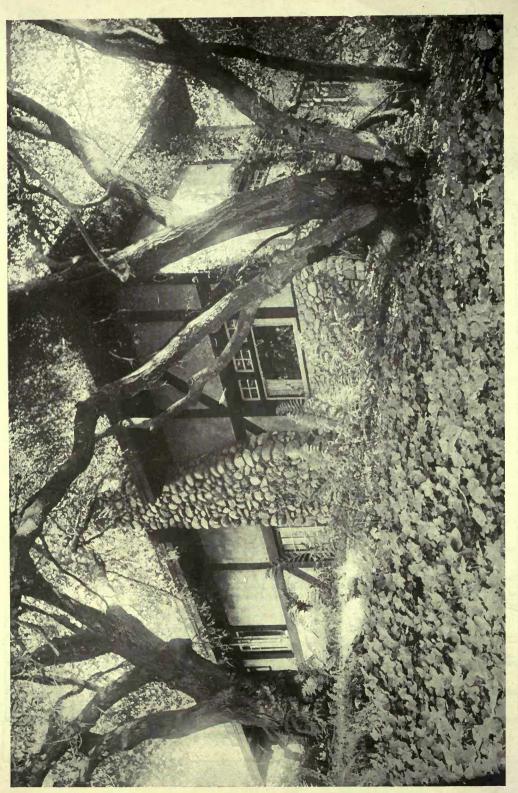


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The cobble-stone treatment is very attractive through the heavy growth.

68 06 8 KEITH'S MAGAZINE

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No. 1

Planning a Community of Houses

Anthony Woodruff

EVERAL years ago a community group of houses was planned and built in one of the suburbs of Boston which developed some

interesting points in group building.

It is an acknowledged principle that a larger production reduces the pro rata cost. The man who builds only one house in his lifetime, or in a long period of time is necessarily at a disadvantage over the investor who builds many houses, often many houses at the same time, and can take all of the advantages of buying materials in large quantities, and regularly employing a large force of labor.

Realizing that the individually built



The outside walls are of brick or hollow tile.

home, and the houses generally offered for sale, whether attractive or unattractive, usually have been built on the retail plan with a relatively high cost, the building company which planned this suburb, as they say, "not in the spirit of selfishness, nor in the spirit of charity, but in the spirit of good citizenship,

undertook to point the way to home ownership for persons with limited incomes."

"Many families long to own a home. Instinctively one realizes the satisfaction that inevitably accompanies such ownership. A sense of security and independand thrifty. It is largely because no plan has been devised and generally offered to the public whereby it is feasible for a family in moderate circumstances to buy a home and still be able to meet from the family purse the necessary daily living expenses."

"Woodbourne" gives one solution of

this problem. The company expects, and is satisfied with a moderate financial recompense for its undertaking, but one of its purposes is to demonstrate the possibility of supplying attractive, sanitary, moderately fire resisting houses, at a moderate cost.

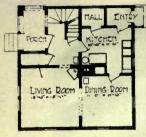


DECOND THE

The two-family houses have a central fire wall.

ence is thereby engendered, which is a constant source of joy. To have and to hold a home of one's own adds a zest to living and stimulates the ambition to save. The very care and up-keep of 'your own home' is a matter of pride and pleasure."

"That more people do not own homes is not because they are not industrious Thirty acres of land was acquired, reached by the electric service, within fifteen minutes of the business center of Boston. Competent architects were employed to lay out the community as a whole, both the houses and the landscape work. Kilham and Hopkins, well known architects of Boston, and authorities on housing and city planning were put in



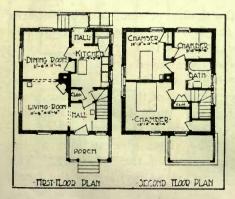
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charge of the work. Since - planning this Boston community these architects have had a large share in rebuilding the industrial portion of Salem, Massachusetts. following

the great fire, and have worked with the National Housing Association.

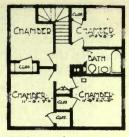
The Community Design shown in plan gives the layout and grouping of the houses. The "checkerboard plan" has been entirely disregarded, and the houses, single family, two family, or group houses are arranged on streets and terraces which conform to the lie of the ground. Small parks and playgrounds are placed among the group houses.

The outside walls of the houses are built of both brick and hollow tile construction. The brick is the so-called tapestry quality with pleasing soft color effects. The tile walls are plastered on the outside with





A single family house.



11

SECOND . FLOOD . PLAN.

cement stucco and given a dash coat texture.

All of the houses have light sea green slate roofs, flashed and made tight with copper throughout.

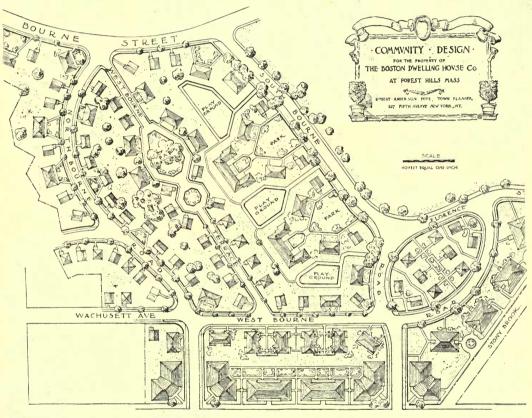
All of the gutters are hung, to prevent any chance of water getting in through the eaves of the houses. The brick houses are furred on the inside before plastering



An attractive Individual house.

while the tile constructed houses are plastered directly on the tile.

Each house is provided with a fire place in the living room. This is faced up with water-struck or tapestry brick with wide white cement joints. The living rooms are painted in white enamel. Each dining room has its china cupboard The plans of three of the single family houses are shown, and the very attractive two-family type of house. A brick fire wall divides the two parts, and each family is entirely isolated. The larger unit gives an advantage in the design. In addition to these are the picturesque blocks of six houses. The management found



HYDE PARK

AVENVE

with glass doors, also a dado with a plate rail above, all stained in attractive, rather dark tones. The hall in each type is provided with a coat closet. The floors throughout are of hard wood.

The kitchens have sheathing dados, with sink and double tubs arranged in a convenient way, with draining shelves, cupboards, et cetera. The bathrooms are fitted with dados, up-to-date plumbing fixtures, and a small medicine cabinet. that the double or semi-detached houses were the first ones to sell and frequently the first houses to rent.

One of the avowed objects of this community plan was to find a more satisfactory solution of the city housing problem than the "three decker" of New England or perhaps the "duplex" of the West. The views give an idea of the picturesqueness of the grouping. The back yards are as inviting as the front.

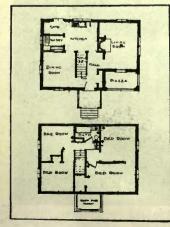


The back yards are as inviting as the front lawns.

Owing to the comprehensiveness of the undertaking the building company were able to build a house having the greatest possible value for the least possible money. Many of the houses were sold before they were completed. An individual owner could not build a single house for the price for which these, planned and constructed at one time, had cost.

The purchasing conditions accepted as an axiom of human nature that small payments at frequent intervals are possible and comparatively easy to make, while larger payments at longer intervals, though not larger in the aggregate, are impossible to make.

Such restrictions are placed on each lot when sold that the owners may be assured of the permanent character of the general development and of the use to which his lot and the surrounding land can be put, thus insuring the community against undue depreciation.





A larger house.

Making An Old House Comfortable

E. I. Farrington



T is of no use to try," declared my wife, "you can't make the old house livable, to say nothing of making it comfortable."

And if I had been willing to rest the matter there, we never should have bought the little, old-fashioned farm house which has become a delightful and very satisfactory home. Really, there were no doubts about the possibilities of the place, even though my wife could not see them at first. It was in a section of the country that we liked, too, and finally the purchase was made.

As a matter of fact, the house was in deplorable shape. Much paint, paper and patience (and to complete the alliteration, I might add pluck), were required to make it fit for living. There was no end of scrubbing, even after we had moved in, but apart from these preliminary labors, the first permanent improvements must be, as all agreed, the making of a bath room. But where was this room to go? Every countenance was blank when the question was put. Yet the final solution of the problem was not difficult at all. At the head of the stairs was a door leading to a store room over the kitchen. The bath room was partioned off at one end of this store room, the door mentioned leading into it. Wall board was used for this partition and with full satisfaction. It continues to look well and to wear well and was not expensive to put on. There seems to be no difficulty in using this



At the end of a year.

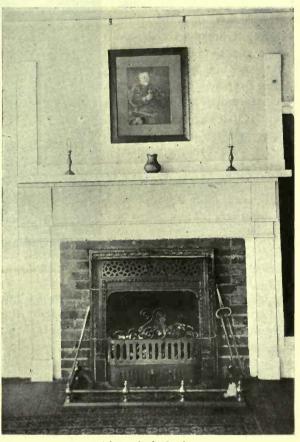
wall board if the wood strips covering the joints are not put on for a week after the board has been applied to the studding, thus giving it an opportunity to expand. When this has not been done, I have known the board to buckle. A neighbor of mine has transformed the appearance of his kitchen, the walls of which were in

very bad shape. The board was put on right over the broken plaster walls, paneled off and tinted, producing a charming effect, while making a much more sanitary kitchen than before. Coming back again to the little cottage, the problem of letting daylight into the new bath room was solved by putting a metal skylight into the roof. The cost of this skylight was about ten dollars and it does not leak. Modern plumbing was installed for something under \$200, only simple fixtures being used. The hot water boiler, connected with the kitchen range almost directly underneath, was placed in a corner of the bath room behind the door, and we are very glad that we located it there rather than in the kitchen itself.

As winter was drawing on rapidly when we moved into the house (which was as soon as possible after the necessary renovation had been completed) the heating question soon came up to be met. In the days when the house was built it had been heated entirely by fireplaces, with

four of them in the different rooms, including a huge affair in the kitchen with a great Dutch oven attached. The oven was still in use, as a catch-all. It is a curious great cavern, this old oven, and in the days before cook stoves came into being must have held enough bread and cake to last a week. Surely the builders never dreamed of the time when it would serve a flower "crank" as a dark hole in which to start his Christmas bulbs. After all, though, it seems rather fitting to grow Dutch bulbs in a Dutch oven. Hyacinths and narcissi start beautifully there.

The fireplaces had been closed as a matter of course, when stoves came into use. Doubtless the people who bricked them up supposed they would never be thought of again, save as curiosities of a



A heater in the fireplace.

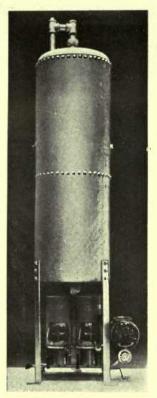
bygone age. Yet our first task was to dig them all out again, except the one in the kitchen. Meantime I had consulted the local plumber and furnace man about installing a heating plant. He looked the house over, shook his head and declared that it could not be done without closing up at least one fire-place permanently, and that even then it would be a difficult job. The obstacle was a massive stone wall dividing the cellar, plus a stone foun-

dation as big as a small room on which the chimney rested. There seemed to be no place to make a connection for the furnace pipe, and other difficulties presented themselves. Finally by what seemed a rather unwise decision. I determined to heat the house with a pair of ventilating grates for burning coal, one being placed in the living room and one in the dining room fireplace. The latter was provided with a pipe leading to the second floor. These heaters are excellent devices for supplementing some other system. One of them will heat a single room nicely and offer some heat for another. They gave a very cheerful appearance to the room and many people complimented us on our open fires. For the practical heat-

ing of a year-round house though, in a cold climate when no other system is used they are not satisfactory, unless possibly in a small bungalow. After two years we out in a furnace at a cost of under \$200, and now the whole house is comfortable at all times.

Still we are glad to have the grates. We know that we can never be frozen out, for when the mercury drops to ten below zero even a low fire in them makes forcing the furnace unnecessary.

For heating a small house like ours, a good furnace can hardly be improved upon. Being set near the middle of the cellar, all the pipes are short and have considerable rise. The direction of the wind makes but little difference and only a small amount of attention is required in order to keep the house warm. Fortunately, there was sufficient room in the cellar with a little excavating to admit a



Kerosene water heater.

regulation size furnace, but I should not have been dismayed if there had not been. for in delving into the heating problem. I found that a low-down furnace had been invented to meet just such contingencies. This kind of furnace can be installed in a cellar where there is barely height enough to stand erect. It is very ingenious and and seems to be satisfactory. And this leads me to admit that the manner in which we got around the difficulties originally pointed out by the local furnace man was not wholly without ingenuity. Cutting into the chimney from below was found to be wholly impossible, as there was no chimney there, only a great mass of rocks, which extended a foot beyond the chimney's limit, so an open-

ing was made through the floor behind the kitchen range properly tinned and the furnace pipe brought up through it, being let into the bricked-up fireplace. The pipe shows but little and is not in the way, and the plan has worked out splendidly. The great chimney itself is a curiosity to builders, for it is made in the form of an arch, one leg being on each side of the staircase, which literally goes up through the chimney the two parts of which, each containing two flues, come together just under the roof.

What with a furnace and ventilating grates, we have no lack of fresh air at all seasons, for which reason it seemed wise to stop some of the window leaks. In an old house with windows that rattle in every gale, these leaks are likely to be many and serious. They were ended by the use of metal strips, which keep out the wind, make the windows run more easily and put a stop to the rattle. These strips are certainly very desirable and should be put on by a workman who knows his business.

As the house was built long before window weights had been thought of the windows had to be raised by main strength and held up by sticks, most of the buttons formerly used having been broken. Naturally the wife had numerous forceful, not to say caustic comments to make on these windows, especially when on cleaning day one of them would come down with a crash, threatening to shiver every light in it and perhaps missing the maid's head by scarce an inch. I experimented in the bedrooms with spring holders, which were set into the window sashes and held them fast at any point. They were useful, but not satisfactory enough to install all over the house

Then I tried spring sash balances which proved to be just what was needed. These balances answer every purpose of cord and weight, and they can be fitted to any window. The windows in old-fashioned houses cannot be equipped with weights, for the reason that there is no room for them in the window casing. The spring balance is simply set into the frame near the top, while the metal tape is fastened to the sash in much the same manner as a cord. The spring holds the sash at any point and is a perfect counterbalance.

Less than \$50 paid for the installation of electric lights and the simple but attractive fixtures which were selected. The cost was low because the workmen were able to carry the wires in long open spaces under the eaves and very little cutting was required. The feed wires were run to the barn and the meter located there, for which reason no one in the house is disturbed when the company's representatives comes to make the monthly reading.

As there is no gas in our street, one city luxury had to be given up. Truth to tell though, it is not missed at all. A blue flame oil stove is used for summer cooking and is quite satisfactory. For a time it seemed as though there would be a lack of hot water in summer, and this seemed rather serious, for after a strenuous hour or two hoeing weeds in the garden or perhaps a lively tennis match on a Saturday afternoon, a warm bath must be considered a necessity. This difficulty vanished, however, like many others. It was discovered that a kerosene water heater could be attached to the hoiler and provide an abundance of hot water at any time, at a small cost. Several different types of heaters are on the market, and they solve the problem of summer hot water in the country. It is rather surprising that they are not to be found in more farm houses, for they do much to lighten the burden of the housewife, giving her plenty of hot water at sink or tub without the necessity of starting up a hot fire.

So much for the improvements which may be classed as necessities. Different families had occupied the house for fifty years without realizing that these things were well nigh indispensable, but standards of living fortunately, are changing even in the country. Of course, we did not stop when the changes mentioned had been completed. I suppose we shall never stop making what we consider improvements. We laid a hardwood floor in the front hall, for example, using thin flooring in matched strips that could be laid directly on the old floor without making such increase in height as would be noticed by the casual visitor or interfere with the opening of the door. We added a porch on the side, screened it in and connected it with the house by French door, which was fitted with metal weather strips like the windows, thus making it unnecessary to put on a storm door in winter. When the French gray paper

which was hung in the living room promptly faded out, we were equally prompt in covering it with gray alabastine which held its color until we were ready for a change. All we could do with some of the ceilings was to paper them, which rather interested some of the neighbors although in other parts of the country papering the ceiling is the customary practice, even when the ceilings are new.

A little room back of the living room was evidently designed for sleeping purposes, but it was ridiculously attenuated. When made part of the living room by means of a wide opening, however, it made a splendid music corner. Heavy portiers were hung in the opening. They were suspended from the new curtain moulding that is tacked to the woodwork and becomes a part of the house for all time, being painted white like the rest of the standing finish. Wooden carriers with small rings attached slide in a hidden groove, and if the portier pins are properly placed the top will fit so snugly that little if any air will come over it. These portiere hangers are very cheap and we much prefer them to the old style brass or wooden pole.

The kitchen has a painted wall with a Dutch picture frieze around the top to

relieve the monotony of a solid color. The walls were painted when we took the house and the paint also covered a splendid wainscot made of boards seldom if ever matched for width in these present days. We had lived in the house a year before I accidentally discovered the presence of this wainscot, but some day, unless my plans go awry, its beauty will be seen, for I hope to turn the present kitchen into a dining room and to make a new and decidedly smaller kitchen. The amplitude of the kitchens in all these old houses is discouraging to the modern housekeeper, who objects to spending all her time in making the wide circle from sink to pantry and from pantry to a faraway range. The sink in the new kitchen will be placed at just the height indicated by the mistress of the house, regardless of tradition. There is no reason why mistress or maid should work at a sink which is altogether too low just because it is the "customary height."

Then there are plans for a sleeping porch jutting out from the roof on the side overlooking the water, and plans but after all, this article purports to tell how the old house was made comfortable, and the new plans are for luxuries rather than mere comforts.

The New Dishwashing Edith M. Jones



SHORT story in one of the recent magazines interested me and seems quite apropos to the subject

I have in mind today. It was written in a facetious style and most people would perhaps have called it a very funny story, but someway there was a pathos about it to me because I have heard so many people complain about the same thing on which the story hinges.

It seems that on a certain private yacht

carrying quite a large party of people, a most exciting thing happened one day. The assistant in the kitchen whose chief duty it was to wash dishes, attempted to commit suicide. He was rescued, however, and when asked why he had been so foolish explained with tears in his voice that he had been counting up the number of dishes he had already washed in his life and added to the number what he would probably have to wash before he

died a natural death and the total was so appalling that he decided to • end the matter then and there. He said he didn't mind work but the monnotony of the endless line of dishes was too much to contemplate.

Of course this is a silly story and he a most foolish person, but it is surprising how many people look upon dishwashing as the essence of drudgery. I think probably dishwashing on a private yacht might be a bit trying and no doubt

the old-fashioned "terrible black pans" from coal stove cooking were most unpleasant,—but I maintain that nowadays, with the proper equipment which is possible to almost everyone, dishwashing can be made an easy if not an agreeable task.

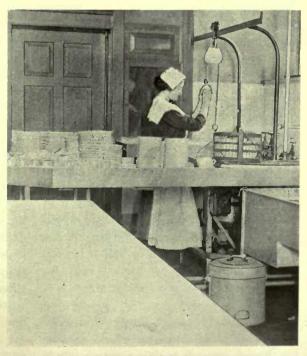
It is wonderful to go into the kitchens of the great hotels of the east and watch how they take care of the great mass of dishes, silver and glass. They wash thousands of dishes an hour and overcome with machinery what would otherwise be an almost impossible task. There are several kinds of these machines on the market today but they all aim at the same end, that of handling the maximum of dishes with the min_ imum waste of time, energy and material. And this is the secret which we housewives must learn-we must demand for our industrial centers just what every other industrial plant demands, namely, conservation and efficiency. For instance, in this matter of dishwashing it has always seemed to me the conditions made the work unnecessarily hard. For instance; until very recently all sinks



Hand power dishwasher.

were set at 30 to 34 inches from the floor. This for the average woman is too low and causes a most unpleasant backache because of the peculiar stooping position. This is one of the things which has been overcome in all hotel dishwashing machines. This picture is interesting because it illustrates the upright position and some way there seems to be very little confusion or weariness about this trim little maid operating the machine. The

picture shows a part of the kitchen in a high school lunch room where hundreds of dishes are washed and the work is done by the students who wish to earn a little money and find dishwashing with a machine far from an unpleasant task.



Kitchen in a high school lunch room.

There has been such a demand for household machines that there are several different types on the market today. The accompanying cut shows the most efficient type operated by electricity so far brought out, as it cares for the dishes of an ordinary family in 3 or 4 minutes. Of course the dishes are not alone cleaned but sterilized, polished and automatically dried without the water or dishes being

touched by the servants' hands except to place them in the racks. The rack is slid into the machine over a rack of clean hot soapsuds which is forced over the dishes from every direction through revolving nozzles. cleansing all parts of every dish. Clean, boiling rinse water is then turned on until the dishes are thoroughly sterilized. The hot dishes quickly dry

when the racks are slid out of the machine. And by the way, did you ever think how much more sanitary the fresh air drying process is unless you have clean towels for every meal?

Then the simpler, less expensive machine which may be run by hand power is proving very satisfactory in homes where it is in constant use. These types are well worth any housewife's attention. But before closing this article, I must tell you about the dishwashing arrangement of the farm kitchen which I spoke of in last month's magazine. Possibly you will recall I spoke of the equipment of the dairy house being made to help with the kitchen dishwashing-and it was most interesting to me to see how it was done. The housewife was not very strong and help was difficult to get. In the first place a supply of pretty, inexpensive dishes was purchased, enough to last for two whole

days. Then one of the farm men who understood working in metal, made two large metal receptacles with strong handles and perforated bottoms. The used dishes after each meal were carefully scraped by the housekeeper and everything (except the silver and glass which she washed herself after each meal) were stacked in these metal receptacles. When the men had the steam on to sterilize the



Electric dishwashing machine.

milk cans in the dairy house they put the kitchen dishes through the same process. The steam cleaned and sterilized them and a few moments in the air dried them and they were brought back to the house as shining and clean as one could wish. The arrangement actually saved two hours a day in the busy housekeeper's life, and gave her time for a little extra rest, a little reading or a

visit perhaps which broke the day's monotony and which otherwise might have been impossible.

This farm arrangement was most interesting to me because it was thought out by a successful New York business man who had learned the value of efficiency methods in his offices.

Perhaps we may safely say that all the old-fashioned methods of farming and the old-time methods of housekeeping each show the need of study along efficient business lines and in no way can money be better invested than in labor saving devices wherever they are possible. If it is true that dishwashing is the most tiresome, endless part of housekeeping, then the equipment for carrying on the work must be given the most careful attention and the future must hold in store for us this problem eventually improved and solved for all.

How to Recognize Fruit Buds

M. Roberts Conover



F one has not learned to know them it is a puzzling thing to judge of the fruit prospects of one's trees in the dormant sea-

son. And this is one of the many secrets that the fruit grower must learn through observation. Suggestions help him to know quickly, but to know surely he ought to get right after buds from the time they are perfected in late summer, through fall and winter, during the swell-



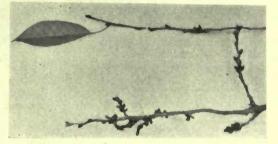
Cherry, with fruit buds thickly clustered at the termination of twigs.

ing of the buds in early spring and the blossom and first development.

The purpose of this little article then is not to tell one all there is to know about fruit buds, but to help one to look for himself until he learns to recognize the buds which will develop fruit and those which will develop foliage and new growth only.

Fruit buds have distinct characteristics as soon as they are perfected in late summer, but it is their position, relative size and shape that reveal to us their destined purpose.

Buds do not appear precisely the same

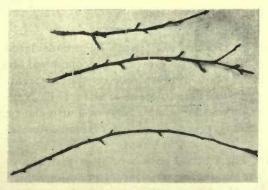


May cherry-leaf buds above and fruit buds below.

at different periods of the dormant season. They vary slightly in their compactness and the appearance of their outer covering. In the autumn they are often covered with down. Later their shiny outer scale is noticeable.

The fruit buds are more easily distinguished from the leaf buds in autumn while the sap is yet in them and in the spring when they begin to swell because their individual characteristics of shape and size are most apparent to the naked eye.

Compared with a bud that will develop only leaves, fruit buds are thicker,—more roomy, containing as they do the plan of fruit and leaves. Those on the apple, pear, peach and plum trees are more rounded at the tip than the leaf buds.



Apple-fruit buds above and leaf buds below.

Those on the cherry tree are as pointed as the leaf buds, but much thicker.

Of course the size of fruit buds vary. Some may result in but two blossoms and others in more, resulting in one apple or pear or three or four cherries, or in two or three apples or pears, or six or eight cherries.

The fruit buds of apples are found on



The spring bloom on this young Richmond cherry tree shows the bulk of the fruit promise located latterally more than terminally—a characteristic of a very young tree.



Fruit bulbs of the apple in the fall.

lateral and terminal spurs varying in length from three-quarters of an inch to two inches long. The buds at one side of the extremity of spurs which have just borne fruit are leaf buds.

Moreover, fruit buds are on spurs growing from branches which are dependent upon mature parts of the tree.

Upon peach trees fruit buds are several in number, borne along six or eight-inch lateral and terminal shoots.

Plum trees develop some fruit buds upon their branches as well as upon lateral and terminal shoots.

Cherries develop their fruit buds upon short spurs directly upon the branches and in greater numbers near the extremities of the branches and laterals.

The fruit buds of the quince are at the termination of the branches.

The Square House

THE house that is square or nearly square has always been considered one of the most economical to build, but it must receive special treatment in order to make it attractive. Nevertheless the square type of house can be made very good looking, with an interesting window treatment.

The stucco house here illustrated shows the simple yet satisfactory planning which may be given to this type of a house. The entrance from the vestibule is into a central hall with columned openings on either side, to the dining room on one side and to the living room on the other.

The living room fills one end of the house, with the windows grouped in an attractive way. The long inside wall gives space for furniture if desired.

Opening with French doors, at the end of the living room is the very roomy sun porch. The alcove which is formed by its



A square house with interesting window treatment.

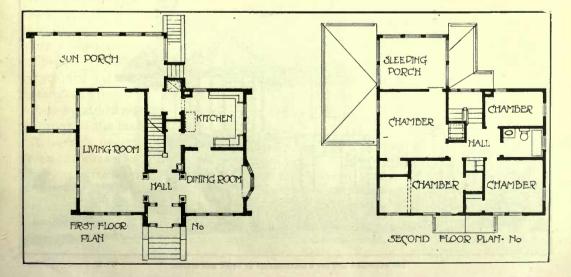
Lindstrom & Almars, Architects.

extending past the two windows of the living room makes a cozy and protected corner, which would make even a mending basket attractive, with a sewing chair and table beside it. For a couch and a late magazine or book, what could be better?

