porches be 8 ft. 6 in?

6. Should the top of the front doorway and the top of the windows be the same height?

The upper sash of the windows will have small panes. I had thought of a Craftsman door and side lights with small panes of beveled glass in both. These to be the same height as the window openings 7 ft. 6 in. or 8 ft. (as you think best) and have no transom.

7. Since the group of windows in the living room, and the doorway are under the one large arch is it best to have the top of each on a level or not?

8. Would it be best with or without a transom?

I wish to apply stucco with sand finish over a frame building and I am especially anxious that it shall not crack. As this material has not been used in this section I cannot judge of its durability under the climatic conditions prevailing here.

Answer: We cheerfully reply to your inquiries, although your architect is really the one to take care of all these questions.

Taking up your questions in order:

(1) 9' 6" is a usual height for first story ceilings in a medium-size two-story house. A 10' ceiling is unusual here, though sometimes used in your climate.

(2-3-4) The door openings, glass or otherwise, should be on a level with the top of the window openings, etc. 7' 6" quite high enough. Of course in large stately rooms, these openings are higher.

(5) Without seeing an elevation of the front of the house it is impossible for us to say whether 8' 6" is a correct and proportionate height for the porch arch or not; probably.

(6) Yes, the effect is better when the front door opening is on a line with the tops of the windows. Of course there may be an architectural treatment of some kind above it. Your idea of the style of front door is very good.

(7) We do not recommend transoms.

(8) Answered in No. 6.

Stucco is a permanent exterior coating and is used with much success even here in the Northern states where the extremes of temperature give a much more severe test than such finish would receive in the South. You can certainly select this material with every feeling of security that it will prove satisfactory.

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Question: I notice in your June issue an article on waterproofing cement with a bituminous process. I have a basement in a summer cottage below tide-water, from which I cannot keep the water. It is of concrete construction with six inch walls, but a few inches of water comes through the floor at high tide.

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Will you please tell me how I can stop this without too much expense?

Answer: The problem of keeping the water out of your basement is a difficult one to solve in view of the fact that, as I understand the situation, at high water tide the ground under the house as well as surrounding is saturated and the water seeps through the bottom of the foundation wall and also comes up through the floor. About the only way to keep the water out under conditions like these would be to have a waterproof basin un-

der the entire house. I mean by this, take up the basement floor, go down about 6 or 8 inches and then put in heavy grouting of crushed rock with a rich mixture of cement and then about two to one mixture of cement and sand with waterproofing compound powder worked into the cement powder before the ingredients are assembled and put on a thick layer of this rich mixture, I should say an inch and a half or two inches and cove it up to the basement wall. This for the inside protection or protection of the floor. Then I believe it would be necessary for you to go down all around the house on the outside and smear the foundation floor down to the bottom with about $\frac{3}{4}$ " coating of pure cement and preferably with waterproofing compound in it.

Sometimes where there is only a little water collects you can keep it out by running a porous tile all about the outside of the house at the bottom of the foundation. We cover this subject of foundation work, waterproofing outside walls, etc., in our builders' pocket guide, "Building the Home."

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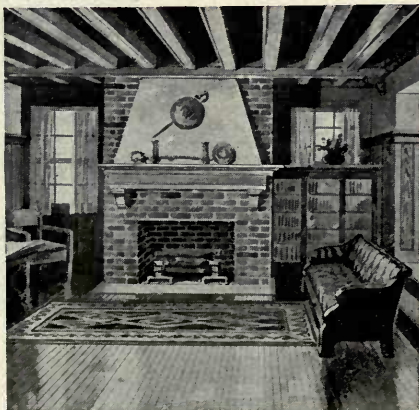
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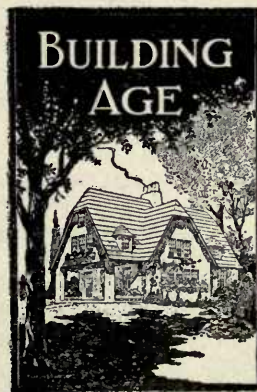
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SPLINTERS AND SHAVINGS

House Numbering of Comparatively Recent Adoption.



T WAS in the year 1512, says the New York Sun, that the idea struck an architect to have numbers painted on houses in a certain quarter of Paris, but the idea took a long time to take root and it was not until 1789 that the system became general.

In St. Petersburg they have an excellent way of displaying the numbers of houses by little lanterns bearing the numbers on the glass, a most useful notion after dark.

The numbering of houses in London, as above shown, is of comparatively recent date, and a backward glance into the history of the metropolis shows that the convenience of the method has been gained at the sacrifice of a picturesque element in our streets.

"In the later Stuart times," says Macaulay, "the houses were not numbered, and there would indeed have been little advantage in numbering them, for of the coachmen, charmen, porters and errand boys of London a very small proportion could read. It was necessary to use marks which the most ignorant could understand. The shops were therefore distinguished by painted or sculptured signs which gave a very gay and grotesque aspect to the streets."

These descriptions referred to houses in comparatively well defined spots, and the difficulty of locating the poorer residents was considerable, as during the first part of the eighteenth century the names and places were continually changing to correspond with the change of ownership or of the signs that hung in the streets. An act was passed in 1752 to compel the residents to do away with hanging signs, which had become a dangerous obstruction, and fix them to the walls of their houses. The act, however, did not include the numbering of houses, which was secured three years later in 6 George III., cap. 26.

The first instance known of a London street in which the houses were numbered is Prescott street, Goodman's Fields, but the practice did not spread far before the year 1764, when it received a great impetus, and it soon after became well established in London.

It may be interesting to add that there is still a strong objection on the part of householders to occupy a house numbered 13. The London county council has often been requested to allow another number to be substituted, though the request is not often granted. In one instance the proprietors of a nursing home urged that if the number were not altered many superstitious patients would be afraid to go to the home and the business would suffer in consequence. In this case the council gave way and the house was numbered 12A.

Something New in Decorative Material.

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Glazed Porcelain Radiators.

A new type of radiator made of glazed porcelain was recently exhibited at a building exhibition in Leipzig, Germany. It is claimed that this form of radiator has a higher efficiency than the cast iron type. The general design is similar to a cast-iron radiator, except that the walls are considerably thicker. The sanitary features of its construction are emphasized.

—*Heating & Ventilating Magazine.*

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Action for Installing Heating Plant.

A contractor undertook to install a heating plant in a residence, according to certain plans and specifications provided, for \$340. The contract provided that the plant should be put in in a skillful and workmanlike manner, and would heat the house according to the requirements of the specifications. It provided that if any alterations were made in the installation under the direction or with the consent of the owner, a reasonable amount for any extra work or material should be paid by the owner. In an action by the contractor for the contract price, for extra work and materials, it appeared that alterations and deviations were made, some admitted to be under the direction of the owner, others which he denied were made either with his direction, knowledge or consent. The total amount of the alterations made, extra material furnished, and extra labor performed, as claimed by the contractor, amounted to \$82.31. A trial resulted in a judgment for the original price, and the owner appealed.

One of the owner's principal contentions was that the plans and specifications required a boiler of the American Radiator Company make, and that the one installed was one handled by the contractor not made by the American

Radiator Company, but by another firm, and known as "Our Own." The evidence upon the question as to whether the owner consented to the substitution of this boiler was conflicting, but it appeared that the boiler was taken to the owner's house and placed upon his lawn, that while there he saw it and knew that it was not the make called for by his contract, but that he made no objection to its installation or use, and did not object to the substitution of this boiler for the reason that he wanted to move into the premises as soon as possible. There was no evidence that, so far as capacity or quality of the boiler was concerned, the one installed was not equal to that specified. The evidence showed that the pipes originally put in the plant were placed within the walls of the building as required, that in order to replace them with larger ones it would be necessary to cut into the walls either from the outside or inside, that to do this would cost from \$150 to \$200; that if the pipes were of sufficient size and the plant of sufficient capacity and quality to perform the work required of it, then the other defects which were pointed out could be replaced or repaired at an expense of not more than \$75. The evidence was held to sustain the judgment for the contract price.—*Heating & Ventilating Magazine.*

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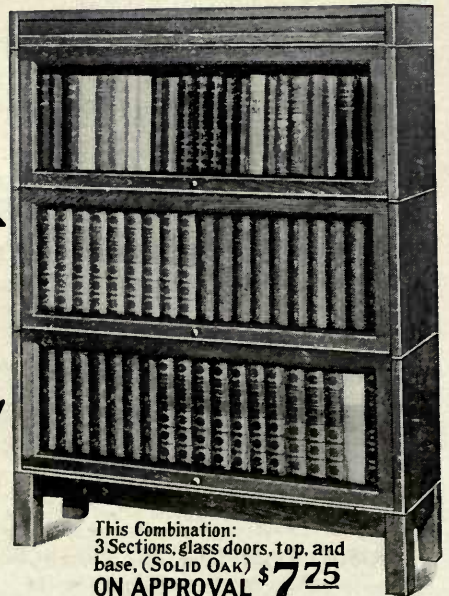
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KEITH'S MAGAZINE

VOL. XXXII

NOVEMBER, 1914

No. 5

The House with Individuality

N. Margaret Campbell

DO you remember the quaint fancy of the beloved English writer who said, in describing a certain house situated in a blind alley, that it looked as though it had run away when it was a little house, and having grown up there, was never able to get out? Of course we know that houses never really run away and they don't

grow up, but the fancy pleases us nevertheless, for it attributes a soul to the house and aptly expresses the feeling we have often had as we stood before some venerable homestead. In any house, not a mere imitation, the really impressive and vital thing about it is a part of, and yet distinctly apart from, the wood, or brick or stone, just as a man's clothes



A Sturdy, Independent Sort of House That Holds Your Interest.



A Suggestion of the Gothic Gives Distinction to This Home.

might never be mistaken for the man himself although the sight of them might always suggest him.

Now the way a man combs his hair, or wears his hat, and whether he indulges in clamorous checks or subdued stripes, is expressive of his personality, and in the same way a roof, if it is much too large for a house, as though apeing an extreme Spring fashion, or cocked up at a rakish angle over a twinkling dormer window, may give you a clue to the inner spirit of the house.

The house with individuality, that stands out from among all its neighbors so that the passing stranger at the close of a long journey will find it sharply etched in his mental vision against the indistinct blur of all the other houses he has seen—such a house, regardless of the material in its construction or the location in which it is found, will always have certain characteristics. The individ-

uality of a house is in a large measure, determined by the same traits that mark a forceful personality. It must be original in the sense of being free from imitation, bravely sincere in execution, true to the architectural traditions of the past and a logical and dominant part of its own environment. The lofty towered house of the rich as well as the humble cottage of the day laborer may alike claim admission to this distinguished class if they answer these tests.

No house can be a servile imitation of another house and retain an air of distinction. Any architectural style not elastic enough to permit an individual treatment of doors or windows or lattice to express the owners preference has outlived its usefulness and should be avoided.

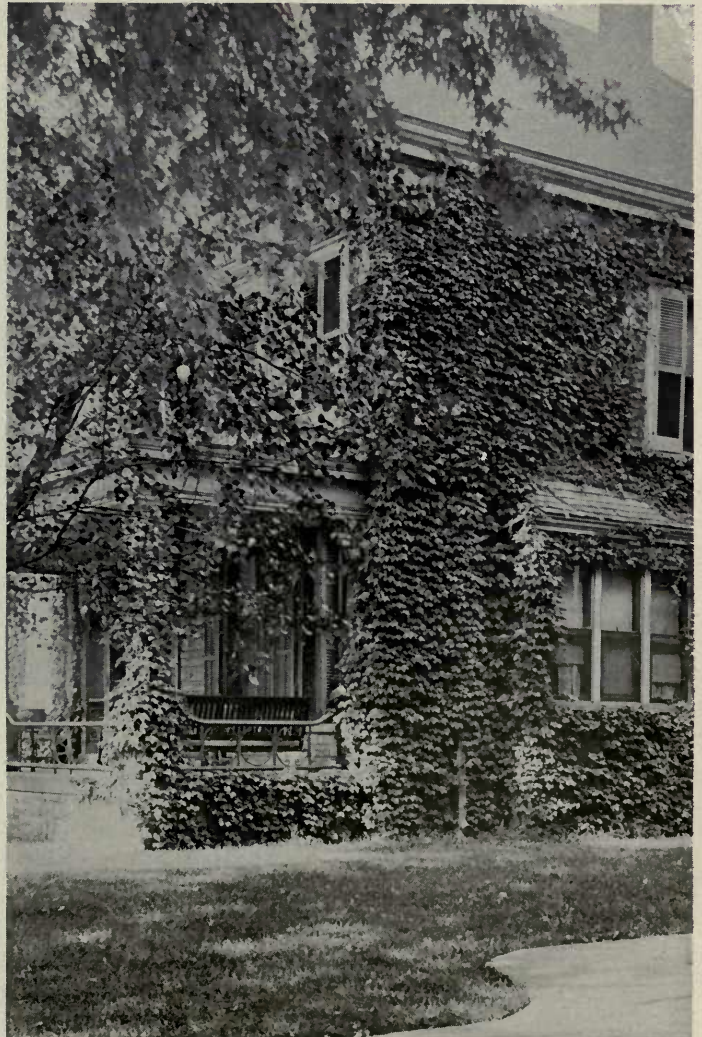
Nor should any house pretend to be something it is not. If the entrance is of the stately colonial type the interior should be executed in the same lofty and

dignified manner; the trivial and any attempt to produce "cozy" effects will at once seem incongruous and insincere. A little house should not be ashamed of its size and attempt to deceive the world as to its dimensions by elaborate entrances and ornamentation, all of which look well enough on some pretentious building but completely rob the small house of the simplicity and restraint upon which its dignity depends. Its limitations are the source of its beauty and charm.

No house will seem to have individuality if it is an importation of some foreign style of architecture. However pleasing it may be in its native atmosphere, when taken out of its natural setting it loses its charm and becomes affected and exotic unless adapted to the peculiar limitations of its new environment. This accounts for the mannerisms of many houses that jar upon one like the acquired accent of the boarding school girl. They give one the uneasy feeling that they have not been in America long enough to take out their naturalization papers.

Then, the house must be proportioned to the site it occupies. It must not seem lost and lonely amid spacious grounds and labyrinthine paths nor must it thrust an aggressive gable into the unoffending window of a next door neighbor. Who has not seen some pompous, self-assertive house, thrust directly into the

line of vision of some helpless, earlier comer along the street? And, finally, the house must blend into the landscape so that no flaring color will center attention upon itself and detract from the harmonious effect of the whole. If the background is crowded with other houses, the color note emphasized in them must also be taken into consideration so that the entire scenic effect will be unified and consistent. Public taste has shown a decided improvement along this line recent-



A Mantle of Living Green Will Transform the Most Prosaic and Unlovely Building Into a Bower of Romantic Beauty.

ly but much still remains to be done. Too often we see an effective color scheme "killed" by the color treatment given an adjacent building.

The house shown in our frontispiece is most modern in construction—employing the much favored combination of timber and cement, yet would never impress anyone as a *parvenu* because of the

from the petty vanities of bric-a-brac complicating the machinery of too many of our modern homes.

The exteriors illustrating this article were purposely chosen from homes of an unpretentious character in order to emphasize the individual note that may be present in a home of moderate cost. The Dutch Colonial house illustrated on the



A Simple Design with a Dignity and Charm of Its Own.

quaint angles in gables and dormers and the weather-worn tone skilfully brought out in shingles and sidings. There is a certain air of idealism above the sloping lines tempered by the intensely practical. You know, without entering that science and art have both contributed to the arrangement and decoration of the interior. With every line of the exterior so frank and unaffected you instinctively know that the rooms within will be free

first page is an excellent example of dignified reserve given a homey, livable touch by the gambrel roof. The small divisions of the upper sash of the windows relieves the plain exterior without detracting from its simplicity. The effect of the sturdy, brick chimney at the end of the house will be wonderfully softened and toned into the mossy green of the shingles by the ivy beginning to grow over it.

Just at this point it is well to note the



A House That Is Sure of Itself Without Being Over-Conscious of Its Virtues.

effect that vines have upon a building. A house that might otherwise be barren and spiritless may be transformed into a rustic and picturesque bower when robed in the changing glory of English ivy, or some vine of equal beauty. The imagination is always moved by a vine-clad dwelling but it rather marks the owner as one who counts charm before cost, for the leafy covering is rather destructive to paints and even causes stone to be repointed. The devotee of the beautiful, however, will continue to lovingly trim and train his vines regardless of an occasional embarrassing item on the wrong side of the ledger.

The Gothic *motif* differentiates the little home which follows. The spire-like posts at the entrance and the carving of the wood carry a faint suggestion of that style of architecture that has been so long expressive of the religious and devotional that it can scarcely be dissociated from this feeling, yet in this little house the use of it is so discreet that

it only tempts the fancy and gives distinction to an otherwise ordinary design.

The design illustrated above is rather more ornate and shows the very modern use that can be made of the Greek traditions in architecture. The house was painted a pure ivory white, all contrast being obtained by the deep bands of shade in the cornice, the frieze and the channeling in the Ionic pillars. At each corner of the house Ionic pilasters add to the dignity of the design and fit in perfectly with the Greek spirit of ornamentation. The monochromatic scheme strictly adhered to in the exterior finish gives the house an air of calm and restraint so difficult to preserve in a small house having elaborate cornices and broken roof lines.

Just a word about the homelike little structure of frame and cement plaster on the opposite page. Not a cent has been expended on useless fripperies and furbelows, even the porch is an inviting

(Continued on page 380)

Our Dining Porch

Verona Gee Lucas



WE built a bungalow last year and planned it so that the dining porch would command a view of the garden and back yard. The porch faces east and there is a glimpse of the street on the north and a rose garden on the south.

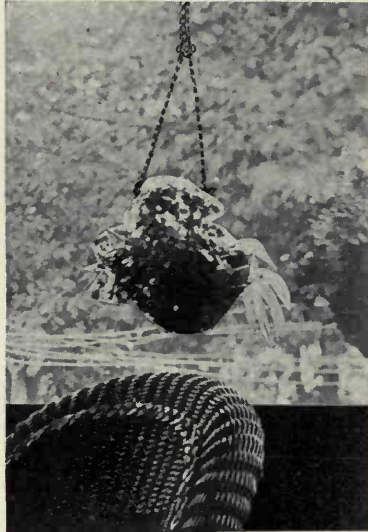
The roof drops in a sheltering way and there is a brown wood parapet, the intervening space is screened by one wide strip of netting so there are no bars or joinings.

This space can be easily glazed later.

A California climbing rose is at one corner, but it has not climbed very high yet—however we can think how attractive the pink blossoms will look against the brown wood and gray stucco. Hanging baskets are suspended from the low overhanging roof and, being on the outside, they are easily watered with the hose.

Next summer we intend to have the brown willow table and chairs and a long seat with blue and white Japanese crepe cushions, but at present a few rattan pieces of furniture are doing duty.

The dishes used on this porch are blue and white, also blue and white Japanese cloth is used for table "linen"; this comes by the bolt about twelve inches wide and can be sewed together any size desired; this cloth is very easily laundered and is cool looking. The kitchen window



Hanging Baskets Suspended from the Roof,
Help Make Our Porch Attractive.

opens upon this porch and there is a very convenient wide shelf even with the bottom of the window where dishes and food can be placed for the table.

Our first breakfast was taken there one fine morning about half past six. It seemed as though we were in a new world, the leaves were growing every minute, the plum trees white and fragrant, and like a May Queen was the great apple tree covered with its beautiful blossoms and shak-

ing down a perfect shower of petals.

The lilacs were coming into blossom, and while we are talking of them, aren't they comfortable friends? They never take offense. We had some growing in the shade where they spindled up to reach the light, but the elms and lindens grew faster, so it was a losing game for the lilacs. The gardener was directed to take them out, and later we saw him beating their roots against a tree to dislodge the earth—he cut off their tops, but they came right on with foliage and a promise of better things next spring. If little attentions are shown, like trimming and cutting off old blossoms, they respond beautifully.

To go back to the dining porch—as we sat there an old blue jay—king of a nearby pine tree, came down near us and stared, turning his head first one way and then another, chased away a

sparrow and came back and stared; our nearest neighbor Robin Redbreast chirped and twittered at us, then made a swift plunge toward the middle of the garden, planted his bill in the soft earth and jerked upward, took a firmer hold and pulled with all his might and almost fell

can't think of cutting down an elm. We won't say much about the garden just yet, expecting that everything will grow tremendously, especially weeds and dock—however, we see rows of lettuce and other green things—but we have learned that a garden to be a success demands



A Glimpse of Our Dining Porch, Where We Can Eat "in the Open" and Be Entertained by the Rarest of Songsters Who Ask Only a Crumb for Their Pay.

over backward, but righted himself and flew back with his breakfast.

A song bird made his offering and another not far away as if to rival him, warbled and trilled with all the abandon and joy of his being. These brought out other singers and the air was full of music and fragrance and our hearts full of thanksgiving.

There are twelve elms bordering this garden—most too much shade—but we

eternal vigilance. We think we shall get something much more valuable than vegetables from our garden.

The evening of that first day on the porch was likewise filled with wonders. The low rustle of the leaves, the old fashioned scent of the lilacs, and the soft crooning of the birds in their nests made us feel that the out of doors would claim us most of the time for the next four months of summer.

Effective Lighting of the Home

Richard Hill



WE are told that the first creative fiat was, Let there be light! and since that the human family has been persistently struggling with the question of creating light wherever, or whenever, sunlight is lacking. So difficult has this been of achievement that long after the questions

of philosophy had been settled and the ancient and medieval world had fixed the laws that govern the fine arts, the question of artificial lighting was almost as far from solution as when prehistoric man puzzled over it in the shadowy recesses of his cave in the hills.

True, some progress had been made in the fashioning of the vessels containing the lights. Cities buried beneath volcanic ashes over two thousand years ago have yielded up braziers that, from the viewpoint of decorative art, would be an inspiration to the best of our designers today, but the character of the light itself had undergone very little change. The uncertain light of the taper and the feeble ray of the candle made impossible prolonged

and intense application to any delicate task at night and it was only with the discovery of the illuminating possibilities of gas and electricity that our present industrial era was able to utilize twenty-four hours of each day for working.

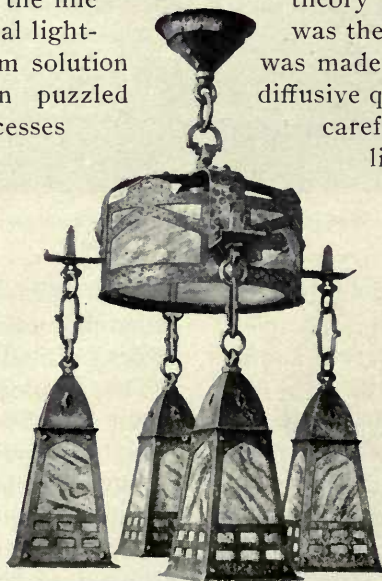
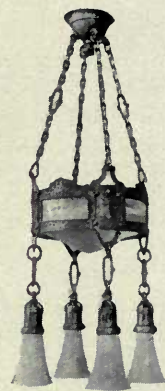
With the discovery of the Welsbach mantle in 1887 and the perfecting of electric lighting, attention

was directed to the nature of the light itself and, acting upon the theory that the most brilliant light was the most effective, every effort was made to increase the power and diffusive qualities of the light. Rooms

carefully shaded from the sunlight during the day were

flooded at night by a blinding glare. People were experimenting with the small boy's theory that, if a little plum pudding is good, a great deal will be a great deal better, and the results have been well nigh disastrous to our eye sight. Had we paused to think we might have remembered the well-known law that any stimulus applied to a

nerve continuously with increasing intensity will soon pass the pleasure point, irritate the nerve causing pain, and fin-



Good Examples of the Artistic Fixtures Now Being Designed.

ally result in its total destruction. This is exactly what our mania for bright lights has been doing for our eyes.

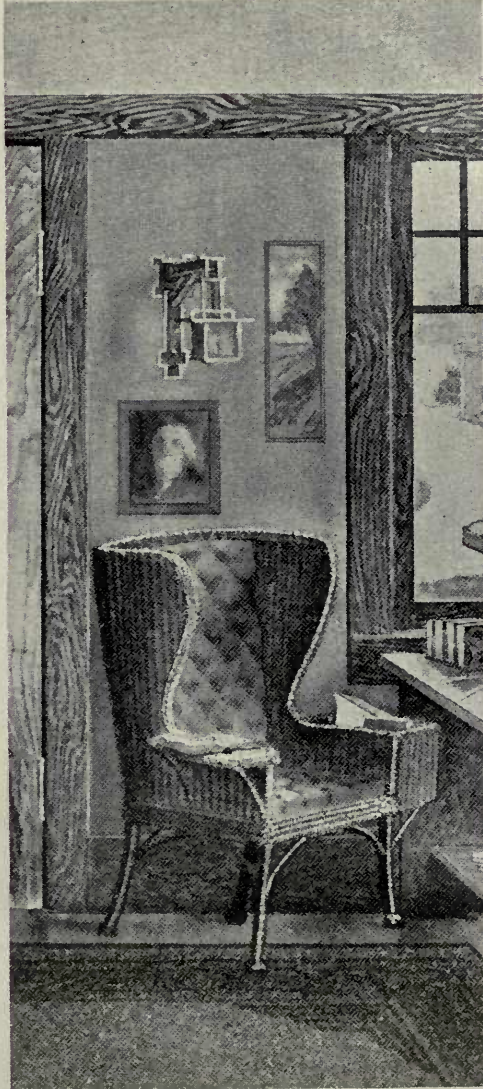
Physicians tell us that the human eye "should not be exposed to light sources having an apparent brightness greater than five candle power per square inch." This partly explains the popularity of the oil lamp, whose candle power was only eight per square inch and hence did not subject the optic nerve to a light stimulus intense enough to become painful, but when we come to the Welsbach mantle having fifty candle power and the powerful Tungsten light having one thousand candle power, it becomes apparent at once that the eye must, in some way, be shielded from the light source.

To reach the correct solution of this problem we must first answer two questions: Do we want to rest the eyes by keeping them in comparative darkness while we focus the light upon some object, or do we want to simulate the pervasive light of day so that all objects in a room will be re-

vealed with equal distinctness, and yet conceal the source of light from the eyes? Such progress has been made in the manufacture of lighting fixtures that you may now select the method of lighting that exactly suits your purpose.

We first illustrate instances in which the lights have been placed with careful forethought. The book-lover's nook by the window will be as pleasurable by night as by day and the light arranged for the low stand by the bedside is a luxury that becomes almost a necessity when it has once been tried. At a time of illness it is a boon to both patient and nurse. Note how carefully the light source has been shielded.

A light, judiciously placed, may increase the usability of some portion of a room beyond compute, while a light obtruding at some unfortunate point may completely nullify the good



A Booklover's Nook Made Attractive by Night by the Placing of the Light.

effect of furnishings and wall decorations. It is this phase of the question that has led a decorator of nation-wide repute to insist that an electric light plan be laid out for a house while it is being built,

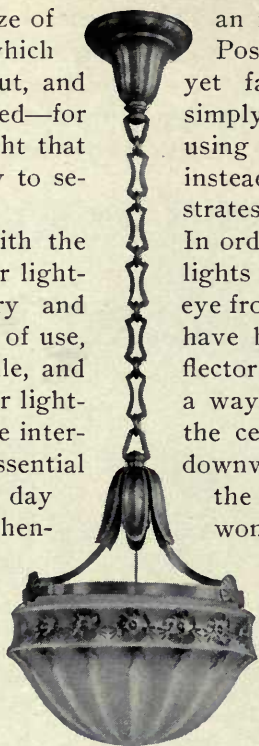
taking into consideration the size of the wall spaces, the use to which the particular room is to be put, and the color scheme to be employed—for dark colors absorb so much light that more fixtures may be necessary to secure sufficient illumination.

We must not forget that with the advent of gas and electricity our lighting fixtures became stationary and could not be removed when out of use, as were the oil lamp and candle, and this has forced us to make of our lighting fixtures objects of decorative interest so that they may seem as essential to the harmony of the room by day as by night. For, you see, whenever an object cannot justify its presence on the grounds of its utility, it must on the aesthetic, since in the home as elsewhere, "beauty is its own excuse for being."

In most cases it is desirable to have mellow light of equal intensity diffused throughout the room and for this

an indirect lighting system is best. Possibly some of our readers are not yet familiar with this term which simply means, in effect, that you are using your entire ceiling as a reflector instead of a small disc which concentrates the light rays directly beneath it. In order to utilize all the power of the lights and, at the same time, shield the eye from the light source, special lamps have been designed having silver reflectors placed **below** the light in such a way that every ray is thrown upon the ceiling from which it is reflected downward with equal intensity over the whole room. Reflected light is wonderfully soothing to the nerves

and restful to eyes wearied by the day's work where the light is insufficient or there is a glare of sunlight upon reflecting surfaces. For this reason the lighting of the living and dining rooms, where relaxation is of prime importance, should be most carefully considered.



A Night View of Rooms Lighted by the Eye Comfort System.

We illustrate several interiors where this method of lighting has been successfully employed. All these photos were taken at night and show the soft diffusing glow that brings out distinctly objects in the far corners of the rooms, where obscuring shadows usually lurk with the ordinary method of lighting.

This form of lighting is especially agreeable on a living porch where exposed lights invite public attention and shaded lights do not furnish enough illumination for reading or sewing. Furthermore, in this screened portion of the out-of-doors, the moonlight effect of reflected light is peculiarly in keeping. In the porch illustrated the bowl containing the light was fashioned of wicker to harmonize with the furnishings and the vines trained over it make it beautiful by day as well as by night.

Since the whole ceiling is being utilized as a reflector in this method of illuminating, it is important to choose a color that will not absorb the light. Cream or ivory will have the highest reflecting power.

Whatever the method of lighting employed, the fixtures should be in perfect harmony with the rest of the interior decorating scheme. So varied and artistic are the designs to choose from that no excuse exists for the careless man who introduces into a colonial room a fixture that is strikingly modern in spirit. There has been nothing good in the lighting vessels of the past that has not been seized upon by our designers and adapted to modern illumination. The illustration with which this article opens is an excellent example of a beautiful hall light in the form of the ancient lanterns that used to swing before the porter's gates in feudal castles. How vastly more suggestive it is than the gaudy glass of fantastic shape that so often destroys the harmony and simplicity of an otherwise dignified hall.

The day may not be far distant when

the touch of a magic button will create a rosy glow of light in rooms where no lighting fixtures are visible. A step toward this has already been taken in homes where halls, lofty and spacious enough to admit of columns, are illum-

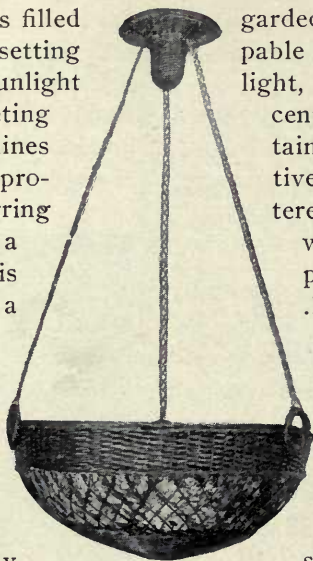


A Light by the Bedside Becomes a Necessity, Rather Than a Luxury When Once It Has Been Tried.

inated by lamps cunningly hidden around the tops of the columns, or grouped in great urns in which reflectors are arranged to throw the light upon the ceiling from which it softly diffuses downward. There is an indescribable charm about a place so lighted. Have you ever

surprised a room when it was filled with the afterglow of the setting sun? In the all-revealing sunlight there had been many disquieting things in that room, here the lines had offended your sense of proportion and there a recurring color note had clashed like a high staccato off key, but this strange radiance established a new relationship between line and color, softening all petty details into one consistent and harmonious whole. And there was, withal, a mysterious and ethereal quality about it that soothed you physically while it stimulated your imagination. Now this is the quality you will find in a room skilfully illuminated from unseen sources.

Recent experiments conducted by scientists have demonstrated that certain substances, which we have always re-



garded as opaque and hence incapable of transmitting or diffusing light, may be made highly translucent when impregnated with certain chemicals. From a decorative point of view, the most interesting material thus treated was marble. The marble is prepared in sheets between .117501 inches and .7874 inches in thickness, is ground on both sides and then impregnated with various oils at high pressures and temperatures. Careful tests show that marble discs so prepared have higher transmissive qualities than opal glass of

normal thickness although it has quite as good dispersive effects while it is much superior to matt or crinkly glass. The beautiful color and veinings of the natural stone make possible certain colored effects that could not be imitated with glass or porcelain or any artificial ma-



A Subdued, Restful Glow, Admirably Suited to An Enclosed Porch.

terial now being used in lighting fixtures.

As all kinds of marble may be treated in this manner, the possibilities of development along the line of the interior decoration of the home cannot be estimated. It is quite possible that the time may come when some structural essential of our rooms may disperse light just as our windows now admit the light of the sun. In that event, with no fixtures to consider, we will have one less decorative problem in planning the interiors of our homes, and that will mark the final stage in scientific lighting.

But we need not wait for this Utopian method of illumination to light our homes effectively, and whoever searches diligently in our shops today, if he has wisely provided himself with an armor of good taste sufficient to withstand the lure of dangling beads and the monstrosities of glass and bronze masquerading as examples of decorative art, will have no difficulty in finding the light that will satisfy every demand whether utilitarian or aesthetic.

In determining the method of lighting a room, the amount of light to be used and the placing of the fixtures, it is well to remember that the color values in walls and furnishings were chosen relative to the amount of sunlight admitted during the day. A color scheme worked out in rich browns, gold and red tones, most effective and pleasing by day, will become flat and lifeless, devoid of all

warmth and feeling, when flooded with a white, garish light. The owner is painfully conscious that something is wrong, and is apt to find fault with the color scheme employed in the decorations when the trouble lies entirely in the lighting. If he will substitute a subdued, amber light the color will again become restful and satisfying. If the indirect method of lighting is being used, the amber tone may be secured by placing a color screen over the reflectors or by tinting the ceiling to the desired tone. In this same fashion we must determine the best lighting scheme for the colors predominating in each room.



A Portable Lamp with Special Reflectors Which Direct and Spread the Light Uniformly.

But even if we are not possessed of the requisite taste and the needful cash to procure the most harmonious effects in the lighting of our homes, we can at least be comfortable in a way that was never possible, under the haphazard system employed during the "dark ages" of too much light. We will no longer subject our friends to nervous prostration and optical paralysis by expecting them to smilingly converse with us while they gaze at miniature burning suns thrust directly into their line of vision.

It may take a great deal of planning to light your home in a way that will anticipate every individual or social need and enable you to create the atmosphere suggestive of the "mood" you want at a given time or place, but you will be repaid, many fold, in rest to mind and body.

What a Modern House Should Be

An Address Delivered Before the Royal
Architectural Society in London

A. Benton



AN English gentleman gave the following advice to his son, whom he thought was old enough to marry, "Do not marry a prize beauty, because she will not last long enough, and do not marry one whose looks will do discredit to your taste."

I have always thought that this gives a good hint to home builders. A home should neither be a peep show, nor an excrescence. There are a few rules to start on that will simplify my ideals. Design your home with due regard to artistic taste, the requirements of architectural rules, simplicity, durability, sanitation, and blending in with the surroundings; last, but not least, a maximum of conveniences, with a minimum of labor, for the people who are to do the work and live in the house. As to the first rule, avoid everything that comes under the heading of filigree; such as scroll work, carving, and an excess of balusters on the outside. All this adds to the first cost, and the repair bills. It also detracts from the ideals of artistic taste.

Above all, see to it that your roof will look like a piece of the general design. So many houses seem to be all roof, some remind me of a hat that has had the rim blown off, while others look like a hat which is all rim. Avoid both extremes. Do not have a hip roof if you can help it, such a roof lacks soul; it also costs a lot of lumber, slates or shingles, without compensating advantages. A gable roof gives space in the attic for several rooms and can be construed into "Architectural poetry."

Blending in with this idea, I always suggest some bay windows, one in the dining room, for the sideboard, another in the library, with window seats and cushions, to make the room look restful. Another in the living room, to enable one to exchange the monotony of the front view, for an extended one of the lawn, the flowers, shrubs and trees. If you can give your bay windows square corners instead of canted ones, so much the better. One can produce additional artistic effects, both inside and out. For instance, compare the architecture of the Elizabethan period with that of the last century, then you will see my full meaning.

Another idea with regard to the outside; avoid different colors in paint. Do not let the colors be conspicuous or clash with their environment, or the general design. In starting your house, insist on a durable, water proof foundation, concrete for first choice. Have a cellar under the whole house, with plenty of windows, for light and ventilation. Remember that a cellar under the whole house, costs no more—except for excavation—than one under a portion of the same and a foundation under the remainder. A closed space under the floor always produces foul air, and causes the timbers to decay with "dry rot." Another advantage in having a cellar under the whole house is the space you secure for things which can hardly be kept anywhere else, such as preserves, fruit, vegetables, heating apparatus, fuel, laundry and a lot of other things too numerous to mention.



An Artistic Stairway Is the Most Important Ornament in the House.

All pipes should be put in before the concrete, because if the plumber punches holes in the walls to insert his pipes, he leaves a place for the water to seep in during rainy weather. All pipes in the house should be enclosed in such a manner that they can be easily uncovered in case of leakage. If your house is built of brick or stone the mortar should contain one part cement, two of lime, and five of sand. Ordinary brick mortar dries too quickly in the summer and lacks adhesiveness. If your brick is trimmed with white stone or red brick, be careful

not to have enough stone to make it too conspicuous. The same idea could be extended to the color of the mortar. Do not use leaded glass, no matter how pretty or artistic it may appear, because lead being soft will bend out of shape, even with the process of cleaning. If you must have a design of that character, use copper. Do not use tin for flashing or gutters. Galvanized iron is better, but copper will last as long as the roof. The great objection to tin is that it rusts so soon, and in taking it out for repairs, some of the roofing must be removed,

and this can hardly be replaced in as good a shape as it was before. Do not rely on slates, shingles or other roofing materials, to prevent leaks entirely. Cover your roof with tar paper in the first instance. It does not cost much, is a disinfectant, and prevents leaks in the outside roof covering, from percolating through to the ceiling below. Of course you will want a second story, because the ground floor is often not a good place for a bed room. The higher up you can sleep, the healthier you will be. Sir Andrew Clark said, that even in London a man could escape all the foul odors of the city if he could sleep thirty feet above the level of the street.

When you get to the inside, remember that the first thing which catches the eye has the most lasting effect. Therefore, I always insist that an artistic staircase is the most important ornament in a house, and should never be relegated to the background. The next point is, have the interior arranged so that a person coming to the house on business, can be attended to without invading the seclusion of the family, and that your intimates can be entertained so as to make them feel "at home." The dining room should be oblong to make it symmetrical when the table is extended, and so arranged that it can be approached from the kitchen, and entered by the family or guests, without confusion, or the necessity of passing through another room. The kitchen should be fitted up with conveniences, to save work, to secure perfect sanitation, and to give it an air of comfort, cleanliness and attractiveness. A great many women complain of their inability to keep their help; when I look at the kitchens and bed rooms provided for such help, I am not surprised at the result. I suggest, therefore, that in addition to this, a room should be provided in which they can receive company and have some books and papers. If you

should secure the best class of help, you must provide for their intellectual enjoyments, etc., or they will seek diversions elsewhere.