The stair arrangement is especially noteworthy, as the door from the hall se-

cludes the stairway from the entrance without making it any the less accessible while it is very convenient to the kitchen. The maid can answer the calls at the front door without passing through any of the other rooms.

The kitchen is very attractive as well as convenient. Cupboards are built on either side of the room, extending to the win-



dows, and with a broad shelf under the windows, giving excellent working space. The refrigerator is in the rear entrance and may be iced from the outside. The basement stairs are convenient to this entrance.

There is a full basement under the house which is very dry and light. The house is set so high above grade as to make all of the basement windows very good. The basement accommodates the heating plant and fuel rooms. There is a good laundry and storage space.

On the second floor are four chambers and a good sleeping porch over the main part of the sun room. Each chamber has good closet space, the arrangement being rather unusual in that respect.

The group of windows on the landing makes the hall very light. The wall space of the hall itself is only large enough to accommodate the doors to the various rooms opening from it, yet without being crowded.

The whole plan is very economical of space, and does not require unnecessary steps in its care.

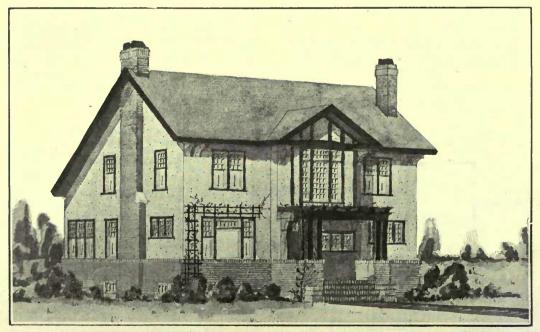
The exterior of the house is of stucco with white wood trimmings. The roof is of tile.

A Home with An Unusual Floor Plan

THE front entrance to this home is through a covered portico, the rafters of which are covered as shown in the picture, by overhanging vines, under the beams, however, is a tin deck or

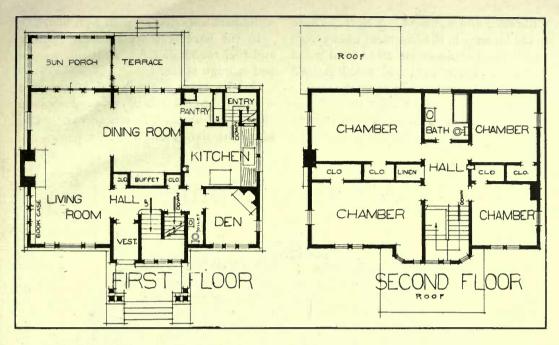
roof with conductors for the proper draining of same. The floor of this is of brick, as well as the steps.

Passing through the vestibule one enters a small hall with the main stairway



The exterior walls are a combination of brick and stucco.

W. W. Purdy, Architect.



turning back to the front of the house, the large group of windows over the entrance letting a flood of light into the landing. Stairs to the amusement room in the basement lead down under the main stairs. Two small coat closets open off this hall, which also connects very conveniently with the kitchen.

The long living room takes the whole side of the main part of the house, with the fireplace in the middle of the long wall and book cases on one side of that. French doors open from the end of the living room on a glazed sun porch, while French doors again lead onto the brick terrace.

The dining room also opens onto this terrace and faces the garden, giving the room more privacy and leaving it less disturbed by street noises than when it is at the front of the house.

A butler's pantry places two doors between the kitchen and dining room. This pantry is particularly well located, as in it is placed the refrigerator, iced from the rear entry, as well as the usual cupboards. It is not easy to find a location for the ice box where it is equally convenient to both the kitchen and the dining room, and it is unfortunate when one must choose between them as to location. Think of all the things that must be served directly from the ice and returned there in the summer time, and in fact most of the year. Yet, one must be satisfied often, if the refrigerator is only convenient to the kitchen and the cooking. The kitchen entrance is at the grade and the basement stairs continue from it. In the kitchen the sink is placed under high windows and has double drain boards.

In front of the kitchen and opening directly from the front hall is a small den. It has a corner fireplace, and while small is still very convenient. The toilet and lavatory is placed here, and is a most convenient adjunct to have on the main floor of the house.

On the second floor are four chambers, large, light and airy, each with cross ventilation, since each is a corner room. The closets are ample and well arranged. A square hall at the head of the stairs gives access to all of the rooms without any waste space, and is well lighted from the group of windows on the landing. The bath room is conveniently placed and has

a tile floor and wainscot. A clothes chute to the laundry in the basement opens from this hall. The floors are all of hard wood and the finish either hard wood stained and waxed, or painted in enamel.

The large amusement room in the basement has a boulder fireplace and cement floors finished with a cement paint. The walls here are covered with wall board.

In the basement are also the furnace and fuel rooms, laundry and fruit rooms, and storage space.

On the exterior the house is veneered with brick to the sills of the windows, and above that finished in stucco over metal lath, with dark stained timber work.



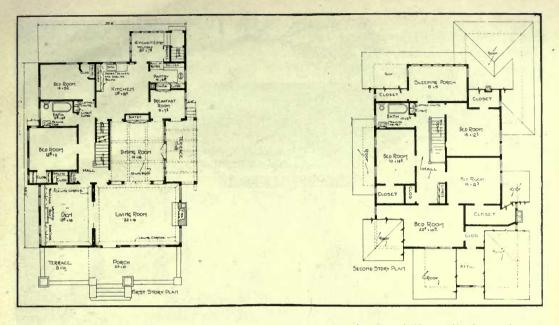
Planned from the standpoint of artistic home-like effect.

E. W. Stillwell, Architect.

THERE are advantages in planning from the standpoint of artistic, homelike effect, a house larger on the ground and smaller in the second floor than to plan a small house with both floors equal in size.

This is a fine example of what may be done in planning the part two-story house. The main ridge line—running crosswise of the plan—is higher than the front gable although the low position of the camera or perspective makes it appear the reverse. The main roof is gabled from front to rear spanning the entire plan, and this gives full-height to the bedrooms in the center. The front bedroom is low at the sides; the sleeping porch being roofed separately, is full 8 feet in height. The exterior walls are a pleasing combination of siding and cement plaster. This, however, could be all plaster, all siding, or brick and plaster without materially changing the appearance of the building. All roofs are shingled (according to plans), but most any other material —tile, slate, etc.—could be used equally well.

In plan the house has been very carefully studied to make it a "livable" home, large enough in size for the family to live in comfort, even though the family is not small. So much attention has been given to the small house, the home in which the family can be closely fitted if they are not restless, but without an inch of space to spare, that a roomy house is a pleasing



thing to see. This house has been carefully planned to give the "efficiency" of the compact house. It has a ready accessibility between the parts. The stairway, even in this larger house, is so located that it can be easily reached from any part of the house, yet without intruding on the living spaces. One side of the den is lined with bookcases under the windows. The closets are roomy and convenient. An open fire in the living room cheers the den as well. The pergola covered terrace opening from the dining room is most attractive. That convenient thing, a breakfast room, is especially well planned, connecting with the terrace, the dining room, the kitchen and the china cupboard with doors on both the breakfast room and pantry side, giving a very clever access to the pantry. It is planned to give all the comforts and conveniences, all the labor saving devices which help to make the work easy and pleasant.

On the main floor are two bedrooms and a bath, making a very complete suite of apartments for the owner. On the second floor are four chambers, a sleeping porch, a bath, all with good closets.

White Plastered Colonial Bungalow

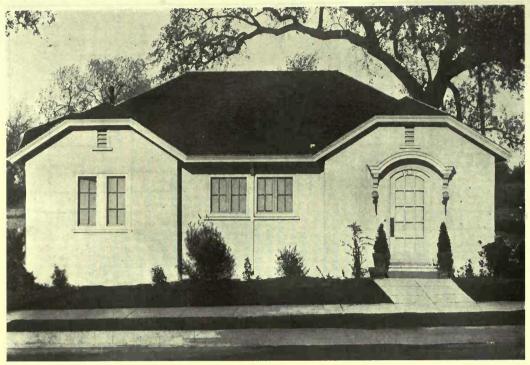
THIS white plastered colonial type of California bungalow has atracted much favorable comment. Simple lines and unusual detail mark it from other types. The entrance is made attractive by a well designed semi-circular entablature over the entrance door, the glass of which is cut up in a very interesting manner.

The exterior walls are of white cement

plaster, applied on metal lath, which is put on over the sheathing, building paper and furring. The shingle roof is of a cool green shade and lends a pleasing contrast to the delightful picture.

Planned for convenience and labor saving, this model little bungalow provides two bedrooms, a bath room which is readily accessible and private.

The living room containing a fire-place

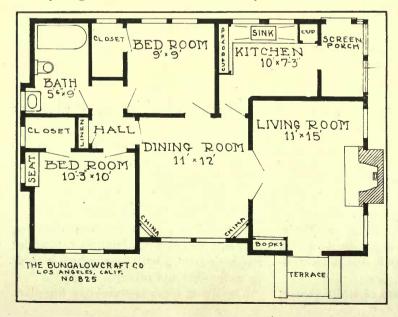


Simple lines and unusual detail distinguish it from other types.

Bungalowcraft Co., Architects

and built-in bookcase is connected to the dining room by means of wide French doors, cut into small lights.

The kitchen is sufficiently but not necessarily large. It contains the necessary



modern built-in features, such as cupboards, drawers, bins, bread board, plastered hood over stove, sink and drain boards.

The woodwork in the living and dining

rooms and in fact all through the house, is finished in an ivory white dull finish and the doors are stained mahogany, which gives a very rich and pleasing effect.

This bungalow is unusual in plan as well as in exterior treatment. It is small and very compact and cleverly arranged. It would make a very livable little home while it would not be expensive to build. The central location of the dining room would make it necessary to use it more or less as a means of communication between the other parts of the house.

The dining room is very attractive with its corner china cupboards.

The small hall which connects the bedrooms and bath may be entirely shut off from the rest of the house, secluding the sleeping portion of the house very conveniently. While the bedrooms are small, the bedroom closets are unusually roomy. They might even adapt themselves to the use of some of the so-called disappearing beds, which would leave the space in the room for use in the day time.

The New House

J ANUARY is a good time to get started in a very definite way for the final decision as to the plans for the new home which is to be built in the spring. are so complete that he will know exactly what you want.

The contractor is really a very good sort of a man, if you have selected a good



Shingles and stucco for the small house.

Work should be begun as soon as the spring opens so that excavations can be made. But if the plans are definitely decided upon in January it will give good time to figure over the work with the contractor. Be sure that your specifications contractor—and expect to pay him for his work. But if you try to "beat" and get something for which you do not pay, be very sure that he will get the best of you in some other way.

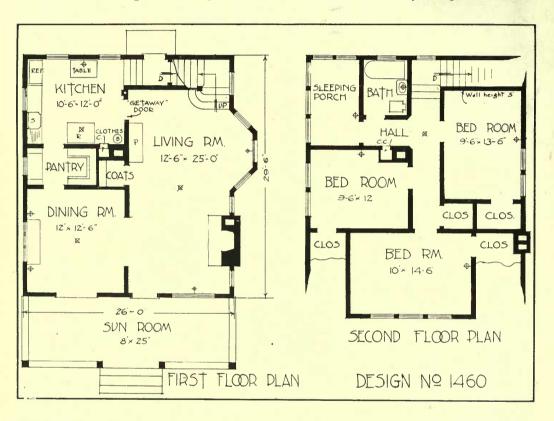
This group comprising four different

types of homes, will give points of interest for the moderate sized house, the bungalow, and the very tiny house.

The first photograph of the group is a shingle and stucco bungalow, attractive, and homelike. The white trim of the windows and the diamond panes are attractive. The shingles in the gables are bring sunlight into this end of the room much of the day, no difference which way the house faces.

The main stairs lead up from this end of the room, and under them are the basement stairs from the kitchen with a grade entrance for the kitchen.

The kitchen is very compact in its ar-



laid in alternating widths of exposure, giving a pleasing texture to the gable ends above the stucco.

In plan the entrance from the screened porch,—which may be glazed for a sun room—is into a long living room, with the dining room beside it, which also opens with French doors onto the porch or sun room. Opposite each other in the dining room is a buffet under a group of windows, and in the living room a wide fire-place with windows on either side. Beyond the fire-place the living room is enlarged by a bay of windows which will rangement. The refrigerator is against an outside wall and may be arranged so that it can be iced from the outside. Beside it is a work table and a sink. There is a clothes chute beside the chimney.

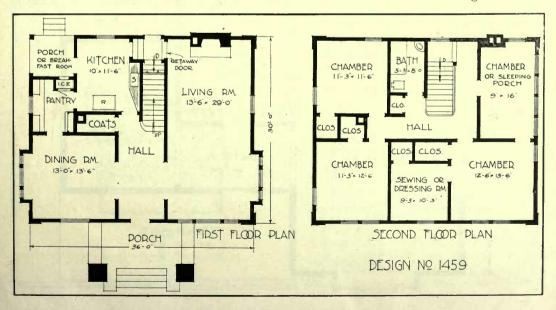
Between the kitchen and dining room is a butler's pantry, with cupboards around three sides of one end and in the other is a work table with bins and drawers under. A window gives good light, and on either side of the window are shelves or small cupboards for spices and the requirements for the baking.

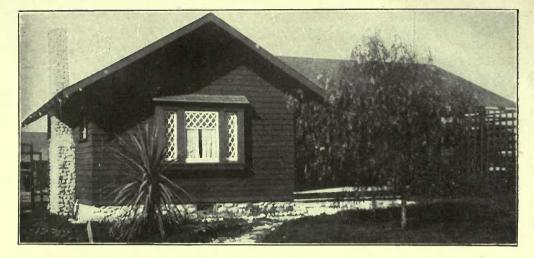
On the second floor are three bed rooms



White stucco for the exterior.

and a bath and a small sleeping porch. This sleeping porch connects with the main hall so is available as an extra sleeping room. The rooms are well supplied with closets. The clothes chute opens from the rear hall. The second design is a full two-story white stucco house. The two designs are interesting in being shown together as the first floor plans are quite alike. Each has the long living room occupying one side of the house. In the larger house a

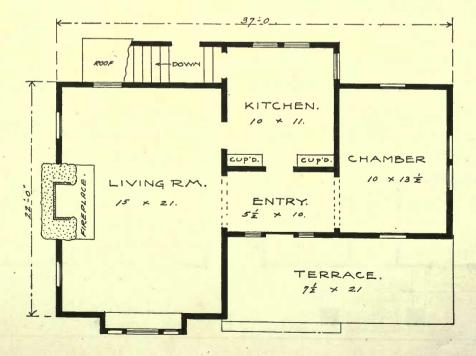




A summer cottage.

central hall separates this room from the dining room and kitchen. Each has a good coat closet, and each has a butler's pantry between the dining room and kitchen. The stucco house has a very well placed ice box, which may be iced from the outside, but what is especially important is its convenience both to the kitchen and to the dining room service. This is a point often overlooked. On the second floor are three chambers and a sleeping porch and beside these a sewing or dressing room. The closets are ample, with a full closet beside the bath room for the linen.

The third design is for a summer cottage and is not planned to be used throughout the year, though this would be very practicable with a foundation and a furnace installed.



With the intentions of summer use the rooms are of good size and are not compactly grouped. It is a somewhat plain shingled bungalow which is strictly a one-story design. It is not usually necessary to make provision in these three and four-room cottages for a house maid, therefore in most cases but one chamber is arranged for. Considerable ground is covered by this design which is 37 feet wide by 22 feet deep, not including projection of kitchen. Height of story, 10 feet. A cellar entrance is provided for a vegetable cellar under the living room. There is no heating plant but the cellar is large enough to contain one. If a scuttle were provided there would be a little storage room available in the attic space. The terrace, 71/2 feet wide by 21 feet long, is rather hidden from view in the illustration by a young silver leaf maple, but this terrace makes a fine retreat for the hot summer afternoons.

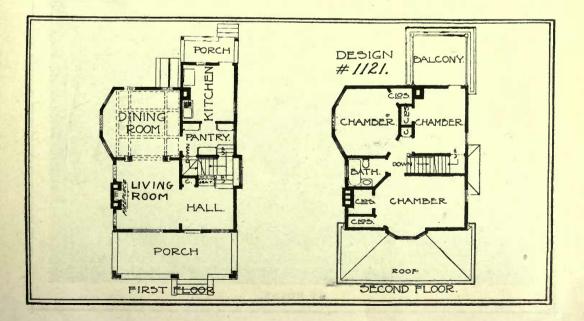
The last design is very attractive under its peaked gable. This is a substantial house and perhaps not quite as cheap to build, as some other designs, but the



The gable is attractive,

character and style it possesses, in shingles and cement, are well worth the slight additional cost.

The finish is also in keeping with that of a much more pretentious house in that what there is of it is good. The diningroom has a beamed ceiling, Georgia pine floors are laid throughout the first and



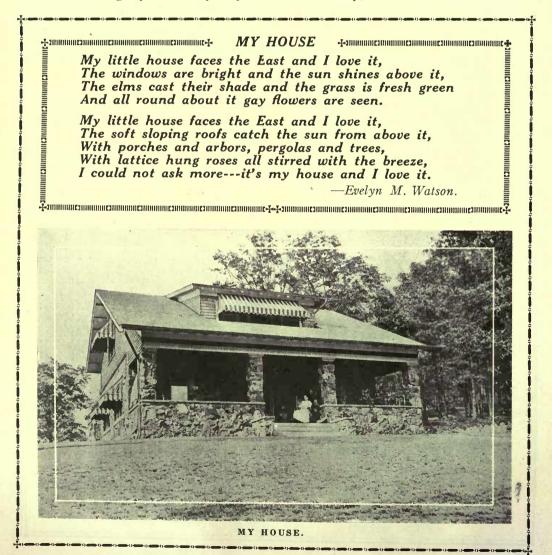
second stories, the finish of the principal rooms of the first story is of white oak, second story, birch.

The hall is very pretty with its halfscreened staircase, built-in seat and tiny coat closet. The fire place in the livingroom is a unique, though simple little affair in brick. The columned archway separating the living-room from the dining-room, making practically one splendid living-room, is a very pretty feature of the interior.

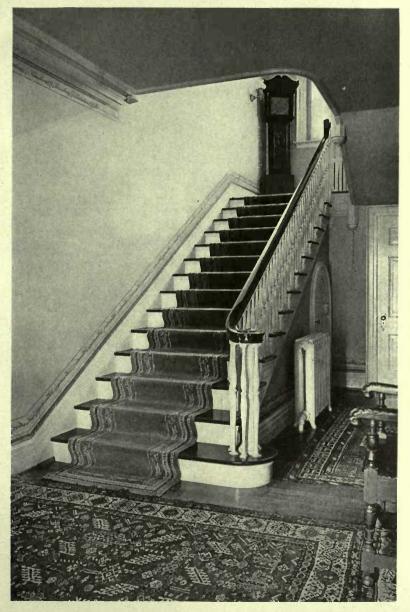
The second story rooms, in one or two instances are slightly cut off by slope of rafters, but this slope is steep and does not interfere with the practical uses of the rooms; in fact, gives it rather a unique and pretty effect.

There is good attic space reached by stairway from rear bedroom up over main stairway. The basement is also finished up with cement floor, laundry, hot air furnace, outside cellar entrance, etc., making a most complete home.

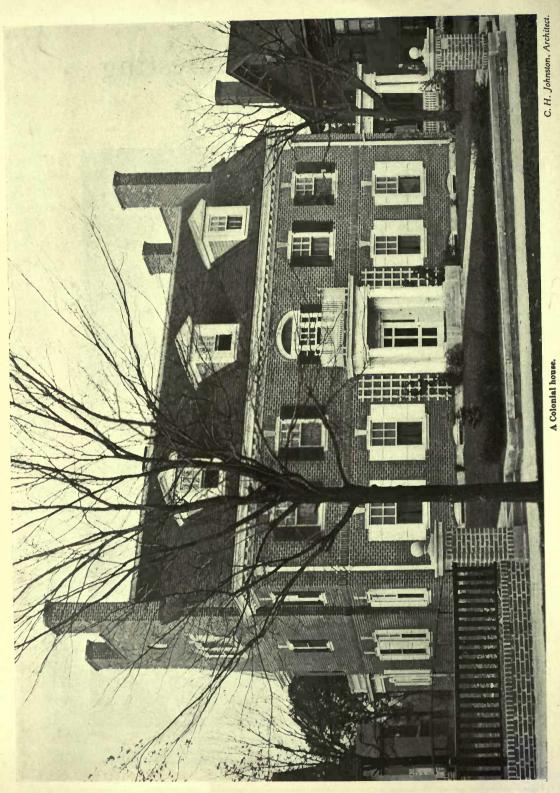
Its width is 24 ft.; depth, 33 ft., not including porches or projections; height of basement, 7 ft., first story, 9 ft. 5 in.; second story, 8 ft. 3 in.



Portfolio of Interesting Homes

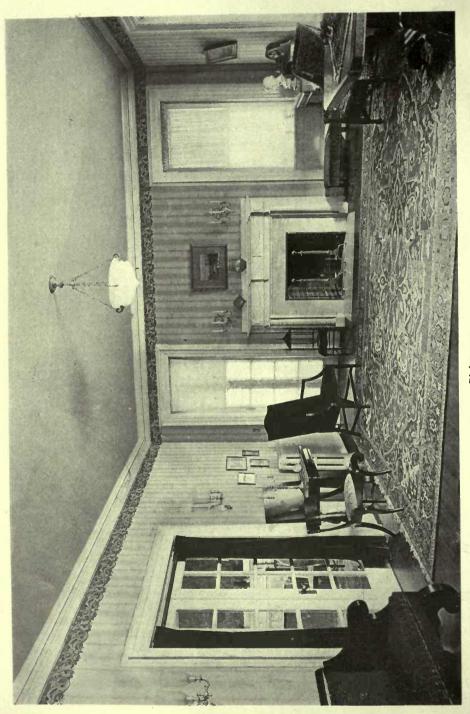


The stairway.

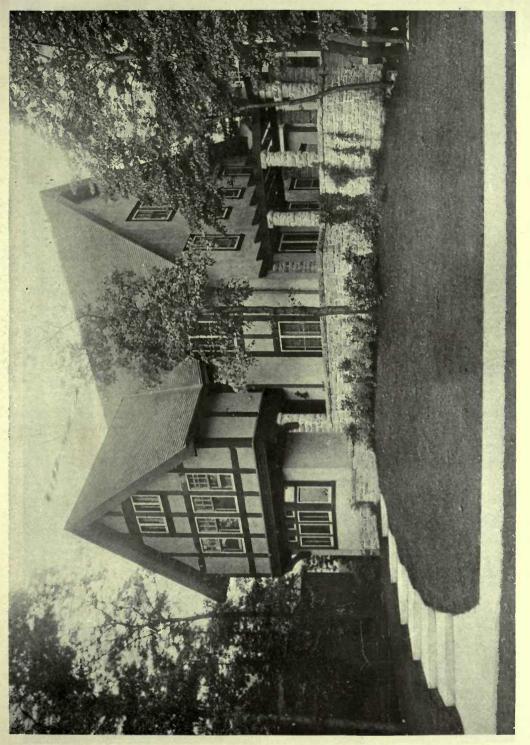




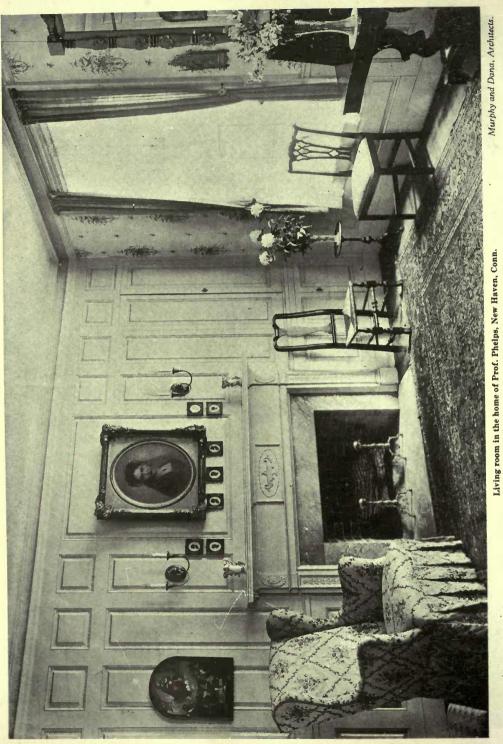
The library.







An interesting design in stucco and half timber.





Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

The January Clearing House

ANUARY, long known in the homemaker's calendar as the linen month, is an opportune time for making household inventories

and taking decorative stock. While the shop windows display advance spring fashions the temperature calls for open fires and warm color schemes.

Whatever our winter climate may have been in the old days, it is safe to predict that January will be the longest, coldest month in the year for those who live north of the Mason and Dixon line. With the passing of Christmas, however, comes the inevitable feeling that something is closed and finished, and that new paths and new experiences lie ahead. It is therefore quite consistent to wish to infuse a little novelty into our surroundings.

The wise housekeeper makes subtle changes in her menu and in the arrangement of her living room furniture. If she has put away many small objects in order to make successful her Christmas decorative schemes, she will realize as the holiday greenery is discarded, that her house is more attractive for the elimination. But she will feel instinctively—still being wise—that the cool, summer bareness of July is not to be desired. Warmth and coziness must be secured else better to marshall back those small household gods which help us to forget the winter

world outside. To obtain the golden mean in the placing of these accessories is an art which few amateurs grasp and many professional decorators never master. To strip a room of those personal touches which so clearly define Mrs. Brown's home, from that of Mrs. Green's. is not solving the problem. Rather success lies in keeping the Brown house very Brown and the Green residence very Yet if this individuality can be Green. attained with a few good things skillfully placed the Browns and the Greens may be hailed as true decorators and possibly a trifle ahead of their neighbors. They do not need a January clearing house, but the Whites, Blacks and Grays do.

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In taking decorative stock, the holiday gifts must pass muster and here one notes the passing of the old order of giving. Aside from a few substantial family presents, Christmas with many people has become a "card shower," a plan far less taxing than the old way of searching for appropriate trifles for a wide circle of friends. An individual card posted to friends and acquaintances—a share and share alike idea—saves time and money, unless the scheme be carried to a very fine point.

Therefore the January inventory will probably include several really desirable articles which add to the beauty of the





The Garden of Allah.

house and give pleasure to the entire family. Perhaps a chair, a fine clock, a reading lamp, a pair of tall brass candlesticks, or lesser things chosen for good lines and color values.

When rearranged the January living



Reminiscent of a Japanese print.

room will seem larger, more restful, better balanced and far more livable. but possibly a little cold and a trifle formal. There are several ways of meeting the too formal aspect. One is by a blazing fire, another by brilliant flowers, a third by the judicious use of a very decorative chintz. Many people possess fire-places. Lucky mortals they! Many attain the flowers with little thought or trouble and many there are who find no difficulty in achieving fire, flowers and chintz. Yet to the fireless and the flowerless the gayly figured material should make a special appeal.

Just how the chintz should be used is a matter of individual preference governed by such practical conditions as the size of the room, height, light and the amount of figured surfaces already present. A few concrete examples may give emphasis to the suggestion.

In a city living room of average size having a mantel, but no fireplace, a printed linen in the Garden of Allah pattern is used as a decorative panel above the mantel shelf. The material extends to the molding which acts as a frame for the upper edge. The lower and side edges are framed in a similar band of wood which like the trim of the room is stained light brown. This "Garden" linen may be purchased in several different color schemes and is therefore well adapted to many backgrounds. The scheme chosen here is a fine harmony of soft browns, warm grays, deep ivories, and a little brilliant orange, which blends in an agreeable way with the grayish brown of the walls, the deeper browns of the rugs and the yellow tones of the over curtains. Used in quantities the "Garden of Allah"



would be rather expensive but as a mere decorative note, measured by feet rather than yards, it fits a moderate purse.

Another living room is hung in gray grass-cloth and furnished in an effective scheme of black, gray, mandarin yellow and Gobeline blue. Here a printed linen in a bold landscape design, copied from a Japanese print, is used as a panel between two doors and again as a matter of balance between two windows. This material, long in the repeat as shopkeepers say, gives a delightful touch

to an apartment having few pictures and broken by many doors.

Quite a different effect is obtained in a living room in a house in the country occupied all the year. An apple green trim, ivory walls, rugs of ivory with narrow borders of green, and old-fashioned muslin curtains form the foundation here. The furniture consists of several old rush chairs in black frames and modern willow painted to match the trim. In summer a glazed chintz in ivory, green and old pink is used extensively. In winter a cretonne with a black ground is substituted, upon which are thickly massed brilliant flowers and tropical birds. Above the fire-place, in the cold months, hangs an old Chinese mirror-picture as gay as the cretonne, while on the shelf are placed high copper candlesticks and a pair of mantel vases in famile verte decorated in gorgeous butterflies. With the return of summer, glass candlesticks make their appearance while glass posy-holders filled with pink clover replace the Chinese articles.

Black cretonnes and chintz fit well the January room, provided the surface is lib-



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Thickly messed color on a black background.

erally covered. A large expanse of black is to be avoided. Pillows made square and piped with harmonious colors, plain in tone, look exceedingly well standing along in a stiff row on a sofa or settee. Remnants may be utilized here if care is taken in the selection. Broad landscape effects are not desired. Birds of gay plumage, baskets of flowers, urns of fruit,



A "Bird of Paradise" linen.



each pillow complete in itself so far as motif is concerned, are excellent patterns from which to choose.

To speak of slip-covers is to call to mind summer rooms and summer schemes. Yet an occasional chair, covered with chintz, forms an agreeable addition to winter quarters. A wing chair decked out in a plain material loses half its beauty, and the same may be said of the high-backed, upholstered type with mahogany arms. While chairs of this order are most at home in a colonial setting, they should not be debarred from other backgrounds. A wing chair, especially, adds a particularly cozy note to a winter room and not showing a scrap of woodwork, blends with many color schemes. Naturally the slip-cover must be chosen to tone with the prevailing color note, and to add variety and zest also.

In thinking of pattern in relation to a room we are apt to take into consideration vertical surfaces only forgetting the important part pattern plays when lying flat. Oriental rugs are conspicuous examples of figured surfaces used horizontally. In a lesser way chair seats and table covers suggest themselves. Yet, here is where a figured note often may be introduced with telling effect. Particularly where the rugs are solid in tone will a chintz chair cushion or a cretonne table cover help wonderfully in the balancing of the decorative scheme. Too much pattern is irritating to the eye and fatiguing to the nerves, and two little is tiresome and monotonous. When the correct proportion is attained the room usually satisfies, although the occupants may be unaware of what is back of their pleasure.

When the January room is in process of rearrangement many of these fine shadings may be determined. There is really no better time than the month after the holidays, once termed "between hay and grass," but now recognized as an excellent period of reconstruction.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

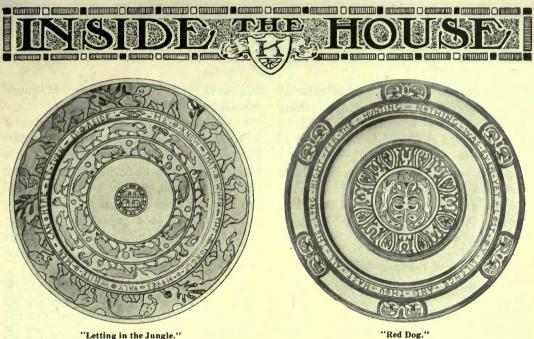
Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.

Kipling China

OVERS of unique table china will be interested to know that the Jungle service plates, designed by Mary Bacon Jones, may now be purchased separately as well as by the set.

The dozen includes, among other designs, "Red Dog," "The Miracle of Purun Bhagat," "Letting in the Jungle," "The King's Ankus" and "The Undertakers." The ground of each plate is a deep ivory and the color scheme as mellow as an old oriental rug. Clever drawing, composition and handling are shown by this gifted craft worker.

It is pleasant to own the entire dozen, yet one makes a charming gift, for many are the uses to which a large flat plate



Service plate designed by Mary Bacon Jones.

may be put. The decorative quality of each design is wonderful, and between the useful and the ornamental a Jungle plate is never out of service.

My own china cupboard contains "Red Dog," "Letting in the Jungle" and the extremely popular "Mugger."

If you have a Kipling memory that extends beyond "Soldiers Three" and "The Light That Failed" you may recall that the mugger, in company with the crane and the jackal, enlivens that cheerful story, "The Undertakers." The fact that he is an old crocodile, keeled, crested and armored like a modern submarine, makes no difference with his human understanding, with his wit and wisdom, nor, apparently, with his fitness for a central motif on a china plate.

When Miss Jones had the Kipling inspiration she selected the mugger first and followed it up with eleven other subjects, all chosen from that wonderful forest, which needs no board of conservation to keep it intact. From beginning to end it is quite a story. First Mr. Kipling's per-

"Red Dog." Service plate designed by Mary Bacon Jones.

mission and approval were obtained, then many preliminary drawings were made before Miss Jones was entirely satisfied with her own Jungle folk, finally the twelve completed designs were sent to France to be transformed into a dozen service plates at the Limoges china works. Colors were tested and samples submitted. A trial set was made but the blue was found to be too gray and the green too vivid and the background too yellow. At last, fully three years after the old mugger first haunted the artist, the plates were delighting many Americans.

People who know their Kipling better than their Bible—and there are such—say that Miss Jones has caught the spirit of the Jungle in a remarkable manner. Artists are enthusiastic over the plates because they conform so cleverly to requirements of a circular design—not easy when you are dealing with bears, tigers, lions, alligators and elephants. Hostesses like them because they help make conversation, leading gently away from Kaiser, King and Czar. And, coming back to



the mugger, in his long life of tyranny and philosophy he never said anything better than the sentence which Miss Jones has used to decorate the border of the crocodile plate: "With good luck, a keen eye, and the custom of considering whether a creek has an outlet or not before you ascend, much may be done," all of which is just as true in times of peace as in times of war.

New Wall Papers and Textiles

As with Charles

Lamb's old blue

china, it is a little

difficult to live

up to the new de-

signs in wall pa-

pers and textiles.

The boldest

schemes are not

for the timid nor

for those who like to follow in

the beaten paths

There is a scenic

quality — a real drop curtain ef-

fect to some of

the latest things.

which is at first

rather startling.

o f

decoration.



Reproduction of a Salem wall paper.

Beautiful are the new French cretonnes and extremely brilliant, suggesting the paint brush quite as much as the loom.

There are no Austrian patterns in the market, and "German" as an adjective seems to have gone out of print. England holds her own in the making of chintz. France, contrary to expectation, still exports cretonnes and printed linens, while our own manufacturers are doing fine work in every department of house furnishing.

Color schemes are vivid. Black and white are still used, but largely in combination with brilliant motifs. Stripes in black and white have been replaced by black and white cubes, over which are printed small but colorful flower-baskets, nosegays, even bird cages.

Wall papers show a variety of patterns —on the one hand large, highly decora-

tive motifs; on the other, small neutral effects almost plain in character. The popularity of the neutral wall covering enlivened by gay figured materials still continues. Standard shades are sand, twine, putty, gray, oyster white, ivory and biscuit. One big wall paper house is reproducing the colonial patterns of Salem and Marblehead. These are much in demand in colonial halls, drawingrooms and parlors.



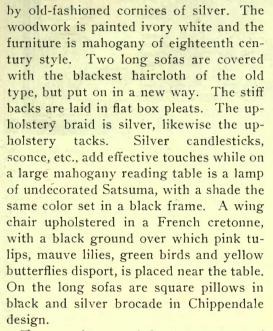
Copy of old paper in Empire design.

A living room recently seen in a city apartment has been done over for the winter. On the walls is a plain gray paper that has somewhere in its being a touch of pink, but so faint as to be scarcely noted. At the long narrow windows are net curtains in tone like the walls, over which hang lambrequins of amethyst velvet. These are cut on formal lines, outlined in silver braid and held in place

KEITH'S MAGAZINE א האמותים 🗅 המתחימותים 🗅 המתחימותים 🗅 המתחימותים 🗅 המתחימותים 🗅 המתחימותים בתחימותים 🖿 המתחימותים 🖿 המתחימותים בתחימותים בתחימותים בתחימותים בתחימותים בתחימותים בתחימותים בתחימותים בתחימותים בתחימותים ב

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Fortunately, a coal fire burns most of the time, while globes of very lively gold fish add their note of brilliancy, and the hostess tells me that she is arranging with a nearby florist to supply her with a purple window garden. The list of flowers includes a wonderful range of color in every possible garden shade of lavender. heliotrope, purple and mauve.

About the middle of January I shall drop in for tea and take a look at the winter garden.

Table Linen

New linens there are and of beautiful weaves, for Ireland and France are still exporting, but Belgian products are absent, and German and Austrian designs may not be had for the asking. Art linens and the finely embroidered pieces from

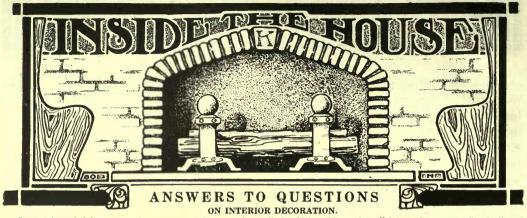
France, so long a feature of the January linen counter, are not forthcoming. The women who have spent hours in the past in making these exquisite articles for the American market are otherwise employed. The wonder is that so much in the way of standard linens has found its way to this country.

Foreign manufacturers are making every effort to hold our trade at this vital period, and every January purchase helps the good cause.

While few of the extremely intricate patterns are seen, those standbys of former years, the well known dew-drop, diamond, bird's-eve and hail-stone designs are in evidence, also new variations of ivy leaves, chrysanthemums, roses, lilacs, etc.

Taste on this side of the water runs to simpler designs and the table cloths most in demand have large spaces of plain linen broken at intervals by pattern. One importing house prefers to make its own designs, sending them twice a year to Ireland. A pond lily theme recently seen is quite out of the ordinary. It will not be woven probably until after the war as it calls for "many cards" as weavers say, in spite of its simplicity. The center of the cloth suggests a lily pond. There are plain spaces upon which flat pads and buds apparently float. The border at the edge of the table shows open lilies thickly massed, while at the corners are great bunches of leaves, buds and half-open flowers, the long stems knotted as if just gathered. The beauty of a dinner table set with this unusual linen may be imagined.

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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

Mahogany Finish or Oak.

R. J. E. I am sending you drawing of the floor plan of our new home which is now under construction.

The woodwork in living room will be in mahogany finish to match furniture which is upholstered in black leather. Will get a new davenport but would prefer tapestry instead of leather if this is advisable. Have a rug for this room in green brown and tan, small design, but the predominating color is green.

Dining room to be finished in dark oak to match furniture. Will get a new rug for this room. What do you think of delft blue for this room?

Now for the den. We have a roll top desk in light quarter sawed oak; what other pieces of furniture would you suggest to make this room attractive? Woodwork to be light oak.

What do you think of fumed oak woodwork throughout the down stairs?-

The windows in living room are high enough from the floor so that a davenport may be placed under them.

Ans. For the living room with the mahogany wood trim and furniture in the same wood, we would advise a plain brown paper in a golden tone that will reflect the light. This color will prove very restful and for a little touch of color would use a straight line border about four inches wide next to the picture moulding; this border to have blue, deep rose red, and black and yellow. The draperies should be in golden brown a little darker than the walls. Your dining room facing east would offer a delightful contrast to the brown living room if treated in dull old blue, solid blue rug in deeper tone with soft silk draperies in dull blue. Do not pick out blue that is pronounced as it will be too striking but rather blue in old faded tones.

Do not spoil the front wall of living room by placing the davenport under the windows, but rather keep this space clear and set davenport against the back wall. We would not advise a hard, slippery leather davenport, as they are never comfortable, but select one that is overstuffed as shown in some of our illustrations, with loose cushions filled with silk floss. Have it covered in a cotton verdure tapestry in green and brown or a brown imperial velour.

The den may be papered in an orange tan with a colorful border at the picture moulding. Have the paper quite plain and hang a number of small pictures on the wall. A mission arm chair with soft loose leather cushions and a couple of brown wicker chairs would complete this room.

You speak of oak wood trim. We should prefer oak to mahogany finish, which in time will become shabby and necessitate touching up and refinishing. Fumed oak is being more largely used than mahogany in modern houses.

Enamel and Mahogany.

A. O. A. I am enclosing the floor plan of the home we are going to build. Will you please advise me what color to use



Paint is a familiar word; "white lead" is not. 'Twould pay house-owners to learn to think

Dutch Boy White Lead

where they now think simply "paint."

Send for Paint Tips KE

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in reception hall, living room and dining room in regards to rugs, drapes and walls. Would you advise me to finish the downstairs in white enamel or mahogany stain? Expect to use mahogany furniture throughout the downstairs. Will you suggest what I should get in a davenport for living room and should I have chairs upholstered in same color?

We are planning to use a gray brick for fireplace.

Please advise me how to furnish a boy's room. Shall I finish the wood work in white enamel or mahogany? We expect to use dark furniture. This room is over the library so windows are on the west.

All windows in this house are casement windows opening out. Will you suggest a color scheme for the guest room which has windows on the south? I expect to use bird's-eye maple furniture.

What color shall I use in room with windows on the north, which has mahogany furniture? The finish upstairs will be white enamel with mahogany doors.

Ans. It would be very pleasing to have the wood trim of dining room in old ivory enamel with the walls in old blue and blue silk hangings at the windows. If you use selected birch for the living room, it will take a nice mahogany finish. Otherwise, we would have the trim in old ivory enamel with the walls hung in warm gray and the draperies and chair coverings in deep old rose or mulberry.

The library would be very reposeful if hung in soft olive green with the draperies in old red or copper velour that has a good sheen and trimmed with dull old gold. Whatever treatment you use in this room should be carried through the upper hall. If you wish, with the colors outlined above, you could use a white oak for the wood trim throughout and leave natural, except for a rubbed wax finish which will give the wood a neutral gray tone.

For the boy's room, treat the wood trim in an egg-shell enamel in a pure olive color with the walls in tan or an orange buff, in a plain paper, with a richly colored four-inch border at the picture moulding. Use a rich deep colored rug with the draperies in a coppery gold sunfast with quite a sheen; or a stunning chintz with birds and flowers in deep rich colors on a gray or neutral ground.

For the guest room with the bird's-eye maple furniture, would suggest a graystripe, two-toned, for the walls with a small border in black, gray or rose. Hangings should be of cretonne in rose tones with gray stripes over a cream ground.

For the north bedroom in which you will use mahogany furniture, would advise using a yellow buff or straw color for the walls with hangings in a deeper yellow and the rugs in deep buff tones.

The wood trim on this floor would be most effective if done in an old ivory enamel, with the doors in mahogany. Glass knobs would prove very effective also.

Finish for Reed Chairs.

M. G. T.—I have four natural (unfinished) Chinese reed chairs which I wish to stain brown. Will you kindly advise me what to use?

I tried a wood dye, fumed, but it was much too dark. I want a medium brown and do not wish to shellac over stain unless necessary, preferring a dull finish.

Ans.—With reference to staining the reed chair, would suggest that you get a half pint can of "medium oak" stain which comes already prepared. If it proves to be too dark, you may lighten it by adding a little turpentine.



INSIDE HOUSE

Do not get your brush too full as it will gather under the reeds and make the color uneven.

Stains and Finishes.

M. B. M. In arranging for interior finish I thought I would finish my living room with either oak or red birch; staining the red birch mahogany or the oak a Flemish stain. Which would you advise, considering the present styles? I expect to finish the hall with oak or chestnut, with oak floors.

We expect to use oak in dining room with beam ceiling with 5 inch strip leading from base board to beam ceiling. What style of plaster would you suggest for hall and dining room? The den also leads from the hall near the stairs, a room 11 by $11\frac{1}{2}$ feet, with extended bay window 18 inches which runs the full length of room. I thought of having this woodwork stained with a light gray acid stain if it would harmonize with the rest of the house. I thought of painting all the bedrooms flat white paint, pine wood floors with mahogany doors. What kind of woods takes the better stain?

Ans. We would suggest that you use the same treatment for the wood trim of living room, hall and dining room. Birch trim stained mahogany while very rich and handsome, is much more difficult to take care of and does not retain its newness the same as a good fumed oak stain with a wax or rubbed varnish finish. Also, when the birch shrinks it may open up and it will show white streaks, especially in the door panels. Mahogany trim also calls for a more elaborate treatment in decorations and furnishings. Very few homes are being finished. in mahogany, the general preference being for fumed oak or a tobacco brown stain. Flemish finish is altogether too dark and would suggest that you discard the idea. The wood trim of den would be very pretty in white oak and simply rubbed with "Old English" wax which will give it a charming gray tan effect and would be in harmony with the fumed oak of the other rooms.



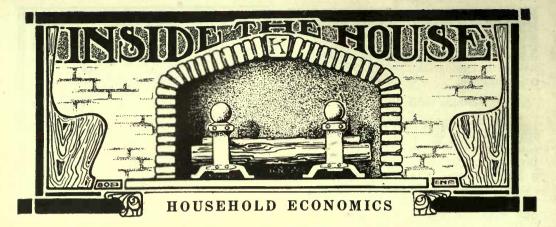
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Machine Washing

HERE is no occupation or business more conservative, it would seem, than that of the housekeeper. A generation ago the farmer, at that time conceded to be a conservative, began to see the economic advantages of farm machinery, even when it cost a good deal of money. Then with characteristic American lack of thrift, or perhaps it is only heedlessness, he would leave this expensive machine out in the storm and weather during the nine months or more when he did not use it because he could not afford to build big barns. The machine could pay for itself,

it would seem, in the few seasons that it lasted with this lack of care.

A washing machine, a vacuum cleaner, a dishwasher, an ironing machine, any of the new apparatus which helps the housewife in her constantly recurring duties would cost less than the elaborate farm machin-ery, and is in constant use rather than standing idle a large part of the time. A business man does not hesitate to buy an adding machine or a filing case when it will either save his own time or reduce his office force.

Why should not his wife have similar conveniences? Waste in Woman-Power is a tale as old as the hills. No one likes to think of the work that women do in the terms of horse-power; the woman herself would be the most surprised at the computations. The housewife is doing miles and miles in unnecessary Marathons around her kitchen.

Wash day is traditionally the hardest day of the week to the woman who is her own laundress. Has anyone computed the amount of horse-power which is required to "rub at the tub" for half a day? There are washing machines on the mar-



ket in unlimited variety, both as to the principles on which they are operated and as to cost. They may be operated by hand, by water-power, or by electricity.

In a general way. washing machines may . be classed as of two types, those in which the water and suds is forced through the clothes, and those which agitate the clothes in the suds. The cuts show washing machines of both types.

The first cut shows a solid copper tub, seamless and perfectly smooth on the inside, pivoted,

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writes a woman who Upsonized, "I would use Upson Board entirely, for the walls and ceilings.

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the material, the paneling and the color effects." You see, Upson Board is really artificial lumber. It does away with the constant expense of plastering and wall-papering, and is ever so much less expensive than steel. It is easily and quickly put np - my husband and a friend did the work themselves." we were to dijust the other day. Carpenters like Upsonizing because the Upson Board looks, feels and wonks like lumber, and doesn't take the time or give the trouble that other boards do.

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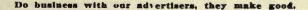
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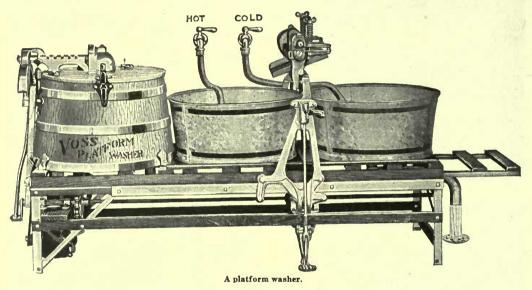
with a spring action, and connected with an electric motor set above the machine.

The washing principle forces the hot suds and air through and around the clothes at the rate of 100 times a minute.

The copper tub is as smooth as glass inside, ideally sanitary and easily cleaned.

Gravity springs produce the violent throw of the hot suds, forcing the water to pass off quickly, is all of the plumbing which is required.

The tub of the washing machine proper is equipped with a metal drain with handle outside of tub, so that the hot water can be easily discharged into the common drain, which carries the waste water from all three tubs. The two metal tubs with which this machine is equipped are



through clothes—as the washing principle—instead of clothes through water. The balancing springs reduce the pull on the motor, insuring smooth and noiseless running and economy in use of electricity.

The wringer is reversible, twin gear. It is operated by the same motor as tub and has a reversible water-board.

Independent levers make it possible to operate tub and wringer separately or together, allowing one to wring part of clothes while washing others.

The platform washer shown in the second cut is practicable whether there is running water in the house or not. It may be operated by hand, by water power or by electricity. While it drains perfectly it does not need plumbing connections. Hot and cold water faucets with a short piece of rubber hose on each, and a drain in the floor, which allows the water specially designed for use on this machine. The bottom of these tubs are fitted with hard rubber stoppers.

The wringer is mounted on a strong, movable, metal frame, resting on machined rollers. It moves easily to any position on the platform.

The wringer control consists of two distinct controls. There is the customary hand lever at the side and top of wringer frame in addition to the treadle at bottom of machine, which responds to the slightest foot pressure. The operator's foot has the wringer under complete control when both hands are fully occupied.

The electric motor operates the washer and wringer. The wringer moves from tub to tub and the movable extension, which slides under bench when not in use, is of sufficient strength to support an extra tub or basket as desired.



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Conducted by HELEN F. LITTLE

Adulteration of Spices

Sugar and Spice and All Things Nice.

HE very word spice seems to waft one to sunny isles of the Orient, and the pungent odors of true spices hold a peculiar fascination. But alas, the housewife of today, from no fault of her own, is often quite unacquainted with the real taste and smell of

the reader is, "Why, I supposed 'pimento' to be a red pepper which is sold in cans and used for salads!" This is a common mistake, which has been assisted on its way by some of the canning companies, who still persist in labelling cans of "pimentoes" or sweet red peppers, with

the various spices. Ground spices are happy hunting a ground for all sorts of seeds. shells. bark, husks, sawdust, starch, olive stones, plaster, and even dirt, masqueif rading, you please, as cloves, cinnamon, mace, allspice, or pepper!

Small wonder that this should be true, for just stop to consider how easily small ground particles may be counterfeited, and how little the average woman knows of the sources and preparation of even the most used spices. Take "allspice" or "pimen-to," for example. The first thought which will occur to



Pimento or allspice.

the name "pimento" which belongs to the dried berry of a tree of the Myrtle family, which grows in the West Indies.

This berry when dried has a flavor, resembling a mixture of cloves, cinnamon and nutmeg, hence the name "allspice." By far the best method for the housewife to pursue in buying spices is to invest in a spice grinder, or mill, and buy the whole spices. Or, if this seems too much like a return to the days of our grandmothers, buy your spices at the drug store, for those used in prescriptions must be pure. One must be

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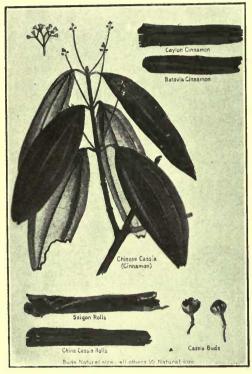


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No advertising is accepted for "Keith's" that you can not trust.



prepared to pay a higher price however, for absolutely pure spices, twenty-five cents for the amount usually obtained in fifteen cent cans. The much finer flavor, and the decrease in amount used prove



Cinnamon and cassia.

the pure spices to be less expensive in the long run.

The housewife whose gingerbread has been flat and insipid, and whose husband has sighed for the gingerbread or ginger cookies "grandmother used to make" may not have realized that the difference was in part at least in the spice used.

There are several firms now who are putting pure spices on the market, and it will pay the housewife to investigate their products.

A brief description of the most used spices may be of interest, and assist both in buying and using them correctly.

Cinnamon and cassia are different species of the laurel family, and both entitled to the name "cinnamon," although the original spice was that obtained from Cevlon. This was the inner bark of the tree, dried and rolled. It was a light yellow, thin and smooth, and possessed a more delicate flavor than cassia. At the present time it is not sold in this country. The cassia grows in China, Japan, India, and the East Indies. Although the bark of the poorer grades is dark, rough and thick, the better grades are more like the cinnamon bark and are more expensive. There are three grades on the market, the "Saigon," which is the best, the Batavia and Corintie, and the China or poorest grade. In buying whole cinnamon, select a light colored, smooth roll, Ask for "Saigon" cinnamon when buying the ground spice.