To secure the best arrangements in a kitchen, I find it advisable to consult the cook, as well as the mistress. When it comes to planning the closets, I always consult one or more women and find that their ideas are based on experience derived chiefly from living in houses devoid of such necessary luxuries, or nearly so. Two points that are overlooked, perhaps more than any others, are the position of doors and windows, so that there shall be a logical place for bed, dresser, lounge and chairs in the bed rooms and the piano in whatever room you select for it.

One more important point; never have a ceiling over 9 feet 6 inches high, unless the size of the room demands it. A high ceiling retains the heat making the room hotter in the summer and colder in the winter and all space between the window head and the ceiling, being devoid of ventilation, retains foul air and increases the difficulty of keeping the room in a sanitary condition. Always select your mantel with great care. Remember that some styles are cranky, and temporary, and in art there is no room for fashion. The things which were considered artistic in Athens 3,000 years ago are just as artistic today. The beautiful things which were produced in Italy 400 years ago are admired just as much or more today, and the home architecture of the Elizabethan era has never been surpassed. Nothing about your home demands more careful thought and planning than your interior decorating. Take the advice of your architect, or some publication devoted to real art. If you want to avoid the mistakes of others, read Ruskin and other kindred spirits, and you will find your artistic taste cultivated immeasurably.



A Talk on Woods

Article Two—Pine

EDITOR'S NOTE.—This article, by Mr. W. T. Christine, is the second of a series we are publishing concerning the uses and excellencies of various woods. Statements made regarding the merits or demerits of products or processes represent the personal opinion of the writers.



ARE you on speaking terms with American woods? Can you look into their tree faces as they stand in the park, along the roadside or in the forest, and call them by name? Can you tell one wood from another when it is offered to you in the form of lumber?

If you can do all of these things your woods and lumber education is of a very superior order.

The trees of North America are variously classified as evergreens and deciduous, needleleaf and broadleaf, conifers and

hardwoods. Commercially they are known as hardwoods and softwoods.

While popularly and legally a wood may be called "hardwood" or "softwood" these terms are not specifically descriptive. Any discussion of individual characteristics and values of any kind of timber must be confined to the particular kind of timber under review.

Very briefly and tersely: Hardwoods and softwoods are generic not specific names. "Softwoods" is the commercial generic name for such important timbers



Living Room of a Pana, Illinois, Residence Finished in Pine.

as the pines, the firs, the cedars, hemlock, spruce, tamarack, cypress and redwood.

There are many kinds of pine timber in the United States, ranging from White Pine, a soft wood of light weight and exceeding durability, to Cuban pine, perhaps the hardest, heaviest and strongest of the pines, and of which there is very little left. There are a number of different cedars, several kinds of fir, spruce and hemlock.

Pine is the greatest of all structural woods, but no treatise of the pines as "pine" would throw very much light on the values of different kinds of pine.

Of the pines in all verity this may be said:

"Pine is the lightest, easiest to work and most durable wood there is. It is especially adapted to the needs of the factory operator, the carpenter and the cabinet and pattern maker."



The Ordinary Figure of Arkansas Soft Pine.

With equal truth the following may be said of the same wood:

"Pine is one of the heaviest, hardest, strongest woods and is valuable where a material of great strength, durability and resistance to abrasion is wanted."

These two statements describe the two extremes in pine.

An endeavor to tell all about all of the pines would necessitate the compilation of a treatise of formidable character. For that reason we will confine ourselves to the story of one of the pines. A study of Arkansas soft pine and its characteristics, may serve as an introduction to the entire pine family.

Arkansas soft pine is a shortleaf pine which specie abounds throughout the interior portion of the southern pine belt. It is harder and heavier than the white pine but much lighter in color and weight than the other pines of the south. While shortleaf pine abounds throughout the south, that growing in Arkansas has been characterized as follows by the Forest Service, in Bulletin No. 106:

"Shortleaf pine in Arkansas generally is considered a higher grade than the same species grown in other regions. It is soft, of good color, and the wide annual rings show well in the grain. It is a favorite material for sash, doors and ceilings and is well liked for flooring."

Respecting the purposes for which Arkansas soft pine is best adapted the same authority, in Bulletin No. 99, states:

"Inside and outside trim for houses is manufactured from shortleaf pine. It is widely used for flooring and is recommended both by appearance and because of its wearing qualities. It responds readily to oils, wax, and other floor finishes and dressings. It answers equally well as wainscoting and ceiling, for chairboards, baseboards, brackets, molding, cornice, roseblocks, ornaments, carved work, spindles, balusters, railing, stairs and panels. Window frames and frames for doors and

doors themselves, and sash, are largely manufactured from this wood. Plasterer's lath and shingles are products of shortleaf pine forests, and porch columns and porch flooring cause a further demand upon the supply."

Arkansas soft pine is an advertised product. Manufacturers of this wood are on the lookout for special information pertaining to its uses and values and, based on the information they are securing from the building and factory trade, they are shaping their products so they will more nearly and completely satisfy the demands of consumers. In this case one of the first fruits of advertising has been the extra care exercised in preparing this lumber for market, thus insuring and giving the buyer extra value for his money.

Botanically, shortleaf belongs to the hard pine family. Actually, and insofar as that portion of the shortleaf pine now under consideration is concerned, it is a soft pine partaking of the durability of the hard pines.

Every builder and home owner knows that an entire structure may be made of pine, but it does not follow that any pine may be used for any purpose with the assurance that the result will please.

This lumber, perhaps, is more of an exception to the rule than any other pine with the single exception of white pine of the north. Throughout the northern

and eastern portions of this country are many thousands of structures built entirely of white pine. Its value is universally known and conceded.

One of the predominating traits of white pine is the absence of figure or marking. Its formation has been termed cheese-like, for which reason it is preferred by wood carver and cabinet maker.

Arkansas soft pine, on the contrary,

is liberally and beautifully figured. Coupled with the figure is a uniform formation that is of decided advantage when used for interior finishing.

Products of Arkansas soft pine must live up to their reputation and their record for by its reputation and its record it is



An Inviting Room in Which Pine Was Treated with White Enamel.

judged by all who select building materials in an intelligent manner.

It has few equals and still fewer superiors as a building wood. Its particular field is the small frame structures, interior woodwork and trim for any and all classes of buildings, exterior trim and siding and factory material of moderate weight and uniform character. It is recommended for the particular purposes for which it is

cover many features incident to the manufacture and use of woods. They are technical in character and only small portions are of general interest.

The emphasis that has been given Arkansas soft pine merely is a reflection of the manufacturers' belief in the value of his product, based on knowledge acquired of the service it has rendered.

Predicated on its service value the pro-



Pine Was Used for the Paneling and Interior Finish Throughout.

adapted and not urged indiscriminately for all manner of uses.

Some of the pines of the west and the softwoods of other sections of North America merely are names, unfamiliar names, to those interested in building. So long as that condition prevails the public cannot be expected to take the initiative and ascertain and establish, at its own expense, the uses and values of such woods.

Bulletins issued by the Forest Service

ducer is recommending Arkansas soft pine for exterior and interior woodwork, for cornice work, siding, porches, porch steps, porch floors, for framing and sheathing for small buildings and, again, for interior trim in all manner of structures. It is widely chosen for flooring, both because of its appearance and wearing qualities and because it readily responds to oils, wax, and the various floor finishes.



Home Grounds and Gardens

The Garden in Its Winter Coat

Alice Lounsberry



HE garden, as much as an individual, is swayed and governed by the vagaries of climate. In the soft, dulcet days of summer almost every plant that grows is seen in holiday mood, following its nature, disporting itself alternately in breeze and sunshine. The first stinging cold, however, warns it to gird itself for the winter, to take a positive stand against the general enemy, frost. It is at this time of year that those plants which have been cultivated by man receive most gladly his assistance, that is, provided he gives it them in accord with the established habits of their kingdom.

In the gardens and the general planting about country homes there are to be seen many shrubs, bulbous plants, annuals, perennials and perhaps a few biennials; the latter not being grown as generally as the others, since they require two full years to mature their bloom and die completely as soon as it has had its day. The professional gardener with no other

thought in life than to care for plants is usually the one to speak the warmest word for biennials. As inhabitants of simple gardens they are somewhat troublesome and amateurs are mostly content to omit them from their planting grounds.

Annuals, on the contrary occur in every garden from the smallest to the greatest in the land. Yet they need no warm winter coat for they live only throughout one season. Their seeds are sown in the spring and during the warm days that follow they simply bloom themselves to death. Before the advent of frost even, many of them have made and sown their seeds, that their race may be continued on the earth. In putting the garden in order therefore, the beds wherein annuals have bloomed should simply be cleansed, considerable attention also being paid to the trimming of their borders. The latter is an important part of autumn work since it enables grass edges to settle well and to harden over the winter.

The bulbous plants, long before the ap-

proach of cold weather, have died down to the ground, their bulbs hid in the snug warmth of the earth being lost to human sight. In very few instances do such bulbs require any warmer coat than that given them by Dame Nature. Gladioli bulbs, however, should be taken out of the ground as soon as they have ripened, although modern practice does not deem it necessary to wait until the plants have died down completely. The stalks should be cut off close to the bulbs, and the latter stored in open boxes in some chosen place, cool and dry. But before storing they should be laid where the sun strikes them until there is no doubt of their being perfectly dry.

Many bulbs die out each season, others deteriorate. For this reason it is necessary to plant a few new ones every au-

tumn. The sooner they can be planted after they have ripened the better, although many choice bulbs, notably those of the Auratum lilies cannot be set before November. These bulbs bloom late and cannot then be dug until their foliage has died down to the ground, after which they have still to be shipped to this country from Japan, England or Holland or wherever they are grown for the trade. Spanish irises and Madonna lilies, unlike most bulbs, make a leaf growth in the autumn and owing to this habit should not be planted later than September. But snowdrops, crocuses, squills, narcissi, hyacinths and tulips form a list that can be planted late with the promise of gratifying results in the springtime.

With biennials excluded from the garden, annuals dead through excessive

blooming and the greater number of bulbs set in their permanent places, there still remain in the garden many perennials grateful for a winter covering, also shrubs in the form of rose bushes, the hybrid teas and teas among which must unquestionably be wrapped up warmly.

Perennials are generally and quite properly regarded as the hardy plants of a garden. Their habit is to live on year after year, blooming every season, causing the minimum of trouble. At the same time many perennials show deterioration in the size and color of their blooms



Method of Covering Young Shrubs with Evergreen Branches.



A Sea-Side Garden Where the Shrubs and Young Trees in Their Winter Coats of Burlap Bags, Appear Like a Band of Gypsies.

unless logical care is given them in the autumn. They require food in the form of fertilizers, to be divided every second or third year and not to be put to too severe a test of endurance throughout the winter.

To this class of plants it is the alternate freezing and thawing incident to the American climate that causes damage; the sun scorching them, the snow and sleet freezing them. The purpose of a winter coat is now as much to prevent the cold from getting into the ground as it is to keep the frost there from getting out before the seasonable time. Yet many gardens suffer from a too heavy covering of manure which causes their members to soften and gradually to decay.

A light mulch of leaves and dry stable manure provides a desirable coat for perennials. Straw is particularly to be commended for winter covering provided it is to be used in places free from high winds which blow it about even from under evergreen boughs. It also must be remembered that straw cannot be used for

large gardens without involving considerable expense.

Perennials that are planted in the autumn should not, when possible, be set later than October, earlier if feasible, the desire being to get them in the ground sufficiently early to take root before the advent of cold weather. When for various reasons they cannot be planted, or divided and transplanted, at this time it is better to hold them over until spring.

The best winter coat for hybrid tea and tea roses is now acknowledged to be soil. It should be drawn up well at their base so that a mound is formed about each one and then packed down so that it will remain in an unmovable position. Standard roses can be saved by loosening them at one side of their base, laying them flatly on the ground and then covering them with soil until they are completely buried. As soon as spring awakes they should be uncovered and set again in their former, upright positions.

(Continued on page 380)

Designs for the Home-Builder

CONTRIBUTING ARCHITECTS

Design No.
B 549 JOHN HENRY NEWSON, Cleveland, Ohio
B 551 CHAS. S. SEDGWICK, Minneapolis, Minn.

Design No.
B 553 BUNGALOWCRAFT CO., Los Angeles, Cal.
B 555 JUD YOHO, Seattle, Wash.

Design B 548.



IN a northern climate, where the snow fall is heavy, the English type of house, on account of the steep pitch of its roof, is becoming more and more popular. There is also a certain quaint stolidity about the general effect that never fails to attract.

In this design we have the roof over the bedroom continued down to form a shelter, supported by a heavy bracket over the entrance stoop. The entrance is direct into a large living room, 13x22, with a broad open fireplace extending to the ceiling. To the right of this are built-in bookcases with high casement windows above, arranged to swing out. A wide, cased opening separates the living and

dining rooms, in both of which the same color scheme is carried out in the interior decorations. A single French door leads from the living room upon the sun porch, which can also be used as a dining porch or breakfast room. This porch is equipped with casement hinged to open in, so that it may provide a storm sash for the winter months.

The kitchen has been fitted up with a work table having drawers and cupboards underneath, the cupboards above extending to the ceiling. There is also ample wall space for a gas range and a kitchen table. A stairway to the basement leads down to a grade door underneath the main stairs. Provision is made for a good-sized bedroom and a bath on the

Cost Estimates of Designs Shown in This Issue

MATERIALS AND LABOR	DESIGN NUMBER						
	B 548	B 549	B 550	B 551	B 552	B 554	B 555
Excavation at 30c per cu. yd.....	\$48	\$45	\$35	\$67	\$37	\$40	\$60
Mason Work, to include Foundation Walls, at 20c per cu. ft.....	230	200	175	250	200	175	250
Cement Floors at 45c per sq. yd.....	55	60	35	110	40	60	60
Hollow Tile Walls.....	.....	.....	.....	500	.....	.....	.....
Chimneys and Brickwork at 65c per hour.....	425	600	150	1,200	150	140	325
Tile Work and Slate for Roof.....	.....	.....	.....	350	.....	.....	.....
Tile Floors and Wainscot.....	90	100	.....	150	.....	.....	75
Lumber.....	600	600	525	800	580	505	650
Millwork.....	715	775	600	1,325	650	565	630
Exterior Cement Plastering at 90c per sq. yd.....	110	150	.....	.....	.....	.....	.....
Interior Plastering at 26c per sq. yd.....	300	300	280	475	300	250	320
Painting.....	290	310	240	450	280	275	300
Carpenter Labor at 45c per hour; Common Labor at 30c per hour...	530	540	450	800	500	435	600
Hardware (Rough and Finish).....	250	275	185	400	240	175	265
Electric Wiring.....	60	60	40	75	40	35	60
Galvanized Iron and Tin Work.....	95	85	80	250	70	65	85
Heating (Air or Water).....	425	475	325	700	400	150	170
Plumbing and Gas Fitting.....	300	300	260	500	275	260	300
Miscellaneous.....	50	50	40	75	25	40	40
Cost.....	\$4,573	\$4,925	\$3,420	\$8,477	\$3,787	\$3,170	\$4,190
Contractor's Profit, 10 per cent.....	457	492	342	847	378	317	419
Total Cost.....	\$5,030	\$5,417	\$3,762	\$9,324	\$4,165	\$3,487	\$4,609

This table is computed on the basis of prices of labor and material now prevailing in Minneapolis and vicinity.



DESIGN B 548

An Attractive Story-and-a-Half English Design

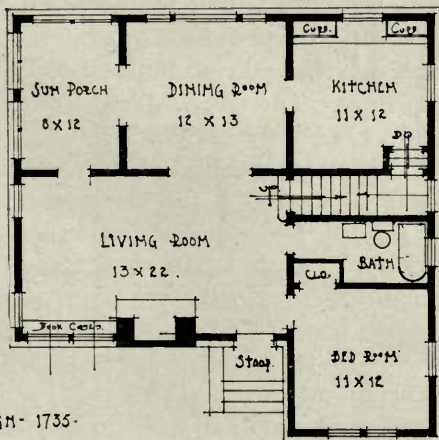
first story. If desired, this room could be used as a library and the bath transferred to the second floor.

On the second floor are two good rooms with plenty of windows and closet space, and a fine, big sleeping porch.

In the basement, room is allowed for a hot-water heating plant, laundry, fruit

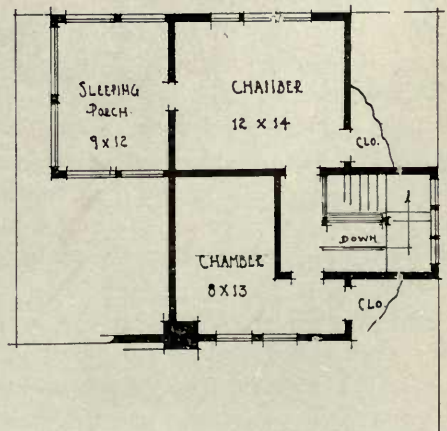
and vegetable rooms, a general storage room and a children's playroom.

The floors in the living room and sun-room are white, quartered oak, with quarter-sawn oak finish in living and dining rooms, stained a light fumed tone. The sun porch may be finished in fir, or pine. The kitchen, the first floor bedroom and



DESIGN - 1735 -

FIRST FLOOR PLAN



SECOND FLOOR PLAN

bath, and the chambers on the second floor have maple floors; the rest of the interior woodwork is in pine, finished with white enamel, with birch doors, stained mahogany.

The materials used on the exterior are brick, up to the first story sills, and above that, rough cement plaster over metal lath, in a light cream color with all the woodwork and paneling a curly fir, stained a dark brown. The roof shingles were stained a deep red.

This house is estimated to cost \$5,030.

Design B 549.

The best in architectural design is combined with a most carefully planned interior in this house. In the construction of the exterior, a rough, red brick is used to the top of the third floor windows and, in the central dormer, the brick is carried to the top of the second story windows, while the gable ends are built of half timber with panels of cement plaster. In the alcove and library, the windows are elevated sufficiently above the floor to provide room for bookcases or the large pieces of furniture often so difficult to accomodate. The position of the hall at the front of the house secludes the library from the rest of the house and provides direct access to the kitchen from the front door; in fact, the hall is so centralized that it opens directly into each room on the first floor.

The entire end of the house is taken up by the living room, which connects with both the hall and dining room. The kitchen, separated from the dining room by a pantry, is provided with every modern accessory. The second floor has been divided into three bedrooms and a bath, with a sleeping porch off of the main bedroom.

The porch upon the front has a tiled floor and is terraced to the main grade line, so that a railing around it is unnecessary; a flight of stone steps leads down from one end of the porch.

This house is estimated to cost about \$5,417.

Design B 550.

This is a design that will interest all those who are enthusiastic over a house built on the principle of a rectangle. So cleverly are the wall spaces broken by the bay windows and the porches that it does not have the severely plain appearance of most square houses and yet it loses none of the simplicity that we associate with this type.

At the front and rear are big, roomy porches, and the living room, 13x20, takes up one whole side of the first floor. At the end of this is a big fireplace which invites everybody to gather around it by night, while the bay window is equally delightful by day.

As the stairway is practically enclosed, the cost is accordingly less. The dining room, separated from the living room by sliding doors, boasts an oriel window.

Four large bedrooms and bath complete the arrangement of the second floor. Each bedroom has a good-sized closet, and there is a linen closet in the bathroom. There is not an inch of wasted space in the house. Estimated cost, with pine finish is \$3,762, including heating and plumbing.

Design B 551.

This house is designed to be constructed of brick, using hollow brick for the inside face of wall and an Oriental mat-face brick for the exterior, built on plain colonial lines. The size is 42 ft. front by 36 ft. deep, exclusive of porches. There are four rooms on the main floor and four on the second with a full basement under the entire house. The construction is thorough and first class, first story being finished in oak with oak floor and the second story in birch with birch floor. The attic story is also finished with two good rooms for servants and a large amusement room, all finished in pine and painted. This house is suited to an east

*John Henry Newson, Architect.*

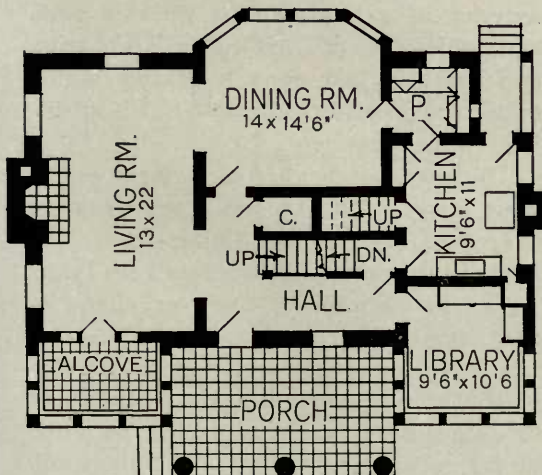
DESIGN B 549

An English House of Rough Brick

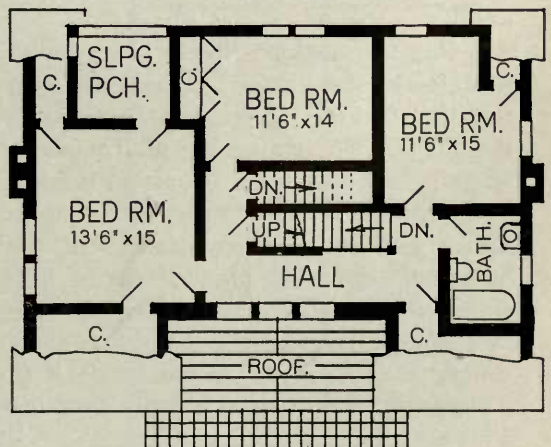
or a south front. The exterior is symmetrical in design with a central porch entrance and large-sized windows on each side and a group of triple windows in the center of the second story front. The attic story is lighted with dormer windows. There is an extended terrace floor

at each side of the front porch; the floor is constructed of reinforced concrete and cement.

It is estimated that this house may be built, exclusive of heating and plumbing, for a sum not less than \$8,500, nor more than \$9,500. The roof is a low-pitched,



FIRST FLOOR



SECOND FLOOR

hip roof with bracketed cornice, the roof to be covered with slate. The arrangement of the interior is convenient and liberal in its appointments with a large-sized living room on the left of the central entrance with a bedroom at the rear that may be used for a den. On the right is the dining room and back of same is the kitchen with the pantry between. There are two staircases, the main front staircase extending up to the third story. On the second floor, opening from the bedrooms in the rear, is a sleeping porch, glazed in. Two of the second floor closets have outside windows. The bathroom is liberal size and there is also a bathroom on the first floor with a servants bathroom in the basement. There are two fireplaces, one in the living room and one in the bedroom above. This is a very complete and substantial home, built on plain lines and economical in construction and finish.

Design B 552.

A careful study of the illustration of this home-like little cottage will do more to convince you of the beauty of this design than any description we can give. The porch treatment is simple and pleasing and out of the usual order: note the unbroken line of the roof, the square columns supported by concrete block piers with wooden balustrade and wooden underfill.

Siding was used on the first story with shingles in the gables. Birch was used for the flooring throughout, except in the kitchen, where pine was used for floor and all the woodwork. Provision is made for a full basement, with a cement foundation and stone above grade. In the basement, space is planned for a hot-water heating plant, laundry and a vegetable room. The height of the first story ceiling is 9 ft. 5 in.; second story 8 ft. 3 in., with lowest height in front chamber 4 inches less.

This house built as described above is estimated to cost \$4,165.

Design B 553.

By clever planning, the second floor rooms are all full square ceilings, although the house is only one and a half story. The necessary slant of ceilings is taken up in the closets. It is seldom that every detail and measurement of a home is so well designed and so well proportioned to every other detail. The result is most attractive from every view-point and the house is much admired.

This commodious little house is only 24 ft. wide by 42 ft. deep, but it contains six good-sized rooms and six fine closets—enough to delight any house-keeper.

The living room has beamed ceilings; the dining room has paneled wainscoting with plate rail and a built-in buffet; the kitchen has every convenience in the way of closets, cupboards, cooler, bins, drawers, etc. The house is of frame with shingled exterior walls and shingled roof. The designer of this residence states that its cost was \$2,250, in Los Angeles, with plumbing, electric wiring and fixtures, painted, stained and tinted ready for occupancy. In Michigan, with cellar and furnace it cost \$2,650.

Design B 554.

This is a wonderfully attractive example of the use of shingles for the entire exterior of a house. The lines in roof and gables are accented by the white trim and there is just enough of this white trim to relieve any suggestion of somberness in the treatment.

The plan of the house is well worth your study. The second story projects over the front of the dining room and part of the porch, securing two very large rooms in addition to the rear chamber and bath on that floor.

The entrance is directly at the center of the house, admitting you to the spacious sitting room at your left and the dining room at your right. The plans are fully detailed for the bookcases in the sitting room and a buffet in the dining



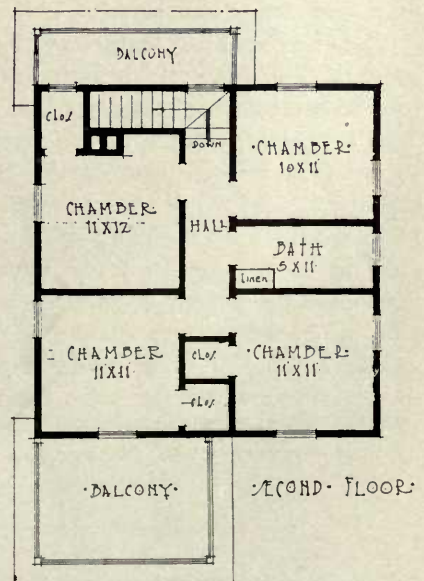
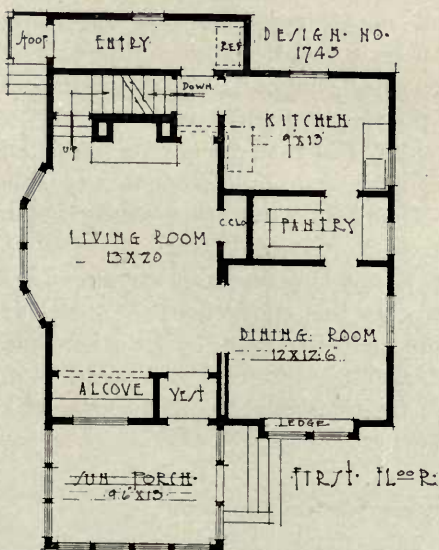
DESIGN B 550

A Home with a Distinctly Livable Quality

room; in fact, the entire arrangement of this house is ideal.

There is a full basement with a hot-air

furnace. The entire lower floor is finished in hardwood, except the kitchen, where pine is used. On the second floor



pine, finished in white enamel, is used throughout. The bathroom is provided with tile floor and tile wainscoting. The height of the ceiling on the first floor is 9 ft. 6 in.; on the second 8 ft. 6 in.; the basement is 7 ft. The lowest wall height of second story chambers in front is 5 ft. 6 in. At the side of the house an outside cellarway with a bulkhead, has been provided; there is a cement foundation above grade and cement front steps.

This house including heating and plumbing, is estimated to cost \$3,487.

Design B 555.

We are fortunate in being able to present, with the assistance of the perspective view and floor plan here illustrated, a design for a six-room bungalow on a fifty-foot lot.

The ensemble is very pleasing. The red brick and white cement of porch and chimney; the white painted trim of house and pergola timbers combined with the terra cotta finish of the "Malthoid" roofing give just the touches of color that are needed to set off the gray of the stained shingles.

A covered front porch was not wanted, so a small hood supported by wrought-iron bars was designed to shelter the doorway from snow and rain.

The most striking feature of the living room is the wide tile hearth lowered a few inches below the floor of the room. This lowering of the floor has a tendency to create a strong draft up the chimney and the tile floor does away with danger from sparks. The mantel of simple design in moss-green tile surmounted by a wood mantel shelf is flanked on either side by broad settees.

The ceiling of both living room and dining room adjoining have been given the same mission treatment of plain

beams and square edged moldings. Both rooms have floors of close-grained white oak.

The kitchen has been laid out with convenience and space-saving as the primary objectives. The windows at the end of the room throw unobstructed light directly on sink and range. Back of the left hand drain board the cooler is set back in the wall and the drain board is hinged to swing up against the outside wall there. At the right hand end of the sink is the gas range, vented into a flue in the main chimney.

At the right hand, facing the range, is a commodious cabinet with built-in cupboards.

Across the kitchen from the sink are two shallow wall cabinets, one containing the ironing board with a small cupboard underneath for the irons, the other is a broom closet complete with broom holders and hooks, and next to these is a cabinet for china and glassware.

The bathroom has a model arrangement not always obtained in a room of the same size. Panels of moss glass in bathroom and linen closet doors relieve the darkness of the central hallway when the doors are closed.

The bedrooms are large enough to contain all necessary articles of furniture. The owner's room has two closets, one deep and one shallow. Off this bedroom opens the sleeping porch with opening on three sides, and if the openings are fitted with sliding sash or casement any side can be closed, when the wind is too strong or the rain beats in.

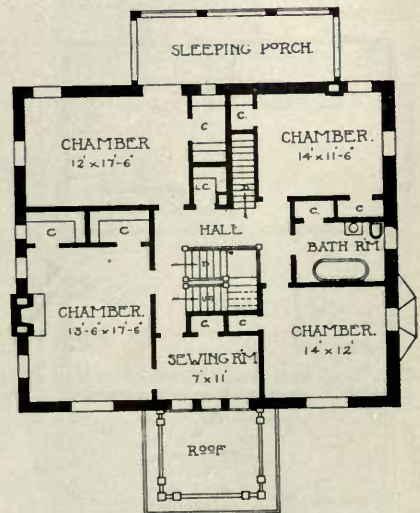
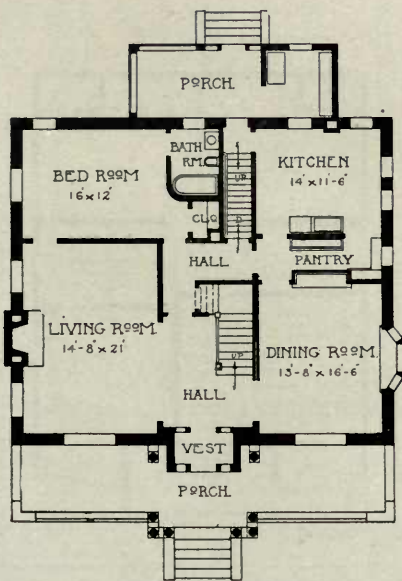
The roomy basement is arranged as carefully as the upper floor; it contains fuel bins, a fruit room, boiler room and laundry. The architects estimated cost, built in the West, is placed at \$4,609.



Chas. S. Sedgwick, Architect.

DESIGN B 551

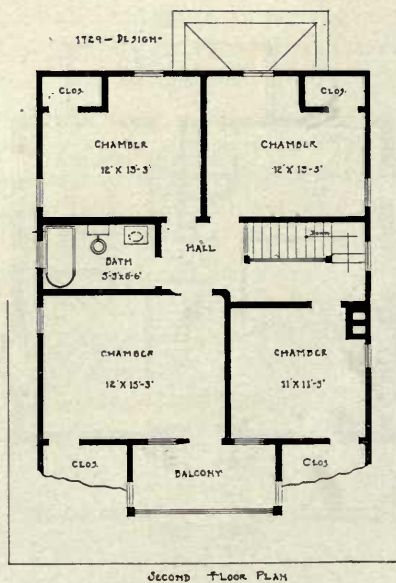
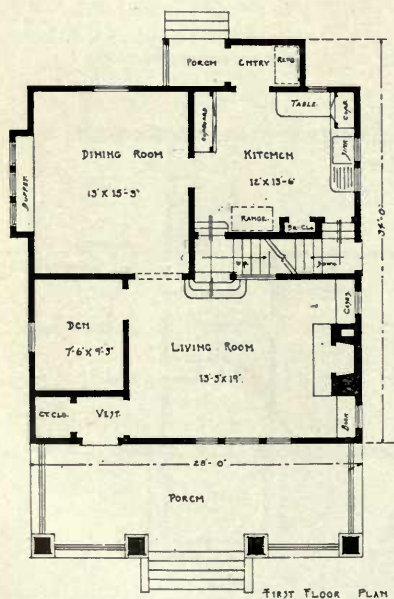
A Substantial Brick House

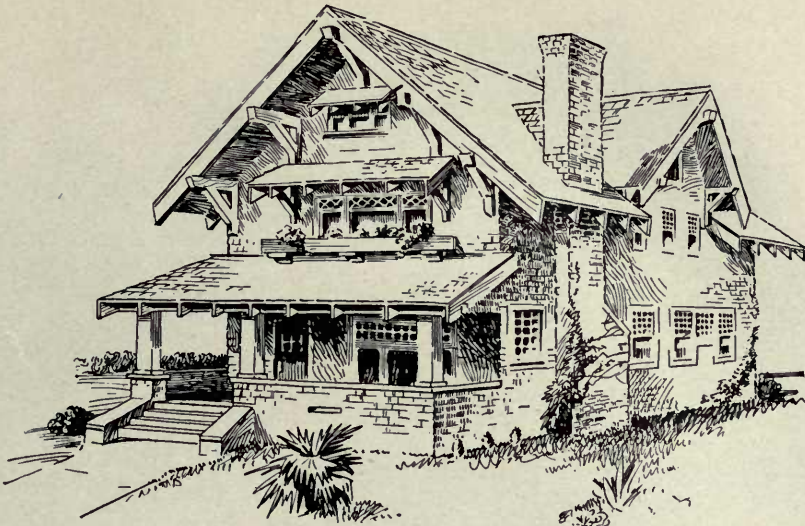




DESIGN B 552

An Excellent Cottage Design

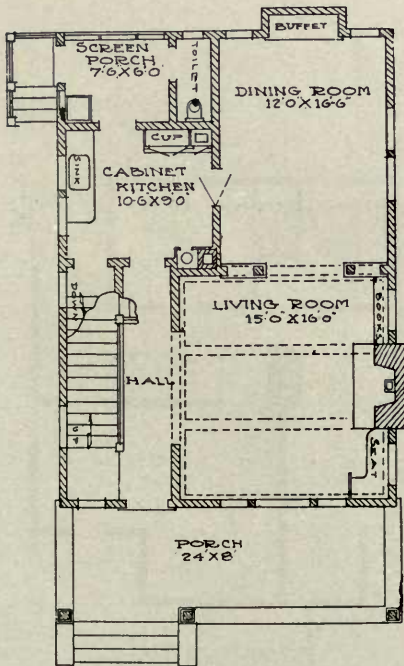




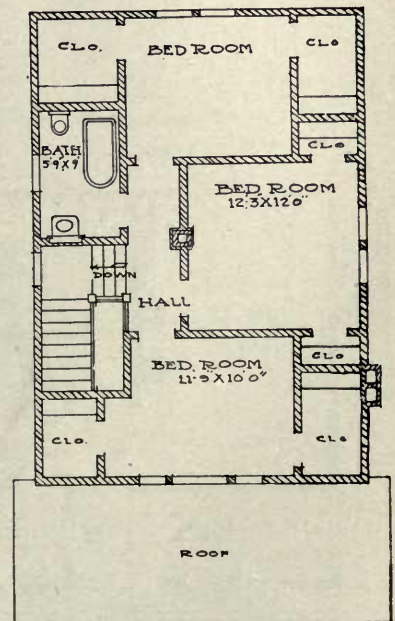
Bungalowcraft Co., Architects.

DESIGN B 553

A Story-and-a-Half Bungalow Cottage



FIRST FLOOR PLAN

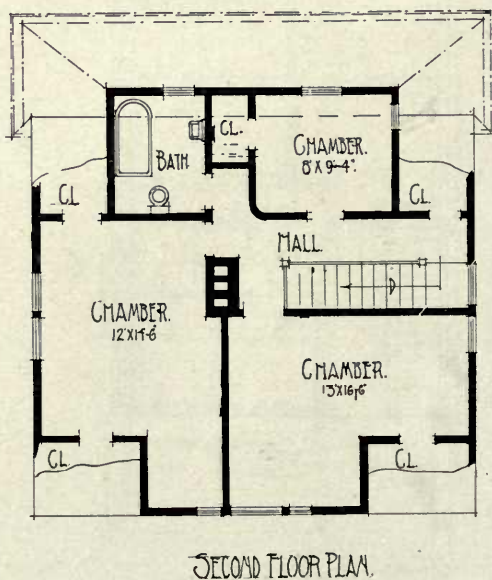
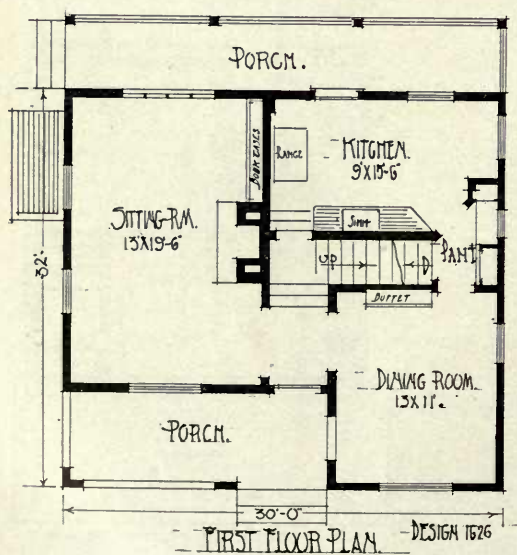


SECOND FLOOR PLAN



DESIGN B 554

A Real Cottage Home

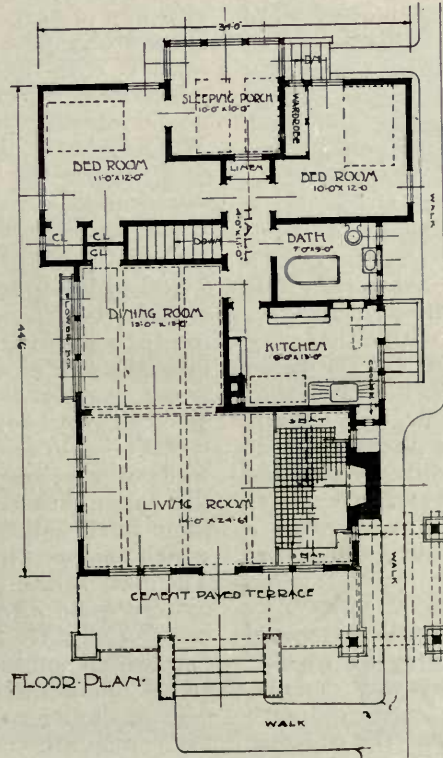




Jud Yoho, Architect.

DESIGN B 555

A Six-Room Bungalow





Conducted by ELEANOR ALLISON CUMMINS, Decorator, Brooklyn, N. Y.

The Value of the White Wall.

WHOEVER keeps track of the progress of decorative art must note the increasing popularity of white walls and woodwork. It can hardly be said to be a revival of an old fashion for it is a far cry from the variety of tones and the exquisite surfaces of today to the ghastly white calcimine and bluish white paint of forty years ago. But the value of white as a background for delicate and brilliant color is being more and more recognized by people of good taste, whether professional decorators or not.

It is seldom that an absolutely dead white is used, either for walls or woodwork. The exception which at once presents itself is in the case of furnishings of Chinese lacquer in scarlet and gold, which find themselves at home against a background of pure and lustrous white, such as one gets in Chinese porcelains. A story published, possibly in the Century, within a couple of years, entitled "The White Pagoda," is a capital guide to the proper setting of chinoiseries.

White should be toned with either gray or yellow. With gray you get the tones known as oyster shell, which accord with the palest of gray woodwork, or if natural wood is used with silver birch or silver gray oak. When pure white is modified with more or less yellow the result is either cream or ivory, but very often a tone is used so little off pure white that it is only distinguishable from it when directly contrasted with it.

Naturally the white wall may be treated in very many ways. It may be washed over in watercolor or other wall coating, it may be painted; it may be covered with some sort of textile, or it may be papered. The first treatment is seldom advisable

for a room of any consequence, but is excellent for dark passages, or for the interior bedrooms of apartments, where light is too precious to be trifled with. For this purpose there is a sort of wall coating which sets like cement and is washable. Its cost is nominal and it is germ proof. Another good covering for such walls is, under another name, table oilcloth with a dull surface. This is more expensive, but looks better and is practically indestructible. It must be laid with care and over a perfectly smooth wall.

The painted wall has many merits, and it can be made very effective by the application of narrow wooden mouldings arranged to give a panelled effect. An interview with the head of one of the mills which supply architectural mouldings will be found very suggestive in the matter of enriching a painted wall. The work of attaching the mouldings is not beyond the skill of a good paperhanger and the result is distinguished out of all proportion to the expense, and a permanent addition to the beauty of the house.

The white papered wall requires to be treated with judgment. Generally, ghastly is the one word that describes it. Its worst variety is the brocaded surface. The test of a brocade paper is to consider whether you could stand a room whose walls were covered with the silk which the paper imitates. Could you live in a room lined with white brocade? Hardly, which taboos the white brocaded paper. The best white papers are those whose pattern is an alternation of two dull surfaces of slightly differing tint. They are not easily found and are apt to be expensive. The next best thing are ceiling papers or dimity papers. Some of the ceiling papers are very good indeed, the best being those with a pattern of interlacing

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geometric figures. Indeed, when a paper of diaper pattern and not too dark in color is needed it can often be run to earth among the sample books which supply designs for side wall, frieze and ceiling in matching tones. As for the white dimity papers they are good enough but rather negative, and generally a sort of Hobson's choice.

The fabric-covered wall is advisable in an old house, where the walls are not exactly in condition for painting or papering, and a considerable variety of materials is available for this purpose, but burlap is as good as any. A wall of this sort can be panelled off with narrow mouldings, giving wood and fabric slightly different tones. While the various fabrics can be had already finished, the effect is much better if they are painted flatly after they are put on the wall.

One wall covering, particularly charming in white, is in a class by itself, Japanese grass cloth. While a whole wall of it is rather flat, unless much broken by pictures, it is exquisite for a lower two-thirds, below a deep drop and a rather heavy moulding, and has the advantage of not fading as do the positive colorings of this material.

The Contents of the White Walled Room.

What are we to put into the room with white walls and woodwork? Generally speaking, none of the conventional furnishings, neither heavy, dark furniture, textiles of strong color and heavy weight, bric-a-brac in low tones and queer shapes, oil paintings, nor brown toned photographs in heavy frames. Other things might be added to the list which commits us to an entirely different type of belongings. But things of this other type are most delightfully at home. Whatever is delicately brilliant in color gains a new value against the white background. All the daintier sorts of china, some of the lovely old Italian faïences, Chinese porcelains, blue or multi-colored, water-colors, Persian rugs with their blending of old rose, blue, ivory and green and the exquisite chintzes and printed linens with their enchanting confusion of birds and flowers and foliage, all of these have their beauty enhanced by being placed in a white setting.

The Proper Exposure for the White Room.

A room with white walls and woodwork is apt to be glaring in strong sunshine, such as comes directly from the south. Its best exposure is western or southwestern, where during the greater part of the day the light will be indirectly suffused with sunshine. However, a room of this style is apt to be devoted to formal uses and mostly occupied in the late afternoon, when the sun is low and the rays which enter pass in at an angle.

The Possibilities of the Pink Room.

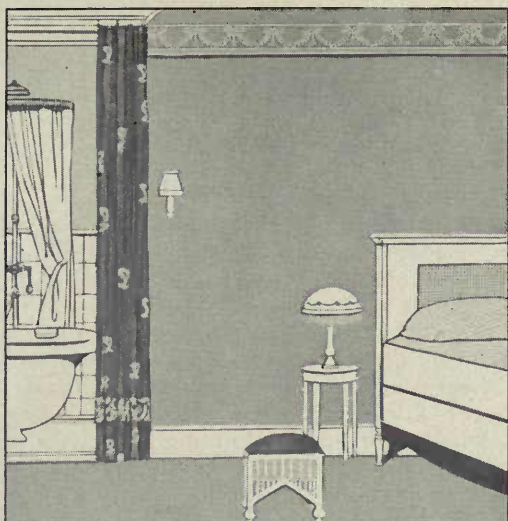
A whole pink room, at least a pink room of average size is a bit too much of a good thing. Not so of a small room or an alcove leading out of a large room furnished in gray. The gray woodwork of the larger room can be repeated in the smaller and the paper can be a dull surfaced brocaded one in a delicate shade. Curtains of deeper rose colored taffeta, the heavy sort sold by upholsterers, a shadowy gray rug, gray furniture, a judicious selection of pink flowered porcelain and, for foil, a dark wood table loaded with small silver, and you have a dainty contrast which enhances both rooms.

Or you may have a big bedroom whose general tone is soft, grayish green, communicating with a much smaller child's room, and this latter may be pink, with pink walls in plain color, deeper pink rug, white furniture with pink lines and tiny painted bunches of pink flowers.

The Revival of Cross-Stitch Embroidery.

Smart shops show big pieces of cross-stitch embroidery done in wool, in many colors and intended for the covers of large chairs. The best type of chair for the purpose is the high-backed Louis XIV chair, with square seat and slender, out-curving arms of wood. Smaller pieces are used for the cushions of square stools.

Cross-stitch embroidery was the favorite fancywork of our mothers, in the days not long after the Civil War, and there must be many examples of it laid away in chests or closets, the designs of which are good enough to entitle them to respect today. Indeed work of this sort is quite good enough artistically to be undertaken by ourselves. There are many



For Bedroom Woodwork here's the finish ideal

For white wood finishes, which are being used in ever-increasing quantities in the better homes, there is nothing better than

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Linduro Enamel

It is the highest grade enamel made—thoroughly dependable for the finest work. Its beautiful finish and great wearing power put it in a class by itself. Made also in blue, white, ivory and cream.

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Mellotone gives a pure white finish or the choice of many delicate hues, "soft as the rainbow tints." It is the most durable finish you can get. Not easily marred—does not fade—lasts for years.

Free booklet—"About Interiors"

Full of ideas and practical information about Lowe Brothers Linduro, Mellotone and other finishes for every purpose. When you write, ask the name of our nearest dealer, if you don't know him.

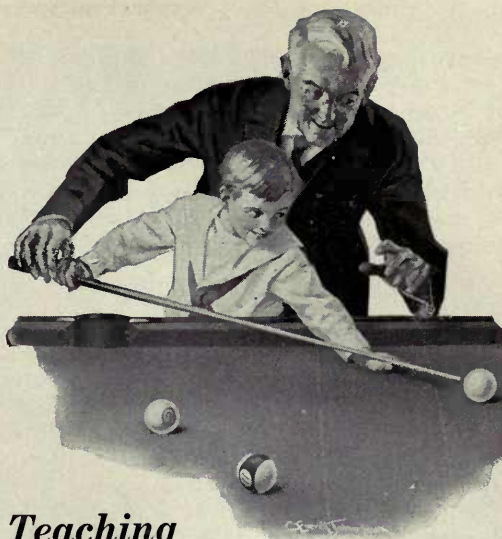
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See Sweet's Catalogue 1914 edition,
pages 1916-1917.



Teaching "Young America" to Shoot!

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- tempering his boyish arms with manly confidence to *hit the mark in life*;
- breaking up the corner "gang."

Thus in the homes of thousands now, *real* Carom and Pocket Billiards played on scientific Brunswick Tables are helping "Young America" grow big and "Grown America" keep strong. And no new home is completely modern without a billiard room.

Plan to Have Billiards

Right now, a spare room in your present house, or a small addition if need be. Then by all means a special billiard room in the house you plan to build. Multiplies the value of your house, gives home a double charm to all the family and your friends.

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The famous Brunswick "Baby Grand" Home Table is made of mahogany with genuine Vermont slate bed. It should not be confused with inferior wood-bed tables or toys.

Gives the perfect playing qualities of Brunswick Regulation Tables—fast imported billiard cloth and Monarch Cushions famed for quick action. Its speed and accuracy are the marvel of Billiard experts.

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With every Brunswick Table we give all necessary balls, cues, cue clamps, tips, markers, cover, brush, book "How to Play," etc.—a complete high-class playing outfit free.

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DECORATION AND FURNISHING—Continued

good designs available and the work requires not more than a tithe of the skill which goes to the manufacture of Irish lace, which can be bought so cheaply that it is hardly worth doing. If done with dull finished filling silk, instead of with crewels, such embroidery will defy the moths and go down to posterity uninjured.

The Paul Poiret Glass.

Mention has been made in recent issues of the new glassware in various vivid tones, scarlet, orange, mauve and green. As yet it is seen only in vases of various sizes and in bottles and boxes for the dressing table, for which use it is often fitted with silver stoppers and covers. An exception is in the case of a remarkable electric light fixture, since it can hardly be described as shades. This affair is a sort of bracket of opaque white glass, from which depends a fringe of large blue beads, concealing the bulb entirely. The effect is rather remarkable and represents the latest inspiration of Paul Poiret, a distinguished Parisian dressmaker. The red and orange glass is useful when a single touch of vivid color is needed, as is sometimes the case in a blue and white or blue gray room. At present it is rather expensive, a six inch perfume bottle costing two dollars and a half and a covered box the same amount.

The Hanging of a Banjo Clock.

A banjo clock, or any sort of a wall clock, for that matter, is a very effective piece of furniture, as indeed is anything which breaks the monotony of walls too exclusively devoted to pictures. But, since nothing else in the room is likely to

balance it, it should occupy a central position, over the chimney piece, or between two windows, or in a dining room, over the sideboard. This latter disposition was very common in old colonial houses.

Pastel Colors and Black.

Going about in the shops, one notices now and again a specially good wall paper, which may be not only beautiful in itself but suggestive of an effective decorative scheme. Such a paper had a black ground with a scroll pattern of leaves and flowers and scrolls in delicate pastel tones, all the forms of the design being slightly blurred. Comparatively little of the black ground was visible, and it did not look impossible as do nearly all the black grounded papers. Out of the question for a large room, it would have been charming for an alcove or for a small room off a large one, such a room as one might use for the assembly of a few choice pieces of furniture. The walls could be covered with it below a deep frieze of ivory tinted plaster, or Japanese grass cloth, and the woodwork could be ivory white, while the ideal furniture covering for such a room would be a soft, dark old rose, with two-toned rose Wilton for the rug. No pictures or ornaments except a single jar or bowl in either old rose or the pastel green of the paper, and a jardiniere of cream colored terra cotta, holding a large fern. Such a room violates all the accepted canons of decoration, as do many of the achievements of the foreign decorators, but is unique, and, if well managed, very charming. A pastel green might be substituted for old rose, but would not light up as well.

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in a building depends on the quality of materials used in its construction. No detail is more important than the selection of serviceable hardware trimmings that will blend harmoniously with the rest of the structure.

Sargent Hardware has the solid quality and workmanlike finish that mean long years of service. Sargent Designs are architecturally true to the period to which they belong. Write for the

Sargent Book of Designs
—mailed free—

It gives you an idea of the latitude allowed your personal taste within the limits of harmony. We have also our Colonial Book, which we will send on request.

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Table or Desk Lamps, either gas or electric, to harmonize with furnishings of any room. Ask dealer for *Guarantee Tag* with purchase. Portfolio on request. Address Dept. D.

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Set Six Screws— and Save \$13.25

It takes six minutes to drive these six screws, and the saving is \$13.25. Now if your time is worth more than \$2.21 a minute, don't read any further. This advertisement is for those who want high-grade furniture at rock-bottom prices and approve a selling plan that actually saves big money.

Over 30,000 Happy Home Owners Have Bought

Come-Pack Furniture for these substantial reasons. Here is an example of Come-Pack economy.

This handsome table is Quarter-Sawn White Oak, with rich deep, natural markings, honestly made; beautifully finished to your order. Two drawers; choice of Old Brass or Wood Knobs. It comes to you in four sections, packed in a compact crate, shipped at knock-down rates.

Our price, \$11.75. With a screw-driver and six minutes you have a table that would ordinarily sell for \$25!



No. 300 Library Table
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for living, dining or bed room. Color plates show the exquisite finish and upholstery. Factory prices. Write for it today and we will send it to you by return mail. M2d

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New Roofing Discovery

Works Wonders in Beautifying Home!



For Simplest and Grandest Homes

CHARMING Moorish beauty and dignity of appearance of Metal Spanish Tile gives an air of distinction to the home graced by this wonderful new and practically indestructible roofing.

It has taken home-builders of America by storm, for it is the modernization of the wonderfully beautiful roofs of historic Spanish edifices.

The art of making this roofing, left behind by fleeing Moors driven out of Spain centuries ago, until 1910 could not be made practical for the modern home, despite its alluring beauties.

After years of experiment, we have hit the solution. That is why today we are able to offer American homes the amazing attractiveness of

Metal Spanish Tile Roofing

Its scores of vital, practical advantages cost no more than common roofing, yet mean tremendous economy—it needs no repairs and outlasts several ordinary roofs because of its practically indestructible metal construction.

It is absolutely wind, weather, storm, fire and lightning proof.

Easy to apply. No soldering, no special tools—any ordinary mechanic can apply it. Interlocking system by which tiles dovetail into each other makes the roof absolutely water tight and provides for expansion and contraction perfectly—summer and winter. It is guaranteed non-breakable.

HOME-BUILDERS—Simply send us today the dimensions of your building and we will tell you by return mail exact cost of all material. Our new book on beautifying the modern American home by use of Metal Spanish Tile is yours for the asking. A postal will bring it. Address

The Edwards Manufacturing Co.

*The World's Largest Makers of Metal
Ceilings, Metal Shingles, Steel
Roofing, Siding, etc.*

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The House with Individuality

(Continued from page 343)

sun parlor whose casement windows may be thrown wide in the summer and permit inquisitive flowers to peep over the sills while you gossip over an afternoon cup of tea. Soon the creeping tendrils of the ivy will have spread over all the lower story forming a mantel of living green that will provide a natural trellis for climbing roses and the many bashful flowers that love to hide among its friendly leaves. Yet such a house, conceived in the spirit of extreme simplicity and constructed to satisfy the heart and the imagination, cost no more than the unlovely box-like dwellings we so often see, painted one of the vivid shades popularly supposed to defy the ravages of time and smoke.

So you will see, if you observe carefully enough, that the house with an individuality that commands interest and respect, is not a comment upon the bank account of its owner, for the most ambitious villa may as signally fail to satisfy the demands of good taste as the plain, little cottage, and the man with limited resources is finding it increasingly easier to construct a home that will be at once representative of his own ideals as well as expressive of the best in architectural endeavor.

The Garden in Its Winter Coat

(Continued from page 361)

Small evergreens, especially rare Japanese varieties which form a striking feature in many gardens are particularly sensitive to the scorching of the winter sun, followed by hard freezing. In climates where these conditions prevail they should invariably be covered, either with boards, corn stalks or burlap bags as a means of protection.

Indeed without its winter coat the garden cannot long retain the health and beauty that make it lovable.



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Oak Flooring

- ¶ OWNERS and BUILDERS find it a clinching argument to say "It's Floored with OAK FLOORING." It means that the tenant or buyer will be glad to pay 10 to 15 per cent more. In color, it is **rich and cheerful**, and imparts an air of **refinement and elegance** to a home. **It is the modern Flooring.**
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- ¶ OAK FLOORING laid forty years ago in public buildings, after very hard service, is still in **good condition**. For **durability**, OAK is the **best**.
- ¶ There is a **solid satisfaction and lasting pleasure** in the **substantial and dignified appearance** of OAK FLOORING.
- ¶ A carpenter or handy man can lay OAK FLOORING successfully. It is very **profitable** work for any carpenter.
- ¶ OAK FLOORING is made in seven different grades—representing different prices to fit the pocketbook or condition under which they are used. There is no limit to the uses of OAK FLOORING and the prices are such that there is one or more grades adaptable to every class of construction.

Write for booklet

The Oak Flooring Bureau

898 Hammond Bldg., Detroit, Mich.



In any room throughout the house the effect of **Luxeberry White Enamel** is one of rich and permanent beauty.

Because of its hard, tough surface it is easy to keep clean. Finger marks and spots simply melt away beneath the dampened cleaning cloth.

And for floors use **Liquid Granite**—the waterproof varnish kiddies can't mar with play-time roughness. Heavy moving furniture won't crack it, nor scrubbing with hot water turn it white.

Liquid Granite is a *high quality* Varnish through and through. Like other celebrated Berry Brothers' finishes its worth and quality are the result of over 66 years' experience in the manufacture of varnishes.

You can bring this experience to bear in the finishing of your new home or the refinishing of your worn dining room floor.

See our nearest dealer or write our factory direct as you prefer.

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World's Largest Varnish Makers

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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert. Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

About Rugs.

E. C. C.—“We are planning to build a home and as far as we can, want to use good rugs for floor coverings, and I want to ask if you can suggest some book or books giving information on selecting rugs.

“I know so little about oriental rugs and would especially like to know of some book that gives the names and some information on the best oriental rugs.”

Ans.—There are a number of books on rugs published, costing \$1.00 or more. They are confusing rather than helpful for practical buying. When you see a thousand rugs together in the stocks, all differing slightly, it is very difficult to apply any ideas you may get from such a book. KEITH'S MAGAZINE has from time to time published short, practical articles on rugs. We think the best way in buying an oriental rug, is to go to a reliable firm, and buy from one who does know and whose judgment you can trust. The high grade Bigelow or Whittall rugs in oriental design and coloring, are really superior to most of the new orientals now on the market. You can still get the soft antique coloring in orientals, but one must be a judge. There are also the plain colored rugs, solid centers in all shades with borders in three tones of the same color, or centers in a small figure in two tones of the same color. These are the Shawmutt and Rosslyn rugs, very heavy and handsome, a heavy pile and will wear forever.

Our advice to you would be to use oriental rugs in your hall only and to use these American rugs in the rooms.

General Advice.

A. M. E.—“My living room furniture is all of the very lightest shade of Tuna mahogany and a rather glaring shade.

I have an upright piano, Victrola, davenport, two very large and two smaller chairs, all to match in color. The upholstery is all black leather and the chairs have large hand-carved dragon heads on arms and claw feet. The davenport has two large hand-carved figures on each side the full size of davenport. I will have to buy a table for this room. Please advise me what kind to buy, and would you also have it Tuna, to match the rest of furniture, or would you get gold leaf or bronze with onyx top, and what size would be best—small or large? My furniture is all very large and heavy. I have one Tabrey Oriental rug 9x12 with rose plain center. Would like to use same in this room. I also have a polar bear skin and a tiger. Please advise me as to the floor covering. I don't like many small rugs, and never could place the tiger and bear in my other home to suit me. They always seemed out of place.”

Ans.—We will say generally, that the best finish to go with the Tuna mahogany in living room is birch, finished natural and that the same finish should be carried through the stair hall and upper hall. The floors may very well be Birch, stained brown. The same in all down stairs except kitchen, etc. With your Tuna mahogany, you could treat the living room as a drawing room if you wish, especially as you are to use the largest bedroom as a den or sitting room. But you cannot have a drawing room with black leather coverings on the furniture; black leather is, moreover, entirely unsuited to Tuna mahogany which is a very beautiful wood if properly treated. A drawing room is a more formal room than a living room and is furnished more daintily. If you should make a drawing room, then the walls should have a grey paper in a brocaded effect; the furniture



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New York Office: Craftsman Bldg., No. 6 E. 39th St., New York City. Architects see Sweet's Index, pages 972-973

be recovered in grey and rose tapestry, and your oriental rug with rose center be supplemented by two or three smaller rugs in plain deep rose. There would be no place in this room for the fur rugs, but they might be used in the billiard room or one on stair landing and one in den before the fire.

We should panel the piece of tapestry in the hall on the small space opposite the arched opening.

As to woodwork in dining room you best send to some of the manufacturers for samples of a walnut brown stain. We should bring all this furniture to the brown tone of the walnut pieces, and the woodwork the same. Possibly you could use the green rug by making this a green and yellow room, but yellow on the walls with the green rug and dark furniture is the only thing in this north room. Yellow Sunfast curtains at the windows.

A brick mantel and bog oak woodwork would be very good in the den. We would furnish it in brown stained wicker with cretonne upholstery in rich strong greens and reds on a black ground. The brick could be mottled green, specked with black. If it is to be a drawing room downstairs, use grey tile. If a living room, grey brick. Don't buy any gilt or onyx furniture and don't use any gilt moldings. You might have one cross beam across ceiling from corner of bay window to corner of arch, giving a sort of division to the fireplace end; just a cornice for the rest.

Curtains for French Window.

W. D. R.—“Will you please tell me the best way to treat a French window, should a French window have a shade and lace curtains the same as any window or should it be used the same as a door without any curtains?”

Ans.—Replying to your recent inquiry, would say that a French window or French door must have any draperies or curtain material including shades, attached to the door or window itself and not to the casings. It depends upon the situation of the door or window, whether the shades should be used. If it opens

on a sunny exposure, a shade may be advisable, but it is not usual. Sometimes curtains of heavy material are used, to draw across the sash, running them on a small rod attached to door. More often the glass is merely veiled with thin net or scrim or Sun-fast colored material and these are slightly shirred on small rods at top and bottom of window.

The chapter on Windows in “Practical House Decoration” would be helpful to you.

Scheme for a Northeast Dining Room.

T. B. M.—“I am remodeling an old dining room. This room has northern exposure and no sunlight, a 6x3 foot alcove with three leaded glass windows and cupboard below them and glass panel door opening into vestibule on south is the only means of outside lighting. The room must be papered and I expect to buy a good 9x12 rug. I am a reader of your magazine and take much interest in this department of it, and would be much relieved if you would give me a color scheme for walls, ceiling and floor finish also color and quality of rugs and curtains. If you could order me samples of such things as I require it would much simplify my dilemma as I am not conveniently located to choose any thing up-to-date.”

Ans.—Your only chance for a cheerful dining room is to use yellows, creams and browns. You do not say if the wall is divided either by a chair or plate rail, but with a 10 ft. ceiling we should use one or the other. If tints are to be used do the wall below the dividing molding in a cigar brown. Above it, dull yellow with cream ceiling. You can use a stencil, paper frieze decoration in browns, yellows, touch of light greens and reds. Or, you can use a decorative paper above the plate rail in a design of brown and yellow leaves on a cream ground.

The rug should be in the same tones as this decoration. The curtains, dull yellow Sun-fast, 85c yard. We do not send samples except with our paid service of 50c a room.



"The Hardest Job

going is to please both the master and mistress when they're planning a new home," says the experienced architect.

"She wants beauty and charm, he wants utility and economy—they both want comfort."

When it comes to the outside of the house the happiest way I've found yet of pleasing them both is with Atlas-White Portland Cement stucco. It's pure, white, really beautiful, won't stain or discolor, needs no painting or repairs.

Saves Time, Expense, and Trouble.

UTILITY Wall Board is ready to nail direct to studing and joists. Saves time of lathing, mixing and applying plaster. Makes a quick, simple, inexpensive job of it. Utility resists moisture, heat and cold; retards sound and fire. The ideal wall lining for any room in the house.

UTILITY the only 5-ply WALL BOARD

Think of the five layers of tough fibre board, cemented into one permanent sheet with hot asphalt under tons of pressure—thoroughly moisture proofed outside. We use five layers because it gives us that much more strength than the usual 2 or 3 layers. Tint Utility with kalsomine or any flat tone paint. Makes artistic paneled or plain walls; beamed, arched or flat ceilings. Explicit, easy to follow directions tell how.

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Send today for free samples of Utility Wall Board and the book "Utility Interiors."

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By "The Economist"



NOTHING that will help to make the domestic machinery run easily and without friction saves so much nervous energy that it is a real economy even though it cannot be counted in dollars and cents at the end of each month. Many a woman who dreamed a dream of casement windows and refused to be satisfied with anything else, has been secretly disappointed because of the difficulty in adjusting them at the desired angle. The petty annoyance incident to the opening and closing them has marred her enjoyment of the simplicity and beauty of this type of window. But now comes the ever helpful manufacturer with a solution for the problem in the form of a casement operator that magically opens and closes your window and holds it locked at any point desired. The accompanying cut shows the little bronze metal handle—the only part of the device which is visible. The shades and hangings on the casement are not disturbed by it in the least. The



device is inexpensive and easily adjusted; and while the handle turns so easily that a child may operate it, the leverage is sufficient to overcome any sticking of the sash to the frame.

Farewell to the Leaky Faucet.

The householder is always ready and eager to adopt any scheme that will relieve him of the expensive visits of the plumber and he is doubly rejoiced if he sees the water bill change for the better. One of the surest ways to run up a big water bill is to have leaky faucets and no one wants to pay for water that runs to waste. Furthermore, there is often a mineral deposit in the water that disfigures the basins and tubs and all this must be charged against the leaky faucet. Everyone knows that a washer worn thin by constant friction, is the most frequent cause of this trouble. Anything that will eliminate this nuisance is welcome, and our readers will be interested to know that they may now procure a washerless faucet that will put an end to this annoyance. This faucet has been thoroughly tested abroad, where it has given entire satisfaction and has been authorized by the London Water Board. Instead of a washer we have a conical valve with direct bearing upon a spherical seat making possible a line contract which provides a perfectly tight joint.

Found at Last—the Right Place for the Gas Meter.

Many nervous women object to admitting a strange man into the home for the purpose of reading the gas or electric

"The Heart of the Heating Plant"

TEMPERATURE RIGHT DAY and NIGHT

You can have exactly the degree of warmth you want during the day, indicate at bedtime the temperature for the night and secure automatically at the "getting up" hour a resumption of the daytime temperature.

The "MINNEAPOLIS" HEAT REGULATOR

Not only maintains these even, healthful temperatures but does away with all guess work, worry, and constant attention to drafts and dampers. Soon pays for itself in fuel saved.

The time attachment enables one to secure a change of temperature at any pre-determined hour. In the morning at the hour set, the indicator automatically and silently moves to 70° and the rooms are warm at the time of arising.

Model equipped with square clock gives an 8-day service of both time and morning change with one winding.

The "Minneapolis" is used with any heating plant—hot water, hot air, steam or natural gas. Sold, installed and guaranteed by the heating trade everywhere.

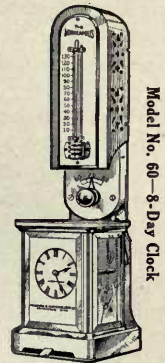
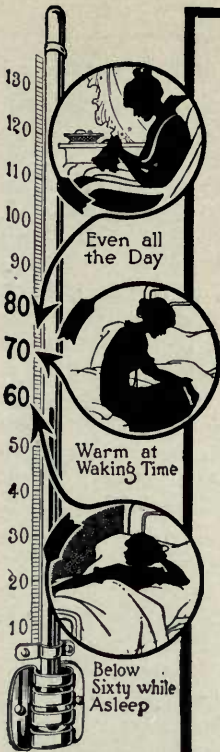
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Minneapolis Heat Regulator Co.

WM. R. SWEATT, President

2725 Fourth Avenue South

Minneapolis, Minn.



Model No. 60-8-Day Clock



Model No. 47-1-Day Clock

Hess Furnaces for Contractors



THE HESS FURNACE is not offered to dealers, but is offered and sold at a factory rate, direct to consumers, the idea being that in such sales we can plan the heating arrangement and secure greater efficiency, at the same time saving for the purchaser considerably in the price. This plan, which we have followed for years, has been highly successful and satisfactory.

Much of this business is done through *contractors*, who co-operate with us by sending sketches of the buildings to be heated and following out our plans for heating, which we supply, without charge.

The equipment we furnish, which includes pipes, registers and every other detail, are made according to our plans and are installed by the owners or contractors. We make a *special allowance to contractors*, which makes our plan peculiarly attractive to them. In any case, dealing with owner or contractor, we fully guarantee the success of the equipment, allowing the money to be withheld during two months of winter weather until the heater is tested. If you are a contractor, or if you are building a home for yourself, let us tell you how we can save you some heater money, and insure comfort in the house you are building.

HESS WARMING & VENTILATING CO.

1217 TACOMA BUILDING

White Steel Medicine Cabinets, also.

CHICAGO, ILLINOIS

HOUSEHOLD ECONOMICS—Continued

meter because it provides such a plausible pretext for imposters to gain access to the house. All this may be happily avoided by using a clever, new arrangement whereby the meter is installed on the exterior of the house, face outward. The public service employee can then read the meter and go his way without disturbing anyone. There are no disadvantages to this trouble-saving method of housing your meter and the only wonder is that no one ever thought of it before. The cost of installing the meter in this way is low, only \$6.00 to \$10.00 for each meter so housed. The accompanying illustra-



Showing the Clever Arrangement Whereby the Meter May Be Installed in the Outside Wall.

tion shows the manner in which the meter box is installed. We feel sure that many of our readers, especially those who are building new homes, will be interested in investigating this contrivance.

Beautiful Andirons

and many other articles of
attractive, dependable

Hearth Furniture

Basket Grates, Fenders,
Spark Screens, Gas Logs,
Fire Tools Wood Holders

Ask for Catalog "D"

Look at the Map! Omaha is the geographical center from which to conduct a nation-wide Hearth Furniture business.

Why? Why select from a little local side-line of old-fashioned, shopworn fireplace fixtures when you may as well have before you hundreds of modern correct designs, all brand new, at lower prices?

(Established 1883)

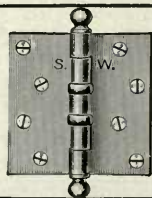
WE PREPAY FREIGHT.

SUNDERLAND BROS. CO., 323 So. 17 St., Omaha, Neb.

A New Kind of Dumb Waiter.



Modern homes are, in many cases, so planned that it is quite necessary to prepare food on one floor and serve it on another and in all such instances the dumb waiter is a positive necessity; but in all homes occupying more than one floor the installation of this simple and inexpensive carrying device would save countless steps and any amount of tiresome lifting. The wonder is that so many houses, complete in every other respect, should be constructed without any provision of this sort. It is merely a survival of the old feeling that labor in the home is much cheaper than the mechanical devices that save it. However, a new day has already dawned in domestic affairs and the up-to-date home will soon be as thoroughly equipped as our factories with every appliance that will conserve energy and eliminate lost motion. While speaking of automatic waiters, we would call attention to a new kind of dumb waiter that also serves as a refrigerator. One of our manufacturers recently conceived the happy thought of converting the upper compartment into an ice chest of modern construction with two good sized shelves. About this airtight chamber is packed wool, paper, sheet cork, mineral wool and asbestos sheathing in a manner that effectively keeps all the heat out and all the cold in. The chest is filled with ice through an opening in the top of the dumb waiter, the capacity being 50 lbs. The advantages of such a waiter will instantly suggest themselves to the housewife. Cold desserts and frozen dainties may be prepared and left on the ice till the moment of serving, yet be within reach in the dining room.



STANLEY'S HINGES

The Standard of Quality the world over. Before buying the Hardware for your new home, write for booklet "Properly Hung Doors."

Department "T."

THE STANLEY WORKS
New Britain :: Connecticut

Oh, What a Difference in the Morning!

WHAT a relief from the clumsy, time-killing, back-breaking methods of cleaning with brooms and dusters and make-shift devices! What a delight to be able to attach a section of light weight hose to an opening in the base-board, press a button in the wall and, in fifteen minutes, to have all the dust and dirt and all the breathed-over air carried away through the 2½ inch piping of the

TUEC STATIONARY CLEANER

For Health and Cleanliness

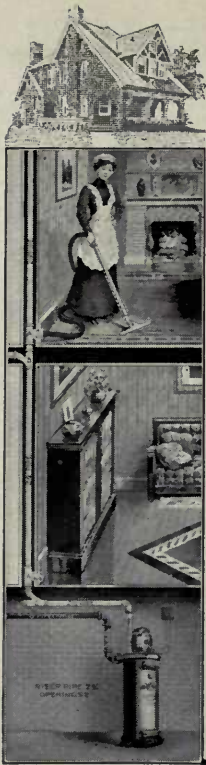
No heavy work at all; no time wasted and no wear and tear on household furnishings. Out of sight in the basement, the TUEC Machine draws the air through its cleaning tool in enormous volumes, bringing with it all the dust and dirt which it deposits in the air-tight tank provided for this purpose. The bad air it exhausts entirely outside the building, leaving the house sweet and clean and wholesome.

The new prices of the TUEC bring this service within your means, no matter how small and inexpensive your home may be. Installation can be made at any time but the best time to have the piping installed is before the house is plastered. Write today for the TUEC Book and for an estimate on TUEC Service for your home.

The United Electric Company

10 Hurford Street

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Make a Man Proud of His Plumbing

Whether for the modest cottage or the elaborate mansion, each individual Wolff Fixture receives the personal supervision of the department head from the moment our factory commences work through all stages of construction until its final completion.

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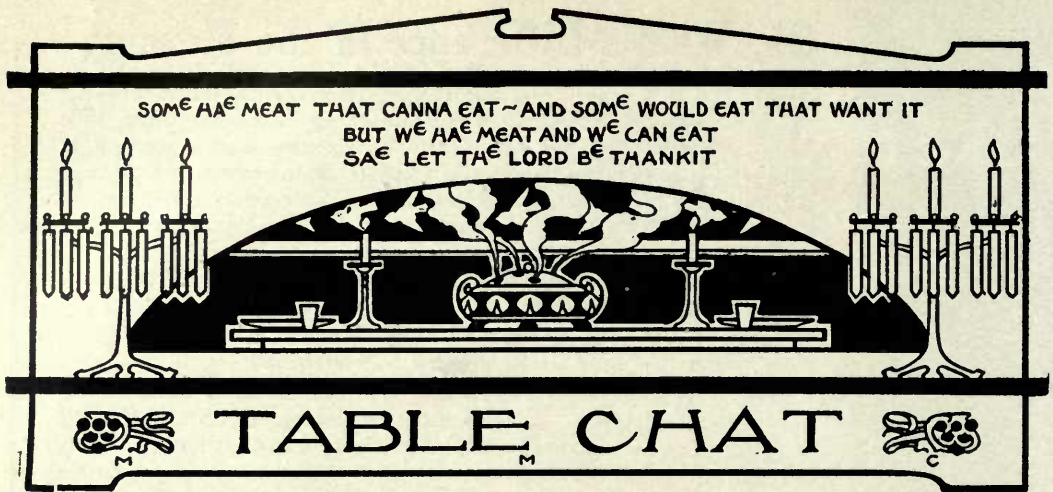
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Pottery: Trenton, N. J.





Decorating the Thanksgiving Table



NOT many flowers are left out of doors at the end of November, in the north, but the green houses are full of chrysanthemums. The huge globes of white and yellow are commonplace, but there are smaller ones, of the old fashioned flat shape, in tawny and golden brown tones which are ex-

quisite for the Thanksgiving dinner table as a part of a color scheme in warm tones of red, brown and orange.

Arrange the chrysanthemums in some sort of a bowl or low jar of brown pottery, not using too many, as they should not be bunched but have plenty of room to display their beautiful outlines. At



Potato Croquettes in Lettuce Leaves.



WALL AND CEILING HINTS from Experienced Users

No. 23. "Visitors notice beauty of Beaver Board"

"Pinecrest, our seventy-five room Inn, in which we used over 58,000 square feet of BEAVER BOARD is now completed. We feel that we have one of the most beautiful buildings of its kind in the state. Many visitors comment upon the beauty of the walls and ceilings which have taken the decoration admirably."

"The beauty and durability, the substantial appearance of the interior of Pinecrest will prove to all visitors that BEAVER BOARD is all that it is claimed to be."

BEAVER BOARD WALLS AND CEILINGS

Booklet "BEAVER BOARD and Its Uses" and painted sample sent free.

The Beaver Board Companies

United States: 311 Beaver Road, Buffalo, N. Y.
Canada: 511 Wall St., Beaverdale, Ottawa
Great Britain: 4 Southampton Row, London, W.C.



Pinecrest Inn, Salt Lake City, Utan.
BEAVER BOARD throughout.



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One piece of "Quality" furniture makes you our friend and customer for life. That explains how we dare guarantee satisfaction or return your money, paying all expenses.

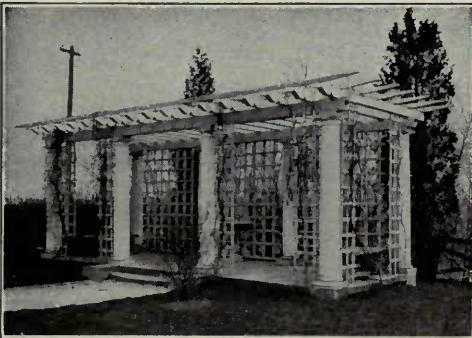
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We have issued a Very Interesting Catalogue on

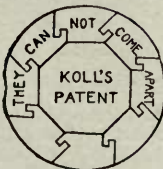
"PERGOLAS" and Garden Accessories

showing a series of new designs, can be had free on request. Catalogue "G-28" for Pergolas and Pergola Columns. Catalogue "G-40" for Exterior and Interior Wood Columns.

HARTMANN-SANDERS CO.

Exclusive Manufacturers of

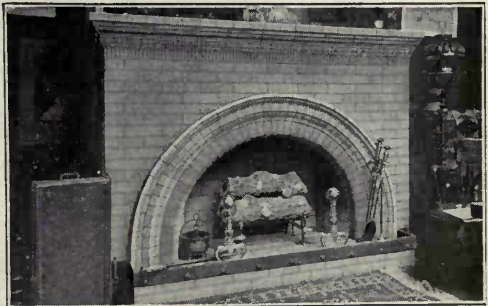
Koll's
Lock Joint



Patent
Stave Column

Suitable for Pergolas, Porches or Interior Use.

MAIN OFFICE and FACTORY: Elston & Webster Ave., Chicago, Ill.
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Do Without Smoke!

A smoky fireplace makes your living room unbearable. Nine times out of ten it's due to faulty construction. Then why not buy a

COLONIAL FIREPLACE

that is shipped to you with all moulded brick cut and fitted for setting up and full scale drawings that make erection simple.

Colonial Fireplaces are equipped with the Colonial Head, Throat and Damper that is adjustable to all weather conditions.

Colonial Fireplaces are economical both in labor saved when installed and in consumption of fuel. Our booklet "The Home and the Fireplace" shows a few of our many designs. Send for it to

COLONIAL FIREPLACE CO.