Spice Cake.

Two cups sugar, 1 cup butter, 1 cup milk, 3 cups flour, 3 eggs, 1 teaspoon cloves, 1 teaspoon cinnamon, $\frac{1}{2}$ of a grated nutmeg, $\frac{1}{8}$ teaspoonful salt, 2 teaspoonfuls baking powder. Cream butter and sugar, add beaten yolks, flour mixed and sifted with spices and baking powder alternately with milk, whites beaten stiff and folded in last. Bake in moderate oven.

THIS department is open to our readers for a free discussion of the various subjects covered by the heading "The Table and Its Service." We invite suggestions, and new recipes. Tell us new ways of doing things. Miss Little will select from these suggestions, and we will devote considerable space to publishing those of general interest. We will be very glad of your co-operation in helping us make this department of maximum service to all.



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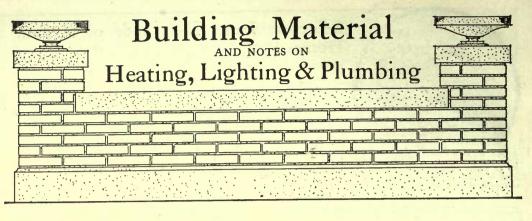
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Doing Concrete Work in Cold Weather

HE use of concrete is becoming so general and the requirements which insure its success, even when the work is done at low temperatures, have become so generally known and practiced that concrete work is now carried on almost regardless of season and temperature. Farmers and others who use concrete may utilize spare time during the winter season in making concrete fence posts, watering troughs, laying barn and other interior floors, etc.

It is necessary to heat the sand and pebbles or broken stone and mixing water so that the concrete mixture will have a certain minimum temperature, then to place the concrete quickly and maintain the heat until early hardening has been completed. Warmth given the concrete from heated materials can readily be held in it for some time-as long as may be necessary to complete early hardeningif the concrete is placed quickly after mixing and at once protected in some way. If a few simple precautions and protective measures are used, winter concrete work will be as successful as that done in warm weather. Heat hastens the hardening of concrete; cold delays it. The effect of cold becomes noticeable in this respect when temperatures fall below 50 degrees Fahrenheit, and becomes more marked as temperatures continue to fall.

As a rule concrete will not show any serious effects from having once been frozen if, after it thaws out, it is not again frozen until early hardening is complete. But it is far better to protect the concrete from freezing for from 48 hours to four or five days, depending upon the degree of the cold, rather than to expose it to the possibility of freezing. If such protection is given, no injury need be feared when the concrete is finally exposed to freezing temperatures.

Warmth and moisture are necessary to the proper hardening of concrete. Any means that will cause these two conditions to be present in cold weather, particularly during the period of early hardening, will lead to the success of concrete work done at such times, if all other good practice is also followed.

Mixing water is the easiest of the materials to heat. It can be readily heated to a temperature of 150 degrees Fahrenheit, and kept at this temperature until used. As cement forms only a relatively small bulk of a concrete mixture, it need not be heated, but should be stored where it will be protected from dampness and extreme cold. Sand and pebbles or broken stone should be heated. A temperature not exceeding 150 degrees Fahrenheit will generally prove sufficient. Too much heat will injure some kinds of sand and pebbles or broken stone, particularly limestone.

On small jobs these materials are usually warmed by piling them over and around sheet iron cylinders, such as an old smokestack, a section of old iron sew-



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er or culvert pipe, or an old steam boiler. A fire is built within and the materials to be heated piled around and upon this "stove." Sometimes a stove is built by using concrete block for a foundation and covering with a piece of sheet steel such as boiler plate. It is necessary to turn or rake over the materials frequently so that those nearest the fire will not become too hot and thus possibly injured, while at the outside and edges of the pile they may not be warmed. Care should be used to keep the sand and pebbles separate, otherwise when taking them from the pile to proportion a batch of concrete, some batch is likely to be improperly proportioned because of the sand and pebbles having become mixed before measuring.

Common salt and other chemicals are sometimes added to the mixing water to prevent freezing. Salt is considered objectionable in reinforced concrete because it may corrode the reinforcing steel. More than ten per cent of salt cannot be safely used without danger of affecting the final strength of the concrete. In any case salt does not accomplish the thing most desired. As it lowers the freezing point instead of adding heat to the mixture it delays instead of hastens the hardening of the concrete.

Metal forms should always be heated in cold weather, in addition to thoroughly cleaning from snow and frozen particles of either ice or concrete. In extremely cold weather wood forms also should be heated.

The protection which may be given to concrete work in several different ways makes it possible to do this work in cold weather. More careful protection must be given to thin floor slabs, beams, columns, etc., than to foundation work or heavy masses of construction.

Floors are usually protected by a covering of hay or straw. Building paper or canvas should first be laid over the concrete, then from 6 to 12 inches of straw, depending upon the temperature to be protected against.

Foundations can easily be protected because the greater portion of the work is in an excavation. Forms, or earth walls of the trench gives enough protection to the sides of the work if the cold is only moderate. There remains nothing but the top surface, which must be covered. Protection can be given by a layer of hay or straw, while vertical faces may be given protection, in addition to that gien by the forms, by building a rough lattice work of strips 10 or 12 inches from the outside face of forms and filling in between lattice and forms with straw or manure. Such extreme measures are usually required only when the cold is very severe. If manure is used as a covering, it should never be placed directly upon the fresh concrete. It is not only likely to stain the work, but may injure the surface by causing a slight pitting or scaling.

For the contractor or person not thoroughly experienced in cold weather concrete work it is recommended that, when the average temperature for the day is between a minimum of 40 and a maximum of 50 degrees Fahrenheit, the building in or on which work is being carried on should be enclosed. When the average temperature is below 40 degrees and above 35 degrees Fahrenheit, the materials should be heated. When the average temperature falls below 35 degrees Fahrenheit, the building should be heated by salamanders or similar means so that the interior temperature surrounding the concrete work will always be higher than 40 degrees.

The Portland Cement Association, in their bulletin on Concreting in Cold Weather, lays especial emphasis on the following:

(1) Sand and pebbles or broken stone used must be free from frost or lumps of frozen material.

(2) If these materials contain frost or frozen lumps, thaw them out before using.

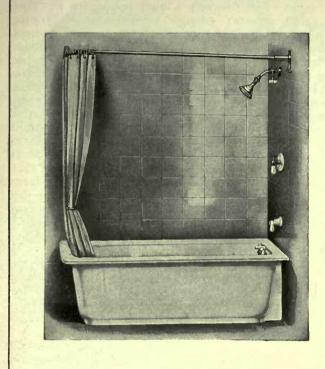
(3) As cement forms but a relatively small bulk of the materials in any batch of concrete, it need not be heated.

(4) Mixing water should always be heated.

Remember that sand and pebbles or broken stone and mixing water must be heated so that the concrete when placed shall have a temperature of from 75 to 80 degrees; also that some sands are injured by too much heat.

Remember to place concrete immediately after mixing so that none of the heat will be lost before placing in the forms.

Remember to protect the concrete immediately after placing. Canvas covering, sheathing, housing-in the work, or hay or straw, properly applied will fur-



Enameled Iron Recess Bath

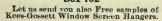
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nish the required protection for some work. In addition to these means, small oil or coke-burning stove or salamanders may be used in enclosed structures.

Remember that temperatures which may not be low enough to freeze the concrete may, nevertheless, delay its hardening for a considerable time. Do not expect concrete placed when the temperature is low and remains low for some time afterward to be safe for use as soon as though placed during warmer weather.

Remember that forms must not be removed from the concrete work too early. This applies to any concrete work, regardless of season, but is particularly important with work done during cold weather.

Remember that frozen concrete sometimes very closely resembles concrete that has thoroughly hardened. When frozen concrete is struck with a hammer, it will often ring like properly hardened Before removing forms, exconcrete. amine the work carefully to see whether it has hardened or is simply frozen. To determine this, remove one board from some section of a form, pour hot water on the concrete or turn the flame of a plumber's blow torch or a jet of steam under pressure against the concrete. If frozen, the heat will soften the concrete by thawing the water contained in it.

Start a Wood Fire Slowly.

One common cause for the cracking of cast-iron sections is not connected with a lack of water. It comes from the practice of burning rubbish or papers in the boiler in the summer, when the boiler is cold, but contains water to the steaming level. A hot fire of short duration gives a result which does not develop enough heat to raise the temperature of the water to any great extent, but still serves to heat the part of the boiler above the water



line to quite a high temperature. This creates enough temperature difference between those parts of a section kept cool by the water and the remainder which is not so protected to set up severe expansion strains and frequently cracks sections. When it becomes necessary to build a new fire in a cast-iron heating boiler which is entirely cold, see that it is filled to the proper level, and then build a slow fire, adding water from time to time as may be needed to keep the level always in sight in the glass. Be sure that the fire is so slow, that steam can form and all parts of the boiler heat up together, and there will be little chance of broken sections.-From The Locomotive.

Hollow Concrete Poles.

Hollow poles of reinforced concrete cast in forms or made by the centrifugal process, have been used in Germany for some time according to Professor Hugo Fischer. Quoting from the English translation of his discussion:

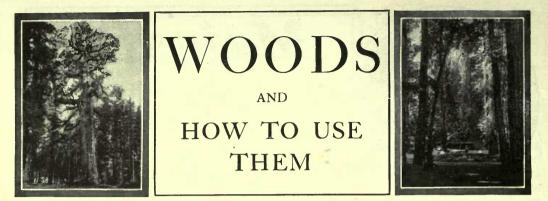
"The first attempt to replace the hollow iron poles used in the construction of electrical overhead street transmission systems, by poles composed of reinforced concrete, took place some 10 years ago. The great advantage, inherent in the new construction material, in uniform working strength-which is apparent in its resistance to the strain of long wire transmission systems, of wind pressure, etc.had led to many installations. Unlike the iron poles, poles of reinforced concrete offer the advantages of a triffing maintenance cost and a great longevity. Even for those purposes for which the cheaper wooden poles were formerly employed the concrete poles are now successfully used.

"The great simplicity of the centrifugal process, the ready applicability and the indisputable qualities accompanying its development are the reasons for its steadily growing popularity for concrete poles.

"Their utility is very great. They readily serve as supports for high tension transmission systems, as substitutes for telephone and telegraph poles and may be advantageously employed as ornamental and display poles, as supports for the globes of gas and electric lighting systems and as structural beams and columns."



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EDITOR'S NOTE. --When the building idea takes possession of you-and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts. This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

Red Gum As a Finishing Wood.



AREFUL consideration of the inside finish is so important to every home builder, we feel this magazine should keep its readers informed on the subject, giving them a

clear understanding of the "service" qualities of various woods. In presenting these articles we endeavor to make them as informative in a practical way as possible, not overstating the merit of any particular wood but telling the purposes for which each wood is, in our judgment, best adapted.

Genuine mahogany has been for ages, and is today, a "king" among woods for inside finish. It is however only possible for those of ample means to buy it because of its high cost, and therefore genuine mahogany is really prohibited for the average home builder. The home builder who favors mahogany finish must, therefore, seek a wood which carries a grain and which takes a stain, that will closely resemble mahogany.

We have already told you of other woods meeting these requirements and now want to talk a little of the beautiful red gum. It is a wonderful specimen of tree life standing

straight and tall, and often reaching a height of 150 feet and a diameter of some 5 feet. In its youth, and while growing generously, under normal conditions, it assumes a long, regular, conical crown, much resembling the form of a conifer.



Quarter-sawn section showing ribbon-striped effect.

After the tree has attained its height growth however, the crown becomes rounded. spreading, and rather ovate in shape. When growing in the forest the tree prunes itself readily at an early period, and forms a good length of clear stem, but it branches strongly after making most of its height growth.

Commercially, the term "Red Gum" applies to the heart wood of the Red Gum tree. In Europe this wood is known as Red Gum, Satin Walnut and Hazelwood. Unselected Gum, or Sap Gum, may be partially heart wood and partially sap wood, or all sap wood. Unselected Gum, or Sap Gum, is often specified as Hazel Pine. Red Gum is furnished in either plain or quarter-sawed lumber and veneer, as is the unselected, or Sap Gum. Lumber cut from such trees has a close interlocked grain, free from resinous matter, and when quartersawed, shows a "ribbon" striped effect which is very similar to mahogany. Finishers claim that there is no cabinet wood which takes a mahogany finish any better and that practically all of the leading varnish manufacturers have been able to produce a beautiful mahogany finish on Red Gum wood. Therefore, as this wood is available and is not high priced, it offers a splendid opportunity for the home builder in a selection for an inside finish where mahogany effect is desired.

Two of the most important uses which are claimed for this wood are for manufacturing doors and interior finish. Where it is finished in the natural color, or stained, it is most attractive and when properly seasoned it admirably fulfills requirements for these purposes. Veneered built doors of this wood will be found to be rigid, free from warping and ranking with the very best. The effects which may be obtained by staining are varied. The figured grades especially with their richness of stripes and variable color tones, with a character soft and delicate, produce a most artistic quality and this wood finished in the "natural" is growing in favor among people of taste and refinement.

Finishing.

Any of the following stains when properly used may be employed with entire success and gratifying results:

Mahogany (light or dark), black walnut (American), French and Italian walnut, Circassian walnut, Flemish brown, Mission and Dutch brown, forest green and silver gray.

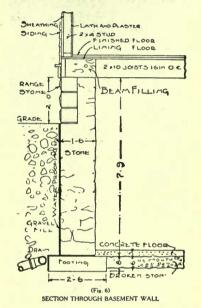
The quartered Red Gum as previously mentioned, on account of its peculiar grain, is probably more adapted for a mahogany stain because this stain brings out the changeable color tones which closely resemble mahogany. When either walnut or mahogany stains are used, experience shows that most pleasing colors are produced. The stain should not be applied sufficiently heavy to obliterate but just enough to leave partly visible, the grain of the wood.

Care of Hardwood Doors and Trim.

General observance and care is very necessary in the handling of all inside finish and while your specifications, which accompany plans, will give you the proper directions, we may say here that all

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Published by M. L. KEITH McKnight Bldg. Minneapolis, Minn. woods are porous, and the drier and more thoroughly seasoned they are, the more readily they absorb moisture and are affected by atmospheric conditions. When unfinished hardwood doors and trim are placed in a damp room they quickly absorb the moisture in the air, which causes expansion or swelling, and when they return to normal (that is, when the mois-



A wonderful specimen of tree life standing straight and tall—often reaching a height of 150 feet.

ture is again dried out) they are liable to warp and open at the joints, and it takes much time and labor to repair the damage. This can easily be avoided if only a little care is exercised.

In the first place, as soon as hardwood doors and trim are received, have a finisher give them one coat of filler, shellac or stain, as the case may require. The reason for this is that nearly all doors and trim are shipped "in the white," and all of the pores of the wood are open and ready to absorb moisture unless protected. Do not hang doors or put on trim in a damp, freshly plastered building. All hardwood finish should be back-painted with one heavy coat of asphaltum stain or lead and oil. This is to prevent absorption of moisture from the plaster. Mortar contains large quantities of water, and until the moisture is dried out of the walls the house is not in the right condition to receive hardwood doors, or any other fine woodwork which is quickly affected by such condition. Wood that is not backpainted is simply protected on one side and allows the moisture to come in on the other.

The manufacturer should not be censured nor the wood condemned if the product, upon which every care is exercised in the making, is not handled properly upon arrival at destination. Leading architects are specifying and insisting that heat first be turned on, so as to dry out the building thoroughly before hanging hardwood doors or putting on trim. If these hints and suggestions are carried out trouble of this nature will be avoided and you will experience the pleasure of having secured a finish for your home of which you may well be proud.

The Russian Forests.

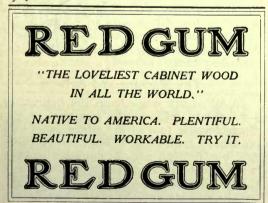
Recent developments are calling considerable attention to the Russian forests and the Russian timber supply. According to information recently published in the Times Russian Supplement, the area of the forests in Asiatic-Russia alone is said to be greater than the total area of the forests in Canada and those of America. These forests include such woods as pines, spruces, firs and larches. The great forests existing in the northern parts of the Russian empire form the eastern portion of the great northern timber belt which stretches from western Siberia to north Russia in Europe, and into Finland, Sweden and Norway.

"Throughout the centuries," says this review, "the great natural forests in the northern parts of the empire, and to some extent in other parts, have remained in their primeval state. They contain a vast store of valuable products awaiting the dawn of the day when the necessities of Europe and other parts of the world, having depleted their own local stores, or commercially accessible stores, should be forced to turn elsewhere to obtain their requirements in this respect.

"The reason for this immunity of the Russian forests from the axe of the lumberer, in the face of the fictitious and increasing price of soft wood materials in the European markets before the war, is not far to seek. The population of the forest tracts is sparse and there is an almost total absence of communications or developed facilities for export.

"The bulk of the forests in European Russia belong to the state; in addition, there are also communal and private forests, some being state-aided. These forests, with the development of the nation and the growth of industries dependent upon the presence of large areas of forest to supply the raw materials and fuel, etc., are destined to play a greater part in the national economy in the future than has been the case in the past, and to afford employment to a large population.

"As regards distribution, the common spruce is the most widely spread, forming the chief tree of northern Russia and Siberia, and growing to a fine size with clean timber much valued in the markets. The Scots pine comes next, stretching farther down into Central Russia than the spruce. The pine forms pure woods over considerable areas, but is also found in mixture with the birch, which is the most widely extended broad-leaved species in the country; next to it comes the aspen, occurring over large areas as both pure and mixed woods. The oak is more or less confined to the south, where it occurs as fine forests, several species being present both here and in the Caucasus. The larch holds a considerable space in the north, chiefly mixed with conifers, mostly pine.



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SPLINTERS AND SHAVINGS

Salt on Cement.



F your sidewalks are of cement do not put salt on them to melt the ice during stormy winter weather. The action of salt is detri-

mental to concrete. In creameries, where salt comes in contact with the floors constantly, it is stated that floors last only a few years. "The salt does not act on the cement, but destroys the gravel and other material and leaves the floors or walks honey-combed, so that they soon break down."

Inefficient Lighting.

One of the largest insurance companies recently made an investigation of 91,000 accident reports and discovered that 10 per cent of the accidents were directly caused by the lack of proper light, and in 13.8 per cent of the accidents poor lighting was a contributory cause. The statistics of accidents in the United States reveal the fact that about double the number of accidents happen during the four winter months when the days are short as compared with the four summer months when the days are long.

Japanese Subsidy for Dye Manufacture. It is interesting to know that the Imperial Government of Japan has recently declared a subsidy to all firms engaged in the manufacture of dyes in Japan, provided more than half the capital is subscribed by Japanese subjects. This subsidy is extended to all concerns making every form of dyestuffs and dye chemicals, including aniline salt, aniline dyes, synthetic indigo, etc. Materials for the manufacture of high explosives or chemicals are listed with these dyestuffs.

The amount of this subsidy will enable the various firms concerned to pay the dividend of 8 per cent.

Salvage of Sunken Ships.

Interest has been aroused here in technical circles, writes Consul General Alfred L. M. Gottschalk, from Rio de Janeiro, Brazil, by a recent lecture at the Club de Engenharia (Engineers' Club) of Rio de Janeiro, by Dr. Sylvio Pellico Portella, concerning his invention for the salvage of sunken ships. It is claimed by him that the invention is applicable to ships sunk at almost any depth, so long as divers are able to reach them, and that it is effective in putting a wreck afloat, no matter what its position on the sea floor.

The invention consists of a tender of special model, which is equipped with floats of waterproof material. These are neatly folded, but later when inflated with air they assume all sorts of shapes, parallelopipedons, spheres, cylinders, etc. They are carried down by divers and attached to various portions of the sunken vessel, both within and without, still retaining their connection by means of hose with the tender ship. When all are properly fastened in place they are inflated by air pressure from above, like the tires of an automobile. As they swell they are said to gradually displace the water within and about the wreck, and it is said that by their own buoyancy they float it to the surface.

The claim is made that the invention had two trials in Paris.

Cost of Fires and Fire Protection.

The annual loss through fire in the United States reaches the enormous total of \$225,000,000, without including the loss through prairie fires or marine fires, said the state fire marshal of Minnesota. This means a per capita loss of about \$2.25. If this money could be saved it would be enough to support the entire public school system.

The Machine and Art.

In all of my work from the beginning I have had faith in the machine as the characteristic tool of my times, therefore an artist's tool. I have believed that this tool put into an artist's hand could be a real benefit to our civilization. I believe that the architecture in America that fails to take into account the machine and mod-



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ern organization tendencies is going to be of no great benefit to the people. Of course I know that it is going to take a more subtle art within more severe limitations to build houses beautifully while utilizing the machine.—*Frank Lloyd Wright*.

Mud as a Building Material.

The possibility of using mud as a building material and so solving the urgent problem of providing cheap country cottages in the rural districts of England and housing accommodation in the areas where there has been a sudden influx of war workers is being made the subject of an interesting experiment by the new household and social science department of King's College for Women, University of London, according to the New York Sun.



Six mysterious looking walls have just been erected in the grounds at Camden Hill, each wall being composed of a different mixture of mud, with a view to testing which proves most suitable to the English climate.

In each case the earth has been subjected to a different process of preparation. In one case water-grass has been added, in another soft soap and in another case lime has been added to the earth and soft soap. A "grouting" of cement has been poured over the mud in yet another case and there is one wall made of earth alone.

Compensation.

As there is no worldly gain without some loss, so there is no worldly loss without some gain. If thou hast lost thy wealth, thou hast lost some trouble with it. If thou art degraded from thy honor, thou art likewise freed from the stroke of envy. If sickness hath blurred thy beauty, it hath delivered thee from pride. Set the allowance against the loss and thou shalt find no loss great. He loses little or nothing who reserves himself.— *Ouarels*.

Marble in New York Buildings.

Someone has taken the trouble to ascertain that more than 400 kinds of marble are used in construction work in New York City.





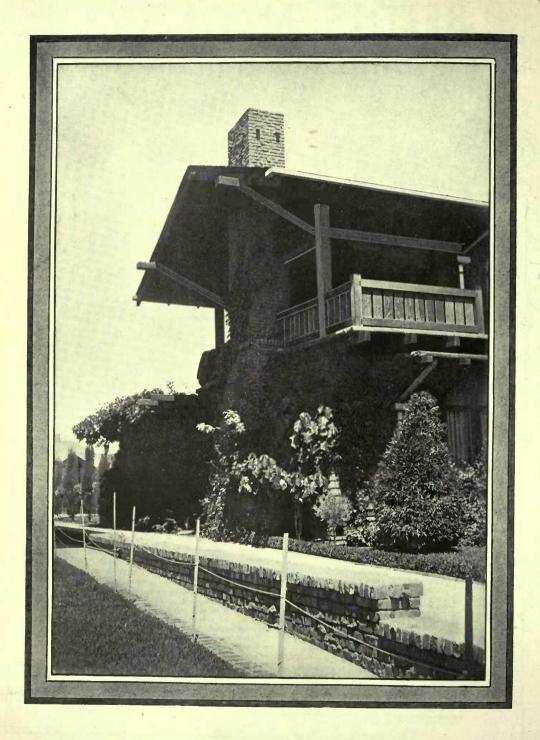
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VOL. XXXVII

FEBRUARY, 1917

No. 2



The drive terraced within a step of the entrance.

Friendly Houses Katherine Keene



NE house smiles at you and invites you to enter; another house frowns and lowers at you, and if you are young or timid your feet

will carry you past the door; still another meets you with total indifference, and you feel that it is hardly worth while waiting to see if any one answers the bell. One house speaks restlessness and another repose, while both may express hospitality.

When a house was built simply as a

shelter and a man's work and living was out of doors, as in the days of the pioneers, windows were few and small. The man who had breathed vigorously of fresh air all day wanted warmth and protection when he comes into his shelter. Now that people work and live indoors walls are being built of glass, a side of the room is filled with windows, living rooms are turned into porches at will and "all out of doors" is brought within the four walls. This feeling is gradually effect-



The timbered house has interesting roof lines.

ing a change in the type of windows. When civilization first began glazing the openings which had been made in the fort-like walls of old castles and great houses, openings intended as advantageous positions of defense, quite as much as for the purpose of admitting light and air, a movable or swinging sash were fitted in the opening. Swinging sash are still largely used in the old countries. When the early settlers came to America, they built for protection and devised the sliding window with two sash, which has since developed into the more or less complicated construction of the double hung weighted window. Consistent with the severity of the colder climes these may be made tight against the weather, but it



A protected entrance.

is impossible to open more than half of the wall opening.

In some houses where the winter rooms of the houses are fitted with double hung sash, the openings of the sleeping porches and sun rooms are filled with some form of casement sash, there being a great advantage if several of the sash can swing together as shown in some of the houses i!lustrated, so as to open up a wide space.

In any case the windows give the character to the

house. Yet many windows are not necessary to give a friendly, inviting aspect to a house.

The white stucco house, with the drive terraced to within one or two steps of the entrance, meets the guest in a very friendly way. The walls are not closely set with windows. One feels that the exterior interprets the interior arrangement, making one gable much more important than the other. The windows on the pergola posts are very distinctive.

The compact stucco house faces the south and the entrance is protected by sash on either side, which may be opened to leave the porch quite uninclosed. It is broad and friendly and encloses side lights as well as the front entrance, hardly shown in this view. The window casing are designed as a frame for the windows. The window boxes cast interesting shadows. The windows themselves



Nicely designed stucco and timber combination.

open their full capacity. The wide porch under the shade of the trees looks cool and inviting. The treatment of the roof and of the chimneys is distinctive.

The timbered house is a good example of the so-called English type of house. The gables and roof lines are interesting, the timber treatment is logical, the slight overhang of the gables, and the treatment of the verge boards in the gable end is satisfying. The openness of the house is very inviting and livable. Seeing it from the outside one pictures the comfort of the great glassed-in sun room, and the sleeping porch over it, with the pergola covered extension. The electric fixtures are casements, opening outward. The windows of the sun porch are double casements, hinged together, and so arranged that the pair may be pushed to either side of the opening without the need for mullions between.

Stucco and timber work may be put together in many fascinating combinations. A big rambling building takes this treatment in an especially effective way. The club house shown is very inviting, with its stucco work in the first story and porches, and under the extension of the roof on the second story. Here again the windows are interesting in the way they throw wide spaces open without divisions.