4624 West 12th Street
CHICAGO

TABLE CHAT—Continued

the base of the bowl heap grapes, purple, green and red, pears and apples, russet and rosy. At the corners have wrought iron candlesticks with orange candles and the tiny Geisha shades of orange paper. Dishes for nuts, olives and bon bons of orange or brown pottery, and bunches and boutonnieres of chrysanthemums at the places, complete an effective and rather unusual scheme of decoration.

Genuine Hospitality.

Change of one's point of view is always a salutary experience. To find oneself in the place of the other fellow is more

much enjoys the meals she eats in her friends' houses that she is constantly asking herself why she did not have more guests when she had a home of her own, and resolving that if she ever has another she will share it more generously.

Hospitality is decidedly not an American virtue, and it is fallen from its original, not very excellent estate. Its disuse is part of the growing pretentiousness of life, a pretentiousness which foreigners are quick to notice and censure. They think, and with some justice, that we try to appear better off than we are, and that we are not hospitable because we are unwilling to let people know ex-



Chicken and Spaghetti in Individual Cups.

illuminating than any amount of moral lectures on the beauty of this or that virtue. Such an experience the writer has had in the last few months. She has exchanged the stable and firmly anchored domesticity in which she has always lived for an existence of light attachment to lodgings and a succession of meals eaten in restaurants. Such an existence is by no means an unmixed calamity. It carries with it a delightful sense of freedom and an agreeable variety especially when it is compensated for by the nearness of friends and the possibilities of escape from it for a day or two at a time.

In the writer's case it has had another advantage. It has led her to appreciate the value of hospitality. She so

actly how we live. On the other side, they tell us, people are quite willing to be known as poor, while we worshipers of the dollar are anxious to be thought better off than we are. It is quite possible that this is only an incident—a passing phase in the history of a comparatively young people, who, having achieved great material success, set an inordinate value upon it. If that is the case, let each of us do her share toward helping its departure by the cheerful exercise of a simple and spontaneous hospitality, not looking for any special return, and finding our reward in the consciousness of having given a very real pleasure to some one of the homeless, of whom there are so many in every city. And an excellent motto for the undertaking is the old



If You
**BUILD
BUY
OWN**

Be up-to-date
and have the
**WORLD'S
BEST**

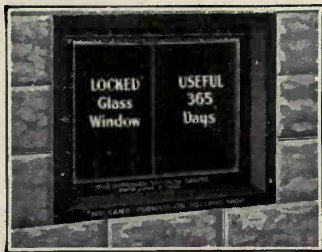
The WINDOW Chute

For Your Coal Bin

Thou-
sands in
use

The Very
BEST

Write for
Booklet C.



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Holland, - - - Michigan

World's Largest Direct Installers of Furnaces.

Phenix Hangers and Fasten- ers—for Storm Sash



SIMPLE—easily applied—
rust-proof—non-rattle—
and practically unbreak-
able. Positively the best storm
sash and screen hangers and
fasteners you can buy. If not
at your dealer's, send for
samples today. Hangers only, 10
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The Clean, Handy Way for Garbage

Dispose of your garbage by
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MAJESTIC

Underground Garbage Receiver

This keeps it free from frost in winter and the hot sun
in the summer. Operates by the foot. Contains a gal-
vanized garbage can that is easy for the garbage man to
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Write for our catalog and the name of your local dealer.

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Lorenzen Fire Place in the Home of CARRIE JACOBS-BOND

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The Keynote of the Home

is the Lorenzen Fireplace. It is
bound to be in harmony with your
living room, no matter how distinctive your
scheme of interior decoration may be be-
cause the Lorenzen line covers every style
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are built scientifically to throw the heat out
into the room and draw the smoke up the
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The satisfactory fireplace must meet your require-
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Charles F. Lorenzen & Co. (Inc.)
74 W. Washington St., Chicago, U. S. A.

TABLE CHAT—Continued

saying, "What is good enough for me is good enough for my friends." If the quality of your *menage* is such that you are ashamed to have a stranger have a taste of it, it is high time to institute a reform. Indeed there is no such domestic stimulus as the expected guest, as most housewives know.

Recent Things in Table Ware.

The Copelands, manufacturers of stoneware of a high grade, are specializing in reproductions of the china of the eighteenth century, the Golden Age of English pottery. They make dinner services and tea services which are exact copies of the old Spode, Wedgwood, Bow and Peplow, which adorned the tables of the gentry in Georgian days. The Spode service is specially interesting with its wide borders of medium blue dotted with a lighter shade, and its decoration of quaint baskets of brightly colored flowers. The floral designs of all these wares are rather Chinese in character, and they are quite in keeping with the present fancy for everything from the Flowery Kingdom.

The Merits of High Tea.

The writer knows a woman whose table is the delight of all who ever eat at it, a table at which every dish is as near perfection as may be, appealing not only to the taste but to the eye, and withal provided at a very moderate cost. Now this lady does not have a dinner every day but twice or thrice a week invites her family to sit down to high tea, not merely as an economy, but as enabling her to serve various articles which would

be out of place at the more formal meal. In the house where there are no children coming home at noon, and where breakfast is an early and hurried meal there is no opportunity to have a great many very delectable things. Clam chowder, griddle cakes, hot ginger bread, chicken salad, Welsh rarebit, to mention just a few things at random, when do they or can they make their appearance in the average household which dines at night and concentrates its forces on that meal?

But high tea twice a week gives a chance to serve these and many other delightful things with perfect propriety. There are rules, to be sure, that should govern high tea. The excellent custom of serving food in courses should not be neglected, and pie is as little appropriate as at breakfast, but it is quite suitable to have the coffee pot on the table at the beginning of the meal. Perhaps a few suggestions as to combinations may be helpful in establishing it as a bi-weekly institution.

- | | |
|--------------------------|------------------------------|
| Browned Roast Beef Hash. | |
| Poached Eggs. | Muffins. |
| | Chicken Salad. |
| Preserves. | Gingerbread. |
| Sausages. | Baked Sweet Potatoes. |
| | Griddle Cakes. |
| | Maple Syrup. |
| Custard. | Cake. |
| | Clam Bouillon in Cups. |
| Sliced Ham. | Toast. |
| | Welsh Rarebit. |
| Stuffed Peppers. | Corn Muffins. |
| | Oyster Pie. |
| Cheese. | Crackers. |
| | Marmalade. |
| | Clam Chowder. |
| | Tomato Salad. |
| Baked Apples and Cream. | Jumbles. |
| | Meat Pie. |
| Tomato Rarebit. | Graham Toast. |
| Jellied Prunes. | Sponge Cake. |
| | Fricasseeed Oysters. |
| | Mayonnaise of Salmon. |
| | Tipsy Pudding. |
| | Consomme in Cups. |
| | Spanish Omelet. |
| | French Pancakes, Wine Sauce. |

HESS MEDICINE SANITARY LOCKER



The Only Modern, Sanitary STEEL Medicine Cabinet

or locker finished in snow-white, baked everlasting enamel, inside and out. Beautiful beveled mirror door. Nickel plate brass trimmings. Steel or glass shelves.

Costs Less Than Wood

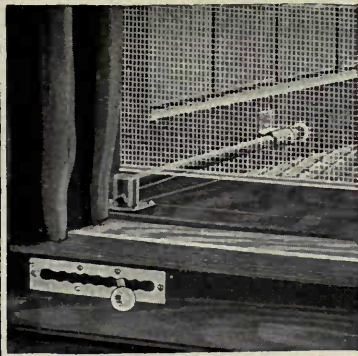
Never warps, shrinks nor swells. Dust and vermin proof. Easily cleaned.

Should Be In Every Bath Room

Four styles—four sizes. To recess in wall or to hang outside. Send for illustrated circular.

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Makers of Steel Furnaces. Free Booklet

The Recessed Steel Medicine Cabinet



The Ideal Window Practically Equipped

No other window can prove more satisfactory than the Casement, you know that—then demand that your casements be practically equipped.

Holdfast Adjusters operate and lock positively from the inside. No flies.—No trouble and absolute permanency. Get our "Handbook".

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CHICAGO

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The colors are so soft and rich and durable that all other exterior stains look cheap and tawdry in comparison. They go farther, last longer, preserve the wood better, and are infinitely more artistic. The genuine creosote wood preserving stains. Every gallon guaranteed. Don't use stains that smell of kerosine, benzine, or other worthless and inflammable cheapeners.

You can get Cabot's Stains all over the country. Send for free samples of stained wood and name of nearest agent.

SAMUEL CABOT, Inc., Mfg. Chemist, Boston, Mass.
New York Chicago



*Stained with Cabot's Creosote Stains.
Henry Maurer, Architect.*



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It tells all about the proper method of finishing floors and interior woodwork, and improving furniture. A big help in beautifying the home—new or old.

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Comes in 17 harmonious and natural shades. Makes cheap, soft woods as artistic as hard woods.

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"The Wood Finishing Authorities"

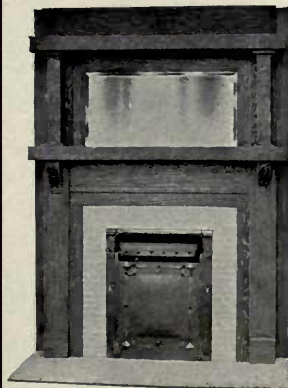


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capacity and you can
save from \$100 to \$300 in
building a home.

Send 50c. for Plan
Book which shows 22
designs—ranging in
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to You"

For this Elegant,
Massive selected
Oak or Birch, Ma-
hogany finished
Mantel.

**Beveled Mirror
18 x 36**

Price includes
our "Queen"
Coal Grate with

best quality enameled tile for facing and hearth.
Mantel is 82 inches high, 5 feet wide. Furn-
ished with round or square columns, as shown
in cut.

Dealer's price not less than \$35.00.

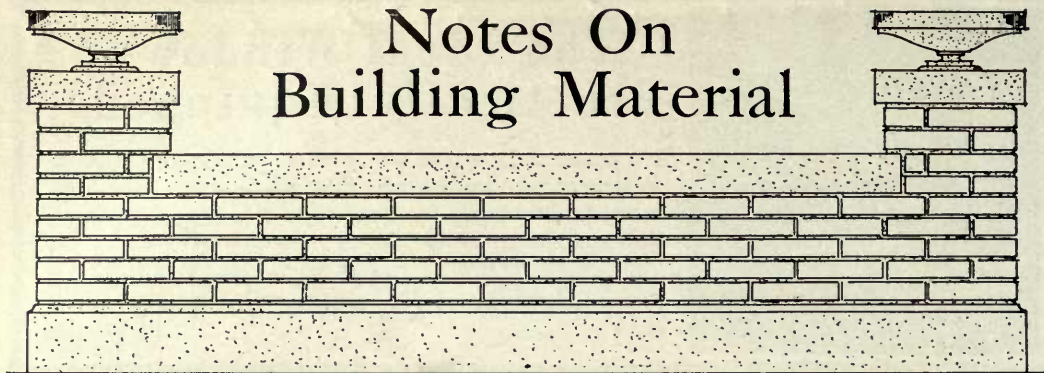
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those building a home.

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Notes On Building Material



Application of Stucco to Brick Work.

IN applying stucco to old brick walls, the most important point is that the old surface must be thoroughly cleaned; if coated with paint, this must be scraped or burned off, and if uncoated the surface must be washed with a solution of muriatic acid mixed in the proportion of 1 part commercial muriatic acid to 5 parts of water. The wall should be scrubbed with this solution, then thoroughly cleansed with clean water.

The joints between the brick work should be picked back from the face of the bricks to a depth of $\frac{1}{2}$ " to $\frac{3}{4}$ ", so as to form a key for the plaster. Immediately before applying the plaster the surface of the walls should be thoroughly soaked with water, for on account of the porous nature of the brick, water would be absorbed from the plaster, thus injuring its strength, unless the brick were thoroughly saturated beforehand.

Sometimes, instead of applying the cement plaster directly to the brick, metal lath is fastened to the brick and the stucco placed on it. Metal furring strips are attached to plugs driven into the joints of the brick work, and the lath is fastened to these strips. This method of construction is always advisable for covering brick chimneys, so as to prevent cracking due to extreme temperature changes.

In applying stucco to new brick work, the procedure is practically the same as described, except in the matter of cleaning off the surface, though the walls should be brushed to remove any mortar that may have splashed on the surface of the brick, at the time of laying up the wall.—*Concrete Cement Age*.

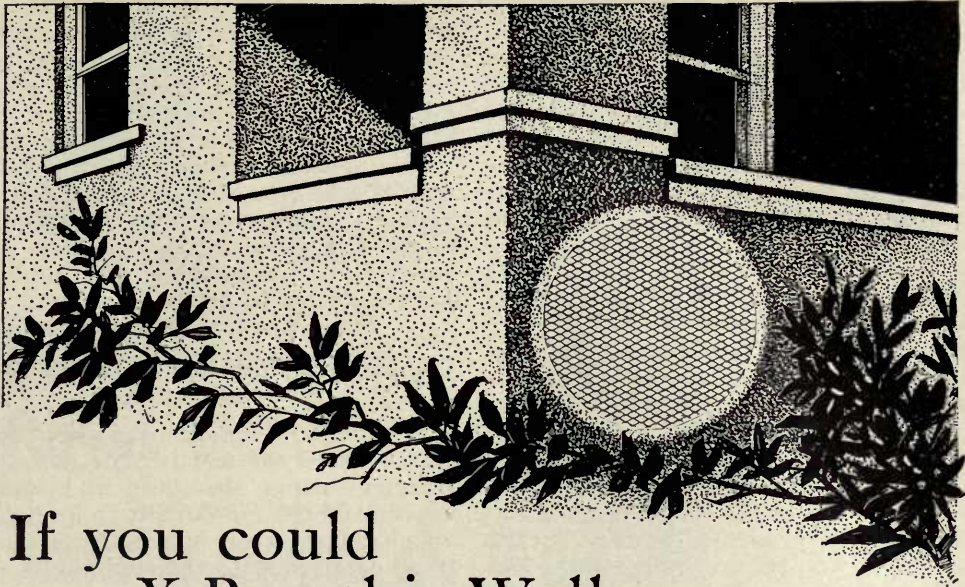
The Cost and Maintenance of Brick and Frame Cottages.

The Committee on Housing Conditions of the City Club of Chicago, Ill., has recently devoted considerable time in discovering the comparative cost of erecting and maintaining brick and frame cottages. The figures are based on the cost of cottages and two-story flat buildings, so common on 25 and 35 ft. lots on the outskirts of the city, the decorative features of which are confined mostly to the front. The sides and rear are as inexpensive as possible.

It has been estimated that a fair average on the cost of frame cottages is \$1,300; frame two-story, \$2,400; brick cottages, \$1,650; two-story brick, \$3,100. The average value of lots in the newer sections of the city has been estimated at \$450.

These figures were used to determine the relative annual expense to the owners of brick and frame buildings, the annual expenditure including general tax, water tax, fire insurance, exterior painting, and repairs, and renewal of roof extended over a period of sixteen years. On this basis the annual expense of frame cottages has been computed at \$73.70 and brick at \$57.60. Allowing 6 per cent interest on the excess cost of the brick cottage the annual expense of this type over frame would be \$4.90.

On the same basis the annual expense of a two-story frame flat building would be \$100.16, and a two-story brick building, \$83, and allowing 6 per cent interest on the excess cost of brick over frame construction, the annual expense of this type over frame would be \$25. The general tax is figured at 1 per cent. on the full value, and water tax at \$11; fire in-



If you could X-Ray this Wall

You would see the "inside" secret of the beauty and permanence of this stucco construction. The X-Ray would show you a metal mesh to which the plaster clings with a most tenacious grip. This metal mesh is

Kno-Burn *Expanded Metal Lath*

--the logical base for stucco and interior plaster work. Lath must grip plaster hard to keep it from cracking. Kno-Burn holds the plaster in an unflinching grip because each aperture through which the plaster comes is smaller than the plaster which settles around each mesh opening. This forms a hold that grows tighter with age. When lath decays or rots the plaster falls. But Kno-Burn lath cannot rot because it is metal. Ask your architect.

Book for Home Builders If you contemplate building a home you should have our book, "Practical Home-Building". It is not just confined to the proper treatment of walls or the exploitation of the advantages of Kno-Burn Metal Lath, but it tells all about home building from the selection of the lot to the time the building is ready to occupy. It contains many practical plans, photographs, estimates, comparative prices and many valuable building economies. The book is exactly what every prospective home builder wants and appreciates.

Send ten cents to cover cost of mailing and ask for booklet 659

North Western Expanded Metal Lath Co.
965 Old Colony Bldg. Chicago, U. S. A.



insurance for frame is figured at 50c and brick at 20c, both on a three-year basis.

Painting costs have been calculated as averaging \$65 for frame cottages, \$85 for two-story frame, \$30 for brick cottages, \$50 for two-story brick cottages. For renewal of roof \$8 per year is allowed, considering the average life of a roof at sixteen years at a cost of \$120. No allowance is made for depreciation, but the following was allowed for exterior repairs: Frame cottage, \$10, two-story frame, \$15, brick cottage, \$5, two-story brick, \$7.

No figures were compiled on the prevailing type of better class suburban houses owing to the large variety of this kind. The committee has found, however, that the annual expense on brick or stucco houses for the suburbs would be considerably larger than the more ordinary houses, owing to the fact that all sides are in keeping with the front.—*The Building Age*.

The Use of Plaster Board.

Plaster board is a product which some of the dealers have not learned to recognize at its true value. If there is any part of a building that is difficult to have done in a satisfactory manner, it is the lathing and the plastering. Now plaster board is being manufactured in these days so as to provide the consumer with a material which, with a little care and patience, he, himself, can nail to the studs and cover it with heavy wall paper

and make a very presentable job. Such work has been done very successfully in the case of summer cottages and country residences and, in fact, there is no place where lath and plaster are used that the plaster board cannot be substituted for the wooden lath at a considerable saving to the owner with a pronounced improvement upon the quality of the job when it is finished. It is attractive to the customer and profitable for the dealer to handle.

—*Poet Products*.

Comparative Cost of Frame and Stucco Construction.

In order to determine the difference in cost between the usual frame house construction using sheathing and weather boards and the type of stucco building in which the stucco is applied to metal lath fastened directly to the studding, a well-known concern in the west takes the trouble to secure a number of estimates from different sections of the country. The average of these show that the stucco construction is only a fraction of 1 per cent in excess of the frame construction. Using metal lath as outlined for the stucco base and also for the interior plastering there was shown an increased cost of from 2 to 3 per cent. In view of the less cost of upkeep and the fire resisting quality of the stucco construction the small additional cost is regarded as being fully justified.



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consisting of *Electric Washing Machines; Ironing Machines; Ironing Boards; etc.*, especially adapted for use in the laundry room of *Residences, Apartment Buildings* and moderate sized *Hotels, Hospitals, Sanitariums* and similar Institutions. Can furnish individual machines or complete outfits. Our appliances are the best that can be had—there are none better.

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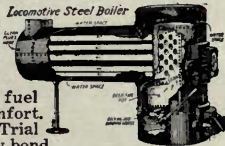
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Plaster on Herringbone Lath does not fall, crack nor become disfigured with lath stains that ruin wall paper and decorations. Herringbone-stucco puts over your home a fireproof cloak that requires no painting nor repairs. It makes a house that seems never to grow old.

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When you build, build wisely. Build with imperishable materials. A Herringbone house, though durable and beautiful, need not be an expensive one. For bungalow or mansion, Herringbone construction is equally adaptable.

For damp climates and wherever lath may be subject to corrosion, we recommend the use of Herringbone Armco Iron Lath. It is the purest iron made, therefore resists rust indefinitely.

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full of illustrations of beautiful Herringbone houses and facts about Herringbone that every prospective builder can use to his advantage. Perhaps it answers the very question you have had in mind. Mention your architect's or builder's name so we can co-operate with you through him.



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Heating, Lighting and Plumbing



Location of Furnace and Registers in House Heating.



only requires a clear and concise explanation of the important bearing that the location of the furnace has on the success of a warm-air heating system and the economy in fuel which will result from proper location for the owner of a building to join hands with the furnace man in getting the furnace put in the right place. The right place is admittedly that which will call for the shortest possible run of piping to all the registers of the system.

One of the greatest troubles found in the average practice is to get a fresh air supply duct that is large enough. A good influence is being exerted upon the design of warm-air systems in relation to the air supply duct by the circulation of air from within the building. The majority of men seem to realize that a larger inside air duct is needed when the air is taken from inside than from out of doors, and they also find that there is little advantage making the ducts of two different sizes, particularly if the two come together at a point controlled by a damper so that either outside or inside air can be used at will. The only kind of material fit for making an air supply duct is sheet iron. Whether it is of a round or rectangular shape, it should be galvanized to protect it from rust, and heavy so that it will hold its shape and permit of efficient dampers being used.

Notwithstanding the various rules that can be used by furnace men with advantage, the use of common sense has the most important bearing on the design of the work in the end. Its installation in such a manner as to avoid friction and the location of registers and furnace must be governed by common sense rather than by any fixed rule. There are, however, a few things that govern the situation. First of these is the heat lost by

transmission through the walls and windows and by the escape of the air brought in to make room for more warm air. In consequence, it has been found that good practice requires the air in residences to be changed two or three or more times per hour. With the cubic contents of the room known and multiplied by 2, 3 or 4, the total volume of warm air required is known. The velocity at which air will flow through the furnace heating system is also well established, and this is not over 6 ft. per second for first floor rooms and more often 4 ft. or 5 ft. It is also good practice to allow a velocity of not over 8 or 9 ft. per second for the air flow to second floor rooms. With this velocity and the total amount of air required known, it is a calculation which a grammar school boy can make to determine the size of the riser and warm-air pipes.

When this is known the size of the furnace required can also be readily computed from manufacturers' ratings, as proved by experience with different types of furnace.—*The Building Age*.

Legal Decision Concerning Plumbing.

A contract to install plumbing and heating in a house provided that petitioners should furnish the plumbing and heating complete, doing first-class work, and leaving everything in first-class condition ready for immediate use. The work was substantially completed in August, but at that time there was a slight leak in certain pipes, and the workmen had put the hot water disc on the cold water faucet, and vice versa. Petitioners, in response to a request, took out the necessary pipes, releaded the joints, and screwed them tighter, stopping the leaks, and changed the hot and cold water discs. Held, that the contract was not completed until the repairs were finished, and hence their right to file a claim for lien dated from that time.—*National Builder*.

Your Architect Knows Why The Underfeed Cuts Coal Bills $\frac{1}{2}$ to $\frac{2}{3}$



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If you are going to build, ask your architect about the wonderful fuel and money-saving NEW-FEED Underfeed furnaces and boilers. A mistake in your heating equipment means discomfort and big expense. So we say be careful! The architect who knows will surely recommend the installation of a Williamson NEW-FEED Underfeed furnace or boiler.

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For many years and in over 25,000 buildings, Williamson Underfeed furnaces and boilers have been saving one-half to two-thirds of the coal bills, and delivering *more* even, sanitary heat than any other heating system in existence.

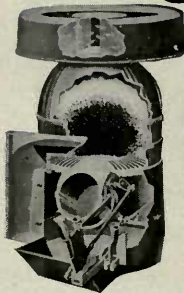
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The attention of a 12-year-old boy *twice* a day for firing and *once* every week for removal of ashes is all that is required. An Underfeed in the basement means *clean, even, economical* heat in the home.

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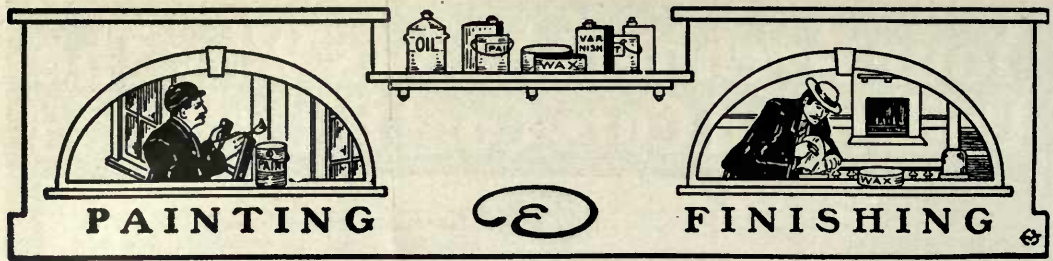
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Warm Air..... Steam or Hot Water.....
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The Proper Care of Varnish Brushes.

MUCH of the usefulness of a varnish brush depends upon the treatment it receives when purchased. The stock of the new brush should be run through the fingers until the loose hairs and dirt are completely worked out and it should next be placed in clean linseed oil and wiped out over the edge of the cup. The brush will then be fit for use in putting on the under coats of varnish, and after a week or two of this work it will do to use in applying the finishing coats of varnish.

A brush should always be suspended when not in use, and never allowed to rest upon its point, for if this is done it will lose both form and elasticity.

Varnish brushes should be kept in a clean receptacle with a cover fitted tight enough to keep out all forms of dirt. If you happen to drop your varnish brush on the floor while using it, pick it up carefully, and holding it at an angle, flood the dirt off by pouring on a small quantity of turpentine. To clean a varnish brush, wash it in oil first, and next in turpentine. Then by a week's use with undercoats, it will be restored to its original cleanliness.

But the brushes which are not used so often, or have any chance of becoming dirty, you must treat differently. The rinsing in turpentine will merely loosen the dirt which will be forced up into the body. These brushes can better be kept in a finishing varnish which should be frequently changed.

Every precaution should be taken lest dust collect on the brushes, and they should never be left lying around for any length of time when not in use. If a cloth is used to clean the handles, it will distribute lint, and this work should be done with a stiff, partly worn brush.—*Pratt & Lambert Varnish Talks.*

Varnished and Polished Floor.

(The following methods of floor finishing are taken from the booklet issued by the Yellow Pine Association.)

Prepare a clean, smooth surface, and if stain is required apply a coat of the desired stain on the bare surface of the wood. Wipe off with cotton waste or cheese cloth to present raise of grain. Sand lightly with O sand paper, and apply a thin coat of white shellac dissolved in grain alcohol; then sand again with fine sand paper and proceed with the finish in the regular way, by the application of floor varnish. To produce as fine a surface as on oak, each coat of floor varnish should be rubbed. Wax may be applied to the varnish surface if desired.

Dull or Waxed Floor.

After a clean, smooth surface of the wood has been obtained, apply a coat of the desired stain (a neutral tint preferred). Wipe off with cotton waste or cheese cloth to prevent the wood absorbing too much moisture. When the stain is thoroughly dry, seal the surface of the wood with a thin coat of white shellac. When dry, sand lightly with O sand paper, apply second coat of thin shellac, and when dry apply with a soft, dry cloth a generous coat of wax. Rub wax thoroughly into the surface with dry cloth or regular floor polisher.

The former way of waxing a floor omitted wood filler, shellac or varnish, but included several coats of wax or oil thoroughly rubbed into the surface of the wood. The effect produced a polished but not a hard surface, and soon discolored from dust and dirt.

Hard Oil Floor.

Properly clean and carefully smooth the floor surface, coat it over with boiling hot linseed oil tinted such shade as will bring the sap and lighter shades to the heart color, allowing it to stand until

Dutch Boy White Lead

mixed with Dutch Boy linseed oil makes paint thin as paper, opaque as ivory—puts a metal mantle about your house. It preserves, beautifies; lasts without cracking.

Paint Adviser No. K. 28

tells about wood surfaces and suitable paint, how to estimate cost, etc.

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thoroughly hardened before being exposed; give a second coat of the same materials tinted as above mentioned; sand paper and finish with floor wax, or first class floor varnish. If wax is used it must be thoroughly rubbed into the surface. If varnish is used, each coat should be carefully rubbed down.

Varnished Floors.

Properly clean, scrape and dust the floor surface insisting upon same attention as is given to hardwood. Apply one coat of good quality floor varnish, slightly cut with turpentine, allowing it to set forty-eight hours. When thoroughly dry, sandpaper lightly with O paper and remove dust; apply second coat of the same good floor varnish, full strength; this in turn to stand until dry and hard; sand-

paper lightly and clean floor as before. Apply a third coat of varnish, full strength, and either leave in gloss, or rub to a dull finish as owner may direct.

Use of Whitewash.

Whitewash is a preservative; it is not as good as paint in some ways, and it may be better than paint in certain other ways. Lime used for whitewash is a good disinfectant and it serves to destroy the fungus growth which may be setting up on the outer surface of lumber or timber and in this fungus growth which makes what we call decay. Whitewash falls short of paint, however, in that it will not stay on as long nor fill the pores of the wood with oil which serves to keep out moisture. Whitewash is a good thing for rough, outside timber and fencing and it is certainly a preservative.

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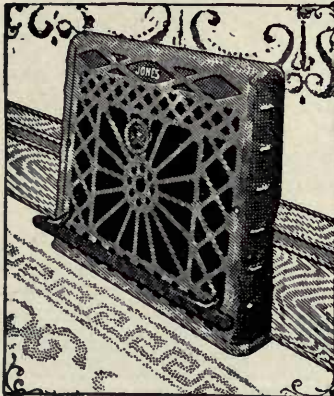
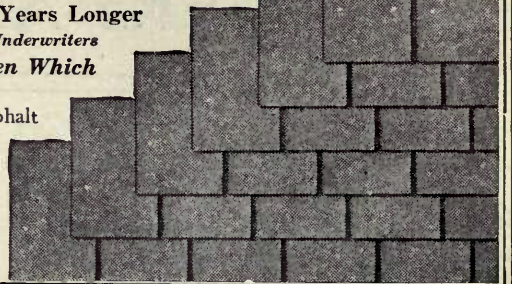
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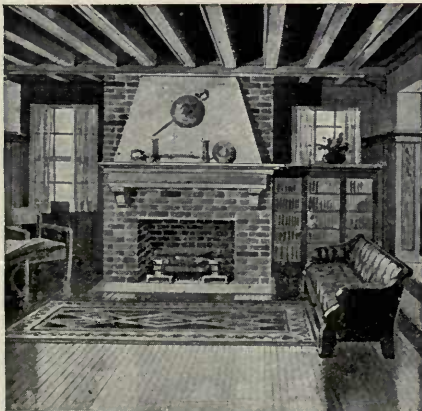
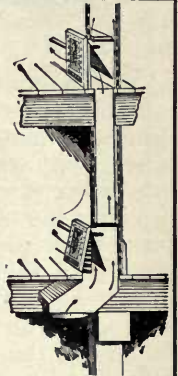
during the coldest weather may be secured by installing the "JONES" System of Heating, one principal of which is the heating of one room on two floors from the same basement pipe, insures not only a saving, but produces the results wanted.

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SPLINTERS AND SHAVINGS

Houses Constructed of Porcelain.

SOME interesting particulars have just come to hand regarding a home of porcelain which can be erected in a few hours with a screw driver and wrench. It is the plan of W. H. Turner of England, who calls himself "the pioneer of porcelain" and furnishes the following details:

"In the construction of the porcelain house there is a complete absence of all absorbent materials, such as brick and mortar, plaster, whitewash, concrete, woodwork and paper. The complete porcelain house is constructed as follows: Framework, preferably of light, rust-proof metal. In this framework are fitted the huge porcelain panels, half an inch thick, 6 feet long and 3 feet wide, weighing 5 pounds to the superficial foot, decorated and glazed on both sides to resist wind, storm and weather, with steam-tight joints, made of copper-coated asbestos tape.

"Porcelain is non-absorbent, insect and germ proof, fireproof and washable, and it makes possible for all a perfectly hygienic home. As for warmth—an inch-thick wall of pure porcelain glazed on both sides is better able to keep out cold than an eighteen-inch brick wall. With bricks and mortar it takes months to erect a house of, say, five rooms; a porcelain house of the same size can be put up in a few hours."—*The Building Age*.

"Pitch" of Roof.

The "pitch" is the angle of the plane of the roof or its inclination it forms with the level line on the plates of the building. This pitch is measured from the ridge of the roof to the level of the plates. If the height of ridge is equal to one-quarter the width of the building, then it is called "quarter pitch," if one-third of the height of the width of the building, then it is called "third pitch," and so on—any work on the uses of the steel square shows how any "pitch" of roof may be obtained.—*The National Builder*.

A Bill of Quantities and Its Advantage.

"A Bill of Quantities," as advocated by the American Institute of Quantity Surveyors (A. I. Q. S.), is an accurate schedule of the quantities and descriptions of work (labor and material) required in the erection of a building, as indicated by certain drawings and specifications supplied by the architect or engineer.

A "Quantity Surveyor" is a professionally trained measurer, an independent party, appointed by the owner, architect or engineer, whose duty it is to prepare the bill of quantities at the owner's expense.

Under "The Quantity System," as advocated by the American Institute of Quantity Surveyors, bills of quantities will be furnished free of expense with the drawings and specifications to all builders desirous of bidding in competition. Lump sum bids will be based upon the quantities or work scheduled in the bill of quantities, the character of same being ascertained from the plans and specifications. In the event of any changes or errors, the cost is adjusted between the owner and contractor by the surveyor. It is recommended that the accuracy of the bill of quantities be guaranteed to the contractor by making "Quantities" the basis of the contract, in other words every bid would be for a fixed, specified "Quantity" of materials and labor.

It is believed that by the adoption of the "Quantity System," many of the evils and uncertainties of present day methods of competitive bidding will be eliminated, the ultimate expense will be reduced, a legitimate profit made possible and that the expense of obtaining competitive bids will fall directly, instead of indirectly, upon the building owner. Co-operation between architects and professional quantity surveyors will materially benefit both parties to a contract by a clearing up of ambiguities and uncertainties and the preparation of clear and easily read plans, resulting in closer bids and reducing the liability of their being either too low or too high.—*The Quantity Surveyor*.

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One important feature is the **wedge shaped tongue and groove** which enters easily, drives up snug and insures a **perfect face** at all times without after smoothing, an advantage that is not obtained by any other manufacture.

Our method of air-seasoning and kiln drying has stood the test for thirty years.

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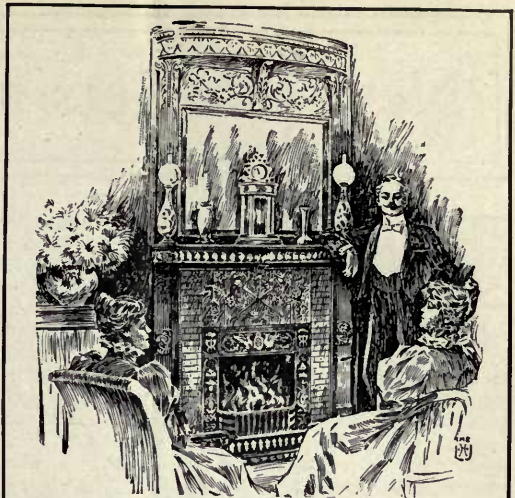
A WONDERFUL BOOK ON HOME BUILDING. Containing 128 New House Plans (costing \$500 to \$15,000). 354 illustrations of Interiors, Exteriors and Furnishings; 11 Color Plates on Interiors; 150 pages on How to Finance, Plan, Build and Equip Your New Home; 320 pages. Bound in Cloth with Art Cover. The Most Complete

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will make your fireplace a perpetual pleasure. Burns wood, coal or gas. Unlike the ordinary grate it produces an even temperature thruout one or several rooms, and gives four times the heat of the ordinary grate. Its special feature is a fresh air pipe which draws pure air from outdoors and sends it heated into the room, while the impure air passes up the chimney. Perfect ventilation is thus assured.

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It fully explains the principle of the Jackson Grate, shows the numerous styles and gives full information with prices.

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New Booklets and Trade Notes



BIRCH INTERIORS is an exceptionally handsome booklet just issued by the Northern Hemlock Association. It gives a clear and concise description of the wood itself and illustrates its uses in built-in work, panelling and columns with some thirty views of interiors in addition to a number of designs of the most popular types of modern residences in which birch was used for the interior trim and finish. As these designs are accompanied by floor plans, they should be most suggestive and helpful. The artistic cover design and the excellent press work throughout give this booklet a noteworthy place among the many worthy productions of the advertiser's art.

* * *

The Ullman-Philpott Company, manufacturers of paint and varnish, issue an interesting brochure concerning the causes and prevention of rust, written by Dr. Franz Seligman, a well known commercial chemist. Metal surfaces must be protected from moisture in the air and the corrosive acids in soot; this booklet tells you how to do this and what paints will be best for your purpose.

* * *

The last issue of *Beardslee Talks*, the house organ of the Beardslee Chandelier Manufacturing Company of Chicago, contains a number of good designs for lighting fixtures on the Colonial order. It furnishes further evidence of the way in which designers for chandeliers are keeping pace with the upward trend of public taste in every detail of house furnishing.

* * *

A monthly journal devoted to Concrete Roads is now being published by the Portland Cement Company which not only reviews, in an interesting manner, the work being done along this line, but will doubtless help to arouse general interest in the construction of good roads.

Cut Your Coal Bill

YOU won't have to "look after the furnace" every few hours if it is fitted with a **Kees Furnace Regulator**. It saves hundreds of trips to the cellar. Works the drafts automatically. Keeps the temperature even at just the degree you prefer. Prevents all waste of fuel, saving its price in a season. For hot-air furnaces only. Write today for booklet.

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Box 102

Beatrice, Nebraska

The Yellow Pine Association of St. Louis issues a little book devoted to the use made of Yellow Pine in homes on farms and in suburbs. It presents some interesting examples of very old structures in perfect state of preservation as proof of the durability of this building material. The figure head of the famous old "Ironsides," one of our first battleships, launched in 1797, is of pine and is perfectly sound after weathering the storms of a century. The Yellow Pine Manufacturers' Association at St. Louis will furnish further information about this wood.

* * *

The Vulcanite Portland Cement Company publish a number of interesting pamphlets, the last one being a paper by Albert Moyer recording the results of investigations to determine the proportioning aggregates for Portland-Cement Concrete. This enables the engineer to state accurately the proportions that, with a given sand and a given stone or gravel, will make a concrete of maximum density and maximum strength.

* * *

A swinging door that will not "come back" at an inopportune time is now possible, if use is made of the *Shelby Spring Hinge Company's Double-Acting Surface Floor Hinge and Check*. This simple device fits into the door and can be easily installed by the man of the house without the aid of a carpenter. The mechanism of this hinge is fully illustrated in a little folder sent out by the Shelby Company.

* * *

A leaflet descriptive of Integral Waterproofing for cement comes to us from the Integral Waterproofing Company of New York City. This compound is "a white impalpable powder with a calcium base which is mixed with dry cement for waterproofing cement, mortar, stucco or concrete above, or below grade." It is recommended on the grounds of its simplicity, economy and security.

* * *

The corrosion of sheet metal and the way in which metal may be rendered impervious to atmospheric conditions, is ably treated in a profusely illustrated text issued by the producers of *Toncan* of Canton, Ohio. Those interested in sheet metals, will find in it much instructive information.

* * *

The September issue of the *Spectrum* consists of exterior and interior views, with interesting descriptions, of five very attractive modern homes in which the Sherwin-Williams products were used most effectively in working out the decorative schemes for the interiors.

* * *

The *Trane System of Vapor Heating* is described in an attractive booklet issued by the Deringer Boiler Company of Minneapolis. It also contains a number of cuts of buildings in which this system has been recently installed.

KEITH'S MAGAZINE ON HOME BUILDING

M. L. KEITH PUBLISHER

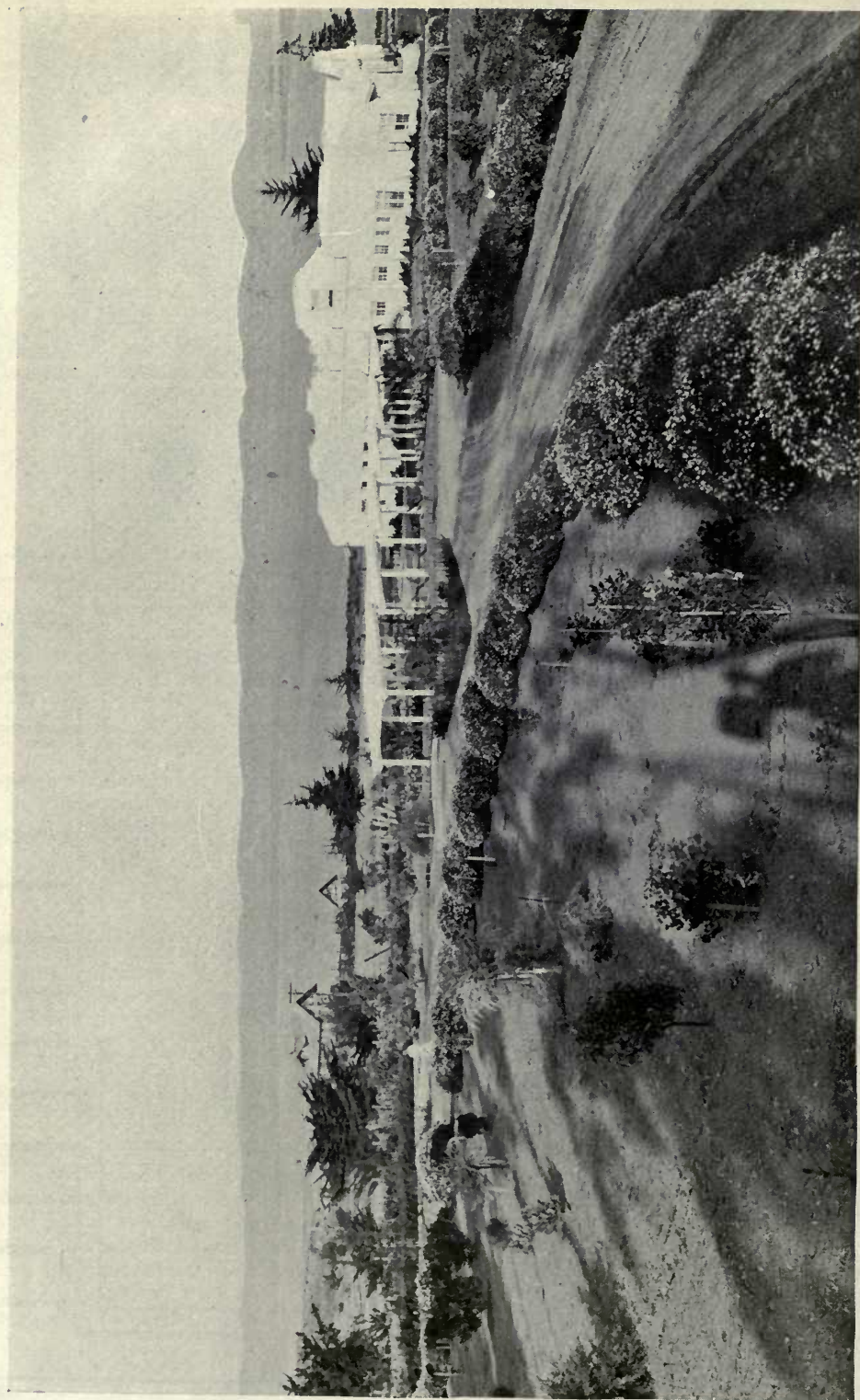
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The lines of this low-lying house on the border of the bay, repeat in a pleasing manner the lines of the surf and the mountains beyond.

KEITH'S MAGAZINE

VOL. XXXII

DECEMBER, 1914

No. 6

Houses Designed Relative to Their Situation

Una Nixon Hopkins



GOOD deal of the success or failure of a house is due to the fact that it either has or has not been carefully considered relative to the position which it occupies. The setting of a proposed house should be as conscientiously studied as the plan of the house itself. In this the foreign designers, generally speaking, are away ahead of us. On pieces of ground that we would reject as useless, because not adaptable to the conventional house, they build the most charming of places—successful for the reason that the house and environment have

been studied as a whole. One of our notable American architects, however, goes again and again to study the lines of trees among which—or near which—he is planning to build. The casual passer-by exclaims over the beauty of his houses, little realizing that the charm is not all in the house—it is the picture that delights the eye, and it is the picture quality that is so important.

Old-fashioned artists used to instruct their pupils in “still life” to arrange their models and then look at them in a mirror—to better gain the effect. It is a pity we



In this little house under the hill the line of the hill seems a part of the elevation.

can't arrange dummy houses in given settings and look at them in mirrors, but the mirror in the instance of placing houses must be in the mind. One must feel a picture as well as see it. What is true of a picture is true of houses, though the latter is the more important to be sure.

And again what is true of form is true of color—the coloring of the house relative to the things about it. Color is more of a problem in the West, possibly, than any part of the country. For “back east,” as the area east of the Rockies is known to the Westerner, the landscape and trees are not of so many tones as they are in the West, for while there may be as many varieties of trees in the East as in the West, those of the former are practically one color, while in the West there is a great range of shades and tones to be reckoned with when the exterior coloring of a house is at stake.

In the picture of a little house under a hill, the hill back of the house seems included in the elevation, for the roof of the one room above is like unto the line against the horizon, and the situation of the house proper is interesting in relation to the trees—native sycamores.

The exterior is covered with cedar shingles, simply oiled and left natural. As they weather they turn light in places—

almost as light as the deep cream trim, so that the bark of the sycamores is not unlike the tones of the house and in early fall when the leaves begin to turn brown the place is a lovely color study. There are purple flowers only, in front. Altogether the house has a rare picture quality.

Generally speaking it almost seems a pity to disturb a wooded plot of ground with a house—but the picture designated, a house

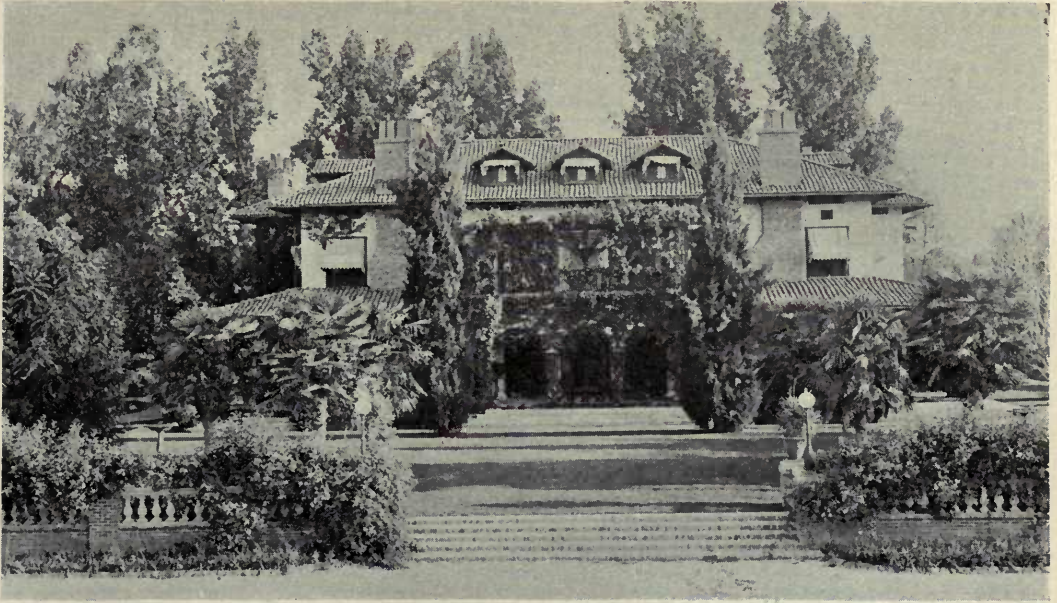
in the woods, is so cleverly designed it adds rather than detracts from the woodsy setting.

The house is of natural plaster and half timbers with a brown shingled roof, and mullioned casement windows, low lying and vine covered. Space in the foreground sufficient for a lawn was cleared and the little brick wall along the street is green with ivy. One feels that a piece of the woods here has been beautified, not desecrated. A large country house with plaster walls



A charming house that seems a natural part of its woodsy setting.

and roof of tile is an excellent illustration in point. The perpendicular lines of the trees compose well with the square house, and the vines in the exact front bring the house and the shrubs and trees “together” as a painter would say making a charming picture, though one may not at casual glance realize the cause of his satisfaction here. And, likewise, a house under the shadow of the foothills gives the impres-



The gray plaster walls and red tile roof are thrown into striking relief against the green of the trees in the background.

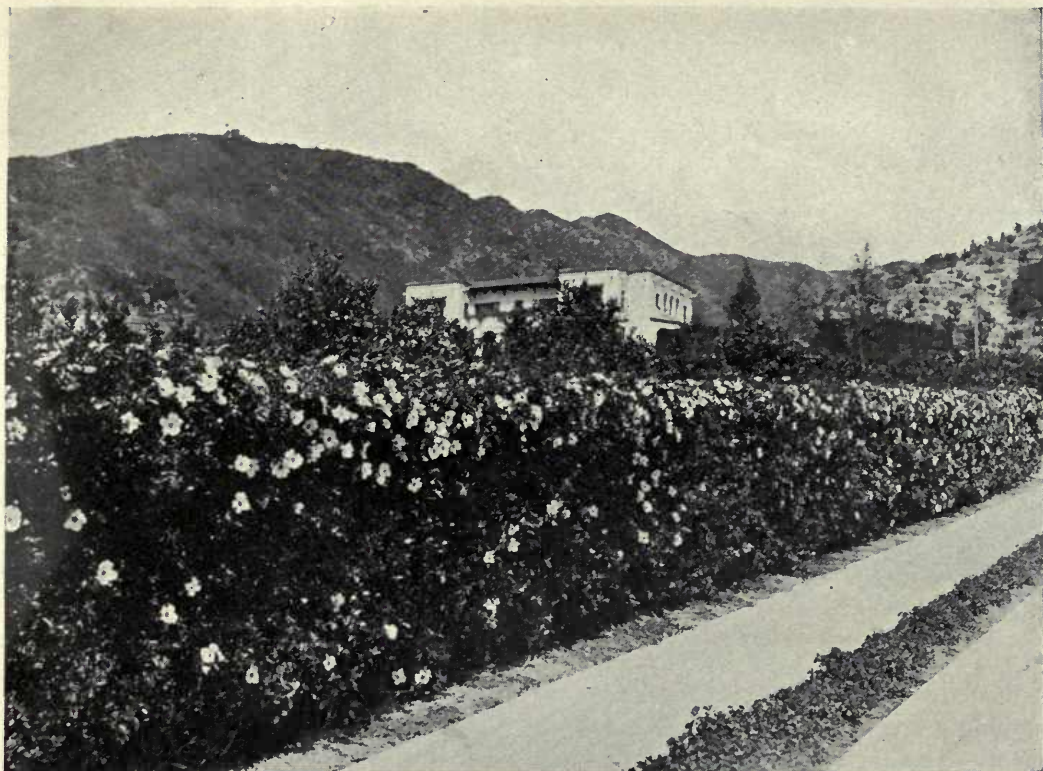
sion that it was designed with the idea of making it a consistent part of its environment. This is true of its form and its color. If the house was high and many gabled, it might stand out too boldly against the hillside, but with its flat roof

it is almost hidden by the trees and high blooming hedge with blossoms as white as its walls.

A house near the street on a city lot is "planted" between two large trees and appears very homelike—on the trees largely,



The big trees on either side of this house give it a sheltered appearance although it is near the street.



This house, under the shadow of the foot-hills, is a consistent part of its environment.

does it depend for this quality—for it has not sufficient room to give it the perspective desirable for so large a house. Gray stone has been used here for the first story, and against this grow pink lantana, pink hyderangas, and other pink flowers of different tones, giving a highly pleasing color impression.

Between the house on the border of the sea and the long line of sea and horizon, there is a pleasing correspondence. The photograph shows the rear of the house which faces seaward. It appears almost

like a beautiful white shell that might have washed up from the shore. On a very large plot of ground, the drives are bordered with white flowers entirely. Not only has the exterior of the house been planned according to the demands of the setting, but the inside as well, for the blue coloring of the Pacific—the bluest of seas—has been used within, sparingly to be sure, but blue is the prevailing tone, and windows hung in beautiful blue and white cretonnes make lovely frames for glimpses of the sea.



Suggestions from the Japanese on Interiors, Decorating and Landscape Gardening

N. Margaret Campbell



THE mention of the word Japanese in connection with art unfortunately summons up a vision of the weird effects and overcrowded decoration too often offered to the credulous American shopper as an example of Japanese

art products, while, in reality, nothing could be farther removed from the spirit of all the art which is truly representative of the Sunrise Kingdom. It is well to remember that for twelve centuries while western civilization was warring its way out of barbarism these gentle, beauty-loving folk were devoting themselves, as a nation, to the practice of the fine arts of painting and architecture. Any artistic movement extending over so long a period might be expected to develop distinctive characteristics of a high order and, as a matter of fact, the Japanese have given artistic expression to the inner life of the Oriental with a finality and perfection only paralleled in the western world by the architecture and sculpture of the Greeks. And furthermore, this

prolonged and undisturbed devotion to the arts has cultivated the artistic spirit among the common people to an extent that can be compared to nothing in our western world unless it be the attitude of the Italian during the high tide of the Renaissance or the Greek laborer in the age of Pericles. In a remarkable way art became a part of the everyday life of the most lowly among the Japanese and not a luxury to be reserved largely for the rich, as with us.

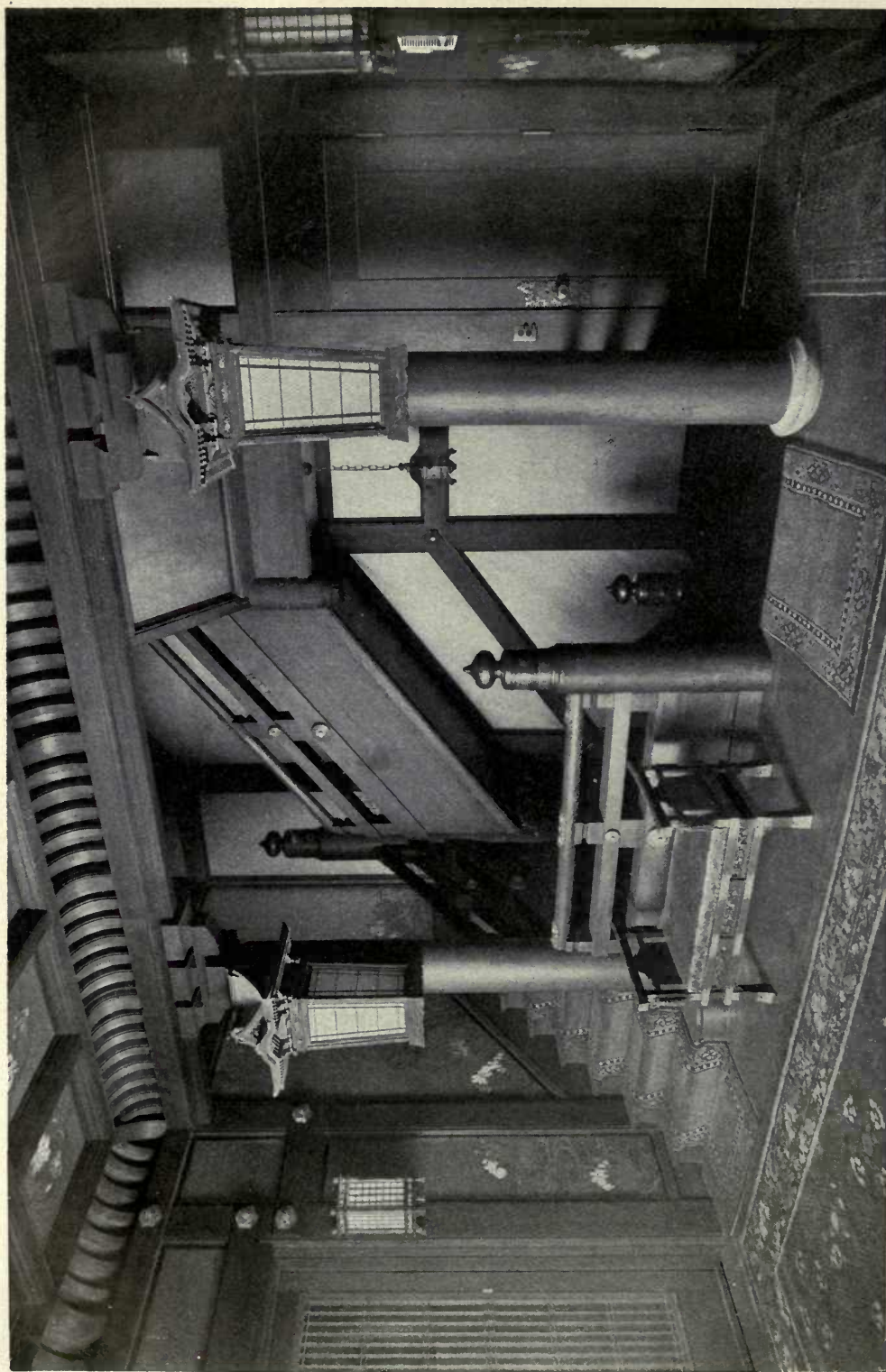
This universal cultivation of the art instinct finds most noteworthy expression in the treatment of the interiors of their homes and the grounds about them. We have no intention of advising Americans to adopt a type of interior decorating developed under conditions and exigencies entirely alien to our requirements, but there are certain general, underlying principles that

might be profitably applied to our decorating and landscape gardening.

Even the accidents of their environment combined to make the Japanese the greatest decorators of the world. The art of writing as practiced among the Japanese is a skilful sort of painting with a brush so that the average educated child



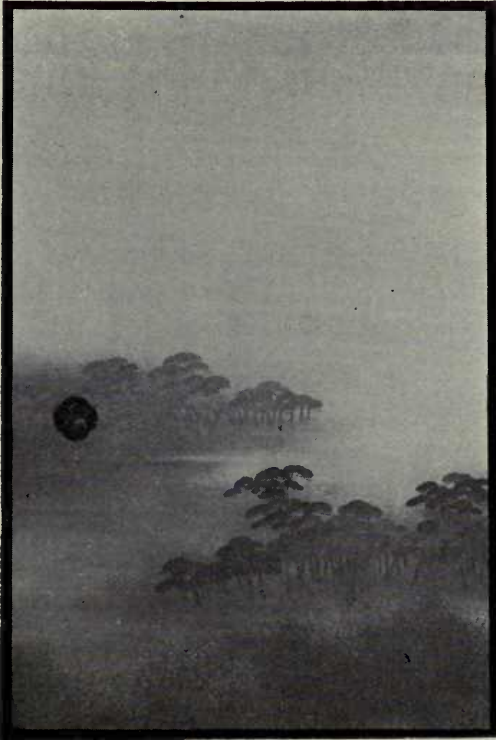
A view of the King Garden, Homer, Ill. Designed by T. R. Otsuka, Japanese landscape architect.



True Japanese architecture is carried out in the interior detail of this reception hall and stairway. — *Courtesy Wall Paper News.*

rapidly attains to a delicacy and confidence in the handling of the brush that is rarely found even among our artists. The moveable panels which serve as dividing partitions of his house are of rice paper or silk, each of which is a ready framed canvas upon which the owner may exercise his skill as an artist. He may bring a charming glimpse of some well loved landscape in-

art treasures of the home are kept and from which only one is taken each day and that placed in a little alcove especially built for it so that nothing may mar the enjoyment of that one object. What a lesson in wise restraint this is for all of us. It ought to give us the courage to leave a bare wall rather than endure a picture or vase that offends our taste, and above all, it ought to



"He may bring a charming glimpse of some well loved landscape indoors to dwell with him, or he may create a misty bit of the blue heavens with clouds of pale gold faintly touched with rose drifting across it."

Courtesy Wall Paper News.

doors to dwell with him, or he may create a misty bit of the blue heavens with clouds of pale gold faintly touched with rose drifting across it. We illustrate such panels, showing the silken tassels by which they are moved, but no reproduction can convey an idea of the elusive delicacy of their coloring.

The frequency of earthquakes and the danger from fires forced upon the Japanese that rarest of all virtues in interior decorating—extreme simplicity. Each household boasts of a fireproof "kura" in which all the

teach us not to confuse the assembling of an unrelated number of pictures and art objects with decoration. A room may be remarkable for the things that are not in it.

In regard to furnishings, the Japanese also point the way to simpler and saner living. They never keep in the rooms any articles not in immediate use. How many American men have sacrificed precious nervous energy to pay for some piece of furniture because it "looked well" in some chosen corner.

This absence of unnecessary furnishings or decorations gives a sense of wide, airy spaces even in rooms as small as we find in our city apartments, and part of the charm is due to the subdued light falling through the latticed windows, bringing a sense of protection and repose.

In their treatment of wood they are almost reverential. It would seem like a desecration to them to paint over the natural grain of the wood as we sometimes do, the only exception being their rare and beautiful lacquer. They treat a piece of wood of fine

sympathetic manner. Our own critic, Mr. Ralph Adams Cram, said of them, "Their buildings seem almost a concentration and perfection of the hills and trees of which they seem to be a part." In a limited space the gardener seeks to create the impression of a rare bit of natural scenery, and in addition to this they strive to work into the scene a "mood," a spiritual essence, that will be an ever-present link between the personality of the owner and his garden.

The nature and color of each flower is carefully considered before it is placed and



Garden designed for Col Fabyan, Geneva, Ill., by T. R. Otsuka, Japanese landscape architect.

texture and figure as our artists would a rare block of marble. Likewise rice paper, used in the moveable screens, is often left its natural, creamy white and never given some trivial decoration as too many of us would be tempted to do in our unexplained desire to cover up plain surfaces. When we have attained to a true appreciation of the inherent beauties of various structural materials we will not cheapen them by making them imitate something else.

In the treatment of their gardens, we could learn even more. The grounds are always planned so that the buildings are made to fit into the grounds in a most subtle and

even in the planting of trees careful attention is given to the effect a trace of light foliage will have against a dark background, while no effort is spared to create charming vistas and a sense of perspective. They love to introduce a touch of brilliant color among the bronze-green of the trees and so you often see the roofs of their pagodas painted a vermillion hue. A garden, to deserve the name, must have a stream flowing through it, crossed by a little, curved bridge with a gray stone lantern to light the way. A spot so designed, said one of their landscape gardeners, "will make you forget any earthly cares whatever."



A CALIFORNIA COUNTRY HOME

Margaret Craig



WITH a vision of a home that would have the delights of the nearby woods and all the advantages of town life Mrs. E. M. Roberts, of

San Rafael Heights, Pasadena, California, chose a lot that to one with little imagination would have seemed impossible.

Yet, on this piece of land, possessing the priceless charm of an abundant growth of live oaks, and sloping abruptly toward the arroyo, one of the most satisfactory of houses was constructed for her, and one closely related to the site.

Situated at the end of a country road that follows the picturesque dried river bed of the Arroyo Seco, the house

is approached by a curved drive-way that leads to the circular court-yard at the west of the house. It would be difficult to say which is the rear of the house, for here is

the main entrance, while the east exposure of the house, the natural front, has been entirely given over to the terrace that commands a view of mountains and valley.

The charm that comes from a home so closely associated with its surroundings, both within and without, is hardly describable. But by color and line without, and by careful cutting of the window and door openings to obtain picture views from within, the house and environment are a unit.



The lattice-work gives character to the entrance.



The walls of the room are in delicate putty-colored shades that bring out the old rose tones in rugs and draperies.

The covering of the structure is of natural stained shakes, and this is happily relieved by the white paint of the trim. The purple flags outlining the drive-way together with the mass of white Shasta daisies and heliotrope contribute echoes of the woody environment.

The main entrance of the house is strongly accented and is made very pleasing by the use of the colonial lattice work, grown with trailing vines, to retain its shape. The door which leads into the house is white and the little square windows at the top above the good panelling form the theme for all the windows and doors.

Directly from the entrance porch the living room opens and although every wall here is cut by openings the sense of comfort, cosiness and charm is very evident.

The walls of the room are papered in delicate putty-colored shades that bring out the note of the old rose that is quite a prevailing color in the room. Between the two sets of French doors the east wall is most

decorative. Here a wonderful painting of red woods by Arthur Davies is hung, and the colors that predominate in it have proven the key-note of the rugs and draperies.

Below the picture is the simplest of fireplaces made effective by the absence of a mantel shelf above and by the rich brown hand-made tiles that surround it.

The few well chosen pictures on the wall are in groups or hung singly on a wall space.

The smaller part of the room, which forms a jog, where the outside entrance was cut, is made very inviting with the deeply cushioned davenport and the built-in book case. It becomes an alcove library of semi-seclusion.

Opening off the French doors either side of the fire-place, and overlooking the scenery of woods and mountains the ample terrace runs entirely across the front of the house and is completely supplied with lounging chairs and a few reading tables.

The little hall and the dining room open off from the living room on the north.

Blue and grey cretonne curtains containing a pine branch pattern with a glow of green and suggestion of yellow, hang at the dining room windows, and form lovely frames for the live oaks without. The walls here are a soft grey with woodwork of most delicate brown shades. Silver

that remained after the building of the sleeping porch.

In the hall at the head of the stairs is a study and telephone room, also a linen closet is made in the little upstairs hallway.

The room at the other end of the hall is made as ideal as possible to answer all the needs of the son of the house. The coloring of the walls is a dull olive and makes



The cretonne hangings are charming with plain walls.

sconces as ornamental as the few simple paintings are also attractive.

There are two main bedrooms upstairs, each in itself a picture of comfort and rest. The one in the south east corner has grey walls and white woodwork with the daintiest of figured curtains at the windows. A sleeping porch opens from a door at the foot of the quaint mahogany bed on the west wall. A larger wardrobe closet is made in the little cove that is constructed in the part of the room that extends over the front entrance way, and consists of space

a blending background for the trophies of the woods and streams, and for college pictures and those of the hunt.

In here one notices a large working table that allows a medley of working materials when necessary, a comfortable couch under the wide windows, and a sleeping alcove opening up on the outside veranda.

Built in the Georgian style, quiet and unique as it nestles halfway up a hill among the sheltering oaks, it is thoroughly adapted to the needs of nature lovers.



“Homes We Have Built” Series

A House Made with Hands

Emma E. Beard



DYING woman looked up into the face of her husband, hastily summoned from his distant western home by the sudden word of his wife's nearness to death. Refusing to accept the truth he bent over her, saying:

“Mother, you must get well. The new home is waiting for you. I've come to take you there.”

There was hardly voice left for the halting answer. “No, father; I shall never see that house again. I'm going to a house not made with hands.”

That was her last earthly speech.

* * *

But we who are still of the earth, earthy? Do we want houses not made with hands? On the contrary, is not the house made with hands still the refinement of architecture—its spirit?

A few years ago the machine-made idea was grappling the home-making idea somewhat fiercely. With the coming of cement into construction the possibilities of a cement mold for everything seized the resourceful inventor. We seemed likely to begin our lives in cement cradles

and end them in cement coffins. All along our life's path we could see enticing visions of household conveniences cast in molds, hung on tiled walls, over cement floors washed off daily by a hose from cement pipes.

Our native forests were being spoiled. What of that? Cement, with its possibilities of decoration in the plastic state, would give us artistic furniture and applied moldings. How much more sanitary would be a whole house into which the aforesaid hose could be introduced each day; and where properly disinfected river water, stored in our own cement tanks, could be played upon every household article, from the baby downward—the baby always being at the starting point of household conveniences and decorations and cementing the household menage as nothing else can.

Last, but not least in home inventions, came the “all-ready-to-set-up” house; a form of light housekeeping upon which I need not dwell here. It has its own place in modern “movies.” But being as yet, neither fish, flesh nor fowl, and having still to demonstrate its satisfying

quality as good red herring, I wait for time to give it its proper place in architecture.

All fads, however, gradually drop their sediment of the impractical to the bottom of things, and only what is of use remains. The home idea has been greatly helped in a constructive way by the evolution of the cement idea, and now we are entering upon a happier relation of the machine to the hand-working crafts.

head, a bed for rest and a fire for warmth and food. It is, perhaps, his one chance to express the best thoughts he has—his loftiest ideal of life. Let him give sunlight, air, space and companionship to those thoughts. His architect can give them the lasting permanence of structural form and materials.

* * *

In America today—whatever distinctive style future conditions may make of



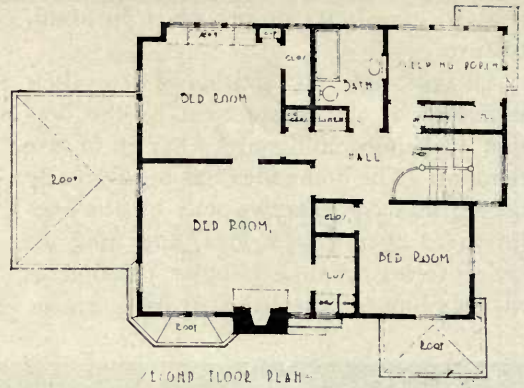
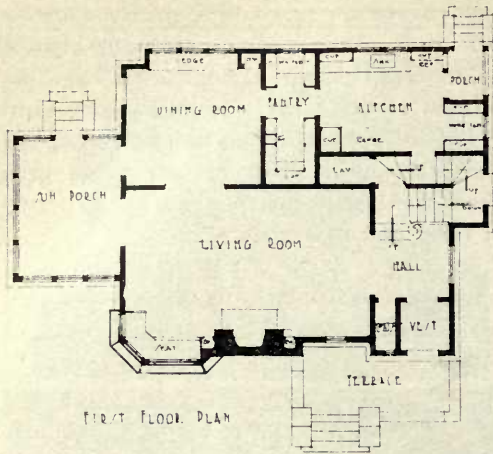
The facade of the house, with its strong, direct and simple lines, was happily broken by the red gleam of the chimney through the green of the trees.—*A. R. Van Dyck, Architect.*

The best sign of this is the growing insistence of our architects upon the independent ideas of the prospective owners of the new home as to the kind of house they want.

I do not mean as to the "period" idea nor always as to the dollars and cents idea. But each man's home is as much his castle today as it was centuries ago. It is his shelter from outside worries; and it means more than a roof over his

our "period"—such artisanly built houses are still best suited to our climatic range when planned upon the colonial model that we evolved from our English ancestry. After over two hundred years this remains our best type of solid, sincere and substantial house building.

To watch the erection of such a house from excavation to garret was one of the chief pleasures and interests of the past spring and summer to me. From south-



ern windows not more than a good seventy feet away I saw the first day's attack upon the hard clods of the March earth. As the sun crept up toward the pole star each day, and the earth's surface began to soften, the cut deepened slowly, the struggling teams descended lower into the cellar of the home and the red clay subsoil came out with more and more of reluctance, promising safe and unshifting foundation walls.

By the time the school children of the neighborhood were picking the first anemones those foundation walls were being poured; and I learned from an authority on cement that "there were all ways of making cement, but only one way of making safe cement." That formula was the one I studied then, as the bags were dumped into the machine. There was a sense of stable satisfaction in looking down into that cellar later and reflecting that here was a cellar floor and walls where furnace room, laundry and vegetable rooms could be daily washed, if need demanded, by their own system of flushing and drainage pipe. Further, they would come out of their bath better than new, shining in the sunlight from about a dozen cellar windows of good dimensions. What an education in cleanliness this may prove for the youths of successive generations who will learn "to take

care of the furnace," or whatever shall stand for a furnace in the next century! Cleanliness was further impressed in this cellar by the electric vacuum cleaner which sent the dirt from both floors down to its own place below.

The frame of the house went up. A new set of workmen came. The tools changed in character, but not the hands that worked. Under the eye of the contractor the roof was established, while shingles were stained in harmony with the tint of the brick facing for the foundation walls and the outside chimney walls. These latter were laid with careful precision and masonry, under the direction of an expert. Windows and window casings appeared, so many in number that the house was a sun parlor in itself. Next came the wire lathing for the cement coats. The various utilities were added. The facade of the house, with its strong, direct and simple lines, was happily broken by the red coloring of the chimney against the cream of the cement, the dashing of which was the last thing to be done to the exterior. Thus, from cellar to attic—where a maid's room, dainty and decorative, with bath room and ample closets provided the last touch of the unity of the human relation—the house arose. Its structure was an evidence of architectural soundness devel-

oped by the spirit and energy of the craftsman's honesty of hand.

The interior was as satisfying in results. The floor plan of the first floor, given here, shows the details of these, in embryo. A hall, a living room, dining room, sun parlor and kitchen, with the usual closets for utility present in lavish convenience, make up this lower floor plan.

A small entrance hall, with coat closet, forms merely the introduction to the stairway and the living room. This last occupies practically the whole breadth of the front, and through the broad doorway at the further end of it extends out a roomy and bright sun parlor, with a fine outlook. The openings here and at the entrance of the dining room being at right angles to each other, with only a small space between, the effect of much extent to the living room is very noticeable. It also gives a sense of unity as to the various functions of family life. You do not feel that one can live only in the living room, amidst books, music and pictures, while to breakfast or dine become secondary affairs. Or that a sun parlor is the only place where sunlight can reach you.

No. The sun walks in at every window of these southeastern exposures. The dining room presents its graceful proportions and beautiful color modestly but firmly to view as soon as the hall

doorway is crossed. The hall door, in fact, is only an excuse for the house motto: "This house is built for the family to live in as a whole, and not by segments." When you drink your morning coffee you hobnob with the fireplace in the living room. The sunlight sends reflections from the windows of the sun parlor. And if the kitchen is assertive of its position as next to the heart of all living, and gives you a glimpse of all its require-

ments of cookery, you will enjoy your breakfast all the more for this democracy of associations. May not a house be as simple, modest and genuine in its beauty as a really beautiful woman is? The interior decorations of both floors, all planned and carried out by one unified design are most successful. The general motive of the woodwork was



A bright and roomy sun parlor with a fine outlook.

birch, either enameled old ivory or stained. The first floor showed the old ivory finish, except in the sun parlor where a gray stain was used. On the second floor a mahogany finish to the birch doors and the same effect on the stair rail were employed. In order that the white details of each room might not become too obtrusive various color effects for the second floor rooms were adopted which toned down the contrasts in the woodwork here. The nursery has its soft wall tints in a neutral shade of tan with a dash of color here and there, and with many bright colored English prints hung midway as a

lively frieze for childish eyes, showing the Englishman in athletics of various sorts and with much red coat. Old pink in another room and a gay, chintz-like paper in the owner's apartment, where is also a fireplace, add to the distinctive arrangement of color. The hangings in each room supplement, rather than modify, the whole cheery effect.

On the first floor the tints of the living

is not beautiful, save in color; but it is the style! And who would ever find a flaw in that fireplace corner, anyway?

Beautiful and dignified is the wide fireplace, with its warm brick against the perfect polish of the ivory of the mantel. That mantel shows the touch of the craftsman in every curve of its moldings, and every soft shade of burnish which the firelight throws upon the lines

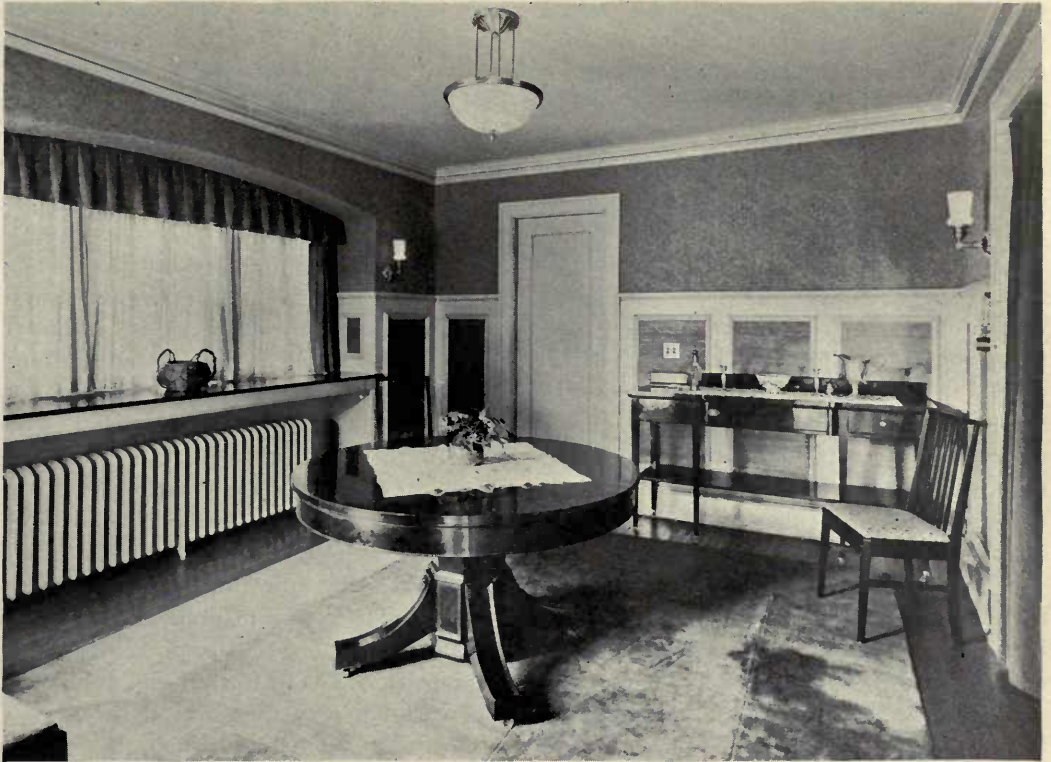


The tints of the living room show a harmonious and careful use of a combination of mulberry and lavender tones.

room show a harmonious and careful use of a combination of mulberry and lavender tones. The decorator has handled these rich tints with so much refinement that not one article or bit of drapery forces itself upon the attention. The return to the somewhat stiff lambrequin over the corner window-seat demands some mental re-adjustment to the styles of twenty-five years ago; but fashion always gets the best of it even when pitted against the decorator. The lambrequin

above. The curving window seat to the left of this—under the lambrequin—follows the line of the lovely window shown in the photograph of the southeast corner of the house. From this window seat can be seen a panorama of lake, park and neighboring gardens and pergola that gives a continual outward change of sunlight, color and movement to the family life.