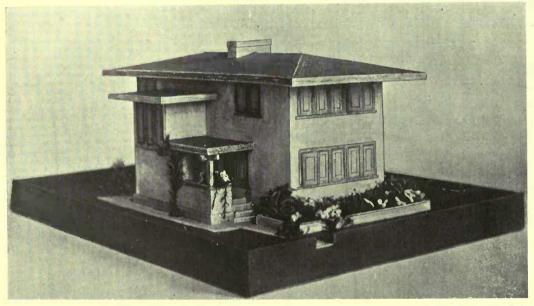
The Building of the House

Anthony Woodruff



HALL the new house be built of wood or shall it be built of tile? Shall we use brick or stucco? Shall we attempt to make it fire-

proof, or be satisfied if it is moderately fire resisting? These are some of the questions that assert themselves, now, to the man about to build a home, as a decade of construction when used in the small and the medium sized house, has never been satisfactorily established and varies rather widely with different estimates. Actual building figures which can be compared are seldom available. Some authorities say that an additional seven per cent added to the first cost of the wooden



Model of house on which accompanying figures are based.

Marion Alice Parker, Archt.

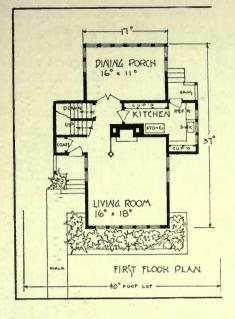
ago, he questioned whether the new house should be "Colonial" or "English" or "Mission."

This very fact shows the direction which the progress of building is taking. It concerns itself with a matter of fundamentals rather than of form. It is not the appearance of the house which is being considered, for often there is little external difference between the frame house which has been stuccoed and the house built of hollow tile and stuccoed.

The relative cost of the different type

house will allow one to build with hollow tile or brick for the exterior walls. Other authorities quote fifteen per cent as the additional cost of tile or brick. These figures concern themselves only with the first cost. They do not take the up-keep into consideration.

Several years ago, after some careful figuring a large building firm offered to build, at the owner's option, houses of either hollow tile or timber construction. They have now withdrawn the offer not, perhaps, because it cannot be done but,

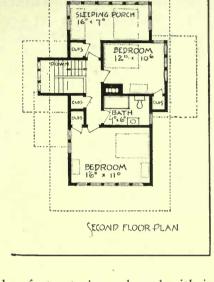


because conditions operate against it. Several points must be considered in the treatment of the different materials.

In the first place men have built with wood since the dawn of civilization and in a general way they know how it will behave under given conditions and what to expect of it. The man who is building the cheapest home that can be built will build with wood. A lucky chance may make the cheap tile or cement house equally satisfactory, but the elimination of chance requires expert workmen, and thereby additional expense.

Special attention should be given to the foundation wall which is to carry a tile or brick superstructure because uneven settlement which starts a crack anywhere will cause it to follow up the whole extent of the wall. Not only should the wall have footings but these should be wide enough to equalize slight settlement and are better to be "mushroomed."

With houses of a little higher cost thoroughly good foundations are considered necessary with any material and this again brings the different types of construction near together in cost for the larger house.



Another factor to be reckoned with in some places seems to be the labor unions and their standardization of a day's work. While eight or ten-inch tile can be laid very quickly in a wall,—much more quickly than brick,—and would seem to reduce the cost of tile, yet a certain amount of wall is a day's work. The good union man who is highly skilled may do no more than his slothful brother is able to do.

The question of the relative cost of different types of construction is such a vital point to the man who is planning to build a home that very careful estimates have been made from time to time, covering these different ways of building. With the recent changes in costs, old figures have lost their value.

We have selected a house of medium size and simple construction which has been estimated as carefully as possible, in order to find the relative difference in cost for the four most used types of construction; all timber; wood construction with metal lath and cement finish; hollow tile construction with cement exterior; and frame construction with brick veneer. These figures are for the house

85

complete, exclusive of the heating, plumbing and electric wiring, but they are prepared, not so much to show what it would cost to build this particular house as to show the difference in cost if built of the different materials as noted in the estimates. These figures which are for the present time and for the vicinity of Minneapolis, are given as follows:

No. 1. All frame construction, \$4,205.

No. 2. Frame construction, metal lath, cement finish for exterior, \$4,255.

No. 3. Exterior wall of hollow tile construction, rough cast exterior, \$4,517.

No. 4. Frame construction with brick veneer, \$4,635.

A small model of the house and two floor plans are shown. The interior finish is very simple throughout. Mouldings which gather dust are everywhere avoided.

So many people have difficulty in reading plans and in visualizing the architects' drawings that the small model, made at the same scale as the working drawings, is coming into favor as delineating the house which is to be.

The model here shown has been worked out in rather an unique way by a teacher of drawing. She makes models at a scale of either the quarter or the eighth of an inch to the foot, mounted on cardboard. The roof of the model lifts off disclosing the second floor plan, which also lifts out showing the plan of the first floor. The cost of such a model is small and is often repaid many times over by pointing out defects or misunderstandings which may be easily remedied while the building is still in a formative state and subject to change or correction.

It will be noticed that the models of construction given with the figures differ only in the outside walls, while the floors and inside partitions are of timber. The exterior wall is responsible for the greater protection from weather and fire from without.

With any construction which is expected to be fire resisting, particular care should always be exercised to close tightly all openings at the floor levels, etc., which might develop the action of a flue, fanning a slight fire into a blaze. Without a draught a possible fire is very slow in getting a start, while the flue action of the unstopped space between studs will speedily put it beyond control.

The reinforced concrete or hollow tile floor construction is very practicable for the home whose owner wishes to provide greater fire protection. Nailing strips are set in the concrete for placing the finished hardwood floors.

Exhaustive tests seem to show that there are a number of so-called fireproof paints and solutions on the market which render wood, or any material saturated in them, practically fire resisting for a considerable length of time. Such a paint or solution may be applied to a shingle roof with good effect. The first floor where the beams are exposed may also be given such a treatment on the under side.

Good workmanship in the building of the home makes for comfort to the family, and reduces both the up-keep and the fuel bills during the years of its use.



Wall Beds as Space Savers and Time Savers

Persis Bingham

N the Southwest the wall bed is used wherever people sleep — in private homes, apartment houses, bungalow courts, club houses and even in jury rooms. It is the housekeeper's best friend when the question of space saving and time saving is uppermost and improvements on it which have



Closet disappearing bed.

been patented during the past few years have made it perfectly sanitary, selfairing and as easy to handle as a baby carriage. There are more than half a dozen different types of wall bed in use at the present time, ranging in price from fifteen dollars to one hundred fifteen, according to mechanism, size and style of finish. Many of these beds are installed as a part of some article of built-in furni-



The bed is perfectly balanced.

ture and must be put in at the time this is finished, but others may be installed by simply driving screws and without causing unnecessary commotion or tearing out of partitions.

One of these beds which requires only the driving of eight screws to install it in



Closet disappearing bed in place.



Side pull rolling bed.

an extra closet serves as a spare bed in a bungalow in Los Angeles. The bedding has been removed in order that the *modus operandi* of the mechanism may be more easily observed in the photograph; ordinarily both mattress and quilts are left in place on the springs when the bed is put away for the day in the closet. The bed is fastened to the door jamb by two adjustable arms, one moving in a plate



Disappearing under bookcase and desk.

secured in the floor, the other attached to the jamb half way to the top of the door. When upright in the closet, the largest size double bed occupies a space on the floor 1'-10"x5'-0" and swings within a radius of 3'-0", requiring a door of that width. It is so perfectly balanced that it swings around into the closet at the slightest touch of one finger and is as easily lowered into position on the floor. When the door to the closet is near the center of the wall, the bed may be turned at any desired angle so as to benefit

by the circulation of air. Iron friction clamps hold the bedding in place when the frame is tipped up and suspend it loosely so that fresh air from the vent shaft in the floor circulates freely through it during the day.

The closet disappearing bed is space saving, labor saving, quickly installed in an old building at slight cost, so constructed that one may clean underneath

> it and capable of being reversed-that is, it may be placed so as to be let down in the house or out on a sleeping porch. This last advantage has made it very popular in private homes where the value of outdoor sleeping is appreciated, for even in mild climates the continued action of the atmosphere eventually causes an iron bed to corrode and a wooden one to lose its varnish or begin to warp. A bed which can be shut up in a closet during the day and pulled out at night when it is ready for use will last

much longer than one which 'must be exposed to the elements every hour of the twenty-four, and the space it occupies during the night may be utilized as an outdoor sitting room during warm afternoons.

In the small house where economy of construction is often an important factor, the owner sometimes finds it impossible to furnish a separate room for guests or occasional visitors and here it is that the wall bed comes to his assistance. By installing one in den, music room, living room or perhaps out

on a sleeping porch and providing a small dressing room and clothes closet combined as shown in the pictures of the Closet Bed, he is in a position to accommodate extra company without a moment's notice and without the investment of several hundred dollars in an extra room. When the housekeeper who does her own work has company, she usually wishes to have the least amount of work

to do so that she may enjoy her visitor, and a bed installed in a closet large enough to serve as a dressing room is the solution of her problem.

Some people, inheriting, perhaps, a certain dread of the old-fashioned parlor bed that used to fold up unexpectedly, catching its occupant unawares, prefer sleeping on something that remains flat on the floor the entire time and contains no mechanism tending to tip it up on end. To such a person the Rolling Bed is more satisfactory because it is



A bed that fits into a recess.

flat on its four feet the entire time whether in use or not. Rolling Beds are of two general types, those that roll into the recess sideways and those that roll endways. Built-in buffets, desks and seats are their favorite hiding places, and they are usually installed at the time the furniture is finished. Their location is completely disguised to the uninitiated and show, in any case, as a good looking



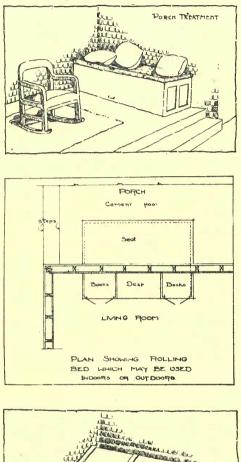
The bed in place.

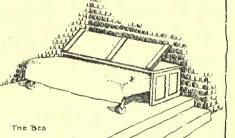
piece of furniture. Side Pull Beds are made with the side of the bed attached to it, as shown in the picture of the Rolling Bed under the bookcase and desk or with the doors hinged to the buffet and closed

after the bed has been rolled out into the room. In the last instance the bed may be rolled to any part of the room and there is no danger of a floor draught from the vent in the floor of the bed recess. If there is a small child who must take an afternoon nap, a bed which will roll out of its recess, leaving no trace from whence it came and capable of being placed in any convenient corner behind a folding screen, is better than one which lets down into position within a limited space. Rolling Beds are made in several sizes occupying on an average about thirty square feet of floor space.

The Side Pull Bed slides into a recess which is partly under a writing desk and partly in a clos-

et on the opposite side of the wall. It requires a space six feet six inches in the clear between jambs and four feet six inches deep. The closet floor is raised above the bed and reached by two steps. All space above the bed is utilized by this method of construction and the Rolling Bed becomes a space saver as well as the Closet Bed. This same style of bed was recently installed in a suburban bungalow so as to be used out on a sleeping porch when desired. The recess which holds it is built partly under a desk





and partly under a seat on the porch. At night the bed may be rolled out into the if the room or weather is warm, the end of the seat may be lifted up, the bed rolled out doors and the seat front replaced again to close opening. the It would be difficult to imagine a more sanitary or logical place for a bed than this, for in the morning it is well aired and sunned, then stored away out of sight until wanted again.

The mechanism of the folding bed is so arranged that the balancing point of the bed is seven inches from the head, making it practically impossible for anyone to get his weight in back of it and a c c i d e n tally close the bed. This is a decided advantage over the old

style folding bed and the patenting of this improvement marked the dawn of a new era in the disappearing bed business. Inventors are continually at work devising new means of lessening the cost of installation and manufacture and a recent step in this direction has been the appearance of the Oscillating Bed. When there is a closet back of the bed, the use of the Oscillating Bed saves the expense of a door and its accompanying hardware. The bed hangs on a panel of special design, 4'-6" wide by 6'-6" high, and revolves on a metal arm, giving an opening to the closet as the bed swings around. When installed in a closet not over two feet six inches deep next to an outside wall, this bed may be reversed and let down on a porch through two doors.

The wall bed is not a passing fad nor an experiment. Tens of thousands have been sold during the past few years and there is searcely a bedroom problem conceivable which cannot be solved with its help at the minimum expense to the owner. One prominent Los Augeles woman has used a wall bed to help solve her servant problem. Instead of giving her maid the customary small bedroom, she had the servant's room fitted with an inexpensive, mirrored bed which could be put away out of sight during the day, transforming the room into a dainty sitting room where the maid might entertain her friends during leisure hours. The plan worked well and it is only one of the many ingenious experiments in which the wall bed has figured; every day some new use is being found for it, but of all the advantages claimed for it, one will always remain uppermost and that is its capacity for saving the housekeeper's labor.

The Farm House Laundry Equipment

Edith M. Jones



S one motors through the country, either in the East or in the West, one cannot but be impressed with the number of hand-power wash-

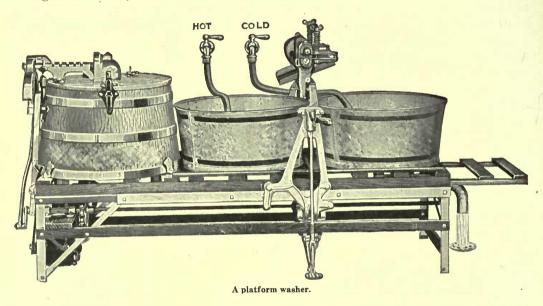
ing machines that are in use everywhere. On the back porch of almost every farm house, during the summer months, one sees the washing outfit consisting of a machine of one make or another, galvanized iron tubs, baskets, etc., hung up on the porch when not in use.

This is indeed a step in advance from the old-fashioned, back-breaking, handrubbing process, but I want to tell you about the laundry at the farm of which I have so often spoken where Mistress Progress is gradually transforming a rundown, neglected, old farm into an industrial factory aiming at up-to-date, efficiency standards.

Those of you who are familiar with New York state will understand when I say the cement floor of this laundry was made from the stones which were collected on the farm, then crushed and made into the cement. Two floor drains were provided, one under the laundry tubs and the other under the crude, home-made shower bath which I will tell you of later.

The tubs, washing machine, electric wringer and laundry stove were installed and the motors which operated the butter churn and the dairy equipment were made to run the electrical washing outfit. There are many good fairies at work in the world today but surely the wonderful fairy—electricity—has done much to change the dreaded washday with its weariness and backache, to a day of comparative ease and comfort. A pump with soft water, drainage for the tubs, several windows for ample ventilation, hooks for the clothes lines for winter and stormy weather, were all installed in this farm laundry and all combine to save time, labor and annoyance.

For the ironing equipment we built a shallow cupboard and put in two shelves: one for starch, etc., and the other for irons, etc. The ironing board was hinged to the back of the cupboard, fastened up when not in use and let down with a support when in use for the ironing. This arrangement is very satisfactory because After reading all I have said about this farm I have been so interested in, you may possibly say there is little that is very unusual in it after all and perhaps I will agree with you—but if you could see the farm today and compare it with the farm as I first saw it, you would realize what has been accomplished and agree with me that this remodeled, efficient kitchen, the electrically equipped laundry and



the ironing board is not only out of the way but always clean and ready for use.

On one side of the laundry provision is made for the men's washroom and here the home-made shower bath was rigged up. Really this home-made device interested me very much as it showed what a little originality could do. The shower equipment consisted of a large pail with a cover suspended from the ceiling and placed directly above the floor drain. This pail had a perforated bottom and a slide that opened with a chain. The pail with hot water was raised with a pulley chain and when ready for the shower the chain which opened the slide was pulled and the result was almost as satisfactory as a bath in a luxuriously appointed bathroom.

dairy house, the telephone and an inexpensive automobile have so completely changed the life of this housewife that she no longer talks of being over-burdened even though at seasons of the year the work is heavy and helpers are hard to get. It is only another proof that system, organization and adequate equipment are necessary in the simplest home as well as the largest factory and comfort and success come in proportion.

I am frequently asked about the best kinds of washing machines and I hesitate to name any one kind as there are so many on the market. I went to the Minnesota State Fair this year and it seemed to me Machinery Hall was filled with different makes of washing machines.

I went to the Industrial Exhibit in

Chicago and there, too, washing machines outnumbered everything else, so I hesitate to speak of any one kind, but if I were buying one today I am sure I would at least give one of the platform types a thorough trial.

These machines are built to do away with the lifting of tubs and baskets during the entire

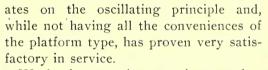
process of the washing. The wringer is so constructed that it operates at any point and is easily adjusted from one tub to the other by means of a rollerbearing track. The wringer is reversible and has a reversible drip-board so the clothes can be wrung from either tub or from either side of the wringer with equal ease.

Of course, many machines have good points, but shifting wringers, unnecessary lifting of clothes are serious considerations and the equipment which eliminates the greatest amount of labor in the whole laundry process is the most desirable in the final choice.

After all, while each part of the equipment in the laundry, as in the kitchen, is important, the arrangement of each part to the whole must be carefully thought out to overcome needless steps and obtain the highest efficiency.

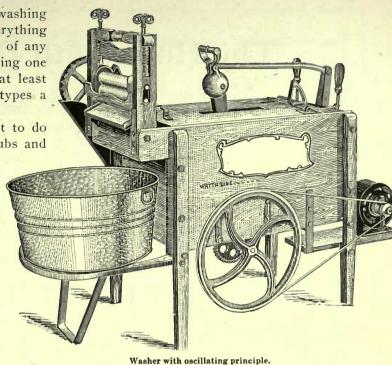
Yes, the days of drudgery for the upto-date farm house are numbered. Household machinery has made it possible for the housewife to accomplish in fewer hours two or three times as much as formerly and is doing in the house for the housekeeper just what it has done for the farmer in the fields or the industrial centers everywhere.

Another electric power washer of different type is shown. This machine oper-



Work of men and women is a wonderful thing. No one is truly happy who has not his or her especial task to perform but no one can fulfil his highest destiny where all the waking hours are consumed with never-ending drudgery that could be better done by a mortor-driven machine and the same human energy turned into the higher service that only the wife, mother and neighbor can give.

We hear much these days in the industrial world about the "eight-hour law" and "overtime pay." Is it not possible for that old adage, "Woman's work is never done" to be buried and the eighthour law established? System, organization and machinery have done it in the industrial world. Will not these wonder workers do as much for woman's work in the home?



The Home with Dignity

THIS is a substantial, dignified home, constructed with wall-bearing tile, finished with cement stucco and having a tile roof.

The arrangement of rooms is one that has proven to be satisfactory by its confor the indirect ceiling lights and for the wall brackets are simple in design.

The dining room which can be shut off from the living room by wide sliding doors is a very handsome room because of the high wainscot of paneled oak and



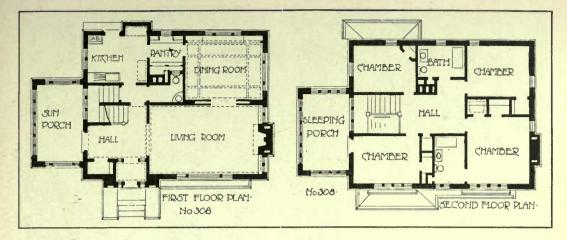
Constructed with wall-bearing tile.

Lindstrom & Almars. Architects.

stant recurrence in all parts of the country. The stairway is set well back into the hall, thus giving, not only a roomy entrance but retiring the stairs and bringing them near the service part of the house so that a rear stairway is not necessary. There is by this arrangement, too, a ready access from the kitchen to the front door.

The living room is fifteen by twentyfour feet over all, one side of which is filled by a tiled fireplace flanked on either side by bookcases. The ceiling is beamed and the oak finish is given a neutral gray stain which is matched by neutral wall decorations. The electric light fixtures the buffet of special design which occupies the entire rear side of the room.

The kitchen has been planned to be compact, with a space for everything; a refrigerator iced from the outside, a kitchen cabinet, a stove with direct connection to chimney and the sink in one piece placed against an inside wall and well lighted. There is imported linoleum on the floor and sanitas on the walls. The pantry gives ample cupboard space and furnishes a double set of doors between the kitchen and the rest of the house on one side as the rear hall does on the other side. The first floor toilet and lavatory will be found a great convenience.



Throughout the house all the decorations and furnishings have been carefully studied to keep the effect restful and homelike and the many windows give the open, airy effect now so well liked.

The central hall from which all the bedrooms open on the second floor is an attractive feature. There are four bedrooms, a large sleeping porch, two baths and many closets on this floor. The bath rooms are finished with tile floors and wainscot, solid built-in tubs and pedestal bowls.

The house has a hot water heating plant and, in addition, an instantaneous hot water heater located in the basement.

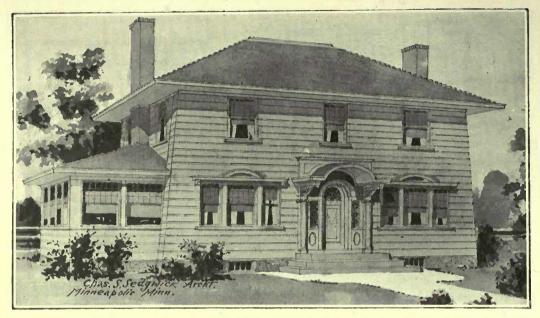
The basement contains the usual space for heating plant and fuel storage, a laundry, toilet, vegetable room and besides a light, airy amusement room with brick fireplace. This arrangement is recommended to others where space is available.

A Commodious Residence

THIS house with its broad, hospitable front is hardly adapted to a narrow city lot but is rather adapted to a suburb where it can have land about it to give it the right setting. It is thirtysix feet wide and with the addition of the sun-porch requires forty-seven feet in width for its ground area while its depth is twenty-five feet and with the kitchen extension is thirty-nine feet in all.

The style may be called Colonial, the exterior is covered with wide siding painted in "Old Virginia White" and the roof may be either shingles stained green or green tile. The story heights are nine feet and eight feet six inches respectively, while the cost is estimated, by the architect, at \$5,000 to \$5,500, exclusive of heating and plumbing. This includes a full basement and the finish of the first floor in hardwoods while that of the second story is in white enamel.

This is the type of house which because it is broad and low and has overhanging eaves gives one a very homey feeling. This home-like feeling is accentuated by the central hall which has the staircase in the center, the living room opening on the left and the library and dining room on the right. The living room has its charm increased as one enters by a view of the large glazed porch opening from it by French doors and by the fireplace opposite the hall door. Another fireplace in the library gives charm to that room and both chimneys count in the outside



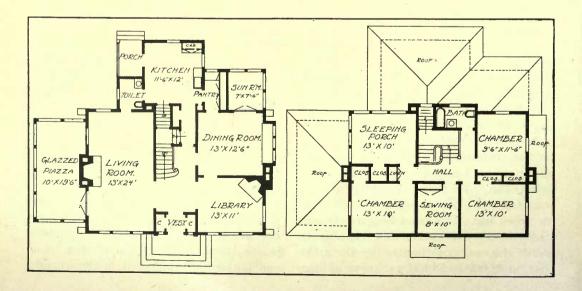
With broad, hospitable front.

Chas S. Sedgwich, Architect.

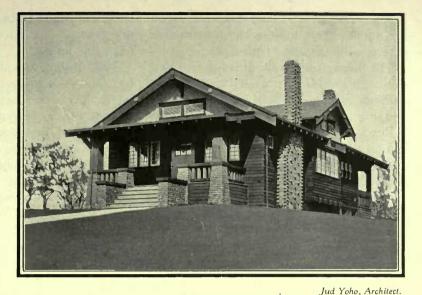
appearance of the house. The dining room is made attractive by the broad window seat and the sun room which could be used for a breakfast room opening from it by French doors.

The kitchen conveniences are particularly well taken care of; a roomy pantry giving access to the dining room, closets for brooms and stores, a kitchen cabinet, direct connection up to the half-way landing of the front stairs and easy connection to the basement. The first floor toilet is also easily reached from either living room or kitchen.

On the second floor there are three good chambers and one room glazed on two sides for a sleeping porch, a bathroom, a sewing room and ample closet room.

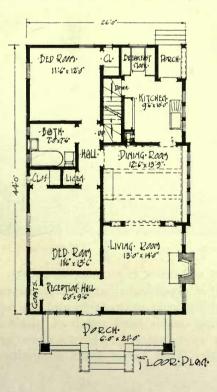


Lots of Room and Then Some



Combination of brick, cement and siding, very attractive in appearance.

MANY owners of big houses go to California in the winter, not so much for the climate, as to be free from the care of the house at home. It is a perfect delight to them to hire a fiveroom bungalow and for the housewife to do her own work in the tiny kitchen, free



from the excess steps that their rambling house at home makes, and free from the servants that are necessary to take care of a large amount of space.

Gradually the idea of compactness is gaining ground in this age of high prices for building materials and the small bungalow, such as this, is daily growing in favor with the rich man as well as the man of medium means. Here is a comfortable place to eat, sleep and rest in for any man with simple tastes, whether he be living on the income from his money or earning his bread day by day.

The use of brick and cement for the foundation and upper story, respectively, with siding sandwiched in, makes the outside of the accompanying bungalow very attractive and pleasing in appearance.

The porch extends nearly across the front of the house and has a large square timber for a support at either corner. The braces protrude through the verge board rather than appear beneath it.

From the porch one enters a small reception hall, across one end of which is a roomy coat closet. Entering the living room, only a broad columned opening separates it from the dining room so that, in effect, one enters a spacious double room. The living room fireplace is on the outside wall, built with an attractive exterior chimney of rough brick.

The dining room ceiling is beamed and the wide window seat on one side is flanked on the other with a simple but pleasing buffet.

Beyond the dining room is the kitchen, equipped with kitchen cabinet and sink and still beyond it, under the windows, is a very attractive little breakfast alcove. The kitchen porch is beside the alcove.

From the dining room opens a small hallway which connects it with the two bedrooms and the bathroom. Stairs lead to the attic space from this hall, and the basement stairs from the kitchen are under them. The linen closet also opens from this hall.