Sitting here, one turns from the background of applied color in the lavenders



The lovely blue of the dining room with its embrasured window-seat gay with flowers and its ivory panels of gray green grass cloth.

and reds of the living room; the lovely blue of the dining room with its embrasured window-seat gay with flowers and its ivory framed panels of gray green grass cloth; and the deep blue-greens, orange and crimsons of the sun porch draperies, and finds these colors all growing and alive in the picture outside. The values are different, but each painting needs the other. The two together add the last charm to a real home, which promises that it may stand a century's test of time's touches. For the human hand has wrought here, by the command of the brain and the eye of the craftsman, a genuine piece of workmanship.

* * *

Of some such a house as this must William Morris have been thinking, when he put this theory about the building of a home into words: "In looking at a new house, if built as it should be, we feel a

pleasure in thinking how he who built it has left a piece of his soul behind him to greet the new comers, one after another, long after he is gone."

This may not strike yet the bull's eye of our own general American architectural conscience, which is still somewhat at too great range from such aims. But we are getting nearer every year to the idea of a home built for the dwelling place of a family life that shall be continuous for generations; with a "front yard" something bigger than a large-sized table cloth; and a "back yard" having other values than those linked with the garbage and the ash cans; and we are realizing that, although a home may be still in a far perspective, it is never too small to be artistic in miniature. But it is always too large for any bad taste.

Occasionally a house builder who knows just what he or she wants suc-

ceeds in planning a house on limited means without any glaring defect in construction or decoration. The result is, indeed, a house made by the individual, and not by the contractor. But as an almost universal rule it is safe to say that even a log cabin needs the skill of the architect to give it the look of a home and not of a hut. And if we could get the average workingmen, the so-called "common people" to accept this fact, and make themselves into a committee of the whole to consider each man's home in some community as his one great painting, the sole expression of his best self, then we could better demand of our architects that they meet this awakening of the masses.

Shall I add—and "cut prices" to match the income of the wage earner? But perhaps this is heresy in an architectural magazine. Only I must confess that, were I an architect, I would rather show at the end of my days of labor a few quiet country villages or outskirts of great cities filled by sanitary houses of simple, but homelike and individual beauty and convenience in all details, than to leave even State Capitol buildings and Halls of Fame.

It is the people who live along our streets who make our majorities; not those on the avenues. Let the former have a fair chance to show what there is of value in their verdicts on home architecture made in America and not in Germany or the lands of the allies. America will survive when European dynasties are things we are forgetting. What shall we have then of artistic originality in the

homes of the people? Will it still be the East Side in New York, the back alleys of Washington, the Chinese quarter of San Francisco, the "L" district of Chicago, the flats of Minneapolis?

The present war will probably change conditions for the house builders, whether employer or employed, to some extent. The system of apprenticeship in Europe has undoubtedly resulted in higher standards than ours, and has been at a sounder state of development. Our trade unions have therefore had difficulty in commanding the loyalty of many workers who come here with European traditions. It being the men who stay outside the unions who really fix prices in the end—so long as they can maintain their standards—the question at once suggests itself: "Will a prolonged war lower or raise prices?" Of still more interest is the question: "Will it alter the quality of the workmen's results over here?"

So much can be said on both sides of both questions that the answers are chiefly guesses. The finest and best of the skilled trade workers of Europe are being swept hourly into unknown graves, in obedience to race loyalty. Will the soul of their race ever arise again to mark time for us? Yet artisanship must still soar above any other advertising, not because the skilled workman charges more, but because his skilled hand is guided by the conscience and not by the hours of labor. And no matter what Heaven may have been to the dying woman, earth must continue to be the foundation of houses made with the hands of the day laborer, the mechanic and the craftsman.

Changing to Chintz

William B. Powell



YOU have probably noticed that clever decorators are more and more using those delightful fabrics—chintz and cretonne. This is a welcome sign, as it indicates a distinct step towards the better things in home decoration.

Chintz, you know, used to be very popular in the early days when rag rugs were on the floors and kettles sang on the hearth. Then gradually it gave way to those dreadful plush and cloth materials which were brought in along with ebony furniture, dark wall papers and the rest of the paraphernalia dear to the heart of those who lived in the "ginger-bread" period. To be sure

you would occasionally find chintz and cretonne used in the country home or even in a bedroom—but never down stairs. It was far too cheap looking—beneath the dignity of our newly made American wealth!

But all the while over in England decorators were using chintz constantly—not only for suburban homes, but in city apartments. In France likewise you would often see chintz used most artistically. But it is only recently that chintz has regained its popularity as a material for use in all parts of the house. It is not only for the summer cottage—I have seen it used successfully in New York drawing rooms. While, of course, there are types of formal, gorgeous



Those stunning bird designs are used to good effect.

rooms where chintz would be absolutely inappropriate, still for the average American home it offers wonderful possibilities.

One of the nicest things about chintz is its cheapness. The shops are offering beautiful designs at exceptionally low prices. You can get a variety of chintz from dainty flowered designs to those stunning peacock affairs at from twenty-five to fifty cents a yard. Many good looking foreign designs with black backgrounds (which by the way are a God-send to those of us who live in smoky cities) are being copied and sold at low figures.

I would like to tell you about a room I did over and changed from a common place "parlor" into an exceedingly attractive and livable living room mainly by the use of chintz.

Formerly the room was one of those un-

interesting "dark green parlors." The walls were dark green, the rug was green, and most of the old fashioned ebony furniture was covered in green plush. One day the room "got on my nerves" and I decided there must be a change. I didn't know just what I would do, but change I would.

After rearranging the furniture so that it was more comfortably and conveniently placed I decided to cover all those dreary looking pieces of furniture with chintz. I was successful in discovering an unusually attractive piece of chintz for only twenty-five cents a yard, which really looked like one of the more expensive designs. It had a profusion of bright pink roses, green leaves and a few blue buds all worked out in a small, close design on a black background. The whole was very bright and



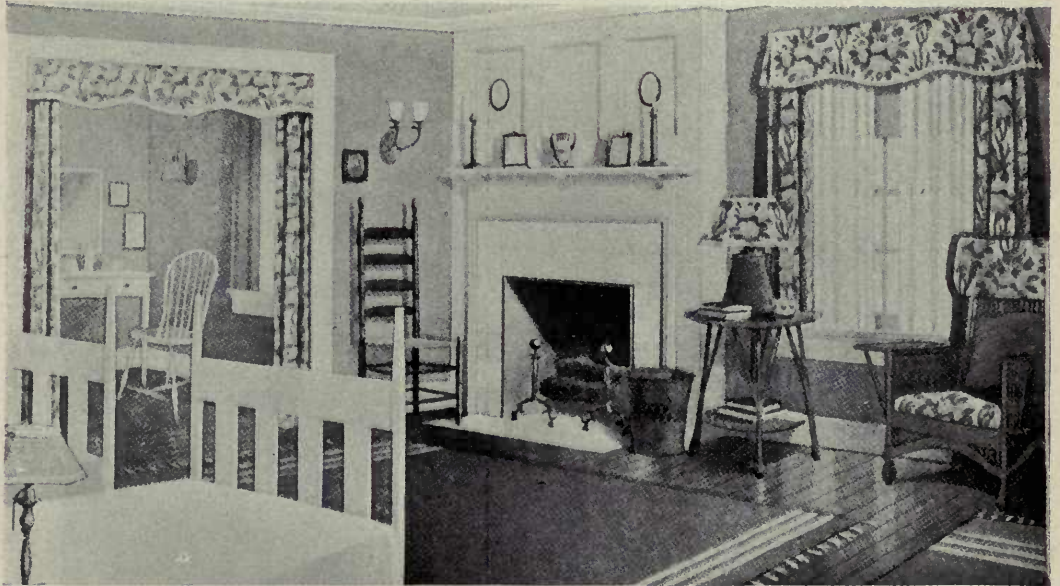
Chintz has always been used in chambers.

cheerful looking, and yet the coloring was such that it would not easily show soiling.

I had slip covers made for every piece of upholstered furniture in the room and it was amazing to see how those worn pieces of furniture took on new life and gaiety with their new coverings. Then I had portieres made for the doors and hangings for the windows.

You may wonder why I said at the beginning of my article that the use of chintz was an indication of the better style of

But again I am wandering away from my subject. A word about choosing your chintz. If your room is large and if the doorways, windows and furniture are of sufficient proportions, select a chintz with large figures. If your room is of medium size and if you are not planning on the chintz for your chief decorative value, choose a smaller, "closer" design. In regard to color, you must be guided by several things—the color of your walls, rugs, the amount of light, the cleanliness of your lo-



A well chosen pattern harmonizes beautifully with white enamel treatments.

decoration. Well, for one thing, when you use chintz you must have plain and usually dull-toned walls—that is, if you have even the slightest conception of what constitutes good taste in home decoration. Surely no one would have the cruelty to use a bright-colored chintz with a bright-colored wall paper. But if this same material were used with a plain wall, the result would be perfectly pleasing and artistic. This, then is one reason why we should use chintz—it encourages the plain wall.

The wall, you know, is primarily meant as a background—a background for your pictures, furniture, hangings, etc.

If your home is in a dirty section of town, don't use a light colored pattern. While most chintzes wash beautifully, still there is no use in having these light patterns grow dirty so early when you can get just as attractive designs with black backgrounds or with darker coloring. If you are not accustomed to using chintz, you may be rather afraid of its bright coloring and startling designs. But try it out in one room. Choose, if you want, a more modest design, then after you have become accustomed to it, I feel sure you will be keen to use those chintzes of most startling and artistic designs available.



An example of the decorative possibilities of plants and flowers and a solution of the problem of saving them through the winter.

Home Grounds and Gardens

Housing Your Flower Friends in Winter

Richard Hill



AS you have walked among your flowers in the late autumn and have looked down on their friendly, nodding heads, have you ever felt an impulse to shield them from the killing onslaught of the North wind, and, gathering them all in your arms, carry them into your house to share its protective warmth and shelter? Only the human battlefield can be more desolate than your flower garden the morning after Jack Frost and his merciless allies have ravaged it. The tender, fragile members of the bright host lie prone and lifeless on the frozen earth, while even the sturdiest droop sadly, their fragrance and glory gone forever. Somehow you feel culpably negligent as though you had no right to cover yourself up warm and comfy while you left your faithful friends of the summer defenseless in the

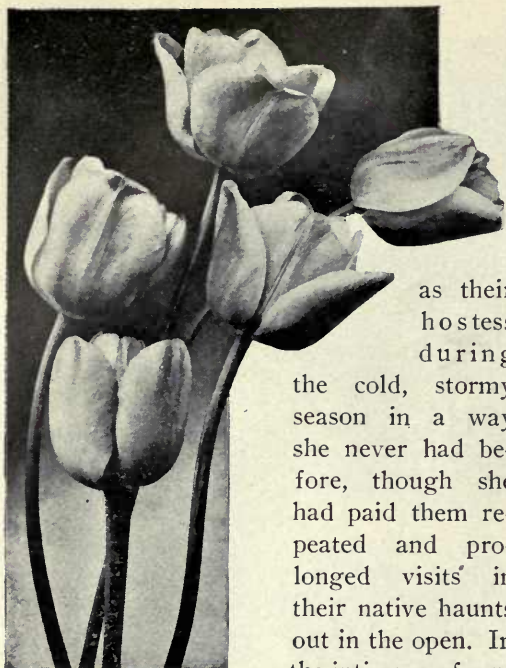
clutch of their mortal foes.

You may laugh the fancy off by assuring yourself that your flowers are only creatures of a season and they would have died a lingering, though probably not so violent a death, if you had obeyed your impulse to take them in your house; but is this true of all of them? Go through your flowers, and you will find a number who will repay a little loving care through the winter with a wealth of brilliant blossoms.

The writer will not soon forget the windows of a flower-loving friend, fitted up with careful forethought as the winter residence of sturdy geraniums, fragile fuchsias and a host of merry comrades who had danced with them in the summer sunshine. The little lady whose fostering care had prolonged their lives told me that she had come to know her flowers while she was acting



A friend worth saving.



as their hostess during the cold, stormy season in a way she never had before, though she had paid them repeated and prolonged visits in their native haunts out in the open. In the intimacy of constant association and daily contact they delivered up the inmost secrets of their existence.

She was their presiding genius, upon whose caprice their lives hung as on a thread. An error in judgment or a lapse into forgetfulness, and some of her trusting guests paid the penalty with their lives. It was almost uncanny to find herself suddenly possessed of the power to make the weather so far as the flowers were concerned. The responsibility became almost alarming at times, but there was no way to shirk it, however she tried. Once she deliberately neglected her duty, and a cold wave laid low two of her favorites, and at another time she thoughtlessly created a torrid atmosphere that took the life of the fairest and most promising of her protégées. It was no small problem to decide just when they ought to have a shower and how much of it they ought to have, and once a distressing drought, directly due to her carelessness, almost cost the lives of all of them.

You will find, like my friend, that every flower develops in accordance with certain fixed laws, and the amount of moisture or

sunshine necessary for different varieties, differs widely. You will need to make a study of each plant as an individual, but your reward will be the instant response it will make to your effort to create the proper environment for it. Moreover, you will find the subject is more fascinating than difficult, if you give it serious thought.

So many excellent articles have been written about the proper way to prepare soil for winter blooming plants to give them the proper drainage and nourishment that we will not repeat it here, but we would like to tell you about a new kind of carbonated fibre that is quite ideal for bulbs. Secure some of the beautiful bowls or oblong boxes designed to harmonize with the decorations of your room, sprinkle the moistened fibre over the bottom to a depth of $1\frac{1}{2}$ inches, place the bulbs far enough apart so that they will not touch, then loosely cover them over with the fibre. This done, saturate the fibre with water, drain this off so that the fibre will be

left thoroughly moist, and set the bowl where it will get plenty of air and a subdued light. After the bulbs are fairly started, bring them out into a strong light to mature. You will be amazed and delighted at the profusion of the flowers produced.

Pure white flowers are always a favorite for decorative purposes, and for this nothing excels the white Roman hyacinth. As it



Beautiful white Roman hyacinths.

takes about three months to mature these, the bulbs should be started early in September to produce flowers for Christmas and the last of January to have flowers for Easter. These bulbs thrive best in a loamy soil, with a little silver sand directly beneath the bulb. When starting these bulbs it is a good thing to bury them, with an inverted pot over the bulb, under a six-inch covering of ashes and decayed leaves. After about six or eight weeks they will be in fine condition to force into bloom.

No flowers respond to window culture more readily than the royal family of the narcissi including the jonquil and their humbler, but no less beautiful, relative the daffodil. If these are started in November they will flower for you in January and you will find that the sunshine caught in their golden cups will brighten the dreariest day for you.

If you want to add a touch of blue to enliven the white and gold of narcissi and hyacinths, you can find nothing more lovely than the

Muscari, or grape-hyacinths. These interesting flowers are dwarfs by nature and are sometimes known as "Heavenly Blue," because they have captured the cerulean tint of a June-day sky.

Prominent among the flowers that can be most easily produced from bulbs during the winter months are the various varieties of the tulips, the crocus, the freesia and the dainty

white-
frital-
liria.

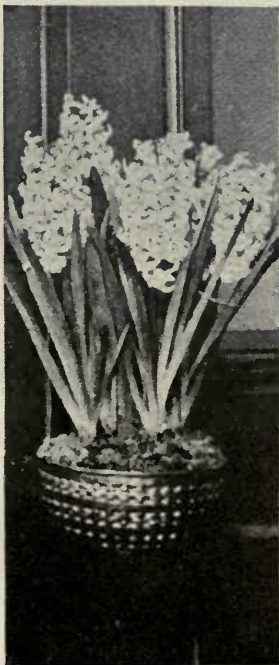
The inexperienced gardener will find little trouble with these if the instructions given for potting them are followed and a reasonable amount of free air and sunshine given them

later. Success with these may give him courage to try the housing of many a favorite from his garden for the following winter.

Remember that flowers, such as geraniums, for instance, requiring a great deal of sunlight out of doors will need to be placed in a sunny window in the house or they will soon begin to lose their vitality.

Vines may be kept in the house over winter and if trained about a window will give a room the effect of a summer arbor, their delicate tracery forming a most effective background for scarlet geraniums and any of the winter blooming bulbs.

As for the boxes, or vessels for your plants, you are no longer forced to use red pottery if it is inharmonious with the color scheme in your rooms. Flower boxes and receptacles of every sort are being designed whose line and color should satisfy the most critical taste. We are beginning to realize that the Orientals are right when they look upon the arrangement of flowers and the selection of the vessel that will best display their beauty, as an art worthy of serious study.



A selection of the proper receptacle will add much to the beauty of the flower.

A Delightful Home-Like Residence



ANY houses are built which fail to attain a homelike appearance. One of the reasons why this house strikes us so happily is due to the design of the roof. The gambrel treatment breaks the regular harsh lines of the square house. This home is an 8-room residence of moderate size, treated with stucco as the exterior finish

the color scheme is a pleasing combination of grey stucco with green stained shingles; outside trim an olive green with window sash drawn in black. Another suggested color scheme would be to tint the stucco a creamy tan and stain the shingles brown, using a maroon or reddish brown for the trim.

Inviting you to examine the interior

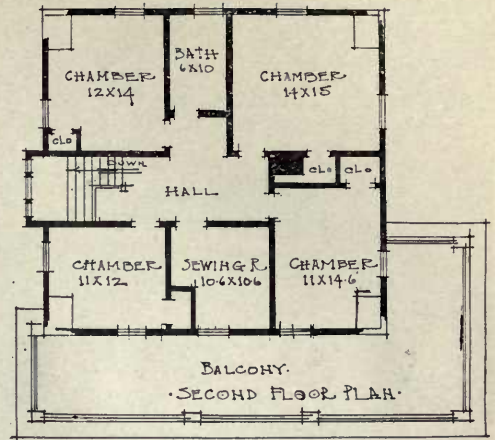
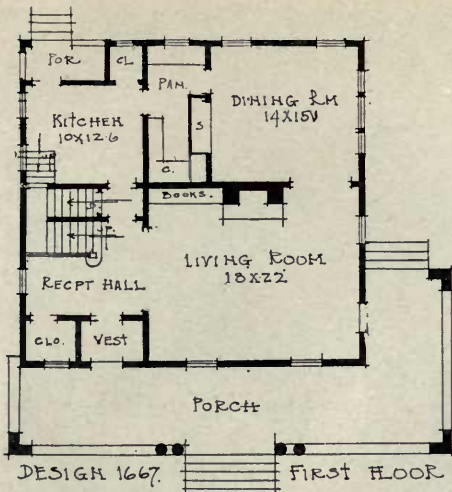


The gambrel treatment breaks the regular harsh lines of the square house.—Keith & Purdy, Architects.

for the first story, with shingles above. In addition to the spacious porch running across the entire front, the same is returned to the side. It is built up solid to the porch rail so that it may readily be screened in. The placing of the windows gives a nice balance to the design.

The picture was taken a short time after the hedge was started and small trees planted in the front yard and on the boulevard. In the course of a few years these grounds will add much to the beauty of this home. Right here we suggest that

arrangement, you will note upon studying the diagram of the floor plan, that the entire front of the house is given up to the living room and reception hall. The stairway is open with a projected landing well lighted by the triple window. The kitchen is located directly back of the stairs and has ready access to the basement as well as combination stairs to the second floor. The owner of the house preferred to have a pantry, which is well located. Some of the space is taken out of this pantry for a recess to accommo-



date sideboard or buffet. If this is not wanted, this partition could be run through straight and give a little more room in the pantry.

No space is wasted on the second floor with a short center hall, off of which opens five bedrooms and bath. One of the bedrooms in front would make a convenient sewing room or could be used nicely for a child's room. If the latter, a doorway should be provided connecting with the other large chamber to the right.

This home is complete in its basement

equipment, where is located a hot water heating plant, laundry, fuel bins and vegetable cellar. The basement walls were built of poured concrete and you will notice that the exterior stucco was carried right down over the same to grade, which makes a very inexpensive finish. We would estimate the cost of building such a home at the present time, finishing the interior first floor in birch or plain oak, the second floor in Arkansas pine, with either birch, beech or maple flooring, for about \$5,000.

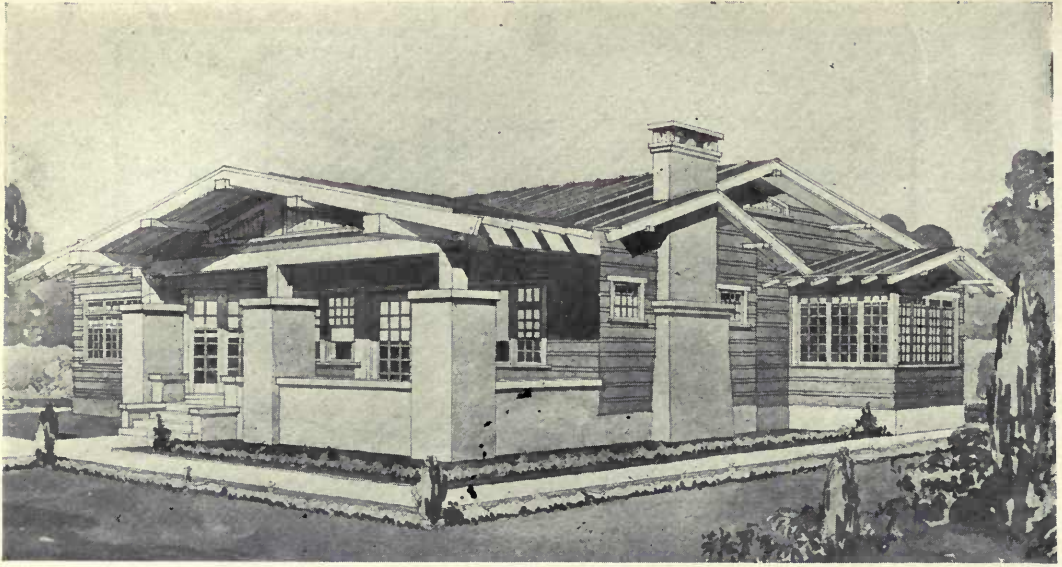
A Comfortable Suburban Bungalow

When a designer is not confined by the narrow boundaries of the ordinary city lot, he should not be made to spoil the opportunities by having the cost limit set too low. With conditions such as this, he should plan for large rooms on somewhat irregular lines, providing chances for interesting exterior details.

After careful consideration, a low-pitched roof was decided upon as the best suited to covering the irregular lines of this plan, and as no attic was desired, a steeper roof was unnecessary as well as useless. Of course in climates subject to

heavy snowfalls, strong, well braced framing must be provided, but the roofing specified for this residence is water-tight as well as proof against fire, being composed almost entirely of asbestos, literally a stone roof. The danger of fire in this case was to be guarded against, as the site is in a district liable to annual forest fires.

For the exterior walls, red cedar shingles in alternate courses, wide and narrow, are to be used, with cement as the finish for porch, chimneys forming the contrasting note.



The front porch is really an outdoor living room and will be well patronized in good weather.—*Jud Yoho, Architect.*

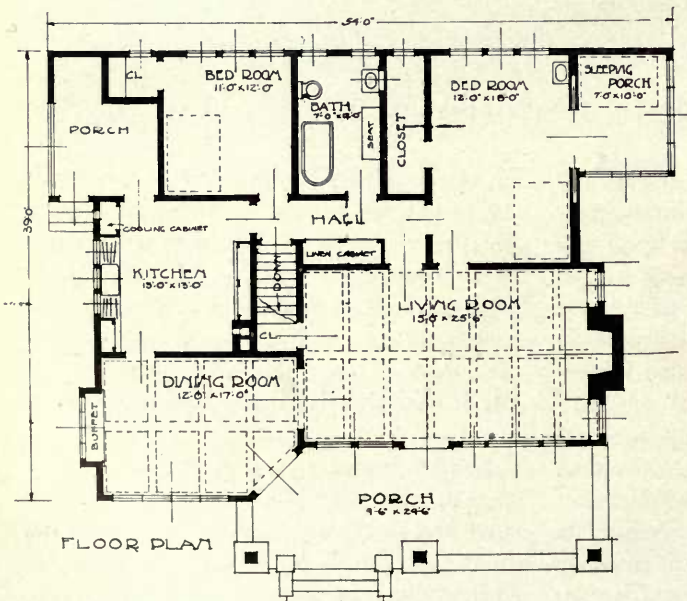
Ventilation is provided for by leaving narrow spaces between the upright boards of the gable panels, covered on the inside with fine screening as a stop to the entry of bees or other insects.

The front porch, floored with everlasting cement, is really an outdoor living room, which will be no doubt well pat-

ronized in good weather. Its large area allowing for many comfortable chairs and a porch swing; the wide cap on the wall only a few inches from the floor will serve as a support for numerous boxes of fragrant blooms.

On entering, one's gaze is drawn first to the beaming of the ceiling, the center beam being very deep and wide, while the branch beams, narrower but same depth as the center beam at the walls, slopes up to meet the central beam with only a little more than half their original depth. Directly under each beam where it forms a junction with the wall is placed a curved bracket the same width as the beam, starting from a wide band running around the room above the heads of the door and windows.

The immense fireplace, faced with clinker brick,



is eight feet wide at the base. Above the mantel shelf the sides are stepped in twice, and it continues to the ceiling four feet wide. The fire box opening is large enough to take four-foot sections of log from the nearby forest. Bookcases are located on either side, filling the spaces between the sides of the mantel and the walls of the room.

The opening between the living and dining rooms can be closed with doors of the French style when privacy is desired.

The most noteworthy feature of the dining room is the high peaked ceiling that appears to be plastered directly on the rafters of the roof with purlins and braces exposed in the room, calling to mind the old churches with their exposed trusses.

In the bay at the end of the room is built a handsome buffet with a very broad top shelf providing a place for a pot or vase of flowers and the display of choice pieces of china or cut glass. The cupboards beneath are ample to take care of china or glassware. At the height of five feet from the floor and on all sides of the room is a plate rail, below which the plaster is set off in panels by the use of wood strips.

A single door separates the dining room and kitchen, doing away with the extra steps a pantry would necessitate. Along the outside wall of the kitchen are the

sink, cooling closet and a commodious cabinet. Another cabinet on the inside wall contains the bins, as well as plenty of shelf and drawer space. The windows directly over the sink light the room.

The bedrooms are well planned, even the smaller of the two is so arranged that the bed can be placed in at least three different positions and have plenty of room for other things at each moving. Sliding glass doors shut off the sleeping porch, which is fitted with patented casements that allow the entire space they occupy to be flung wide open.

The bath room is another room that has not been stinted; seven by twelve feet is large even for a house of this size.

The screened porch off the kitchen has a nook for the refrigerator.

The basement, while occupying only a small part of the ground area, has space for furnace room, fuel bin, laundry and play room.

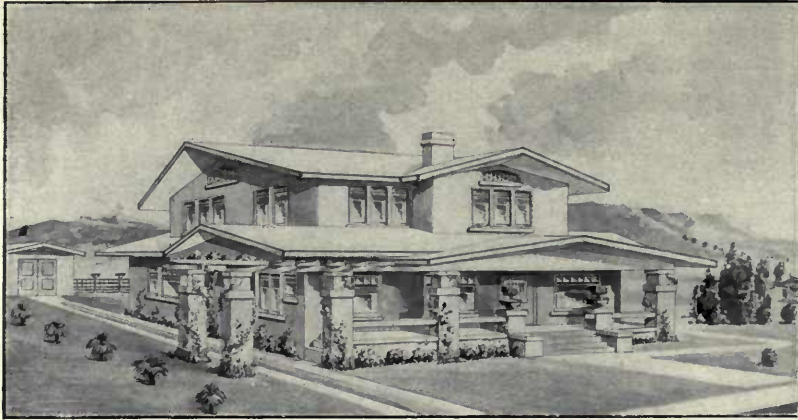
The finish trim through the house is strictly in keeping with the Mission Craftsman feeling. All walls are to be tinted. All rooms are floored with the best quality of fir flooring and the lighting fixtures will be in keeping. The designer, a well-known western architect, states that this bungalow should be built for about \$4,000.

A Bungalow on the Chalet Plan

Considerable interest has of late been indicated in the Swiss type of the bungalow residence, and particularly among home-builders in the extreme West. We present here a very attractive and conveniently arranged bungalow designed rather suggestive of the Swiss style of architecture, with the broad, low flaring cornice. This is a very complete home and a good design. It is intended to finish the exterior walls and porch columns frame construction with stucco finish.

The roof is to be covered with asbestos, with ample air space between the roof and the ceiling to insure protection against the hot rays of the sun. The broad expanse of entrance with a heavy overhead beam is very inviting. The porch is extended to the side in a pergola effect, which gives the service of a portecochere.

The interior is laid out on rather a generous plan, the living room, entrance to which is made directly from the front

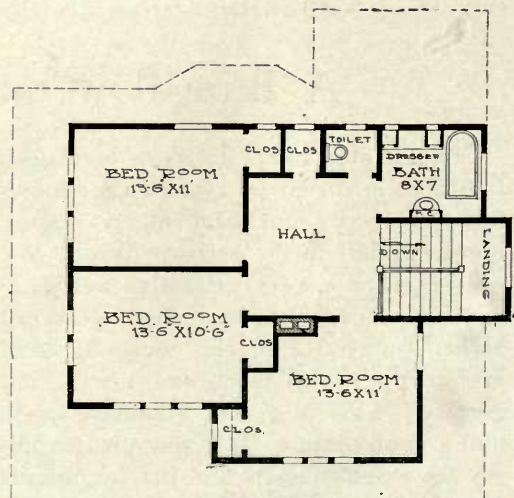
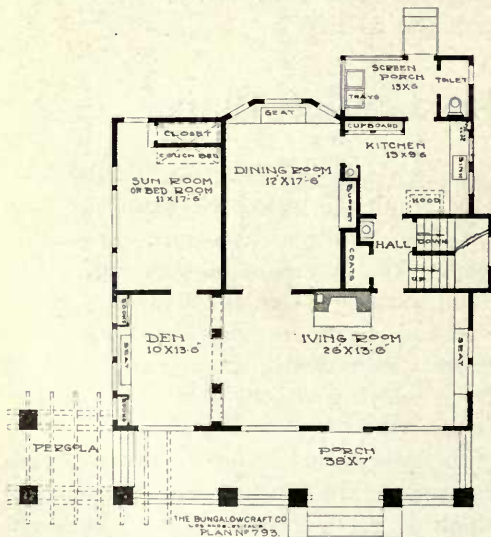


The broad expanse of entrance with a heavy overhead beam is very attractive.—
Bungalowcraft Co., Architects.

porch, is 26 feet long, but is only separated from the adjoining den by a columned opening, so that really the whole of the 36 feet of front is one room. The dining room is unusually large, with an attractive bay window and seat feature at the end. To the east of the dining room is a sun parlor which might well be thrown open to the dining room by French doors, should it not be desired to use this as a bedroom. There are three

good sized chambers on the second floor in addition to the bath; no attic.

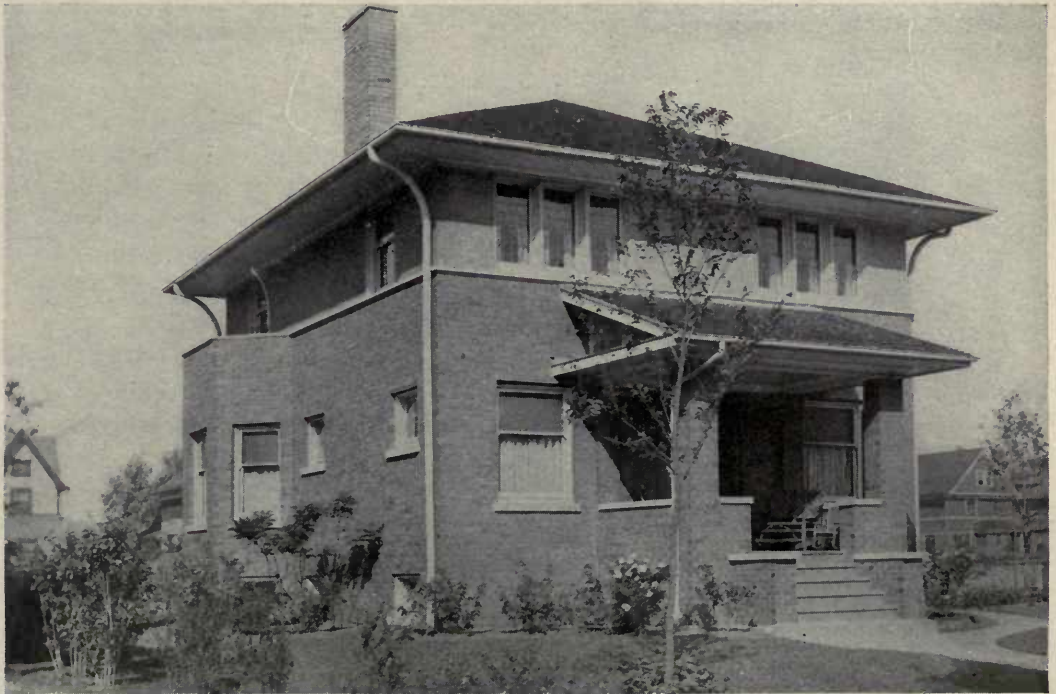
The architect states that the interior woodwork on both floors is Oregon pine, stained, and given a waxed finish on the lower floor, with white enamel in the bedrooms. The floors both up and down are oak. There is a partial basement, where heating plant could be installed if desired. This residence was completed in California with a full basement and a small hot air heating plant for \$6,000.



A Good Brick Residence of Moderate Size

Brick is always a very satisfactory and durable building material and has been used with excellent effect in the little home we are describing. The brick work was stopped at the second story window sill and finished above in a belt-course of cement. A plain hipped shingled roof with wide cornice completes a very pleasing

at the other. A glance at this floor plan will show how attractively the interior is arranged, and to what good use every foot of space has been put. There are four large bedrooms provided with plenty of closets and excellent lighting from the triple windows. The placement of windows doesn't interfere with the practical

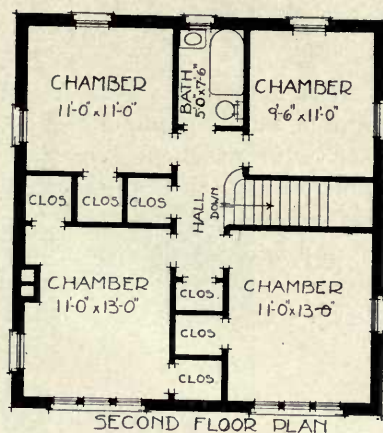
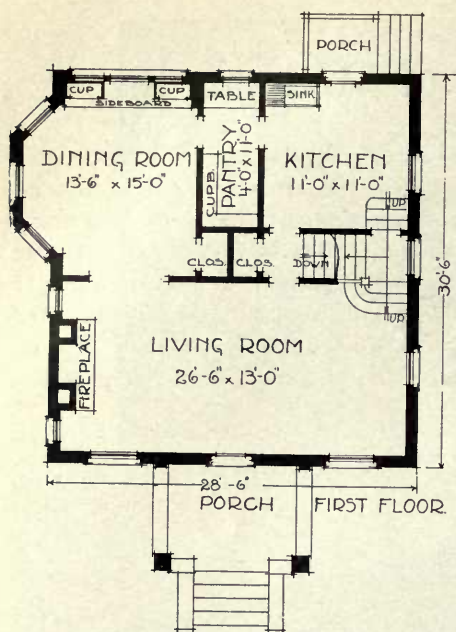


The brick work was stopped at the second story window sills and finished above in a belt-course of cement.—Keith & Purdy, Architects.

residence. We are informed that the trim was painted white, the cement belt-course in the white cement and the cornice finished in a pearl grey, which gives a pleasing relief and color effect. The brick used in this residence was made of cement.

Looking into the interior we again find a home with direct entrance to the living room extending across the entire front, with fireplace at one end and stairway

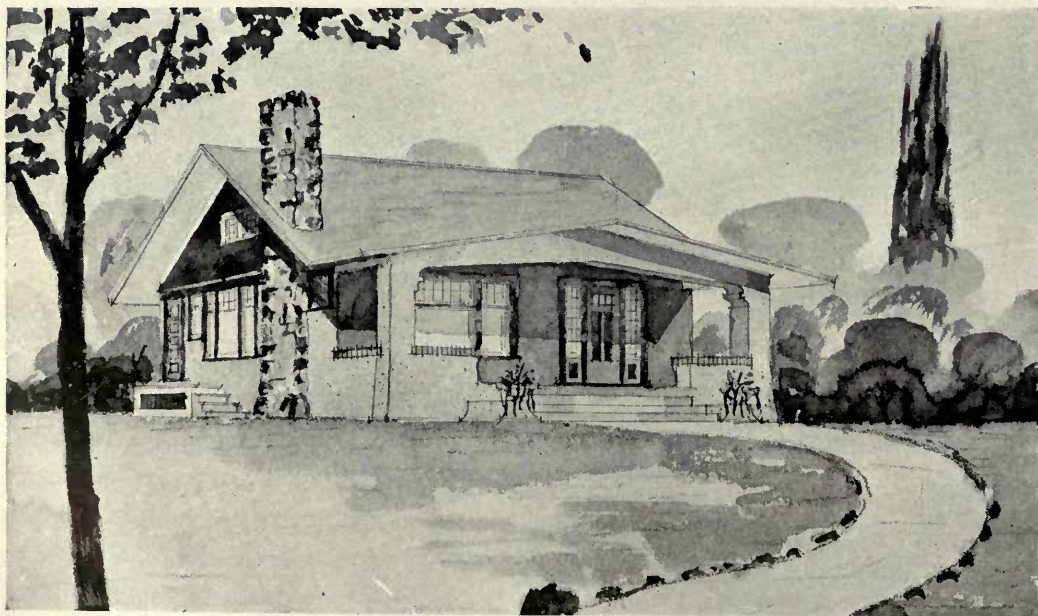
setting of the bedroom furniture, an item that is frequently overlooked by the designer. We have to suggest the interior finish in birch, with floors of the same throughout the first story and pine finish on the second floor with maple floors; full basement with heating plant and laundry. Such a residence today should be built for about \$5,500, complete.



A Modest Little Bungalow

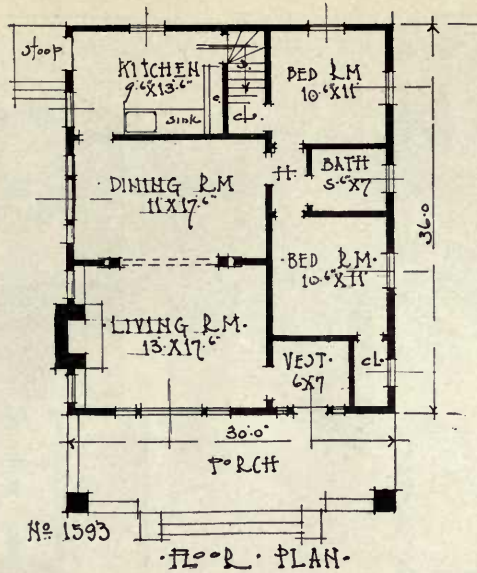
For a variety in the designs in this number, we illustrate an interesting sketch of a five-room bungalow which would make

a delightful suburban home for an elderly couple or a small family. While of modest proportions, the bungalow gives quite



While of modest proportions, the bungalow gives quite a substantial appearance.—Keith & Purdy, Architects.

a substantial appearance. There is no second story, but good ventilation space in the attic, which is reached by a scuttle and can be used for storage to excellent advantage. We have to suggest the construction of the exterior in cement stucco with shingles in the gables and on roof to be stained. A little rustic cast is given to the design by the use of cobblestones for the outside chimney, and the same could be also used in the building of the fireplace if desired; otherwise one of the rough wire cut bricks of pleasing shade would do.