This design, twenty-six by forty-four feet, allows it to be built upon a narrow lot if that seems best. It may be built with a full basement and provision for furnace and fuel rooms as desired. A laundry and storage space may also be arranged for in the basement.

Not the size of a house but the conveniences of its arrangement and equipment are to be sought for in the modern and up-to-date home and for a man and his wife there is all the room they need here and then some.

The Bungalow That Invites You In



A very inviting exterior.

E. W Stillwell, Architect.

THE pride which one takes in the house one owns, is in a large measure dependent upon one's neighbor's appreciation of the appearance of the house. They do not know whether it is convenient to do work in, whether it is

easy to heat or economical in upkeep, but they do know whether the house appears inviting from the outside and the owner sitting on his front porch of an evening is always flattered to hear a passerby remark, "That house looks so inviting I

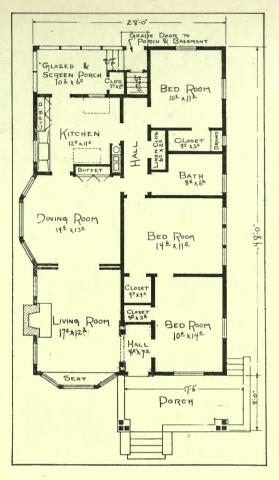
would like to go through it." To gain this element of charm is why the architect and owner take so much thought for the little details of the entrance way; the broad steps and the potted plants beside them.

A house upon a narrow lot as a rule offers a less hospitable appearance than if it presents more face to the street and the designer has been particularly successful in this house in his combination of the porch gable with the main gable and their union with the roof of the bay.

This plans offers a very inviting exterior and a roomy interior adapted to a forty-foot lot.

The exterior is built with shingles stained brown and a darker tone for the trim while the cobble stone work of the porch and chimney give strength and character to the appearance.

The entrance hall is a bit unusual with its wide columned opening into the living room. Both living room and dining room. are flooded with light and the view from either room into the other is pleasing when the wide sliding doors are open. In the living room the fireplace and window seat are the features and in the dining room the built-in buffet makes the room attractive. The kitchen is well lighted and offers an attractive place for the housewife to do her work in. She will especially appreciate the glazed porch connecting and the grade entrance to this, which also connects with the basement, as it offers good protection from inclement weather.



The bedrooms are cozy and have good closets. The front bedroom could well be used as a library if desired as it connects with the entrance hall. The rear hall gives privacy to the bath.

A heating plant can be installed if wished for and the cost is estimated, we are told, at from \$2,290 to \$2,500 for the house exclusive of heating and plumbing.

A Type Worth Studying

H ERE is shown a particularly successful type of the bungalow home which will be found worth studying by those thinking of building a cozy and convenient home along these lines. The floor plan is well arranged and is very convenient for the housewife. The breakfast room is handy to the kitchen and will save much work. This room if not desired for a breakfast room may be

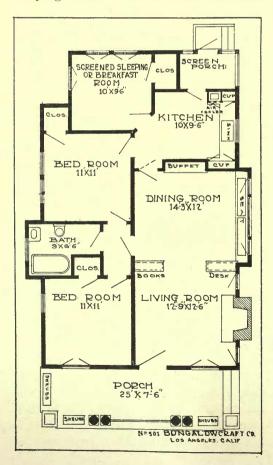
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The house has a strong and massive appearance.

Bungalowcraft Co., Architects.

used for a sleeping porch as the casement windows make it very airy and ideal for a sleeping room. This room is finished in



white enamel and delft blue walls.

In the living room is an open fireplace of pressed brick with a wood mantel shelf and in the dining room is a well designed built-in buffet. A separation is given the rooms by the bookcases and writing desk built between them. These rooms have oak floors, papered walls, and the woodwork is of pine, stained a light golden oak.

The kitchen is finished in the natural wood and the walls have a painted surface on smooth plaster. The sink has a composition drainboard and adjacent to the sink is the air-cooler and the built-in cupboards, bins, drawers and breadboard.

The charm of many a simple cottage is in the placing of a few shrubs or vines and the few extra dollars spent making provision for such growth is amply repaid in the effect gained. Again one can use inexpensive brick for the chimney and then because of the trellis beside it with the green vine covering it find the result better than the hard cold surface of a much more expensive brick.

The exterior walls are covered with wide resawed siding, which gives the house a strong and massive appearance. All of the exterior woodwork is painted white, the shingle roof is stained moss green while the massive outside chimney is of tapestry brick laid up in black mortar and the porch floor is of cement with a brick border. This combination of colors is very effective and the mahogany of the front door gives a contrast and makes the entrance prominent.

The columns on the porch are well grouped and with the railing form an interesting detail. Along the outer edge of the porch spaces are left in the floor for the planting of arbor vitae which add an attractive note to the bungalow and serve to make the porch exclusive.

While this house is designed for a warm climate it has a compactness and many features, such as the adaptability of the screened porch opening from the kitchen, serviceable as either a sleeping porch or a breakfast room, which make it well worth the study of the prospective builder in any climate.

Suburban Homes

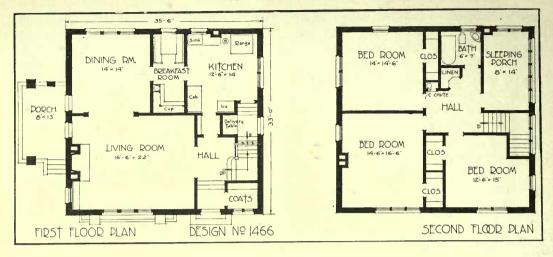
THE keynote of this house is simplicity, but that is what makes it pleasing, for you feel the thought of the designer and realize that he has reached the right result. The house is both compact and roomy with many conveniences that are left out of larger houses, such as

the clothes chute, the roomy coat closet, the delivery table for the grocery boy, the breakfast nook and the kitchen cabinet.

The street entrance has three steps inside instead of outside and this prevents the stumbling over icy steps in the winter time while the porch instead of being



Simplicity is the keynote.



a passage way for this doorway is on the side where it is available from both the living room and the dining room and may be used to lounge on, or meals may be served there nearly as conveniently as in the dining room.

The living and dining rooms open well, one into the other and the fireplace with built-in bookcase beside it makes the living room attractive.

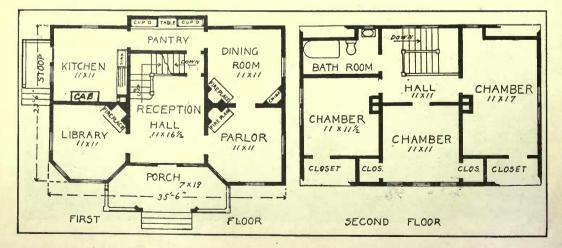
For the hurried breakfast the table, with seats, in the pantry nook is a convenience that many a housewife will appreciate, with the china nearby and only a step to the kitchen.

The outside kitchen entrance, as that of the front, eliminates icy steps and it is near enough the street to save many steps. The grocery boy leaves his parcels on the table provided and the iceman puts in his ice without calling for the housewife who may be in another part of the house.

The second floor gives three good bedrooms, all with cross ventilation and large closets; there is a nice bath and linen closet and what everybody demands nowa-days, a sleeping porch. The hall is well lighted and all rooms have easy access to the bath.

The entire house is finished in birch, stained on the first floor and with white enamel for the second.

The house as shown is built of tile with stucco finish and shingle roof. It might, however, be built of frame construction



equally as well. It requires at least a fifty-foot lot but not a deep one, being only thirty-three feet in depth.

The wide eaves cast deep shadows which add their touch of interest and the brick of the porch piers and flower box is the touch of color to offset the plainness of the stucco wall. Casement windows with their oddly divided window sash are used because of the same plainliving room, a library, a good sized pantry and three fireplaces. This latter fact adapts it particularly to a Southern community, although the house, as built, is in a Northern state. If prospective home builders could only be made to realize the importance of having good plans to build from there would be more homes showing the good design of this. It has an exceptionally well balanced exterior with its



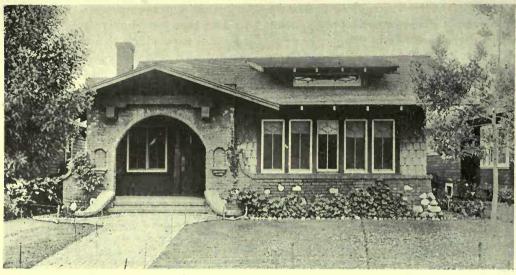
An exceptionally well balanced exterior.

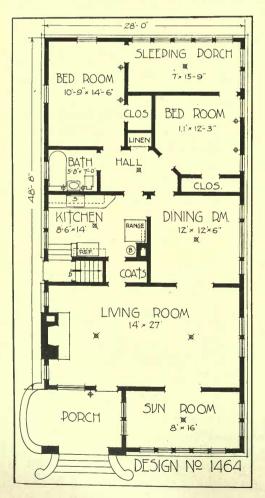
ness of the wall surface. The second design emphasizes the results obtained from building after good plans. The first story of the house is sided with narrow siding and the upper story has shingles.

The porch is both attractive and unique because of its full floor space and angled roof. The reception hall is through the center of the house, a very desirable plan which allows for the convenient arrangement of the rooms, both upstairs and down.

This beautiful cottage home contains many of the luxuries of a more pretentious house. It has, besides the usual board central gable surmounting the entrance in an attractive manner. On the rear is another gable to match it. The roof, being of gambrel style, there is very little waste room on the second floor and this has been utilized as closets. There is always more room in a gambrel-roofed house than there appears to be from the outside. It is this fact combined with the quaintly picturesque appearance which they present that makes the gambrelroofed cottages so popular and this house is proving to be one of the most popular in its style.

The roomy bungalow plan shown is adapted to a narrow lot. You recall the





Recalls the Old Mission of California.

old missions of California when you walk up the broad walk to the entrance porch and you find the porch a very comfortable place to sit down in and rest on a sunny day. When the wind blows you can lounge in the airy sun room and for evenings there is the long living room with its fireplace.

The dining room is well lighted and the kitchen compact and well arranged. The rear entrance is convenient to the street and makes access to the basement easy.

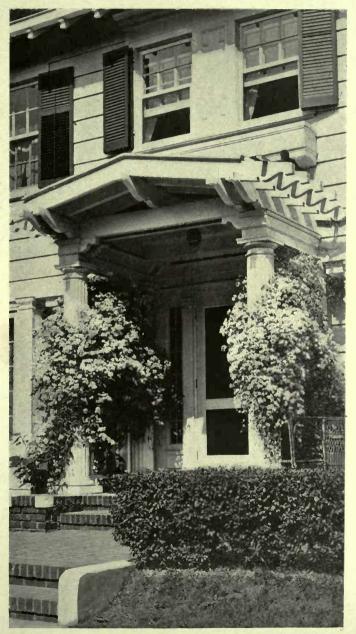
The bedrooms are at the rear, away from the street noises and separated from the rest of the house by the little hall. The sleeping porch has room for several cots and is convenient for either bedroom.

The bathroom is easy of access and the plumbing most economically planned. There is ample closet room throughout.

On the exterior, brick with a few cobble stones inset is used to the sill course throughout and to form the hospitable arch of the front porch. Above it shingles have been used in an ornamental way and the roof is also shingled.

The interior is finished in Oregon pine stained in the front part of the house and painted in the rear rooms.

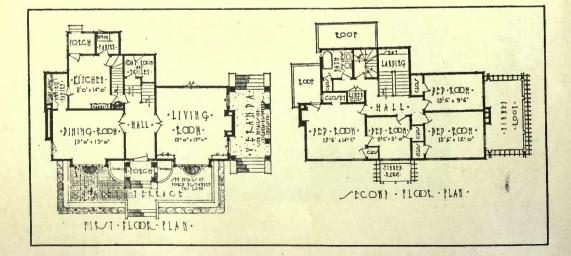
Portfolio of Interesting Homes



Hewitt & Emerson, Architects.



Hewitt & Emerson Architects.

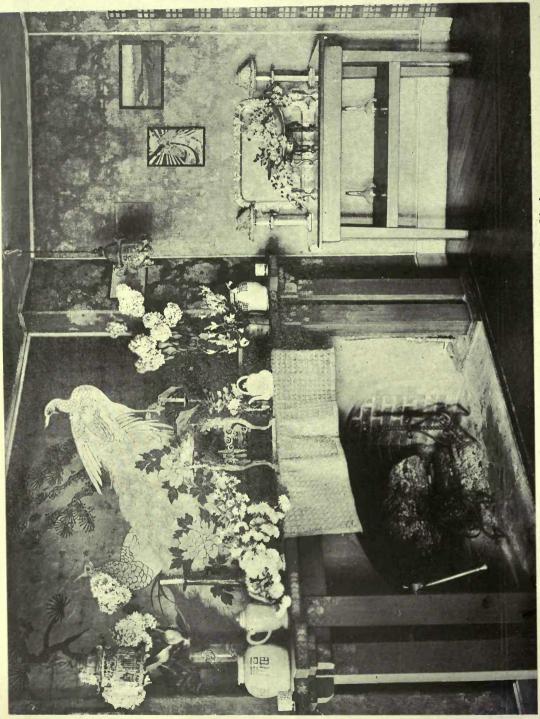




Dining room.



Living room.



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Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Where Orient and Occident Meet

AVID BELASCO is quoted as saying that plays are seldom written; they are usually re-written. And the same may be said

of house furnishing. Rarely is the interior of a home constructed under one definite impulse. Like the renowned Topsy it matures on different lines; and for this reason, if for no other, house furnishing is extremely fascinating. Like a continued story it develops from year to year and always with an element of the unexpected.

Just at present the dominant influence in interior decoration is decidedly oriental —sometimes working for good but often for complete chaos. The mingling of Chinese, East Indian, Korean, Japanese and Persian leads, as may be imagined, to extraordinary results.

Plainly these excursions into the decorative motifs of the Far East are not for the homemaker of moderate means unless gifted above the average. Guided by discrimination, a sense of proportion, fitness and humor, it is possible to introduce certain details into a simple house with charming effect. There must be a slight spirit of adventure about the undertaking and a willingness to risk possible failure in the face of probable success.

China has more to offer than the other countries in the way of practical sugges-

tions. There is long tradition back of the Chinese element in Occidental furnishing. New England comes naturally by the inheritance through seafaring great grandfathers and in a larger way through the long Anglo-Oriental period, dating back to the reign of Charles II and lasting until the late eighteenth century. The present interest in everything Chinese is an outgrowth of the Chippendale revival of several years ago. Today the "safest" schemes are those which follow the old traditions, colonial on one hand and via England on the other. Both make use of lacquered furniture, of Chinese rugs, of bamboo, and of many charming accessories, all of which, when carefully combined, are entirely livable. The English adaptation may follow the lead of Chippendale or the more unusual path of the Queen Anne designers. It may hark back to the seventeenth century when the rarest products of the Khang Khsi period . found their way to the court of the Second Charles, but here one is apt to lose the trail in misty legends or grow bewildered with the sumptuousness of gold lacquer, black Hawthorn and carved jade. Historically this particular period is extremely interesting and highly important. It was so soon effaced by the simple sturdy designs of Dutch origin which followed the accession of William and Mary,



only to crop up again in a greatly modified, decidedly chastened manner with the coming of good Queen Anne.

Many of the new Chinese rooms follow no hide-bound traditions. They assimilate and blend many, and occasionally



Hall of Mr. Albert Herter's house.

achieve marked success. It is, of course, not difficult for Madame Millionaire to secure a delightful Chinese room. Two elements only enter into the plan; plenty of money and a capable decorator. If the latter is wisely chosen the result will be a room consistent in every appointment, yet with a touch of individuality which makes it especially fitting for the personality of Madame Millionaire. Here is

where the true artist is shown. Possibly it will be a breakfast room with teakwood furniture, walls paneled in painted rice paper depicting birds of Celestial origin, rugs of old Chinese weave, rare screens and a lighting scheme which has cost the

decorator many sleepless hours. The silver for the table will be made to order by native craftsmen or cleverly copied by American designers, the cutlery Chinese steel with jade handles and the coffee service real Celedon. Even the looms of China will be called into play to supply the table linen. Very costly will be this room dedicated to the brief morning cup, yet beautifully simple. The dollar mark will be invisible-or, at least, discreetly veiled. It does no harm to consider such a room from time to time even though it touches our own decorative problems as remotely as would a case of Ming porcelain in a museum.

Interior decoration has made great strides in the past half dozen years, and every room, well executed, holds some object lesson. The lessons are not always the same. They may be briefly enumerated under such

general headings as color harmonies, proportion, the balance between ornamental surfaces and plain spaces, furniture arrangement, the use of certain colors in relation to the amount of light, etc. These are broad subjects and may be expressed in many terms. An artist and master decorator, like Albert Herter, would express them with hand-woven tapestries and the rarest and most beau-



tiful things which taste and wealth could command, and someone else would set forth some of the same principles in terms of wicker and chintz.

Even the stage, which has violated, at times, every law of good taste in decoration now bids fair to become another means of education. Nothing is more interesting or encouraging than the great

improvement in stage rooms—for the theatre speaks in no uncertain tones to multitudes. The delightful color harmonies of the Portmanteau theatre will be recalled by my readers who have been

fortunate enough to see Mr. Stuart Walker's productions. Inasmuch as this theatre is portable—literary portmanteau—it will some day come to you.

After many years of theatrical red,—red drop-curtains, red prosceniums, red auditoriums, red upholstery, it is refreshing to look at Portmanteau blue,—a wonderful tone, soft yet very alive. This beautiful color, in combination with black and dull gold, forms the setting or frame through which all the plays are viewed. When the blue curtains are drawn back there is always



Chinese Chippendale cretonne.

Mountain," is presented, an entirely different color range will be noted within the frame—the latter softened into misty outlines by the darkened house. One scene comes vividly to mind, in which

> jade green, lustrous black and coral-red gleam against a neutral background. It is not my intention to dwell on the charm and power of the plays, merely to emphasize the beauty of the color schemes and largely because they have a practical, everyday value. I found myself doing over a guest room in my mind at my first Portmanteau play and next summer mean to work out the scheme.

This is truly an age of suggestion when it is possible to gather here and there hints from many sources. Quite recently a



Chinese Chippendale pattern found in paper, brocade and printed linen.

a "color picture." If you happen to see "Six Who Pass While the Lentils Boil," a fantasy by Mr. Walker, you will enjoy the pure yellows deepening to orange which form the background for the Queen, the Mime, the Blindman, the Milkmaid, the Ballad Singer and the Terrible Heads-

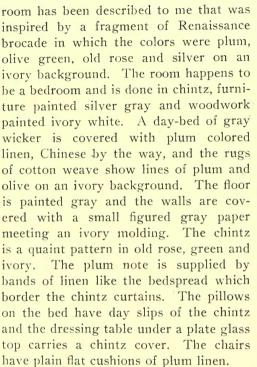
man. If Lord Dunsany's masterpiece,

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Not long ago in a smart Boston shop I noted a day-bed of wicker painted Gobelin blue and covered with a black cretonne showing baskets of dull yellow filled with pink tulips. An hour-glass chair of wicker, near at hand, was painted black with the exception of the wicker braiding around the edge, which was the blue of the bed. A round, fat cushion repeated the tulips and baskets. This shop contained several Chinese bird cages of bamboo with ivory fitments and bright scarlet cords and tassels. Whether birds are any happier in all this Oriental splendor is doubtful but the cages are far more interesting than the familiar ones of gilded wire. I am sure gold fish are entirely at peace with the world in the lovely new fish bowls, clear as crystal and mounted on teakwood stands.

Speaking of bird cages, a curious one was sold in New York recently for several hundred dollars. It belonged to the Volpi collection from the Davanzati Palace in Florence, auctioned for the benefit of the Italian War Fund and netting nearly a million dollars. An iron bird cage for three hundred seemed a mere trifle in comparison with a bronze censor selling for sixty-eight thousand. . In the history of the American Art Galleries, where the collection was exhibited and sold, there has never been a parallel. A rare combination of circumstances made possible the prices: first, the romantic and historic background of an old palace; second, a collection of Italian art treasures never again to be duplicated en masse; third, an audience of America's greatest connoisseurs, and fourth, the reason back of the sale.

Coming back to the oriental note in housefurnishing: one cause of the abundance of Chinese and Japanese articles in the shops is due to the war. The commercial traffic of the Pacific has suffered little. and importers have seized the opportunity to exploit the arts of the Far East. The dearth of toys of European make has given a great impetus to Japanese toymaking, and charming playthings consequently may be secured. One important Japanese shop, famous for its beautiful screens, porcelain and bronzes, filled its windows during the holidays with dwarf evergreens loaded with tiny toys of unusual design, and the dolls, assembled to witness the festivity, represented every rank from Mikado to coolie.

Among the things which will appeal to those who like a touch of the novel and unusual are the diminutive Japanese gardens. These may be used on the din-



ing table, forming a pleasant change from ferneries and cut flowers. With care they will last indefinitely and, like most things from the land of Nippon, are artful and most attractive. Chinese lily bulbs in bowls of brilliant hue interest many people, who like to watch the ugly gray objects blossom forth into beauty. Both China and Japan contribute dwarf trees planted in vases, pots and bowls of various porcelains, metals and lacquers. These little trees seem endowed with perpetual life and are said to thrive on neglect.

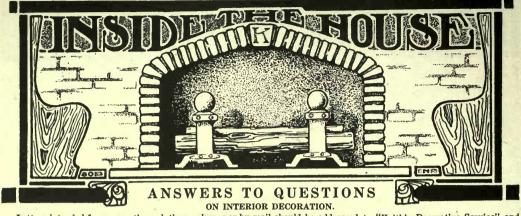
Tea sets, trays, tea baskets, tea caddies and all manner of wicker and lacquered tables were never more alluring. There are nests of tables which fill many uses and are doubly convenient in small rooms. Of table ware, the green Sedji is recommended. Many department stores carry this pale green china, which, by the way, is a Japanese imitation of Chinese Celedon. The clever Japs not only make their own beautiful wares, but copy those of China and Korea and often at half price. Real Celedon is now almost impossible to find, but Canton, Nankin, Gold Medallion, Green Dragon and other well-known products of the Celestial Kingdom hold their own from year to year and in moderate use are perfectly fitted to our tables.

The rise of the Oriental birdcage is decidedly interesting. First came the old Chinese style, very rare and a real work of art, priced accordingly. Then new cages to meet the demand appeared, almost as elaborate and still expensive. Now the Japanese have copied the Chinese and the result is a deluge of cages. I have an idea that an American bird would prefer the Japanese variety. It is simpler, more spacious, and hardly a curio.

Of wicker articles, the new screens fill a practical need, firm, light in weight, and most effective in design and decoration.

The great advantage of these oriental objects lies in the fact that they supply delightful notes of color. As a race we are afraid of color and our houses lack color charm. If we go in for bright tones, we usually turn to wall papers and thus overdo the matter. The Japanese are masters of the use of neutral tones enlivened by brilliant touches. The Chinese are masters of the use of brilliant colors, often held together by black or gold. We have been slow to learn these simple lessons, but there is no reason why we should not profit by them even if our application is on entirely different lines.

Mr. Herter in his own summer home at Easthampton has shown that rooms may be decidedly Oriental in feeling and yet entirely livable. There is a distinguished simplicity to the hall, typical of this decorator's art. Color is perhaps his greatest expression, and the rooms are beautiful examples of color harmonies which I wish it were possible to describe in detail. There are subtle, related harmonies and others where the most brilliant tones are used. Few of us can follow in Mr. Herter's footsteps, but we may learn much from studying his work.



Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

The New Home.

E. B. M. Am sending floor plan of our new bungalow, which with few changes was taken from Keith's. Am going to confess that I am at a loss with the living room and small reception hall. Without conceit I will say I always thought I had good taste in arranging my house and was so considered by others, but these rooms are stiff. They lack individuality, even comfort and ease. Nor is it my imagination. I have seen it in the faces of others; they are plainly disappointed in me. My sister-in-law said, "What's the trouble; are you afraid of the new house; why don't you do as you always have, make it look like you?" The next day I went at it with a will, carrying things out of the attic, and made myself completely sick, only to "drag" every article back where it came from. I need some new things, but have bought nothing; simply afraid of getting the wrong thing. My bedrooms are, or will be, very pretty when the walls are decorated, which will be this spring if I can find out what to do. Some advise paint, others burlap. I can't imagine anything being just right except light brown oatmeal paper, like we had in the old house. I should be ashamed but the truth is I am homesick. I have been used to a good sized parlor and a sitting room. The dining room is all right except the window seat. I didn't know what to do with it, so did nothing. My curtains are all very simple and dainty; think they are all right. The trim and floors throughout are in oak and most beautiful, but make it impossible to use

my parlor furniture of mahogany with ebony piano. The rest is all of oak, bedrooms, dining room and sitting room. If there was only some way of having the mahogany finished over, especially the tete which, with the chairs, have pretty tied-in cushions. I need some good comfortable chairs. Have thought of reed but with an ebony piano, and two leather chairs which I must keep and the rest in oak, I am afraid to add to the variety. My husband likes the large leather davenports now so popular, but I don't think the room is large enough with the other things which must of necessity stay. I do so like the arrangement of using tables and davenport together, but perhaps that calls for a fireplace. Now I can have anything within reason for the house. My husband is most anxious to please, but leaves it all to me. My little daughter's room has always been yellow, her best color, and my own must be pink, but those rooms face the south, so there's a problem. We have a most beautiful shower electric fixture with four rose-lined globes for the living room, also the rug in this room is rose, in oriental patterns, but that is not enough. I want more of that shade. I have worried and worked until I am miserable. I have had the bookcase in the hall, four sections on either side ot the window. Have also had the desk there, but do not know what is right or what such a place calls for; it is hardly large enough for the piano.

I shall be most grateful for the least crumb of help you can give me.

Ans. Your problem is not so discour-

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aging as you seem to feel. With the addition of a davenport, you would be able to give a better balance to your living room. We have made some changes on the drawing you enclosed, which we think will appeal to you.

If you decide to purchase a davenport, select an overstuffed one with just the wooden ball feet showing and covered with tapestry or velour. Soft loose cushion seat would be more satisfactory than a plain or tufted seat. Place davenport and piano in opposite corners to give balance to the room, with table in northwest corner, keeping the space in front of windows as clear as possible.

With rose predominating in your rug, we would suggest warm gray or a putty color for the walls with hangings in mulberry or deep old rose. Nearly every number of our magazine offers ideas worked out in grays and rose; also a number of bedroom schemes which no doubt will interest you. The hall should be treated same as living room instead of in a contrast.

The dining room would be pleasing with the walls in warm golden tan and old blue soft silk hangings. Place a cushion covered in blue cotton sunfast with plenty of pillows in cretonne in blues and tans. The rug may be plain golden brown with plain dark border or a good domestic with brown and blue predominating. We would suggest removing couch from this room, using only the regulation dining room chairs and small side table.

Your daughter's room with the southern exposure should not be in too pronounced a yellow. Rather a cream strip paper with soft faded yellow in the border and draperies. A tan Brussels rug would be pleasing. Your own chamber also facing south, would be charming in rose or pink.

You speak of paint or burlap for the walls. A flat paint is always effective and durable but is not as decorative as paper. Burlap is good, but cannot be changed as often as paper on account of the cost. We would not hesitate to place one or two wicker chairs in the two

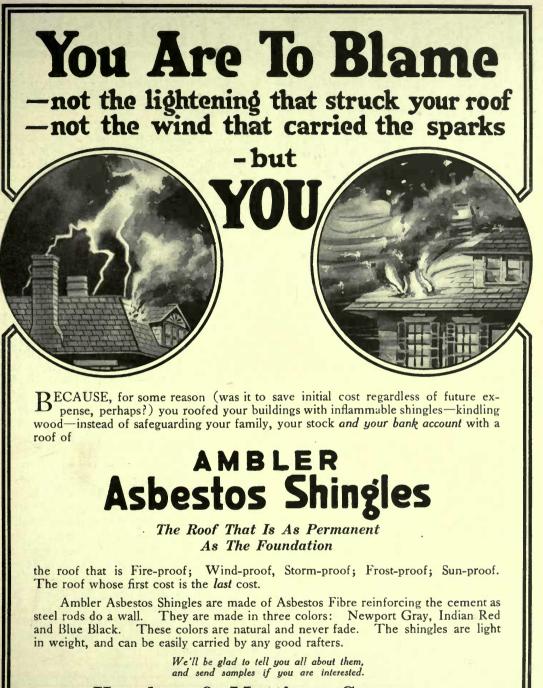
front rooms if selected in a good tobacco brown shade.

Your kitchen on the north side would be more cheerful if the wood work is enameled ivory white in a high gloss with the walls in flat oil finish in colonial yellow. If you have a tile dado, would also enamel in ivory white or light buff a little darker than the colonial yellow.

Harmonies in Gray.

F. F. Will you kindly help me in a color scheme for our new home? The house will face west and is stucco house in a colonial style. We are going to have white woodwork and oak floors. There will be a center hall with a large opening into the dining room (14x19) on the north and one to the living room (15x27) on the south, with French doors. The dining room gets north and west light and the living room east and south, with a sun room on the west. I have wondered if I could carry a gray through the dining room, hall, and living room and use rose draperies in living room and blue in dining room. Would it be possible for me to use fumed oak furniture in dining room? I would also be glad if you can give me an idea of what colors I should use in my bedrooms upstairs-one with east and south light, another with south and west light and still another with north and west.

Ans. Your scheme for all the rooms of gray will make a very pleasing treatment and one that you will not grow tired of. The writer visited a new home the other day which was done in grays (both floors) and it was most delightful in its color harmony. Would suggest that instead of brown fumed oak, that you keep it more to a gray tone with a wax finish, using a slight variation of grays in the different rooms; also have the patterns of the papers slightly different. The pattern for the living room may be a small conventional design in two tones of gray, with the sunroom in a putty color in a pebbled effect. A black, blue and red four inch border in sun room would be pleasing, with gorgeously colored cretonne hang-



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ings possibly with a black ground. Gray wicker furniture with same cretonne for cushions would be stunning.

A pleasing contrast for the living room would be hangings of old deep rose or mulberry. Old blue hangings in the dining room will be very effective.

The northwest chamber would appear more cheerful if hung in warm cream and yellow with the furniture in mahogany. Southwest chamber we would do in gray with hangings in blue with the southwest chamber hung with gray and rose.

Dining Room and Living Room.

R. R. R. Keith's has been of assistance to me several times in building and remodeling so thought I would ask advice in doing over a dining room and living room.

The woodwork is oak, medium dark, with good oak floors. I wish to paper and get a new rug or rugs for the living room. The dining room rug, a small figure Wilton, with tan predominating, I shall use. Dining room and living room furniture early English with Spanish leather seats and cushions. The dining room is dark. Might cut another window or what would you think of French doors opening onto each porch?

Ans. If you desire to install another window in the dining room, would suggest that you remove about eight feet of the outside wall and build a bay window, projecting out about 30 inches with windows on three sides of it. Add a low window seat with a cushion and plenty of pillows and you will have a charming window and will also give the room a more spacious effect.

Select for this room a golden tan paper with the hangings in dull old blue silk, which will harmonize with your rug nicely. Would not advise the French doors to the two porches, as it will cut up the wall spaces badly.

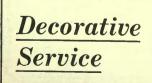
The living room having plenty of sunlight, would be ideal if hung with a paper in warm gray or putty color with the hangings in deep old rose or mulberry. Select a good domestic Anglo-Persian or Wilton rug for this room, with the predominating shade in deep old rose. In this room we would introduce a couple of wicker chairs either in natural color or soft brown shade, with cushions covered in mulberry repp.

A Colonial Room.

R. W. C. Find enclosed diagram of a living room, 15 feet by 36 feet. The house is colonial as is the room. For this room I have some antique furniture, a mahogany davenport, two mahogany tables, black walnut glass that reaches from the ceiling to floor, and three piece set of black ebony, sofa and two straight chairs. Could I use antique furniture of different wood and have it upholstered in the same kind of material and be in good taste? What kind of curtains should I have?

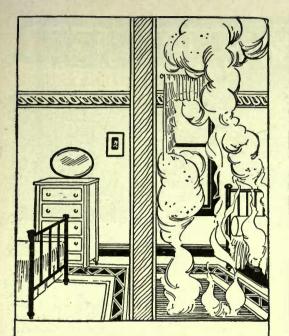
Ans. You have submitted an interesting problem. This room can be made stately and beautiful or it can be ruined. The high walls, long windows, two fireplaces, require correct handling. Should suggest high windows each side of fireplace, throwing them out "box" style so as to get wide sills that would take flower pots, etc., and putting cushioned seats beneath. Bookcases could be placed beneath these windows.

Certainly you can use the different woods of your antique pieces together. They are excellent if properly upholstered. Your pier glass is splendid.



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Keith's Decorative Service, McKnight Bldg., Minneapolis, Minn.



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North Western Expanded Metal Company 982 Old Colony Building CHICAGO, ILLS.



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§" OAK FLOORING is very adaptable for covering old pine floors in old houses, as well as in new houses over cheap subfloors.

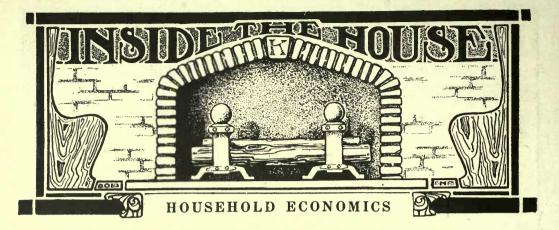
OAK FLOORING can be laid by any carpenter or handy man successfully, and during slack seasons, it offers a very profitable line for any carpenter.

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Planning for the Bed



DEAR old lady used to insist that she must have a "spare room" in the house

to give her "soul space." She felt too crowded if all of the rooms were occupied.

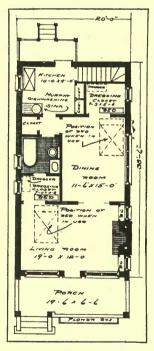
Modern efficiency is trimming down our soul spaces a bit while it is at the same time commending itself by adding to modern comfort. The spare room is almost a thing of the past, and the old idea of a sleeping room seems to be following it, especially in the more concongested parts of the country.

The insistent demand for small apartments begrudges the space which a regular bed requires and has banished that important necessity to a recess in the wall, or to a closet, or some unexpected place.

A Condensed House.

Instead of four rooms to be cared for, —two day rooms and two night rooms, two rooms are used both day and night, giving the conveniences of the four rooms though with scanty "soul space."

There are many devices for these socalled disappearing beds on the market, many of which are very good. Special



A five-room house condensed to three rooms.

attention has been given to sanitation, and ventilation for each bed space. Special planning is required in such cases and a group of plans are here given which shows some interesting room arrangements. The day space of the bed is shown and its position at night or when in use is dotted on the plan.

The cut shows the plan of a three-room bungalow recently built by a man who, we are told, had planned to build a six-room house. A thirty-five per cent was cut from his building cost by the change in plan. One bedroom was cut off because the wife would not need a maid with her smaller house. The bedrooms usually built on the second floor are condensed into the dressing rooms on the first floor.

oms. When they have once lived in one of these condensed houses, many people are unwilling to undertake the care of larger houses.

An Adjustable Bed.

A bed which may be opened either into the bedroom or on a sleeping porch or sun room is shown in the accompanying plan. A bed of the type which folds up when not in use may be revolved into the

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The one question is whether you will do it at first or at last. For here's a significant fact. A surprisingly large proportion of all the Beaver Board that is made is used for the purpose of covering over wornout lath and plaster walls.

You never heard of anyone putting lath and plaster over Beaver Board. When a Beaver wall or ceiling is up, it's up to stay.

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Send for booklet-"Beaver Board and Its Uses."

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United States Branches at Boston, New York, Baltimore, Cleveland, Detroit, Chicago, Minneapolis, Kansas Olty and San Francisco. Manufacturers also of Beaver Blackboard and Beaverbilt Utilities.



sleeping room and opened, or a wide opening from the closet allows the bed to be drawn down into place on the sun porch as shown by the dotted lines.

A One-Room Apartment.

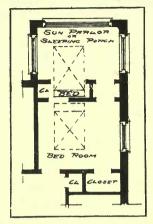
Another plan shows a very luxuriously arranged small apartment with a large light dressing room, a kitchenette and a bath.

This plan could be adapted to the type of bed which is pushed partly into a closet leaving only the width of a couch in the living room.

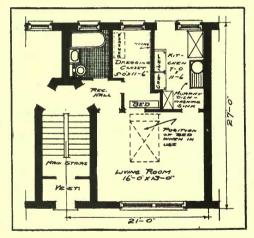
A Built-in Cool Closet.

One of the most convenient features built into a house is the type of a cool closet which is so largely used in California and, it would seem, might be adapted to other climates.

Under ideal conditions it is built on a North, outside wall where the sun cannot touch it, or in an inside wall. It should be open at the bottom to the earth,



Arrangement for sleeping either inside or outside.



A bachelor apartment.

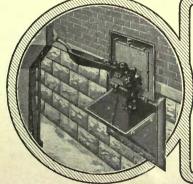
with an opening or ventilator near the ground, and up to the rafters with an opening between the rafters under the roof, thus getting constantly a free circulation of the air. It is usually about eighteen inches square with galvanized wire mesh shelves, and is closely screened at the floor and ceiling.

If the day is very warm a little cold water poured down onto the earth starts a refreshing circulation of cooler air.

As a matter of practice the

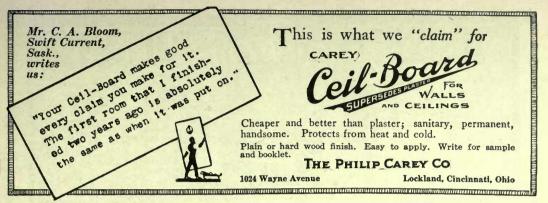
cool closet is very often closed at the floor. But damp papers around the green vegetables and salads, and a wet cloth wrapped around a bottle of cream or a lump of butter is wonderfully effetcive.

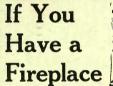
A number of the western architects are making a practice of embodying these cool closets in their designs. We show one installed in the attractive home pictured on page 100 of this issue.





122







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Colonial Recipes



N the days of Washington, whose birthday we celebrate this month, hospitality was more lavish, and entertaining on a much

more generous scale than in these latter days when simplicity is the keynote, and the soaring prices of foodstuffs limits our menus. No doubt we enjoy better health than did some of our ancestors who "dined well, but not too wisely." Their rich, heavy meals would go ill with many of us unless accompanied by plenty of outdoor exercise, but nevertheless, there is something very fascinating about those days of overflowing larders, cellars, smoke-houses, and old brick ovens which held such enormous bakings. Especial-



Syllabub garnished with fruit pound cake.

ly when we compare them with the life in our cities today, where in many families the arrival of an unexpected guest means a hurried trip to the delicatessen. A little old grandmother, in one of the recent short stories remarks that "It didn't use to take us any longer to get a whole dinner on the table than it takes my daughter's cook to make mayonnaise dressing and hollow tomatoes for salad." There were always so much on hand that it was simply a question of getting it on the table.

When we ransack the old-fashioned recipe books, and discover many recipes carefully treasured in families for generations, we gasp at the casual mention of pounds of butter and dozens of eggs. For example, in a book of "Colonial Recipes," by Maude Bomberger, we find the following recipe for "Rich Black Cake" which came from Mrs. Washington herself, and which was probably prepared for the wedding of her granddaughter, Nellie Custis, which was solemnized at Mt. Vernon, on February 22, 1799, the last birthday that Washington spent on earth:

"Take 20 eggs; divide the whites from the yolks, and beat the white to a froth. Then work 2 pounds of butter to a cream, put the whites of eggs to it, a spoonful at a time, until well mixed. Then put 2 pounds of sugar, finely powdered, in it in the same manner. Then add the yolks of eggs, well beaten, 21/4 pounds of flour, and 5 pounds of fruit. Add to this



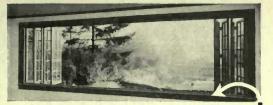
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 $\frac{1}{4}$ ounce of mace, a nutmeg, $\frac{1}{2}$ pint of wine, and some French brandy. Five and one-quarter hours will bake it."

One characteristic of old-time recipes is the generous use of wine and brandy, a custom almost obsolete now. One such recipe has a foot-note which remarks: "If one has limited means, milk may be used instead of brandy, but it is quite inferior, and is only suited to the uncultivated palate."



Tea cakes.

While many of the Colonial dishes are quite impossible, on account of the cost, and laborious processes involved, there are others which are simple and delicious. Those who are planning for "Washington" parties and Colonial teas this month, may find the preparation- of authentic Coloniel dainties more interesting and productive of the old-time atmosphere than the overworked hatchet and cherry ideas. It would add to the interest to have the history of the various recipes given, which may be found in the book of "Colonial Recipes" mentioned above.

Colonial Dinner.

Old Maryland Baked Ham.

Candied Sweet Potatoes. Pickled Oysters.

Maryland Biscuit or Potato Rolls Syllabub or Charlotte Russe or Hamburg Cream.

Afternoon or Evening Party.

Creamed Chicken or Veal Terrapin. Beaten Biscuit. Coffee.

Lemon Tarts or Syllabub.

Colonial Tea.

Black Tea. Serve with it lemon stuck with cloves, preserved cherries, pound cake, jumbles, or "wiggs." The story of "The First Cup of Tea on Nantucket Island" might be read or told at a teaparty. This very amusing little story is found in a well-gotten up little booklet, issued by a spice firm in Baltimore.

Old Maryland Baked Ham.

Soak a ham in cold water for 2 days and 2 nights, changing the water in that time four times. Wash well in tepid water. Place it skin down in the ham boiler, filled with cold water. Do not boil too fast, and as the water boils down replenish with hot water. When the ham is done it will turn of its own accord skin up in the boiler! While hot, remove the skin carefully, then place in a large pan. Stick the ham full of cloves, sprinkle with black pepper, bread crumbs, and brown sugar. Pour over it a cup of sherry wine or cider and bake until nicely browned.

Veal Terrapin.

Boil well $1\frac{1}{2}$ pounds veal. When cold cut in small pieces. Put in a pan a goodsized piece of butter. Rub the meat with a tablespoonful of butter, salt, and pepper, add 3 or 4 cloves. Let cook about 15 minutes. Add wineglass of sherry or cider and 2 hard boiled eggs cut up. This is a good chafing-dish recipe.

Syllabub.

Take one pint of cream, add to it 1 teaspoonful vanilla extract (old receipe calls for a gill of white wine), the grated yellow rind of one lemon, the whites of 3 eggs, 4 tablespoonfuls of powdered sugar: turn it into a cold bowl, stand in a pan of ice and whip constantly; skim off the froth and put into glasses; stand away until perfectly cold, when it is fit to use.

Jumbles.

One pound flour, $\frac{1}{2}$ pound butter, $\frac{3}{4}$ pound brown sugar, 2 eggs, $\frac{1}{2}$ nutmeg (grated), 2 tablespoonfuls rose water. Roll out long and join in rings. Bake in hot oven.



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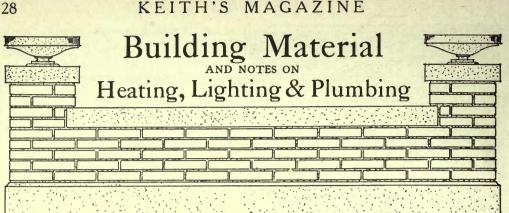
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The Strike of the Farmer's Family

Fred Loomis

A Strike That Brought City Comforts to a Farm House



URRY up, Sis, we don't want to miss any of that film."

The rattle of dishes in the kitchen was interrupted long enough for an, "All right-ready in a minute," and then recommenced with frenzied clatter.

At the end of the screened-in porch where we were sitting, my farmer friend and I. stood the auto, ready for its almost nightly spin

down to the village, the lights of which already were beginning to twinkle in the distance. The boy was tinkering around it, testing the lights, peeping into the gasoline tank and impatiently waiting for his sister, who still was in the kitchen helping her mother with the supper dishes.

With a chuckle, my friend said:

"The kids surely do enjoy that auto. Hardly a night when the weather is decent that they don't run into town to take in the movies, or over to some neighbor's for a visit. One of the best investments I ever made. Don't hear so much about quitting the farm and moving to town as I did before I bought it."



Ready for its almost nightly spin to the village.

"Uh-huh, I suppose so," said I. "The automobile has done a lot to make life on the farm pleasanter and more attractive for the young folks."

My friend was silent for a few minutes while we smoked and gazed out into the deepening twilight. Then he began:

"I've got a pretty comfortable place here, don't you think? I moved here and built

this house very soon after I was married. The wife and I struggled along trying to make it pay out and after the children came we began to hope that after we were through perhaps they might be contented to stay here and take hold where we should leave off. I never paid much attention to the house, leaving that to the wife, while I looked after the farm and the stock. I liked to farm and I always was keen for all of the new methods, ideas and improved tools to make my work easier and more profitable. I guess I was what you might call a good farmer, at any rate that's the sort of reputation I had in the neighborhood. All this time, while I was stocking, equipping and im-



Trade at home and prosperity takes no vacation.

proving my farm, the old house was left pretty much as it was. I never gave it much thought and, as my wife never complained any, I went along doing what I could to make my own work easier and more productive with never a thought about doing anything different for the wife and kids.

"Say, one day I got a jolt. My wife's sister lives down in that town you see there. Her husband has a little store. Just makes a living, like so many other town men. Doesn't make nearly as much in a year as I do.

Well, my girl went into town to visit with her aunt for a couple of weeks and when she got back home there was trouble. My brother-in-law, not nearly as well fixed as I was nor as able to afford it, lived in a house where he had electric light, furnace heat, hot and cold water, bath room and closet, all the things which make living in a town house comfortable and pleasant. Sis got the town fever while she was there because of these and the first thing I knew her brother and her mother had it too. Nothing would do but I must move to town where they, too, might have some comforts.

"I didn't want to go. I like it here. I'm a farmer and I'd seen too many farmers go to seed after they'd moved to town



"I don't wonder the wife and kids struck."

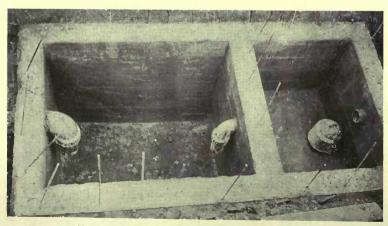
to want to go the same way myself. But what could I do? I woke up to the fact that I had been spending my money on myself and on my farm and all the time had been neglecting the family. I took a good look at the wife and for the first time noticed that she was looking old and worn and tired. She looked older than I did, and she wasn't as old as I was by seven years. The kids, too, got sulky and discontented and said that if I wouldn't go to town they would, at the first opportunity:

"I went out in the barn to think it over. Then I went to town to do some figuring. Of course, I had heard something about heating plants for the farm house, and about water systems and electric lights and all such things, but I had gotten it into my head either that they were too costly for the ordinary farmer to monkey with or that I should have to rebuild my house if I tried to put any of them in. I talked the matter over with the implement man and the village plumber and finally I had them come out to the farm to look things over.

"Well, you know what the house used to be and I don't wonder now that the wife and kids 'struck.'

"Can you see where that little swail

begins. Well, I put а concrete septic tank between the house and there. then ran a line of drain tile about 200 feet to the beginning of that swail. I found I could use what is known as sub-irrigation, whereby the discharge from the septic tank runs thru a fan-shaped system of underground tiling laid with open joints. As the soil down there



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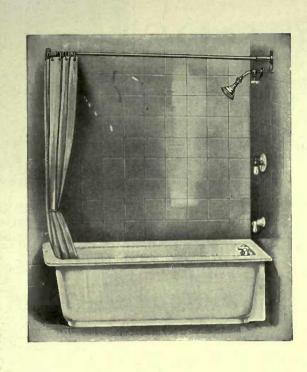
was light, I decided to use the latter. "My septic tank is of concrete, of course, and is large enough to take care of the waste for a family of eight people. It's been in nearly two years now and has worked perfectly, nor have I had to clean it once.

"You know how a septic tank works. don't you? It's built in two compart-The first is dark and air-tight ments. and into this the waste from the house empties. Here bacteria thrive and turn the solid or partly solid part of the waste into liquid form. Of course disease germs would not be destroyed, and for this reason care has to be taken that there is no leaking or seeping from this compartment of the tank or from the sewer pipe from house to tank. The bacteria, I am told, live in a scum which comes on the top of the liquid contents of the tank and this scum must not be disturbed or allowed to run over into the second compartment. To prevent this the tank is built with baffle boards which project down from the top of the compartment.

"From time to time, as house wastes enter the tank, the liquid contents flow over from this first compartment into the second. Here a process called nitrification takes place and the odors of the waste are destroyed. This second compartment is fitted with a syphon which automatically discharges at intervals, drawing off the liquid. It flows thru the drain tile, and seeps thru the open joints into the soil, and you can take it from me that it is the ideal way to dispose of household waste.

"Well, after that came heat and electric lights and the auto. There it goes now toward town with the kids. But it will come back again for the kids can't find any place in town where it is any more comfortable or pleasant than it is right here. And the wife? Say, maybe she has forgiven me now for all of the years when I didn't give her comfort and convenience much thot.

"The cost of household comforts is as nothing compared to what you get out of them. And just as soon as the women of the farms realize this fact a whole lot more selfish and thotless farmers are going to wake up..



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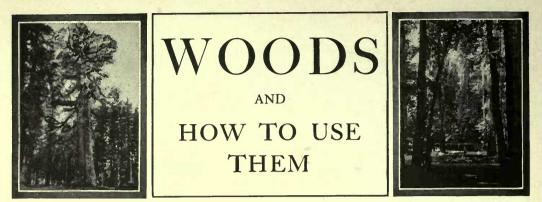
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The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

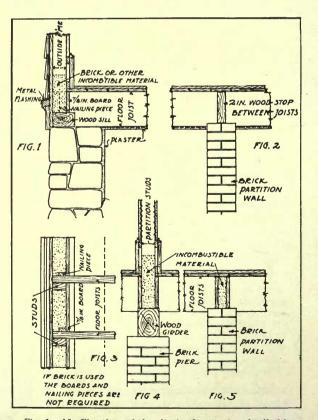
Fire Stops for Wooden Buildings

EALIZING that the common type of the homes in this country is the frame dwelling and that the fire menace in this country is something unbelieveable in other lands, the National Lumber Manufacturers Association has issued letters of

building code suggestions with relation to fire stops in new buildings, careful workmanship, proper selection of materials, chimneys and fireplaces in their relations to safeguarding buildings of frame construction.

More important than the fires that have already occurred are those fires that are likely to occur. Fire prevention is vastly more important than fire extinguishers.

Frame dwellings are the most common type, and are not only represented by the millions of existing homes, but will continue to be built in the indefinite future. This is true for both economic and sentimental reasons. Wood remains the least expensive, most universally available, and the most adaptable material. At the same time it responds to architectural treatment making a strong appeal on the ground of beauty and sentiment.



Figs. 1 and 3.—Elevation and plan showing fire-stopping of wall of frame building at line of sill and between studs and floor joists. Fig. 2.—Fire-stopping with timber cut between floor joists on top of brick partition. Fig. 4.— Fire-stopping of partition resting on wooden girder. Fig. 5.—Same as Fig. 2 except that incombustible compressible material between two boards is used instead of a timber.

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No one feature of house construction will contribute more to its safety in case of fire than efficient well placed firestops. Their purpose is to delay the spread of fire and so assist in confining it to the story in which it starts. This protects life, and affords a better chance of extinguishing the fire.

Careless workmanship may give very disastrous results when supposed fire

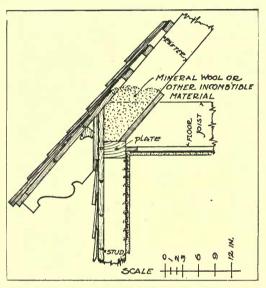


Fig. 6.-Connection of floor joists with outside frame at plate level, showing cornice, and fire-stopping supported on boards cut between joists.

stops do not entirely close the spaces and thus serve to strengthen the draught in case a fire should be started. For this reason incombustible fire-stopping material, such as mineral wool, concrete, or mortar, is soft when used, and is more or less tamped or pressed into the space pre-This usually forms tight pared for it. joints on all sides, even though the work be indifferently done. Material similar to mineral wool which is packed in place and does not harden will have a tendency to expand and fill any space that may later be formed by the shrinkage of the timber, which is an advantage. The necessity for having tight joints is to prevent the passage of air or gases which have been heated to the point of combustion.