The floor plan of this bungalow will bear considerable notice, and we invite special attention to the generous use of windows and splendid lighting. There is a built-in bookcase on either side of the fireplace, wide columned opening separating living room from dining room. The kitchen is provided with cupboards.

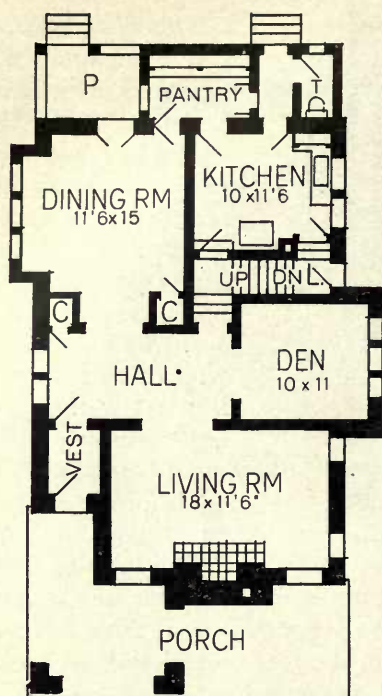
The interior finish is to be pine, stained; hot air furnace provided in basement, and with modern plumbing, we recommend this as a very practical and excellent bungalow which should be built for about \$2,600 or \$2,700.

A Unique Design in Cement and English Half Timber

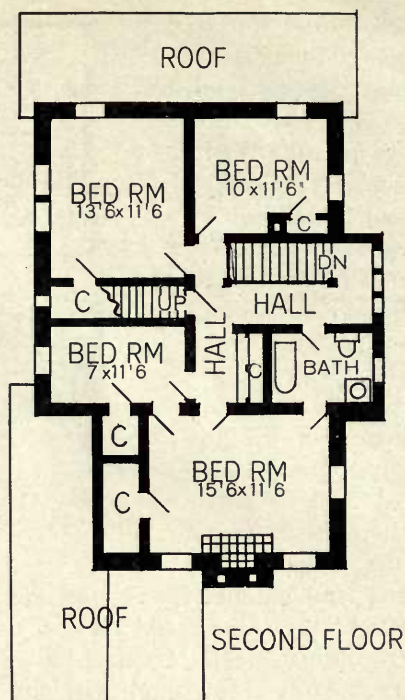


A small covered entrance at the side is connected to an open terrace across the front.—John Henry Newson, Architect.

We present an interesting study by a well-known architect in the Middle West of a house where the entire plan is very complete and where all of the details have been given much study. One of the particularly pleasing features is the entrance. A small covered entrance at the side is connected by an open terrace across the front. The predominating feature of the design is the large chimney in front, around which one



FIRST FLOOR



SECOND FLOOR

might almost say the house was built. The construction of the walls are hollow tile, surfaced with cement.

Examining the interior we find the plan is arranged for a central hall, affording easy access to all rooms on this floor. The stairway is enclosed and could be shut off entirely by a door. Many people object to an open stairway on account of draughts in cold weather and the further

fact that the heat all goes up the stairway. Do not overlook the cozy little den just off the foot of the stairway, and this room might be used as a study. The second floor is devoted to four large bedrooms and bath. We have estimated the cost of the design as above described here would run a little over \$5,000. It is a plan which will commend itself to many.

A Spacious Southern Home

An entirely different type of residence is here shown in this charming home, especially designed for a Southern client. The large porch runs around three sides, a specially desirable feature for a warm climate residence, where out-of-door living is so general.

We think that this house would be found equally enjoyable, however, in most any of the Northern states, with possibly

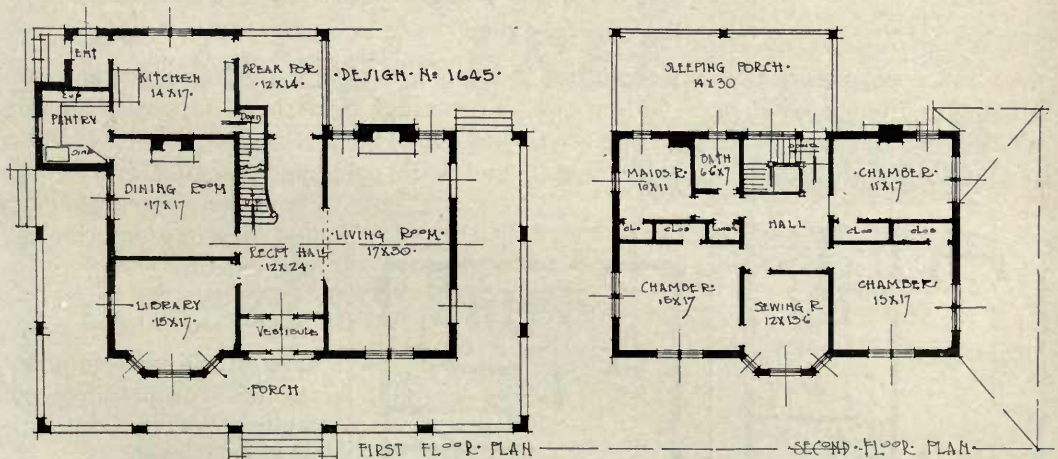
the omission of some of the porch. At the rear, a big sleeping porch is provided, reached from the upper hall. There are two large fireplaces on the first floor. These might be duplicated in the bedrooms if desirable. As is usually desired in the planning of such a home, the hallway is spacious and runs clear through from front to rear. This house was



Particularly adapted as a warm climate residence, where out-of-door living is so general.—Keith & Purdy, Architects.

planned as a brick veneer residence with roof in tile or asbestos shingles. The wall heights of the first floor are planned 9 feet 5 inches and heights of the second story 8 feet 3 inches. There is a complete base-

ment under the entire house, provided with a warm air furnace, fuel rooms, laundry, vegetable cellar and storage space, there being no attic. It is estimated that this residence would cost about \$12,000.



A Wide Sided Cottage

One of our frequent contributors has given us an interesting cottage design this month where the outside wall is finished with wide siding. It is a cottage plan particularly suited to a narrow city lot, for it

is only 24 feet in width. It is very compact in arrangement and provides the modern conveniences and comforts which we look for in a home of this type. There is a very large living room on the main



A cottage plan particularly suited to a narrow city lot.—Chas. S. Sedgwick, Architect.

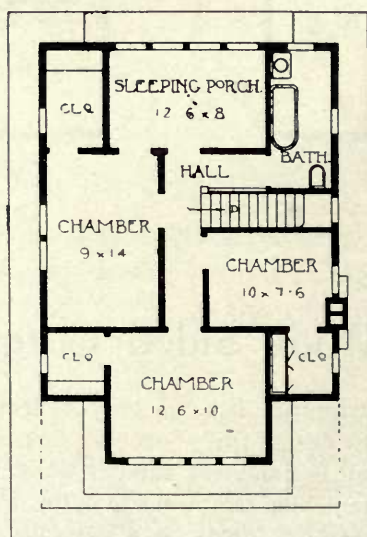
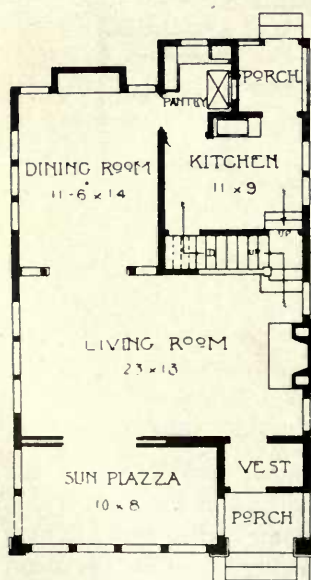
floor and a sun piazza in front connected by sliding French windows. This room is to be enclosed with storm sash and used as a sun room in winter. But one chim-

ney is provided, as the intention is to use a gas range in kitchen. Opposite the fireplace in living room is a triple window, and with columned opening into dining room we secure an open and pleasing interior arrangement.

We have to suggest a color scheme for the outside of brown stain for the wide drop siding and white trim for the cornice, casing, etc.

A tobacco brown stain is used on the roof.

The house is planned for a full basement, heating plant, laundry, etc., and was designed to meet the requirements of a Western client for a residence costing not to exceed \$3,500.



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Scenic Wall Papers.



THE landscape wall papers, some of them of modern design, some reproductions of wall coverings in Colonial houses, are so interesting that some suggestions as to their use are in order.

And first a word about the papers themselves. The entire wall surface is treated as a single landscape, although the units of the design may be repeated many times. While the detail of trees, rocks, water, and buildings is carefully carried out, the distance and the sky are extremely sketchy and generally light in color. The conception of most of them suggests castles in Spain rather than actual masonry and the landscape is apt to be of a very imaginative character. A typical paper is named El Dorado and enough for a large room costs from one hundred to one hundred and seventy-five dollars, the original blocks from which it was printed in France in the eighteenth century having been preserved.

These papers are not to be used unadvisedly. They require large and unbroken wall surfaces and are best associated with a wainscoting of moderate height, say three and a half feet. In any room one of these papers is the whole thing. You can't hang pictures, you must not have furniture that cuts up the wall spaces. Upholstery, except of the most negative sort, is tabooed, and only the simplest sort of white curtains can be tolerated. Naturally, also, the furniture must be of the period of the paper, of the colonial style and of a quality sufficiently distinguished. If these conditions are fulfilled the only place for the landscape paper is in the hall or the dining room, and other things being equal it gives to either of these rooms great distinction and charm.

Many of the eighteenth century wall papers were of less elaboration, with landscapes set here and there on the paper medallion fashion, and were better suited to the house of modest pretensions. Now and again one runs across fragments of such papers, or perhaps an old house in process of renovation has some part of a wall covered with one of them in fairly good condition. Such papers can be copied at a price varying from five to ten dollars a roll.

Japanese Gold Paper.

A wall papered in gold sounds unpromising but is really charming. The paper used is Japanese in a beautiful dull tone, by no means the shiny gilt paper of factories. It comes in small pieces, perhaps eight inches by six, and part of the charm of a wall covered with it is the irregular surface made by the overlapping of the little squares. A room done by a New York decorator had a wall of this gold paper, curtains of apricot silk, furniture of brown oak with covers of ecru linen woven with a fine copper thread, and a Chinese rug of salmon and dull blue.

Balancing the Furniture.

A great many rooms look unhappy because they do not balance. One side of the room is crowded with furniture, the opposite wall has so little that we are uncomfortably conscious of the surbase. Or one corner is filled and the opposite one absolutely empty.

It may not always be possible to have equally important pieces in corresponding places but you can make the two spaces equally important. If a cabinet or secretary stands on one side of the fireplace and a table on the other, you can equalize things by hanging good sized

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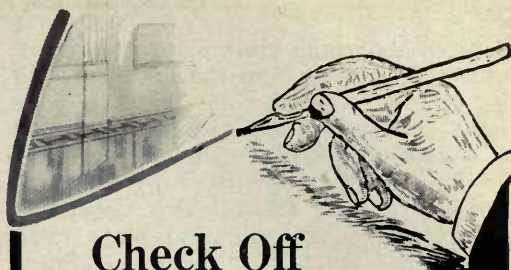
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pictures above the table to carry the eye up to the same level as the secretary. In the dining room you can balance your heavy sideboard by hanging a plate rack or a wall cabinet above the sewing table. Or if the sideboard can occupy a central position you can let the china closet balance the sewing table and plate rack. The triangular china closet is an almost impossible proposition. Occasionally it may fill the corner between two windows with good effect, but otherwise it is pretty sure to throw the whole room out, and two corner china closets in one room, unless built in, are almost unthinkable.

"The Beauty of the House Is Order."

And speaking of effect, why are so many houses spoiled by the presence of odds and ends which ought to be put away? It will be a great day in the development of good taste when some of us realize that the photographs of our friends belong in our bedrooms, that the library table is not improved by the presence of piles of last year's magazines, nor the sitting room floor the place for piles of pamphlets. Read the magazines and pass them on to the hospital or the Old Ladies' Home, or to the jail, where they may divert some man from the thought of crime, but do not leave them about your living rooms. Clutter of this sort accumulates and makes sweeping day a terror. When you get rid of them dispense also with the tippy table, the creaking chair. If you can only have a few things have them whole and comfortable and comfort yourself with the thought that each piece has a definite value which it would miss in a crowd.

Rugs for the Chintz Room.

The great popularity of furnishings of chintz or cretonne makes the choice of appropriate rugs a matter of importance. When these fabrics are used in living rooms, those of medium or dark colors are chosen and with these an Oriental rug of not too pronounced coloring and design is suitable if not ideal. So too are some of the Wiltons and Axminsters which copy Orientals more or less faithfully. The ideal rug is one of practically no pattern, such a rug as can be made from two toned French Wilton and re-

producing some tone of the cretonne, printed linen or chintz used. At its very best the Oriental introduces another pattern to take away from the effectiveness of the cretonne. For a less expensive, plain surfaced rug the Scotch homespuns or their American copies are satisfactory. The brownish gray of some of these rugs is admirable with brown oak furniture and with almost any color scheme.

In bedrooms one can fall back upon the rag rugs woven in plain colors. The hit-or-miss ones often reproduce all the colors of a cretonne and so are harmonious, but they do not draw the room together as does a plain green, brown or blue, whose color is repeated in some part of the figured material. The plain surfaced grass rugs do this, but are less in keeping with the fine texture of the cretonne. All our readers may not know that the rag rugs can be woven to order at an average price of seventy-five cents a square yard. When there is a choice of warp threads one similar in tone to the body of the rug will be found satisfactory. A rag rug woven with a white warp thread soils very easily. For a green rug a dark blue warp thread is effective sometimes, or orange with brown rags.

Colonial Glass for Bedroom.

Small items of bedroom furnishings in colonial glass offer an agreeable variety. Toilet sets are made in this clear glass and are not more expensive than china ones of good design. Branched candlesticks with colored candles and shades are very good for the bedroom mantel piece, either a large one in the center, or a smaller one on either end. Sets of tumbler, pitcher, candlestick and match-box are supplied for the bedside table and there are numerous small articles for the dressing table. This glassware is only advisable in a room with a good deal of color, as it looks rather glacial with pale walls and delicate colors.

The colonial glassware copies in general outlines the fluted glass of early American manufacture. The quality of the glass is unusually good and some of it is very nearly as brilliant as cut glass. In the best designs the fluting, generally concave, stops part way up, leaving the upper edges plain.



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ANSWERS TO QUESTIONS

ON INTERIOR DECORATION

Editor's Note.—The courtesies of our Correspondence Department are extended to all readers of *Keith's Magazine*. Inquiries pertaining to the decoration and furnishing of the home will be given the attention of an expert.

Letters intended for answer in this column should be addressed to Decoration and Furnishing Department, and be accompanied by a diagram of floor plan. Letters enclosing return postage will be answered by mail. Such replies as are of general interest will be published in these columns.

Furnishings for a Bungalow.

R. F. F.—I have been very much interested in your answers to peoples' inquiries on Interior Decoration; so I am bringing my decorative problems to you.

I have read and believe that a woman should use the colors in her home that is best suited to her personality. I am a "red haired" woman and look best in browns, tans, blues, greens and lavender or purple.

The house will have an east front, the living room will have plain light tan walls and will be at least 20x15 feet.

We will have to buy most of our furniture. We have a mission couch, rocker and library table, all in fumed oak. I will buy two more chairs in fumed oak, also a bookcase. I prefer one without doors, as curtains can then be used to soften the hard lines of the wood and help in carrying out the color scheme.

I would like a chair or two of wicker; shall I use brown with green cushions, or green with brown and tan? If I use green, either for cushions or chairs, what shade shall it be?

I have a mahogany piano which I shall have to put in the living room. In building the bungalow could we not build a little alcove off of living room for piano and work out a color scheme that would harmonize with the living room and mahogany piano in alcove? We shall use a brown and tan Axminster rug, in small all over design, in the living room.

Now, as to hangings, I suppose I can use plain white or cream curtains (I don't like ecru) for the present or white with printed border, in colors harmonizing with other decorations, but I do so want over curtains as they add so much interest to a room. In either case what colors should I use?

The dining room is separated from the

living room with a cased opening, has southern exposure. Shall use fumed oak in here also. Believe I should like Dutch curtains in here or are they used in dining room? What color rug shall I use? Material must be inexpensive, either grass, fibre, matting or rag.

Bedrooms on the north. One has north and east window. Rooms are small, about 10x12, walls white. We will tint walls ourselves. Had thought of a very light gray wall with border of lavender. Pink would be beautiful with gray, but as pink is not "one of my colors" decided to substitute a border of wistaria vines and flowers. What sort of furniture shall I use in the room? It must be inexpensive. I like metal beds. What sort of hangings? What color rug? The other bedroom light green or blue and white. I want white enamel dresser in one bedroom. Shall it be in this one? Shall I introduce another color besides white and blue or green. Which color would you use, green or blue? What about rugs and hangings

Ans.—We think your choice of color tones in your house is very good. With the brown and cream scheme for living room you should use a soft pale tan wall, but not a yellow tan, more greyish. This room will be in better taste kept in these tones, and if you use hangings at windows there is a lovely shade of fawn, tan casement cloth at \$1.00 a yard 50 inches wide, that is the best thing we know of for inexpensive yet refined hangings. The glass curtains can be plain cream net or scrim, but not with a colored border.

As to the mahogany piano, forget it. An alcove or recess would have to be treated as a part of the main room so it would not help any. Then you can have some slight color relief in cushions, pottery, etc., which should be a rich green,



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ANSWERS TO QUESTIONS—Continued

not dark. The reed chairs had best be natural with green cushions.

Since the dining room must be so inexpensively treated, we do not think you can do better than use the brown cocoa matting with dull yellow sunfast curtains, hanging straight to the sill from the top. Sash curtains are only used for the kitchen or bathroom.

We do not think you would like the Wistaria design in a small room. We should have a putty-grey wall with small border in mauve or mulberry and darker grey. Then a cretonne in the same colors for chairs and curtains. It is possible to get bedroom cretonnes for 35c that are fairly good in color and pattern, but nothing that would do for downstairs.

We do not like metal beds but would have very old ivory enamel in this room. You could get two small Scotch rugs in deeper putty and mauve for this room. Of course the floor must be hardwood. We would prefer apple green in the other bedroom with simple white furniture, white woodwork and rag rugs.

Color Scheme for a Music Room.

E. J. H.—We are building an eleven-room brick home, the brick of a blue and brown variegated color.

We have an east front and a lot with beautiful forest trees. On the front we have music room on northeast and living room on southeast, each 16x20, with hall 12x20 between. The music and living rooms have colonnades into hall and there are folding doors from the music room to dining room, which is on north with several windows in the north end. The kitchen is on northwest and there is one bedroom back of living room with door between. The bathroom on lower floor is on the north of this bedroom and under stair landing, another bedroom joins bathroom on west.

There is a wide porch across front extending around on north to door into dining room and on south to door into bedroom.

House is to be heated with hot water so only have fireplace in living room. The floors in hall and music, living and dining rooms are to be of oak with balance of woodwork red gum, finished natural. Walls to be plastered, ceiling 11

feet. The dining room will perhaps be paneled in the gum. Will you kindly suggest color scheme for lower floor? The furniture and rugs for this have to be practically all new. Also please suggest color of brick for mantel in living room.

Ans.—You do not state whether walls are to be tinted or papered. We will make suggestions for the former. First, we advise using a mahogany stain on the standing trim of hall and music room, and a brown stain in dining room. Red gum takes these stains beautifully and makes a far handsomer finish than natural. In the music room you would naturally use mahogany furniture, and this would not hitch at all with the natural gum finish. The hall should correspond. The living room and bedroom opening from it can have the natural finish if you prefer, and fumed oak and Circassian walnut furniture, with some natural wicker pieces in living room. The walls of the southwest living room would be agreeable tinted a soft dull green with pale creamy tan ceiling. The furnishings a mixture of leaf greens and wood browns.

The northeast music room walls a soft warm grey with rich mulberry colored rug, hangings and upholstery. The hall should have a paper, greys and mulberries, tapestry design. The dining room with only a north lighting should have wall of golden tan and cream ceiling. As these are 11 ft. walls, the ceiling tint should be dropped 20 inches and molding placed there. Also if plain tints are used, some decoration either stencil or paper frieze, placed beneath the molding.

The southwest bedroom walls would be agreeable in old blue with the natural gum and Circassian walnut furniture. We would use mottled green brick for the fireplace facing, if you can get them; if not, golden tan. The bathroom woodwork and walls must of course be painted white enamel; also the bedroom on the west. But the arrangement of the bathroom is so poor we strongly advise an alteration of the plan. It is no place for a bathroom under the stair, with no outside light or air, and besides, you need a coat closet under the stair opening into the hall with a lavatory off from it. Then take off enough from the west room for a bath between the two.



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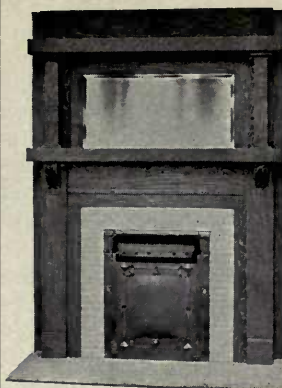
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Harmonizing Rugs and Furnishings.

A. J. A.—Enclosed find plan of house taken from your January number, which we are building this spring. The roof is to be of green asphalt shingles and the house cream stucco. 1. What color would you suggest for the window casings and doors?

2. What would you suggest for the fire-place? We would like to keep the place in tans and browns if possible. We do not know about the brick for fire-place.

3. How would you suggest having the woodwork finished downstairs? We are planning on oak wood.

4. Will you kindly suggest a good color scheme for the downstairs rooms? We have 2 rugs 9x12, one in plain green, the other in a small figured green, which we had thought of using if possible, and our living room furniture will be partly oak and partly mahogany. The dining room furniture is all oak.

Ans.—Regarding exterior trim, the large amount of roofing will afford sufficient color relief, and we would advise painting the trim the tone of the asbestos shingle as nearly as possible, with underside of cornice cream and cream window sash; underside of hood and the supporting columns the same as exterior cement.

As your living room has only north lighting, fumed oak woodwork and light tan walls are the best choice with golden brown and coppery red mottled brick in fire-place. Can you not use one green rug in dining room and one in sun porch, so as to get two 8'3"x10'6" rugs or one large one for living room, in golden browns and cream with touch of coppery red, and thus keep the room in the golden tans and browns?

In the dining room you could bring coppery reds and greens into a frieze decoration on a light tan ground and so keep the green figured rug in countenance. And you could use green and coppery red changeable Sunfast draperies at the window. One 9x12 rug would not be large enough for the living room anyway, so we would try to use them elsewhere, perhaps the plain one in the large bed-room on second floor, with pale ecru wall and border in dull red and green.

Rugs and Wall Treatment.

J. F. C.—I am enclosing a sketch of a floor plan of a home which we contemplate building and wish you would kindly advise us in regard to the decorating and furnishing of same. We intended to have the dining room finished in oak and living room finished in birch, stained mahogany, and perhaps have both rooms wainscoted if not too expensive. We already have oak furniture for the dining room and mahogany for the living room, but it will be necessary to purchase more furniture for the living room. The porch will be all enclosed with double hinge windows.

Please suggest color and kind of rugs for dining room and living room. The upstairs trim will be white wood work, with birch mahogany stained doors; flooring to be oak downstairs and pine upstairs. We have a complete circassian walnut bedroom suite.

The house is to be shingled, stain brown.

Please make inexpensive suggestions for decorating, furnishing and lighting.

Ans.—Answering your request for suggestions, we note your living room has excellent light on three sides. A fawn-grey wall is extremely good with mahogany woodwork and is in harmony with almost any color scheme. We suggest this for living room with either green or old blue as the contrasting color for rug and furnishings. One of the Rosslyn rugs with either perfectly plain center and three toned border in either reseda green or old blue, would be handsome and durable. In 9x12 size such a rug, in small Persian design, blue and green or blue and greyish tan, chiefly, would be good; if you don't like plain rugs. Cost would be the same. You really need a 10x13'6", which would cost about \$75.00.

With this treatment of living room, the sun room woodwork could be stained forest green and would open attractively from living room.

The dining room best be in golden browns and creams with the same tones carried through into the hall. A wainscot would be desirable here, but not in the living room. A heavy cornice molding in living room and a couple of beams crosswise of the ceiling, would be effective.

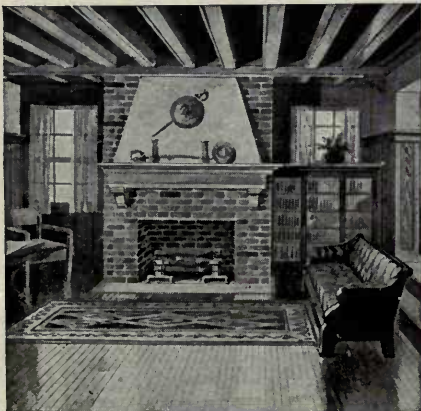


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THE only open grate that warms and brings in outdoor air, and takes out the air of the room that is impure. It is a constant and perfect ventilator, having a fresh air supply on the principle of the hot air furnace. Will heat rooms on two floors if desired, and will burn coal, wood or gas. Keeps fire from fall to spring. Made in many patterns, to fit any fireplace. Catalogue No. K shows styles and prices. May we send you a copy?

Special Catalog of Mantels, Andirons and Fireplace Fittings, sent upon request.

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IN PLANNING your new home the study of Interior treatment both as to architectural detail and decoration is of equal importance to obtaining a good design and a practical, well-planned house. This book illustrates the interiors of many successful homes and contains much valuable advice on Practical House Decoration. Its contents is as follows:

- | | |
|---|---------------------------|
| 1. Interior Decoration, taking up Color Schemes, Treatment of Woodwork, Walls, Ceilings, etc. | 4. Living Rooms. |
| 2. Entrances and Vestibules. | 5. Dining Rooms. |
| 3. Halls and Stairways. | 6. Sleeping Rooms. |
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can't split or curl, rust or rot. The long fibre wool felt, saturated with pure asphalt makes Flex-a-Tiles tough as leather yet pliable as rubber. And they are as attractive as they are durable. Surfaced with chipped slate or crushed granite—either red, green, brown, garnet or emerald—they both look and wear like stone.

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By "The Economist"

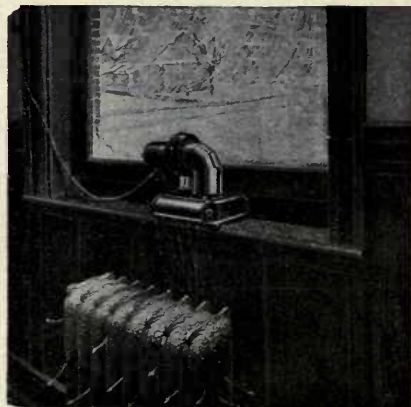
The Way to Save on Your Coal Bills.

LAST month we talked about saving on the water bills and this time we want to describe a device that will help you save on your coal bills. Carefully conducted investigations have proved that "a given amount of coal will convert a pint of water into twenty-five cubic feet of steam at one pound gage pressure, while a slightly less amount of coal will convert the same pint of water into seventy-five cubic feet of steam in eighteen inches of vacuum." In other words, the same amount of coal will create three times as much steam if a vacuum exists. Now an ingenious Vacuum Air Valve has been invented, which may be attached to any radiator and which will noiselessly expel all air and give the "pull" of a real vacuum system. The technical description of the working of this valve might be tiresome, so we will spare you that, and content ourselves with telling you that it works automatically and yet quite as effectively as though you had an elaborate vacuum system. Many housewives have been annoyed by water leaking through the air valve of the radiator and they will be relieved to know that the adjusting of this vacuum air valve will entirely eliminate this unpleasant feature of steam heat.

The Way to Ventilate Your House and Save the Doctor's Bills.

Along with the problem of heating the home in the winter comes the question of proper ventilation. Indeed, more people contract serious colds from living in stuffy rooms filled with poisoned air, than from staying in rooms insufficiently heated. We

all know that a complete and constant change of air is absolutely essential to a rapid convalescence from illness and yet to accomplish this in the intensely cold months without causing a direct draft and introducing air at too low a temperature, has been an almost hopeless problem. But an inventive genius has at last delivered us from both



The new ventilating device.

horns of the dilemma and has manufactured a clever ventilating device that exhausts the vitiated air by suction and brings in fresh air to take its place. It may be easily attached to any window sill and carried from one room to another. It will deliver a stream of pure, filtered air just where you want it and the accompanying sketch shows how this air current may be directed down upon a radiator and thus warmed to a comfortable temperature before it diffuses through the room. As a health saving precaution for the entire household, it is worth trying.

Your Home is Your Castle

BE MASTER of your house or your house will become your master. Don't permit the household drudgery to get the upper hand or allow the forces of destruction to gain foothold in your home. Pipe your house from cellar to attic with 2½-inch piping and install a

TUEC STATIONARY CLEANER

For Health and Cleanliness

This will enable you to keep your house free from dust and dirt without any of the hard work that other cleaning methods involve. It will remove not only the visible dirt but also the invisible particles of dust that carry the microbes of disease into the lungs of those who live in the house and breathe its atmosphere. It will conserve the energies of housekeepers and double the life of the household furnishings.

Thousands of homes no more expensive than the one you are building, are equipped with the TUEC Cleaning System. Our book tells where these homes are located and gives the testimony of the owners of many of them.

Write for this book and for our estimate of the cost of TUEC installation for your home. No cost or obligation will be involved.

The United Electric Company

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CON-SER-TEX

THE IDEAL
COVERING FOR
SLEEPING BALCONIES
PORCH FLOORS
AND ROOFS



CON-SER-TEX is a cotton duck scientifically treated by a combination chemical and waterproof process. It will not mildew or absorb moisture. This makes other fungus growths impossible. It is easy to lay and tightly adheres to the surface. With proper care it lasts as long as the house and protects it every minute. It gives the porch, the roof, the piazza, and the sleeping balcony a neat, clean, trim look. Use it to cover the garage and other outhouses. Write for generous sample.

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The "MINNEAPOLIS" HEAT REGULATOR
with time attachment

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The Standard for Thirty Years

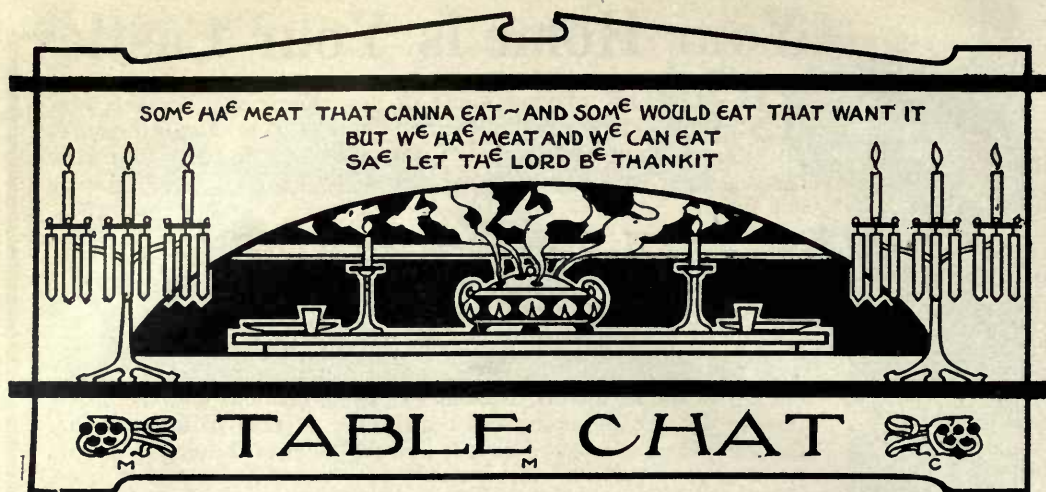
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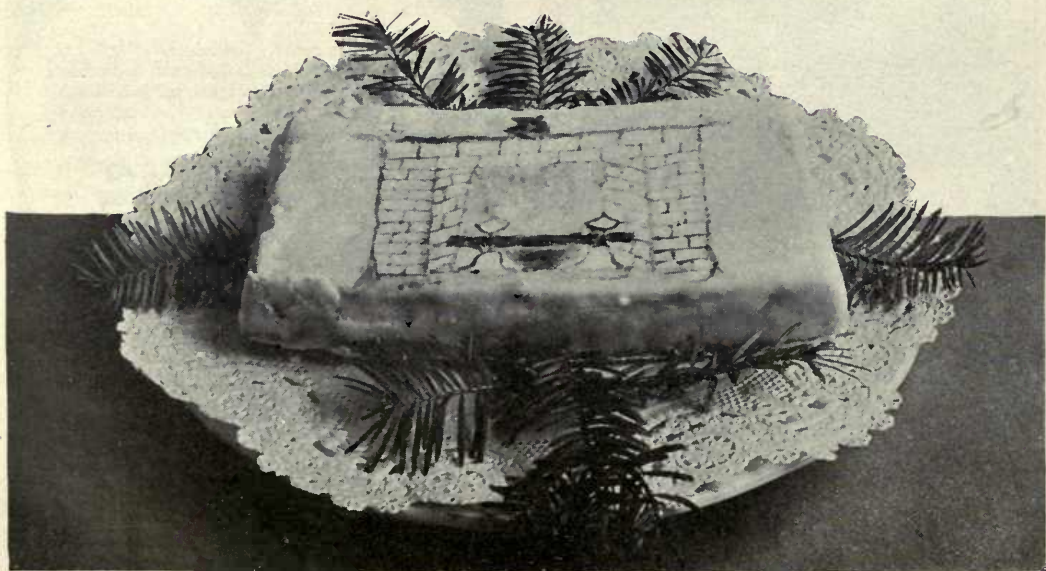


The Message of the Month

AS FOR November, with its peculiarly American festival, so the message of December is one of cheer, an exhortation to love and good will. But while tradition has restricted Thanksgiving to our own immediate circle, Christmas bids us look abroad and include friends as well as family, not forgetting those who are best described as our neighbors in the spiritual sense of the word. In this time of war the call for human sympathy and human help is especially urgent and ex-

tended and it is a narrow and selfish soul which can set itself to the enjoyment of domestic happiness in the Christmastide, without doing something for those who are in so much distress across the ocean.

With each recurring Christmas the protest is in order against the sort of Christmas giving which is merely perfunctory, the giving which is a matter of bargain and of paying off old social scores. Such a conception of Christmas profanes the sanctity of the day and degrades giver and recipient alike.



A Christmas cake that will delight the hearts of the children.

HOME BILLIARDS!

Have this Royal Sport

Yes, thousands of families are playing real Billiards and Pocket Billiards right at home! For now the ideal house is sure to have a private billiard room—or at least enough space somewhere for a famous Brunswick Home-Size Table. Only a small investment. Yet it keeps boys home—and pays big dividends of pleasure all your life!



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or "Baby Grand" Carom or Pocket Billiard Tables

Imposing masterpieces—not toys—built of rare San Domingo mahogany, richly inlaid—a size for every home.

Have the life, the speed, the accuracy that have made the name BRUNSWICK stand for super-excellence around the world. Vermont slate bed, fast imported billiard cloth and Monarch cushions, famed for lightning action.

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Try any table right in your own home, 30 days free. Then pay us a small amount monthly, terms as low as 20 cents a day!

High class Playing Outfit given free with each table—balls, hand tapered cues, markers, expert book "How to Play," etc.

Mailed FREE—Our new de luxe Billiard Book—"Billiards—The Home Magnet"—richly pictures all Tables in actual colors. Gives full details—low factory prices. Just send your address today.

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It contains valuable information on home heating and is absolutely free. A card will bring it. Sending for it will not obligate you in any way.

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Cut Coal Bills $\frac{1}{2}$ to $\frac{2}{3}$

THE one certain way to reduce coal bills $\frac{1}{2}$ to $\frac{2}{3}$ is by using a Williamson Improved New-Feed Underfeed Furnace or Boiler. With the Underfeed coal is fed from below. All the fire is on top, causing perfect combustion. Smoke and gases are burned up, making more heat with no smoke, smell, clinkers, and very little ashes—you can use cheap slack soft coal or pea and buckwheat hard coal and secure same heat as with highest priced coal.

Write for facts. If you want to save from 1-2 to 2-3 of your coal bill, get our wonderfully instructive book entitled "From Overfed to Underfeed."

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Building Experience Prize Contest

\$100

THE "Homes We Have Built" series has been such a success this year that for 1915 we propose to make more of this feature and take pleasure in offering three prizes.

\$50.00 for the best contribution.

\$30.00 for the 2d best contribution.

\$20.00 for the 3rd best contribution.

DO not be afraid to take part in this contest for the experience in building a bungalow cottage is just as likely to prove the most interesting and win a prize as the "experience" of building a large colonial residence.

WHAT TO DO

TAKE a clear picture of your new home and, if possible, one or two good interior views. Then in a conversational way (just as you would tell a friend) write what happened—how you came to build, how long you studied plans before deciding, what method you followed, what you did to learn about building materials, finishes, etc.

All our readers are interested to hear about these things and you will get a good deal of pleasure out of it yourself.

Contributions accepted for publication which do not win a prize will be paid for at regular rates.

Contest Closes May 1st, 1915

Address Editor "Homes We Have Built" Series.

KEITH'S MAGAZINE

McKNIGHT BUILDING,

Minneapolis - - - - Minn.

TABLE CHAT—Continued

Composite Gifts.

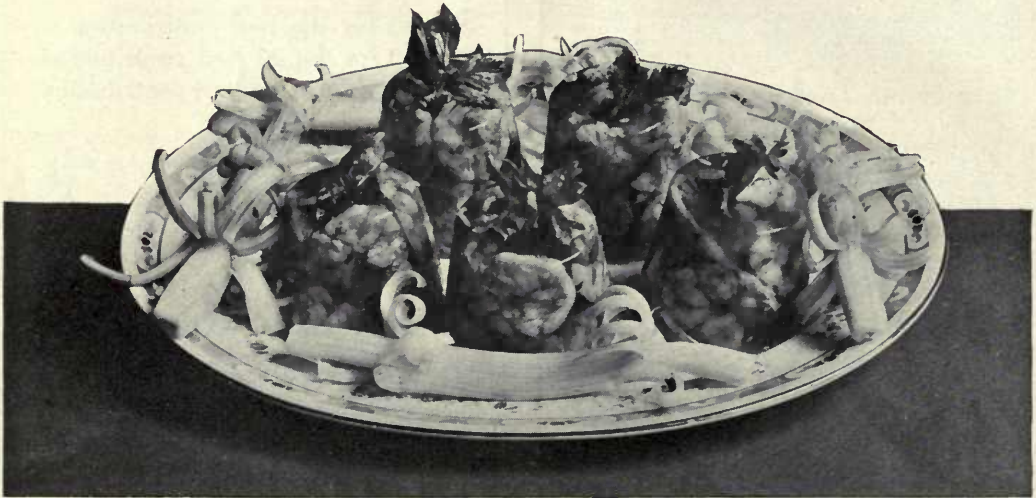
Naturally, the members of the family spend themselves principally on their gifts to each other, and often it is possible to pool the resources of several people in the making of a single gift of some value to the mistress of the house. This may be as pretentious as a set of silver, or a handsome dinner service, or it may be much more modest. In table furnishings at moderate prices, there is a wide range of choice. For five dollars or less one can find charming chocolate sets, coffee percolators, stoneware sets of casseroles

the beautiful and useful things to be had, which are permanent additions to the family possessions.

Plum Pudding and Christmas Cake.

It seems a pity that so few people think it worth while to concoct these dainties, for the home-made article is so infinitely better than the best product of the manufacturer. And really the trouble is not very great, consisting mainly in the preparation of the fruit.

Plum pudding is best made into a foundation of bread crumbs, an ordinary five



Molded jellied chicken for the Christmas supper.

in two or three sizes with ramekins to match, afternoon tea services, chop sets, salad sets, ice cream sets, embroidered linen sets of centerpieces and doilies, and these are only a few of the many beautiful and desirable things to be had at that price.

For ten dollars one can get a Russian samovar, a brass set with tray and cups for after dinner coffee in the living room, any variety of beautiful sewing trays, wood, wicker or glass, a pair of glass candelabra, or a single large one with single candlesticks for the corners of the table, a copper mounted chafing dish with ramekins, a lace luncheon cloth or a set of center and doilies, or a very complete assortment of table glass, tumblers, wine glasses and finger bowls. At a larger figure there is almost no limit to

cent loaf of stale bread with the crusts removed being enough for a good sized pudding. Allow to each loaf two pounds of raisins, one of currants, half a pound of candied lemon and orange peel, mixed, and a quarter of a pound of citron, two cups of syrup and one of sugar, half a pound of chopped suet, three eggs, a cup of flour, a teaspoonful of baking powder, one of salt, two of cinnamon, one of allspice, half a teaspoonful of cloves and a grated nutmeg and you have a mixture of sufficient richness for the average taste. About a cupful of milk will be needed for mixing, and at least four hours steady steaming. If these proportions are doubled or trebled and the mixture packed into baking powder tins the supply of small puddings will last a good part of the winter.

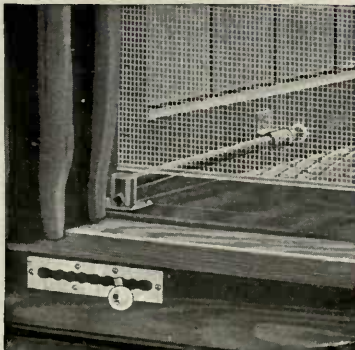
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It Would Be a Nuisance

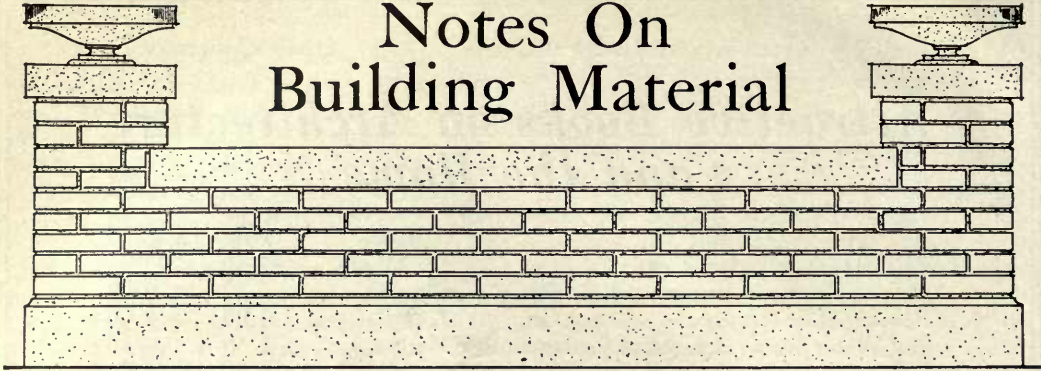
to open that screen, every time you operated that Casement Sash, wouldn't it? And an adjuster that involved disturbing and mussing a fine silk curtain at the stool would not be an ideal device would it? Therefore, see that your casements are equipped with our new 1914 Model "HOLDFAST." The Adjuster that makes Casements RIGHT.

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Notes On Building Material



Face Brick and Flue Linings.

FACE brick is an item of growing importance. In the earlier days face brick simply meant the selecting of good hard brick from among the kiln run of common brick. Today the term face brick has a distinct meaning to many people and is a separate brick from the type known as common brick. There has been enough interest and development in this matter that there was organized some time ago a face brick manufacturers' association composed of clay workers who manufacture fine brick especially for wall facings. Meantime the interest in face brick color schemes and architectural effects has led to a great line of face brick products with characteristic trade names. These include hundreds of shades in brick running from white enamel through gray and buff to reds, then to very dark colors, almost black. They include soft finishes, mat and rug faces, oriental effects and rustic orders.

Face brick of this kind naturally sells at a higher price and goes into building upon which people expect to spend money to get artistic beauty and satisfy the taste for the attractive.

Fire brick and flue linings constitute an item of special interest in the fall and winter. The practice of using fire clay linings for flues and chimneys is becoming almost universal now. In most cities the building ordinances compel their use as a safety against fire and for the sake of the same safety country people should use it, too. They are not only used for lining brick and stone chimneys, but at times chimneys and flues are built of con-

crete formed up around these fire brick linings.

The fire brick line should include not only fire brick of standard patterns, but the blocks and special shapes used for backs and sides of fireplaces and grate openings.—*The St. Louis Lumberman*.

Laying Cork Tile Flooring.

For many uses a cork tile over a concrete structural floor offers qualities which can be developed by no other material.

In applying cork tile flooring to concrete we use two methods, according to conditions. On new work, in which we furnish the under floor or can dictate its composition, we lay on the concrete floor slab while still green 1" of asbestos concrete composed of 1 part Portland cement, 1 part asbestos fibre and 3 parts sand. This is troweled to a true surface with a sidewalk finish, $\frac{1}{2}$ " below the finished floor level. This composition makes a fibrous bed which will hold a nail.

When this is thoroughly dry, the cork tile are applied, being first bedded in a special waterproof mastic. They are laid by a method which closes and cements all joints, at the same time distributing the pressure evenly over the surface. The tile are bradded into place with headless brads which are driven below the surface of the tile and hold them in place while the mastic is setting up, which requires about 12 hours. On hard concrete or any other surface into which nails cannot be driven, the tile are weighted into place. The result is the same in both cases, but in the latter more time is required, and it is somewhat more expensive in consequence.—*Concrete-Cement Age*.

"Concrete for Permanence"

"So That's How

you got that beautiful white exterior on your new home—you used Atlas-White Portland Cement stucco.

Now I'll tell you, we're thinking of building pretty soon ourselves, and my wife says that nothing will please her as well as the pure, clean white.

It's absolutely *stainless* too, you say, and I can get all the facts about it by writing to The Atlas Portland Cement Company, 30 Broad Street, New York City.

Thank you very much---that's exactly what I'll do."

KEWANEE PRIVATE UTILITIES

WATER SUPPLY, SEWAGE DISPOSAL,
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MAKE COUNTRY LIVING
EFFICIENT, HEALTHFUL, COMFORTABLE



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WATERLOO CAST IRON COAL CHUTES

Protect the House from Careless Coal Men. They Are Burglar-Proof---Unlock Only from the Inside.

¶ Being made of cast iron, are not affected by the weather. ¶ Wire glass in door furnishes light to cellar. When door is open, the glass is protected by heavy steel, which operates automatically. ¶ The watertable at the top of chute protects the inside of foundation from moisture. Doors are extra heavy with three hinges at top and are made with a beaded edge which extends over the border opening, making a tight joint. Are made to fit any depth wall. ¶ Drop us a postal, giving your dealer's name, and we will quote prices.

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JAPANESE LANDSCAPE ARCHITECT

TWENTY-FOUR YEARS' EXPERIENCE

in Japanese Garden Construction. Made in all styles, with a specialty to harmonize American Ground. A true service and economy of time are the marked features. Get ready for next spring.

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Heating, Lighting and Plumbing

Watch for Tight Construction.

SUCCESSFUL heating contractors know that heating a building is a matter of making, distributing and retaining warmth. Good results depend just as much on the way the structure is built as on the heating outfit. Both economy and comfort depend on how much of the warmth artificially created is kept inside, and how long it remains. Therefore in making a lay-out and estimate to warm any building, the most proficient heating men investigate carefully the structural features which are liable to waste heat—and have the faults corrected wherever possible. Printed statements in contract forms of particular contractors stipulate that the owners shall attend to these features.

Not a few heating men, however, still neglect to give enough consideration to outer walls, which, if poorly and cheaply constructed, waste the heat. The walls quickly radiate heat rather than retain it; they are said to “cool the air inside.” So, it means quite a difference whether or not outer masonry walls have proper air spaces, or, if built of wood, whether or not the outer walls are well sheathed

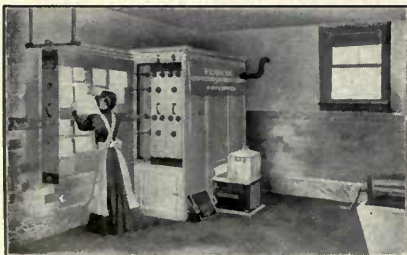
and protected by non-heat-conducting materials. If the walls lack these heat-retaining features, the building can only be warmed by an undue consumption of fuel. Experienced heating men know that no safe adjustment of radiation can be made in any building without a definite knowledge of the construction and area of outer walls and windows.

Then, too, many old buildings requiring new heating plants are found to have doors and window joints warped or shrunk, making large inlets for the entrance of cold air.

Outside entrance doors without vestibules or without proper filling and joining often admit much cold air, which counteracts the good effects of liberally planned heating apparatus.

Where lack of heating success is not due to poor chimney flues, in most cases it will be found that the job has not made good because the heating contractor has overlooked full attention to these important points; whereas, proper correction of cold inlets by the owner would have insured an easy fulfillment of that final pay-winning object—“70 degrees in zero weather,” with not a little fuel saved.—

Ideal Heating Journal.



“CHICAGO” CLOTHES DRYERS And Laundry Room Equipments

consisting of *Electric Washing Machines; Ironing Machines; Ironing Boards; etc.*, especially adapted for use in the laundry room of *Residences, Apartment Buildings* and moderate sized *Hotels, Hospitals, Sanitariums* and similar Institutions. Can furnish individual machines or complete outfits. Our appliances are the best that can be had—there are none better.

Write for our complete and handsomely illustrated No. K 14 Catalog. Mailed free upon request. Send for it today.

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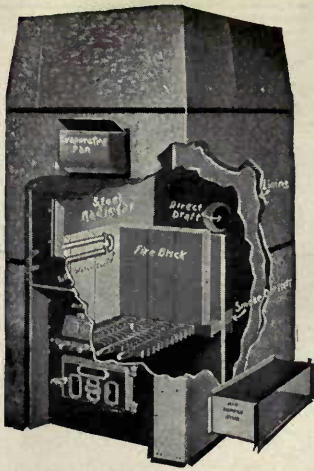
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Up-to-Date 100 Selected Designs Bungalows, Cottages and Homes, Price.....\$1.00
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One Large and One Small Book, Together \$1.25, Three Books.....2.00

Many pretty one-story Bungalows and Cottages. Church Portfolio 50c. If you want the BEST RESULTS, consult a man of experience and reputation for GOOD WORK. If you want a small ECONOMICAL HOME, don't fail to send for these books.

CHAS. S. SEDGWICK, • 1135-K Lumber Exchange, • Minneapolis, Minn.



HESS

THE atmosphere of a *Hess-heated home* is free from dust and gas; there is a good circulation of warm air, which means even heating; a special provision is made for evaporating water, so that the humidity of the air in your rooms approaches that of the outdoor summer atmosphere. Ordinary furnaces, and steam and hot water heating do not accomplish these results.

STEEL

The body of the HESS FURNACE is made up of steel plates, and where these plates join they are melted and welded together, making the construction practically *all of one seamless piece of metal*. Such a furnace never becomes leaky, and gas and dust are impossible. Any fuel is burned successfully, even the cheapest, and because of the air-tight construction the fire is under perfect control and may be held a long time.

FURNACE

We sell direct from our factory to consumer, and we make complete plans and directions, and loan tools, so the purchaser can easily install the equipment. We sell *on trial*, for cash or installments, and guarantee complete satisfaction. Write for illustrated booklet fully describing our method.

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Wolff Fixtures

Make a Man Proud of His Plumbing

Whether for the modest cottage or the elaborate mansion, each individual Wolff Fixture receives the personal supervision of the department head from the moment our factory commences work through all stages of construction until its final completion.

**Plumbing Goods
For Any One
and Any Home
At Any Price**



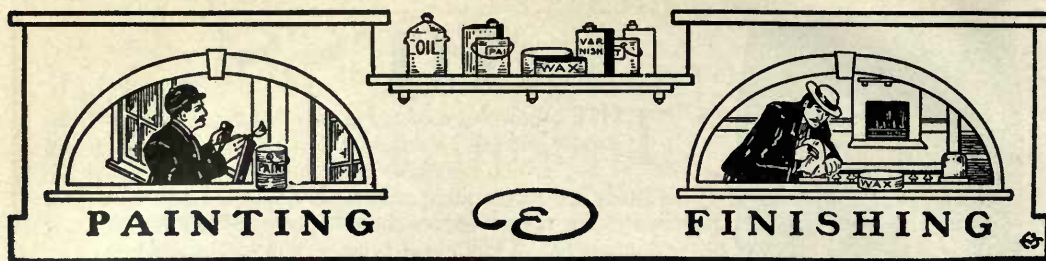
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Manufacturers of
Plumbing Goods Only

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Showrooms: 111 N. Dearborn St. }

Pottery: Trenton, N. J.



Painting Over Cement.



HE time may come, says R. H. Langston, in the Master Painter, when, in exterior painting, more paint will be applied over concrete or cement surfaces than on wood.

"It must be understood that ordinary linseed oil paints cannot be applied with success directly to cement or concrete surfaces on account of the alkaline lime present in the cement, and which is subject to prolonged formation in the presence of moisture. The action of this alkali is to burn up or destroy the oil, causing rapid fading of colored paints, chalking and scaling off of the material. Therefore, it is necessary, if a linseed oil paint is to be used, that the surface be first thoroughly saturated with a neutralizing wash that will destroy the alkali action. The most approved method is to use a solution of zinc sulphate made by dissolving sulphate of zinc crystals in water in the proportion of three pounds to a gallon of water. A cement surface treated with this wash and allowed to dry can then be painted without danger from alkaline action, and with the assurance that results will be lasting, as if applied to a wood surface.

"Many manufacturers now put out cement paints in liquid form, ready for use, in white and all shades, the vehicle used in these paints being alkali-proof and therefore requiring no treatment of the surface before the paint is applied. Paints of this nature are being used extensively on cement and concrete construction with the very best of results and can be obtained at a very reasonable price.

"For interior cement surfaces no better material can be employed than an approved flat wall paint. Most of the leading brands of flat wall paint being of an alkali-proof nature, and where a gloss finish is desired, any ordinary gloss paint or

enamel may be applied over one or two coats of the flat paint.

"All new laid cement surfaces, either exterior or interior, should be allowed to become thoroughly dried out and hard before painting, and the best results have been obtained where the work has stood not less than a month before paint was applied. If the surface is dry and paint right, it will penetrate freely on the first coat, filling the pores and rendering peeling impossible, but this would not be the case if applied over a damp surface.

"Exterior cement paints should dry to a flat or semi-flat finish in order to carry out the stone or cement effect. Nothing looks more out of place than a full gloss paint applied to exterior cement surfaces.

"Prepare and close up all cracks and surface imperfections with a plaster or cement. To all the surface apply a thorough coat of zinc sulphate, giving twenty-four hours to dry, after which apply three coats of paint, color to be selected, each coat to be thoroughly dry before the application of another. The plaster or cement must be thoroughly dry before painting.

"Scrape off all old paint where necessary, close up all cracks and other surface imperfections with plaster or cement. Apply a good coat of zinc sulphate over all new cement or plaster, giving twenty-four hours to dry, after which apply two coats of paint, color to be selected, each coat to be thoroughly dry before the application of another."

Cause of Plaster Cracking.

A writer in a Chicago paper seeks to find cause of so many plastered ceilings cracking, and in some cases falling off, and causing more or less damage. To some extent this defect is very much lessened by the use of one or other of the patent plasters which have been intro-



Give Your Painter Pure Linseed Oil As well as Pure White Lead

THAT old saying, "You can't judge paint in the pail," is perfectly true when there is no sure way of knowing what the paint was made of. It isn't true, though, when you talk about "Dutch Boy" *made-to-order* paint, because you know precisely what that contains. That's the kind the painter prepares from

Dutch Boy White Lead and Dutch Boy Linseed Oil

Both are pure. The linseed oil is supplied to the house-owner in our one and five-gallon cans, sealed at the spout, and guaranteed by the "Dutch Boy Painter" trade-mark to be just as it was pressed from the flaxseed. The painter mixes the lead and oil in proportions to suit the conditions of each job as he finds them. Besides knowing what it is, he knows what it will *do*.

Paint of that kind will dry hard and protect your property from the elements. Another thing that kind of paint will do is beautify the interior of your home and make it more attractive for the shut-in life during the cold weather.

Ask for Our Painting Helps No. K-28

which will give you some convincing facts and information. These helps include our stencil book with a hundred choice designs of high-class decoration, from which you may order at half the art-store prices.

NATIONAL LEAD COMPANY

New York	Poston	Buffalo	Chicago	(John T. Lewis & Bros. Co., Philadelphia)
Cincinnati	Cleveland	San Francisco	St. Louis	(National Lead & Oil Co., Pittsburgh)

PAINTING AND FINISHING—Continued



The Cost Is Small, Mr. Builder

For the many valuable suggestions you can receive from the plans, editorial matter and advertising in every issue of the *National Builder*.

It is to your interest to know about the quality and prices of the many different materials—both old and new—that you will buy when building or doing repair work.

The special feature of this magazine is a complete plan 24x36 inches, drawn to scale. This may be a house, bungalow, barn, two-flat building or double house. They are the same as an architect's blueprint and show front, side, rear elevations, floor plans and details with complete bill of materials.

You Will Also Be Especially Interested

in the practical, easily understood articles on building construction and *the many pages of reliable advertising*. This advertising will introduce you to the best of the old standard materials and tell you all about the newer ones, which in many buildings replace the others, at greatly reduced costs.

The National Builder Is Well Worth While

to everyone interested in building, as it is published distinctly for the contractor and builder doing the average run of construction work.

Just send the coupon below and get the best possible value for your money. If you mail \$2.00 with the coupon, you will receive two years or twenty-four issues. \$1.50 one year or twelve issues; \$1.00 eight months. 15c per copy.

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duced to take the place of the old fashioned lime and hair mortar of our fathers. It may be true that most of the patent substitutes do not crack or break down to the extent that ordinary lime mortar does, but it must be borne in mind that there is a much greater expense incurred in their use, and the benefits resulting are scarcely worth the powder. One of the great defects in plastering is caused at the very beginning by the use of unseasoned joists, defective lath and careless workmanship in preparing the ceilings for the work. If joists are not dry, and the lath is nailed on improperly, one joist will shrink more than another and draw up the lath with it, which will break the bond and start fractures, which are sure to end in cracks. Then again, joists do not shrink uniformly, either as to time or dimensions, and shrinkage occurs more in one part of the joist than in another, with bad results.—*The National Builder*.

Covering Capacities for Varnish.

The following interesting facts are taken from "Varnish Specifications," a booklet issued by Berry Brothers, of Detroit:

"A gallon of varnish will cover approximately 600 square feet, one coat.

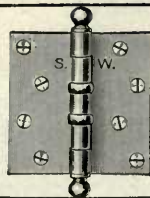
"A gallon of shellac will cover from 500 to 600 square feet.

"A gallon of Spirit Stain will cover from 300 to 400 square feet.

"A gallon of oil stain will cover about 550 square feet.

"From 6 to 8 pounds of Paste Filler made up to volume of one gallon will cover approximately 300 square feet of surface.

"A gallon of Shingletint covers about 160 feet one coat if brushed on; 1½ gallons cover the same surface, two coats. From 2¼ to 2½ gallons of Shingletint will dip 1,000 shingles and another gallon is enough for a brush coat in addition after the shingles are laid."



STANLEY'S HINGES

The Standard of Quality the world over. Before buying the Hardware for your new home, write for booklet "Properly Hung Doors."

Department "T."

THE STANLEY WORKS

New Britain :: Connecticut

The Only Real Stains

Don't judge shingle-staining by the crude and tawdry colors made by cheap builders and painters, which are nothing but coarse paints thinned with kerosene or some other inflammable cheapener. They give you no idea of the beautiful velvety coloring effects of

Cabot's Creosote Stains

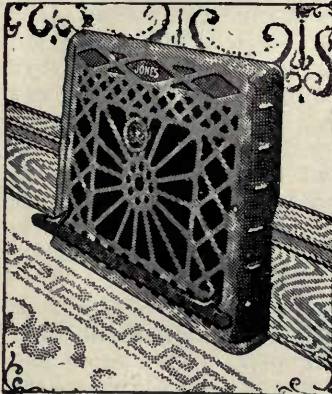
Cabot's colors are soft, transparent—bringing out the natural beauty of the wood—and *lasting*. Creosote is "the best wood preservative known" and reduces inflammability. Result—the most artistic and economical colorings for shingles, siding and other exterior woodwork.

You can get Cabot's Stains all over the country. Send for samples of stained wood and name of nearest agent.

SAMUEL CABOT, Inc., Mfg. Chemist, Boston, Mass.
New York Chicago



Stained with Cabot's Shingle Stains.
Hollingsworth & Bregdon, Architects, Cranford, N. J.



COMFORT IN THE HOME

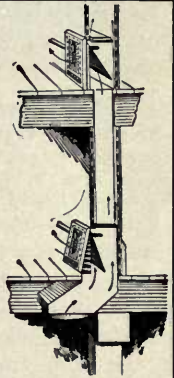
during the coldest weather may be secured by installing the "JONES" System of Heating, one principal of which is the heating of one room on two floors from the same basement pipe, insures not only a saving, but produces the results wanted.

Our improved "JONES" Side Wall Registers have been installed in over 350,000 of the most comfortably heated homes of the United States and Canada.

Send for Booklet, "HOME, SWEET HOME."

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BRANCHES: Minneapolis, Minn. Kansas City, Mo. Albany, N. Y.
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"HOMES, NOT HOUSES"

TRUE CALIFORNIA BUNGALOWS



Building a Home? Is it to be an attractive artistic home? Are you including all the built-in conveniences which we have devised to make house-keeping and home-making a pleasure? Your carpenter can do all if you have our plans and details.

We have been in this business of planning Homes for many years, and our bungalows for any climate are admittedly beautiful and models of convenience.

New edition "HOMES, NOT HOUSES" just issued, 128 folio pages with 249 illustrations showing artistic and convenient bungalows (running mostly from \$1,000 to \$2,500) inside and out, \$1.00 postpaid. Sample pages free. Smaller book showing 38 small Bungalow Homes, inside and out, 25c., post paid.

The Bungalowcraft Co.

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Los Angeles, Cal.

HESS MEDICINE SANITARY LOCKER

The Only Modern, Sanitary STEEL Medicine Cabinet



The Recessed Steel Medicine Cabinet

or locker finished in snow-white, baked everlasting enamel, inside and out. Beautiful beveled mirror door. Nickel plate brass trimmings. Steel or glass shelves.

Costs Less Than Wood

Never warps, shrinks nor swells. Dust and vermin proof. Easily cleaned.

Should Be In Every Bath Room

Four styles—four sizes. To recess in wall or to hang outside. Send for illustrated circular.

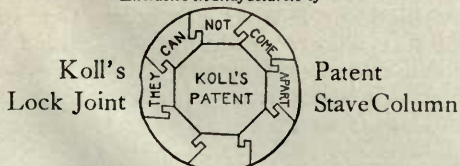
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Makers of Steel Furnaces. Free Booklet

We have issued a Very Interesting Catalogue on "PERGOLAS" and Garden Accessories

showing a series of new designs, can be had free on request. Catalogue "G-2" for Pergolas and Pergola Columns. Catalogue "G-40" for Exterior and Interior Wood Columns.

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Suitable for Pergolas, Porches or Interior Use.

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FIREPLACE

Send for "Vogue in Fire Places." It will tell you everything you want to know about how to make a fireplace a certain success and just what sort to put in the living room of your new house.

Our catalog No. 51 "Tiles and Mosaics" gives you some valuable information about Tiles and Mosaics you ought to have.

A postal request will bring you either or both books.

CHAS. F. LORENZEN & COMPANY
74 W. Washington St. CHICAGO

THE ARCHITECT'S CORNER

What Is YOUR Building Problem?

Put Your Home-Building Problems Up to Mr. Keith, Who Will Give Them
His Personal Study and Reply Either Through These Columns
Or by Mail When Stamp Is Enclosed.

Size of Colonnade Opening.

Question: I wish to say that I adopted the color scheme you suggested for my bungalow and think it is beautiful.

If not too much inconvenience, will you kindly reply to the following questions:

The living room is 18 feet long, opening into 14-foot dining room with 6-foot colonnade opening. My contractor claims that I have ruined the appearance of the rooms by making the colonnade opening 6 feet, that since it is a colonnade and not an arch, the opening should be smaller. Will you say who is correct?

Answer: We have your letter of the 22nd asking for some advice regarding the openings in your rooms. Now we cannot tell from your letter whether the 6-foot colonnade means that there is 6 feet in the clear between columns, or whether the opening is 6 feet between the cased jamb.

If the opening is between the columns then I would say that it represents about an average width. There is no set rule for the spacing of columns, but 6 feet is a good width, though you could hardly say that it was either right or wrong. There certainly must be some particular reason why your contractor would make it less. We like to see columned openings as wide as possible for it gives an air of spaciousness and opens up the two rooms. If you are going to set the columns close together and have a narrow opening, you might better have a sliding door if your purpose is to close off or separate the rooms in that way.

Flooring.

Question: We are getting to the place where we want to select our hardwood floors. We had figured on using either plain oak or alternate pieces of oak and maple to produce a floor that would not show dust so much.

We have been told, however, that a great many new houses now use a picturesque flooring, what we suppose is parquet flooring. This is generally $\frac{5}{16}$ of an inch thick.

Is this floor popular, and if so, is it good policy to buy the border only and fill the field with plain yellow pine and lay a rug over that or is this parquetry flooring used over the entire room and the rugs omitted?

We do not remember ever seeing any article or advertisement of a parquetry flooring in your magazine, to which we are subscribers and wondered if possibly the parquetry flooring is a "has been" and no longer employed when building new houses.

Answer: In reply to your letter on the subject of flooring, we would say that parquetry flooring is not used as much as in former years, due to the fact that the other flooring concerns are furnishing a very superior grade of flooring. I think it would be to your advantage to take this matter up with the Oak Flooring Bureau of Detroit, Mich. There is nothing prettier under harmonizing conditions than an oak floor or border. Of course birch is used a great deal and with general satisfaction. It costs a little less than oak, but if I were considering the choice between oak and parquet, I think I would select for my borders a quarter-sawn oak flooring.



Building? Get This Free Book

It tells all about the proper method of finishing floors and interior woodwork, and improving furniture. A big help in beautifying the home—new or old.

Johnson's Wood Dye

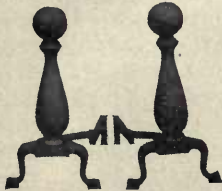
Comes in 17 harmonious and natural shades. Makes cheap, soft woods as artistic as hard woods.

If you are interested in building we will mail you free a Dollar Portfolio of Wood Panels, showing all popular woods finished with Johnson's Wood Finishes. Remember—the Panels and the 25c book Edition K. E. 12, are *Free and Postpaid*.

Take this ad to your dealer—or write

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"The Wood Finishing Authorities"



ASK FOR CATALOG "D"
Showing hundreds of designs.
Prices very low.

WE PREPAY FREIGHT ON ALL GOODS

Look at the Map! Omaha is the geographical center of the U. S., hence the logical place from which to conduct a nation-wide Hearth Furniture business.

It is better to buy our brand new, unsoiled goods of modern design and finish than try to select from the necessarily limited assortments to be found in local stores. Don't buy old-fashioned, shop-worn, unattractive hearth furniture.

SUNDERLAND BROS. CO.

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323 So. 17th St., Omaha, Neb.

Beautiful Andirons

Shipped to any railroad town in the United States

Freight Prepaid

Throat Dampers, Ash Traps
Basket Grates, Gas Logs
Spark Screens, Fenders
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Plaster's "Backbone"

The strength of any plastered wall, either interior or exterior, is only as enduring as the lath over which it is laid. Specify

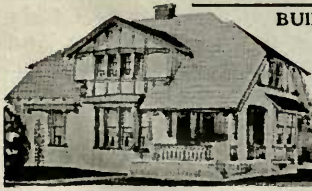
Kno-Burn Expanded Metal Lath

and be assured of permanence, smoothness and lasting satisfaction. Kno-Burn is on the mesh principle. The plaster settles into each opening like a knob, forming a grip that never loosens. Homebuilders send at once for our Free Book "Metal Lath for House Construction." It's valuable and will post you on many building questions. Write today.

North Western Expanded Metal Co.

965 Old Colony Bldg.,

Chicago, U. S. A.



BUILD YOUR HOME "THE NEW WAY"

10% Larger Bedrooms,
50% Larger Wardrobe
capacity and you can
save from \$100 to \$300 in
building a home.
Send 50c. for Plan
Book which shows 22
designs—ranging in
price from \$1200 to \$12000.
John Thomas Batts
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New Roofing Discovery

Works Wonders in Beautifying Home!



For Simplest and Grandest Homes

CCHARMING Moorish beauty and dignity of appearance of Metal Spanish Tile gives an air of distinction to the home graced by this wonderful new and practically indestructible roofing.

It has taken home-builders of America by storm, for it is the modernization of the wonderfully beautiful roofs of historic Spanish edifices.

The art of making this roofing, left behind by fleeing Moors driven out of Spain centuries ago, until 1910 could not be made practical for the modern home, despite its alluring beauties.

After years of experiment, we have hit the solution. That is why today we are able to offer American homes the amazing attractiveness of

Metal Spanish Tile Roofing

Its scores of vital, practical advantages cost no more than common roofing, yet mean tremendous economy—it needs no repairs and outlasts several ordinary roofs because of its practically indestructible metal construction.

It is absolutely wind, weather, storm, fire and lightning proof.

Easy to apply. No soldering, no special tools—any ordinary mechanic can apply it. Interlocking system by which tiles dovetail into each other makes the roof absolutely water tight and provides for expansion and contraction perfectly—summer and winter. It is guaranteed non-breakable.

HOME-BUILDERS—Simply send us today the dimensions of your building and we will tell you by return mail exact cost of all material. Our new book on beautifying the modern American home by use of Metal Spanish Tile is yours for the asking. A postal will bring it. Address

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*The World's Largest Makers of Metal
Ceilings, Metal Shingles, Steel
Roofing, Siding, etc.*

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Cincinnati, Ohio

SPLINTERS AND SHAVINGS

Architects' Duties and Fees.



In answer to the questions, "What should an architect do for his client? How large should the bill be?" the American Institute of Architects replies:

First—Conferences with clients; preparation of preliminary drawings; making of working drawings, that is, the drawings from which contractors submit bids and from which the building is erected; writing of the specifications of construction and finish; preparation of the large scale and full size detail drawings of construction, design and finish; and general direction and supervision of construction and completion.

Second—The minimum fee for such professional service as recommended by the institute, is a 6 per cent commission based upon the cost of the work complete.

It is the custom of architects on certain classes of residential work; on alterations or remodeling work; on monumental work; on furniture or other work of a similar nature; or upon operations conducted under many separate contracts, where much study and business attention are required, to charge a special additional fee or a higher commission.

For consultation services and for professional advice architects charge fees in proportion to the questions involved and the professional service given. Where heating, ventilating, mechanical, structural, electrical and sanitary problems require the service of a specialist it is customary for the owner to pay for such service. It is also customary for the owner to pay the necessary traveling expenses of the architect incurred in connection with the work.

If, after a definite preliminary scheme has been approved, changes in drawings and specifications or other documents are required by the owner, or if the architect be put to extra labor and expense by the delinquency or insolvency of a contractor it is customary for the owner to pay the architect for the additional ser-

vice he may be required to give and the additional expense he may have to incur in such changes and service.

Payments to the architect are considered due as his work progresses in the following order: On completion and acceptance of the preliminary drawings, one-fifth of the entire fee; on completion of specifications and general working drawings exclusive of details, two-fifths additional and the remainder from time to time as the work progresses in proportion to the amount of service rendered. Until the actual cost is determined charges are based upon the estimated cost of the work and payments are received on account of the entire fee.

In case of abandonment or suspension of work, the basis of settlement is as follows: For preliminary drawings a fee in accordance with the character and magnitude of the work or one-fifth of the entire fee; for preliminary studies, working drawings and specifications, exclusive of details, three-fifths of the entire fee.

Supervision of an architect, as distinguished from continuous personal superintendence which may be secured by the employment of a clerk-of-the-works or superintendent of construction, means such inspection by the architect or his deputy of work in studios and shops or a building or other work in process of erection, completion or alteration, as he finds necessary to ascertain whether it is being executed in general conformity with his drawings and specifications or directions.

The architect has authority to reject any part of the work which does not so conform and to order its removal and reconstruction. He has authority to act in emergencies that may arise in the course of construction, to order necessary changes, and to define the intent and meaning of the drawings and specifications. On operations where a clerk-of-the-works or superintendent of construction is required, the architect employs such assistance at the owner's expense.

➔➔➔ *Know Before You Buy* ➔➔➔

Don't Buy a Cat in a Bag!

When you decide on the roofing for a building, know what you are getting and what service you can be assured it will give you. Specify

UNDERFELT ROOFING

And get our Guarantee that it will give you absolute satisfaction or we will replace. It is your assurance against roofing trouble.

We know the Quality of Underfelt---we want You to.



McClellan Paper Company

"Diamond Mack Quality"

MINNEAPOLIS

--

MINNESOTA



If You expect to build Don't miss this offer

At the time you are planning that new home and naturally desire to study the ideas of several leading architects who specialize on residences of the moderate-cost type, you can get valuable suggestions from the

many beautiful designs, plans and details shown in eight issues of

Building Age

The National Building Publication with a Monthly Circulation of 25,000 among Builders, Architects, Owners

The information contained in *Building Age*, both in the editorial and advertising pages, is of the keenest interest to home-builders, and will enable you to introduce numerous features in your new home that add to the convenience, comfort and value, without material additional cost. *Building Age* also contains data that *should save you many dollars.*

OUR SPECIAL OFFER

The price of these eight numbers is \$1.60. We will mail a set to you for special price of \$1.00 if you order at once and mention Keith's Magazine. Don't delay as the supply is very limited.

THIS \$1.00 SHOULD SAVE YOU HUNDREDS

BUILDING AGE, 139 39th St. Building, New York City

For the enclosed \$1.00 send the eight numbers, according to special offer in Keith's Magazine.

Name _____

Address _____



New Booklets and Trade Notes



E are glad to call our readers' attention to a most attractive booklet on the "finish and care" of floors just issued by the A. S. Boyle Company, of Cincinnati, O. It contains expert advice on the finishing of new floors and re-finishing of worn ones, and explains how easy it is to have beautiful, waxed floors and how little work it takes to keep them always in good condition. The specifications contained in this booklet are the result of years of practical experience and an intimate knowledge of the methods employed by the best decorators not only in this, but in foreign countries as well. You can follow all the advice given with the assurance of first class results. This valuable booklet will be sent free upon request.

* * *

"Metal Casements" is an interesting brochure written by Sydney E. Castle, an architect of London, relating the history and development of metal casements. The compelling charm of his literary style and the beauty of the illustrations cannot fail to arouse your interest in the subject of windows. Those who already have metal casements will want a copy of the book because of the richer meaning this type of window will have for them after they have been introduced to its distinguished ancestry and they will also appreciate the invaluable information on the way to clean leaded glass and the proper curtain treatment which it contains. You can secure the book free of charge, from the International Casement Company, of Jamestown, N. Y.

* * *

The artistic possibilities of iron and bronze are very well set forth in a profusely illustrated pamphlet issued by the Flour City Ornamental Iron Works, of Minneapolis. In point of design and artistic effect the examples shown of doors, stairways, etc., recently executed for public buildings in a number of the large cities leave nothing to be desired. The lamp standards designed by this company are particularly noteworthy.

IXL ROCK MAPLE, BIRCH AND BEECH FLOORING



"The Finest Milled
Flooring in the World"

One important feature is the **wedge shaped tongue and groove** which enters easily, drives up snug and insures a **perfect face** at all times **without after smoothing**, an advantage that is not obtained by any other manufacture.

Our method of air-seasoning
and kiln drying has stood
the test for thirty years.

Address

Wisconsin Land & Lumber Co.
Hermansville, Mich.

The General Fireproofing Company, of Youngstown, O., is now publishing a magazine which aims to keep the public informed as to all progress made in methods of fireproofing and waterproofing. The architect and builder will both be interested in their announcement that henceforth, all metal lath made at this plant will be protected by a coat of "baked-on" paint. This will prevent the formation of the initial coat of rust due to exposure before being applied and will effectively protect the lath from atmospheric corrosion. The line of water-proofing compounds furnished by this company has been quite recently acquired from the H. C. Horn Company, of Long Island, after they had made a most careful investigation of all materials and methods on the market. Repeated tests have proved that the waterproofing paste will not oxidize when exposed to the air nor be destroyed by the action of chemicals usually found in ground water. Anyone planning to use fire-proof materials in the construction of a home, will do well to investigate their proposition.

* * *

The Roberts Sash & Door Co., of Chicago, sends us a folder showing a very fine line of cedar chests made from Tennessee Red Cedar. They are excellent in design and workmanship, and the best part of it is they are moderate in price. Write the firm for a detailed description and terms.

* * *

Builders and architects will be interested in examining a booklet descriptive of Howarth Sash Centers and issued by the Michigan Valve Co., of Detroit, Mich. It contains many illustrations showing the action, and methods of applying these centers and gives the following reasons for the superiority of this type of reversible center: They enable you to pivot any window, to make a perfectly weather-proof window, to completely reverse the window for cleaning purposes, are comparatively inexpensive and finished in the best possible manner.

* * *

A perfectly hung door is a joy forever, and the McCabe Hanger Manufacturing Company claim they have produced one in the Parlor Door Hanger No. 10. Their catalog shows a wide variety of hangers and locking devices, applicable to doors of every description. If interested, send a card requesting further information, to their New York office.

* * *

The question of sanitation is as vitally interesting in the home as in a great hospital. If tile walls and floors are good there, why not in the kitchens, baths, and terraces about our homes? The Grueby Impervious Flint Tiles and Mosaics are especially commendable, not only because of their beauty of design but because they have been compounded so as to make slipping impossible and the impact of the foot upon them has been so lessened that the tread is almost as noiseless as though rugs were used.

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