When a fire has heated the air and gases in a room to the temperature of combustion, they will pass through a very small opening and ignite any combustible material they touch. If such gases are under pressure, as is usually the case in a fire, the danger is increased. It must be understood that air or gases heated to the point of ignition of wood—which is less than 1,000 degrees F.—even though they carry no flame and are invisible, will set fire instantly to practically everything combustible with which they come in contact.

Fire-stopping should be arranged to cut off all concealed draft openings, and form an effectual horizontal fire barrier between stories. Open passages in frame walls or partitions are a prolific cause for rapid spread of fire to all parts of a structure. If fire occurs in the cellar or basement, they act as flues to carry it to the attic. If the fire starts in the attic the sparks fall down the hollow spaces. Results are disastrous in either case.

In frame buildings which are lathed and plastered or otherwise sheathed on the inside, all stud walls should be completely fire-stopped with brickwork or other suitable incombustible material at each floor level. The spaces between the studs should be filled to a height of four inches above the floor level, as shown in Figures 1, 3 and 4.

Where stud partitions rest directly over each other and cross wooden floor beams at any angle, they should run down between the floor beams and rest on the top plate of the partition below, and should have the spaces between the studding filled in solid to at least four inches above each floor level with incombustible materials (Fig. 4).

The most vulnerable point of attack for an exposure fire is under the eaves. The heat banks up there and the woodwork is always highly combustible since never exposed to storms. With ordinary construction numerous cracks are almost certain to exist alongside the rafters communicating directly with the attic space which is usually difficult of access and liable to be filled with combustibe material. It is therefore important that the space above the plate and between the rafters be filled as tightly as possible. Where masonry walls are used they should extend up to the under side of the roof boards, or be fire-stopped as indicated. Dwellings within ten feet of other non-fireproof buildings, should always have the walls behind eaves or cornices



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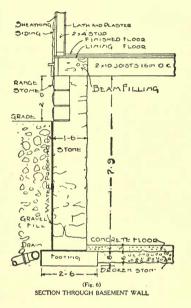
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Published by M. L. KEITH McKnight Bldg. Minneapolis, Minn. fully fire-stopped to prevent fire from a nearby building breaking through into the attic space. Such fire-stopping also protects against fire which might leap up under the eaves through the windows from a fire within. This is shown in Figure 6.

The space between stair carriages should be fire-stopped by a header beam at top and bottom. Where a stair run is not all in one room, or where a closet is located beneath the stairs, the stair carriages should have an intermediate firestop, so located as to cut off communication between portions of the stairs in different rooms or between the closet and the room in which it is placed. Such stops can best be made of plank.

If a flight of stairs is so arranged as to be the only construction separating two stories at the place where they are located, as for example, between the cellar and the story above, the underside of the stairs should be covered with metal lath or one-half inch plaster board and plastered to a total thickness of threefourths of an inch.

The pockets for sliding doors, the spaces around heating and plumbing pipes, and the connections of piazzas with the house should all be thoroughly stopped.

A fireproof floor is the best possible protection from fire within, and such a floor need not greatly increase the cost. The simplest "fire-proof" floor is either of concrete reinforced, or some of the forms of hollow tile construction. Either kind of floor is very practical in small house construction. Reliable building constructors state that such floors can be built in most localities at almost the same cost as first-class wooden construction. Since such floor is also waterproof, rat proof, and thoroughly rigid, as well as completely fire resisting, it would justify an increased cost. Hardwood floors, or tile for vestibule and halls, would be laid over the concrete.

The simplest means of fireproofing a floor and one which authorities assure us has excellent fire resisting qualities, is to paint the basement ceiling timbers with a "fireproof paint" or to saturate them with the fire-proofing solution without the pigment.



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Foresight.

A letter written in 1833 found in the old files in the United States patent office at Washington according to the Scientific American, illustrates the limitations of the human imagination.

It was from an old employe of the patent office, offering his resignation to the head of the department. His reason was that as everything inventable had been invented the patent office would soon be discontinued, and there would be no further need of his services or the services of any of his fellow clerks. He, therefore, decided to leave before the blow fell.

Silk socks made from sawdust manufactured in the United States in 1915 were valued at \$5,500,000.00. Methods have also been discovered whereby sawdust can be successfully converted into binding twine. rope, milk bottle material, baking powder, and many other commodities.



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A Private Garden.

A certain congressman sent free seeds to a constituent in a franked envelope, on the corner of which were the usual words, "Penalty for private use, \$300." A few days later he received a letter which read:

"I don't know what to do about those garden seeds you sent me. I notice it is \$300 fine for private use. I don't want to use them for the public. I want to plant them in my private garden. I can't afford to pay \$300 for the privilege. Won't you see if you can fix it so I can use them privately? I am a law-abiding citizen, and do not want to commit any crime."



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remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

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New Booklets and Trade Notes

The American System of House Building.



R. FRANK LLOYD WRIGHT, noted Chicago architect, recently talked before a body of Chicago business men concerning his American System of House Building.

"I hesitated a long time before I decided that I would undertake a thing of this nature. It is something I have always believed could be done here in America better than anywhere else in the world. In all of my work from the beginning, I have had faith in the machine as the characteristic tool of my times, therefore an artist's tool. I have believed that this tool put into an artist's hand could be a real benefit to our civilization. I believe that the architecture in America that fails to take into account the machine and modern organization tendencies is going to be of no great benefit to the people. Of course, I know that it is going to take a more suitable art within more severe limitation to build houses beautifully while utilizing the machine. But I believe this effort is the logical conclusion of my studies and my architectural practice.

"The idea back of the American System has been in my head for years. I have guarded it carefully. I wanted time to think in quiet of how the idea might be brought to the public without injury to the integrity of my own art. Any student of design will know that the designs of these houses are not architectural at-tempts at reform. They are developed accord-ing to a principle. They grow from the inside out, just as trees or flowers grow.

"I do not want any mistake made about this new "System." These buildings are not in any sense the ready cut buildings we have all heard of where a little package of material is sold to be stuck together in any fashion. The American System-Built House is not a ready cut house, but a house built by an organization, systematized in such a way that the result is guaranteed the fellow that buys the house. I want to deliver beautiful houses to people at a certain price, key in packet. If I have made progress in the art of architecture, I want to be able to offer this to the people intact. I think the idea will appeal also to the man in the street. Every man would love to have a beautiful house if he could pay for the tremendous amount of waste usually involved in building such a house. The American Plan you see, simply cuts out the tremendous waste that has in the past made house building on a beautiful scale possible only to the very rich, and any integrity in the result possible only to the very rich, and any integrity in the result possibly only to the especially enlightened in-Unlimited money has failed there dividual. most loudly. "When I, as a young American architect,

went abroad, I found many things that astonished me. I expected to find over there, a great variety—great interest. I went from one city to another, and for the most part found beauty in the very old buildings only. The Germans who really built German buildings, and the Italians who built really Italian build-ings, built beautifully. I naturally come to the conclusion that much of the hideousness in the architecture of modern day was due to the academic "Renaissance," that Europe has so nearly standardized. To my mind, the ren-aissance, although academic, never was or-ganic. And, for centuries, architecture, like other arts, touched by the renaissance, has been divorced from life, divorced from any organic relation of cause and effect.

"Now, when we go back to the old architecture, we find something quite different. The Gothic, for example, was a true style. It was a real architecture. It was an organic architecture. In all of my work I have always tried to make my work organic.

"Now, in America, you understand that we have been all of these years borrowing bad forms. The result is that our buildings have no life-no meaning in them, and if we are ever going to have a living architecture again -an architecture in which there is really joy and which gives joy, we have got to go back to first principles. We have got to go beyond the renaissance to reality, to truth.

"In America, the natural tendency of our times is away from the old handcraft. The railroad locomotive, the great electrical dyna-mo—these are some of our truly beautiful products—beautiful because of their perfect adaptation of means to ends. Now, I do not believe any architecture in the time of commercialism, of industrialism, and of huge orgamization, can be real architecture unless it uses beautifully all of these great tools of modern life. And that is just what the American System of building houses proposes to do.

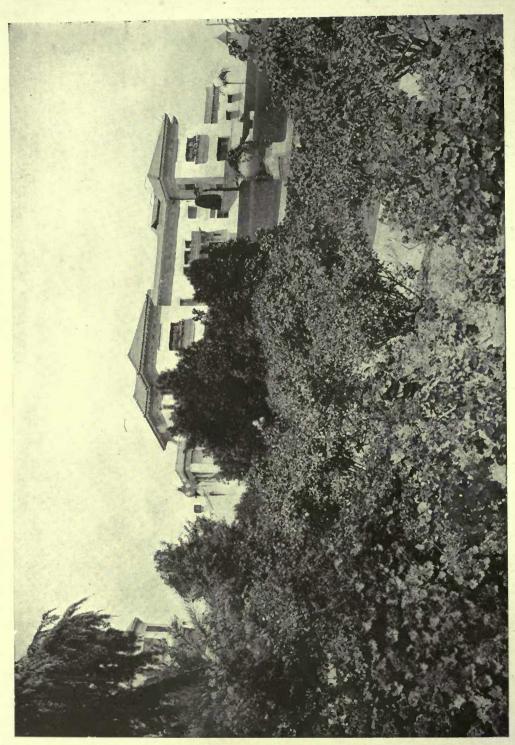
"Of course, I realize the danger in all this. I would not dare go into it if I did not believe I could in the midst of industrialism and commercialism, keep on top with my art. In the designing of all these houses, I have kept close to first principles, but I look with horror at what might easily happen in spite of all the care with which I have handled this matter. I do not want to lose sight of the central idea of using the machine and all modern industrialism to produce beauty. I asked you men to be patient with me if I sometimes insisted upon things that you do not understand the meaning of. Simply selling houses at less cost means nothing at all to me. To sell beautiful houses at less cost means everything. A beautiful house means a truer, better house in every way.'

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Crowning the hillside.

VOL. XXXVII

MARCH, 1917

"Model" Houses Anthony Woodruff



ERY one is familiar with the story of the young husband, whose pride on being called a

"model husband" by his bride was turned to chagrin, looking in the dictionary at the behest of his envious coworker, he found the word "model" defined as "a small copy of the real thing." We are using the word in its dictionary meaning when we call these photographs of "Model houses." They are small copies of the real thing, built at the scale of one inch for each foot of space represented. A group of houses, nine in all, a residential suburb, were designed by Howell and Thomas, architects of Columbus, Ohio, who specialize in suburban homes. These designs were built in miniature, at a scale of one inch to the floor, or onetwelfth of the actual size, but with every detail perfect and in scale. The landscape work, planting and settings were designed by O. Albert D. Taylor, landscape architect of Cleveland, all of the details of which were carried out with equal care. The trees are real trees or parts thereof.



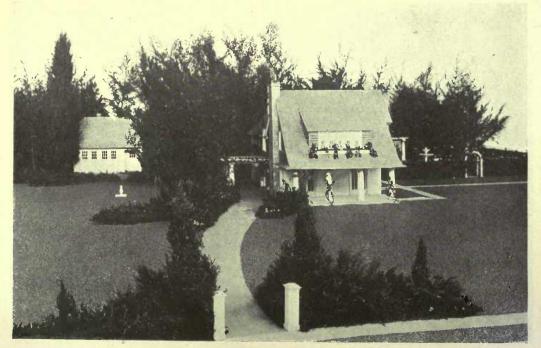
A Dutch Colonial house.



A modified Colonial treatment.

the drives and sidewalks are specially prepared, the grass is represented by sawdust made the color of grass. The whole suburb is set around a horse shoe drive. In no other way could so many different types of houses be studied together and compared with each other. This suburb of homes was first exhibited at the Complete Building Show held in Cleveland early in the year of 1916, and attracted so much attention among home builders that the exhibit has been carried elsewhere.

Inspired by the beautiful old Colonial



An attractive small house.

houses which were built of white pine in pre-Revolutionary times and are not only still standing to attest their worth, but are sought as beautiful types of building and of construction, and copied with more or less fidelity for some of the most beautiful new homes in the country, came this effort to show the beauties of wood in the modern house.

These houses were designed especially to be built of wood, and each would lose story under a gambrel roof. This with the dormer gives good height for the second story without any waste space under the roof. The two wings with the lower roof make an interesting composition. A white house with green shutters is satisfying, and the small panes of glass set a pleasant scale.

The second photograph shows another New England type of house, which is also essentially a wooden house. The



A large rambling house.

some of its distinctive character if carried out in any other material. The scale has been kept so completely that one realizes this even in the model. For example eight inch siding is shown eight-twelfths of an inch. The shingles also are in scale.

The first house is very attractive and homelike with its flower bordered walk and seats on either side the door. The end of the house is also seen beyond the garage in the fourth photograph, where the treatment of the gable end of the pergola may be seen.

The house is in general, of the so-called Dutch Colonial type, with the second porches at either end have been made very attractive features. The less usual trellis effect over the front of the house which has not been given to the ends is found more often in modern houses that in the older ones, and gives a very good effect. The pergola and garden effects are nicely worked out with reference to the house and in the model, on the small scale is most interesting.

The third photograph shows a smaller type of house with the sturdy porch posts carrying the roof, and the second story bedroom extends over it, with the group of windows in the dormer. The



A dark stained house with a shingle-thatch roof.

wing at the back of the house is a story and a half.

The fourth photograph shows a big rambling house such as we see very often, with a simple hipped roof and a fair projection of the eaves. The small paned windows and the flower boxes under them give special points of interest. The garage in this photograph is interestingly treated and shows a very convenient means of approach.

The last photograph shows a dark stained house with a "shingle thatch" roof. The angles are taken from the timbers of the eaves, giving them a rounded form, then the shingles are soaked and made to conform to the curves. The French doors on the first floor and the groups of windows above, all with their light colored shutters are very effective.

The inability to read blueprints is a common difficulty with the home builder, and the growing use of the small model as an interpretation of the architects' drawings will be gladly welcomed. As compared with the total outlay the cost of the scale model, which will show the owner, before the work is started, just what he is going to have, is comparatively small. Then he will not be disappointed through his inability to visualize and read the drawings. Often a small defect, or a detail that is not to the owners' liking can be corrected, while it is still in the formative stage.

To give satisfaction to the owner it is not necessary to build models so expensive as the houses shown in these photographs, nor on so large a scale. Many models are made on a scale of a quarter of an inch to the foot, the usual scale for working drawings, or even half that size, -an eighth of an inch to the foot. These may be made of paper with the elevations, drawn at the scale and colored, mounted on the cardboard. Such a model gives a surprising likeness to the reality, while not being very expensive. In such a model the roof is sometimes made to lift off showing the plan of the second floor, which in turn may be lifted out revealing the plan of the first floor plan.

Interesting Group Houses

Margaret Craig



LITTLE way from Garden City, New York.

is a group of houses built around a horseshoe green. Joined by arched passageways, with the rear yards separated by low brick walls. this group allows of great individuality in the treatment of each home, as every porch, every yard and wall space is different.

The architect has imbued much of the English cottage spirit into the construction of the houses, which are built of

greyish brown reinforced grout or stucco. The use of green old-fashioned panelled shutters, window-boxes and lattices contributes an air of quaintness.

One of the central houses is occupied by a little lady, who, in a year's time, has converted the new home into a cozy bower. She has made the rear yard a very important feature of the house, by the judicious planting of flowers, trees and vines, and by considering every corner as an inviting retreat. This out-of-door room is a trapezium in shape, and planted so that there is a restful triangular area of green in the centre.

Along the eastern and northern garden walls, that bound this space, and also near the house itself, are hollyhocks inter-



A charming entrance.

spersed with the birch trees. Near the meeting place of the walls is a goldfish p o n d, which is shielded by a bamboo frame, trailed with grape vines.

In the northwest corner is a long white seat, which was formerly a pew in the church attended by the poet, Brvant. It is placed against the brick wall, and two trimmed box trees in terra cotta jars are placed in front of it on either side.

The planting of Violets at the base of the house had imme-

diately taken away a barren look, and in order that there would be continuous blossoming of plants near the door, Bachelor's-buttons and Sweet-William were planted so as to follow the fleur-de-lis when it ceased to bloom. Also, English ivy was at once trained so as to relieve the hard look of the stucco.

All lines in this garden yard lead to the rear door of the house, which is the most important corner, and why shouldn't it be attractive, as it leads to the out-ofdoor living room? A gravel walk, marked by two box trees, and lined with the purple fleur-de-lis, leads to this entrance. Near it, beneath a kitchen window, is a green "laundry seat" painted the same green as the lattice work and win-

dow shutters. On the other side of the door, placed against a shiny laurel bush as a background, is a large hand-wrought earthern jar.

The front entrance of the house is formal and simple. The small hallway opens into the living-room, which shows care in the individual treatment of wall spaces and corners. The coloring of the walls is a warm gray, that forms a good background for the Japanese prints, and for the mahogany furniture.

Against the eastern wall is a carved sofa with grey green velure covering. On each side are two ladder back Chippendale chairs and above the sofa is a large print of Yerson's "Samurai Holding a Hawk," in deep blues and blacks.

The dining-room is as cosy as can be imagined and when the large table is folded against the wall, and simply ornamented with a bowl of pink poppies and "Queen Anne's lace," the room becomes another living-room.

Originally there were two doors, which opened, in the eastern wall of this room, on either side of a wall space into two closets.

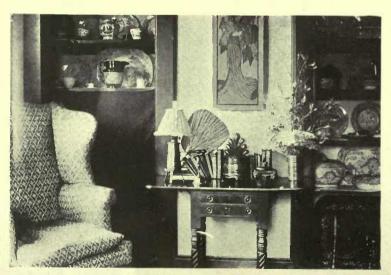
The new tenant, always alert to change the commonplace into the interesting,



A most important corner.

seized upon the idea of changing these shallow closets into two china cupboards, by inserting shelves and then taking off both doors. The shelves were immediately laden with lines of old beautiful china, many pieces of which had been brought over from Brittany long ago.

Between these decorative china closets



The two china cupboards.

is a table for books, a yellow shaded pottery lamp and a reddish fan, a variety of color echoed in the Japanese print above. Near a north window and next to these closets is a winged chair covered with a golden cloth, and in an opposite corner is a solid looking old walnut chest of drawers and above it is a group of shelves on which are placed

old pewter plates and odd coffee pots.

Near the western window on a table is a line of reddish streaked "wandering Jew" planted in a row of hidden flower pots. In winter when they are raised to the middle of the window they make a lovely design with the light shining upon them through small paned windows and yellow toned curtains.

On the second floor there is a bedroom, trapezium in shape, like the garden, and furnished with rare old mahogany. The golden curtains at the window harmonize with the Holbein prints on the walls.

The achievement of making a new house have the air of comfort is due in great measure to the making up of cosy corners where any one may find ease and pleasure and in a happy choice of interesting objects.

The Bird Bungalow

Neighbors have moved in next door; Occupy that little place. One of modest, maiden grace. Greets me, from the open door. We can watch her at her work; Slender, beautiful and fair, With a song, surpassing rare, In the nooks where shadows lurk. Alway's singing, singing so, Songs we somehow, seem to know.

What a charming neighbor this; Tidily she keeps her nest; By the sun and flowers bles't, Nothing fretful or amiss. Whilst she minds the baby brood, Dad commutes to meadows far, Where the jobs for mankind are; Sings while working for their food. He is quite a steady one, Toiling, 'till the day is done.

Gossip has it, that they met Somewhere in the South, last fall, At a Palm Beach garden ball, Then eloped. . . the sly coquette. Oh, she has a saucy way; And as for her mate he sings All the latest summer things, Cultured voice, the neighbors say. Mrs. Blue Blrd is her name, He has operatic fame. -W. Livingston Larned.

In the Matter of Windows A Folding Casement



Windows pushed to one side.

HE windows are the key in the design of the house. No other one feature makes more difference, either as to the comfort and

livableness on the inside of the house or as to the appearance and character of the outside. Two points seem to take precedence; "how much of the window space can be opened," and "how much do they cost." Any type of windows can be given a picturesque grouping, if properly handled. Yet the possibility of grouping the windows is in part dependent on the necessity of heavy mullions between the units, such as are necessary when the weight boxes for double hung windows are provided for. This brings us again to the question as to whether the windows shall be casement or a sliding sash.

The house shown in the photograph has windows so arranged that not only can the space of two sash be opened as with casements, but the width of the opening which may be filled with these sash is only limited by the constructive feature of the lintel. The sash are in pairs and fold together, each pair moving freely to either side of the opening. No mullions between them are required. This fact brings surprising possibilities. The whole end of the living room may open in this way, or two sides of a sleeping room, converting it into a sleeping porch.

The photograph showing the details of the outside of the porch also shows the operation of the window more clearly. Three pairs of sash are pushed to one side of the opening. The sash are pivoted, top and bottom. The lower hinge is also a handle, and a slight push folds the pair, opening outward. Then the folded pair will slide in any direction. Any number of pairs may be used in an opening. The two sash are held in such a relative position that they brace each other against the wind and are held so firmly that they do not rattle. The sash, where they hinge, are rabbeted as are also the meeting rails so that when the windows are closed, by drawing inward the handle at the lower hinge, the pairs of sash bolt together making the window very tight.

Advantage is taken of this tight closing sash by double glazing the sash and do-

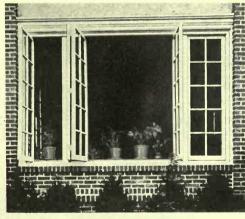


A view of "all outdoors."



The windows are a key in the design of a house.

ing away with the necessity for storm windows. The glass is all set very tightly, with a wooden strip between the two pieces of glass, giving an air space, which serves as an insulation against the cold - in the usual parlance. Of course, it is really a packing which as much as possible



A group of five sash.

division of the screen usually corresponds with the pair of sash, and is made, as may be seen from the photos, to slide up far enough to allow the handle-hinge to be reached from the inside, in order to open and close the sash.

From the inside of the sun parlor fitted with these sash one

prevents the heat from escaping from within.

With any new type of window the adjustment of the screen is a separate problem. With this window, the screen is of necessity inside the glass and so should be finished like woodwork of the room, while the sash may be painted. The has a view of "all out doors." It gives practically the same openness that can be obtained with an open porch, yet with the possibility of quickly and easily closing the entire exposure. It carries us one step farther in the present day effort to make it possible for people to work and live out of doors as much as possible. This window device has of course been immediately seized upon by the home builder, but its advantages have been also applied to the business building, as well as to schools and hospitals. When the window group consists of an odd number of sash, a slightly different hardware attachment operates a sash singly, but with the same freedom in sliding to either side of the opening.

If one wishes to realize the progress

which building construction has made in the last century and a half in this country, it is only necessary to study one of the beautiful old Colonial houses with the idea of reproducing it, in part, in a new, up-to-date house. Of course many of the old windows are beautiful in their white frame work, but let any one but a strong man try to open one of these windows and he will realize the time that has passed since the building of the house.

Split Boulders for the Fireplace

MANY bungalows have a fireplace built of boulders or cobblestones in their natural shape, laid up as they are found in the fields or lake shore. When the boulders are split and laid with the split surface exposed they give in reality a stone fireplace.

The accompanying photograph shows a split boulder fireplace built by one of KEITH'S readers. In laying it the stone mason split each stone, placing the halves symmetrically on either side of the center. The hearth has similar treatment. The boulders are of granite or some hard crystaline rock and the broken faces show

While boulders are very difficult to work there are great possibilities in their use. Split boulders are very effective under conditions where they are quite impossible in the round.



Symmetrical with split boulders.

Photograph by J. Howard Howe.



Turning "Blue Monday" Into "Joy Monday"



ASHDAY, a few years ago represented the

hardest day of the week for the housewife, with its heavy work, which she could not escape. More than half of this drudgery, however, was caused by unnecessary inconvenience through Edith M. Jones

Equipment for Home Laundry

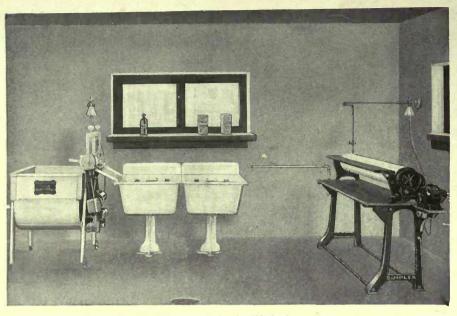
- 1. Set of tubs.
- 2. Electric washer and wringer.
- 3. Gas water heater.
- 4. Gas or electric iron.
- 5. Ironing equipment-board, etc.
- 6. Clothes baskets, hangers and clothes bars.
- 7. Gas mangler, with or without electric motor attachment.
- 8. Sanitary ventilated gas wash boiler.
- 9. Gas clothes dryer.
- 10. Small hot plate for cooking starch, etc.
- 11. Properly located artificial lights.

come a misnomer. Appliances designed primarily to save labor have accomplished even moreespecially when the equipment is complete in every detail. Both time and expense may be reduced and the elimination of the excessive heat in the laundry and the

poor arrangement and inadequate equipment.

But today science and invention have wrought wonderful changes and a well equipped laundry is no longer considered a luxury but a recognized necessity. The old time phrase "blue Monday" has becarrying away of steam and disagreeable odors, insuring pure air, enables the laundress to be much more comfortable and do far more efficient work.

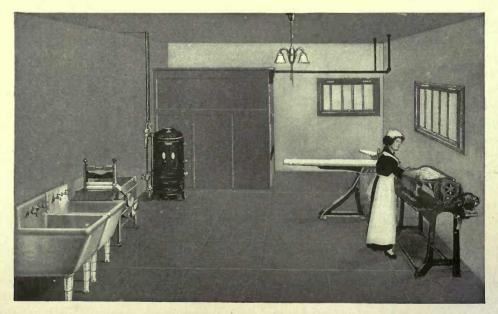
The first thought in planning the laundry should be given the assembling of the proper appliances required with relation



Well equipped and well lighted.

to the possibilities of the room in which they are to be installed. Convenience in the procession of the system of doing the laundry work should be the great consideration, this being the basis for the arrangement of the laundry.

Gas and electricity should be used when available for fuel and power. Water, sewer, gas and electric vent pipe service lines should be adequate and carried to the locations of the various appliances after the laundry has been planned. If the furnace chimney is not accessible a chimney or stack should be provided with at least a five-inch flue connection in the laundry. Floor drains are satis-



Well equipped but poorly lighted.

factory as they insure against wet feet and make cleaning with a hose, as in a garage, possible and practical.

The arrangement of the equipment depends a good deal on the size and light of the laundry. When the room is large enough it is a great help to place the tubs away from the wall far enough so that the light and air fall across the work instead of over it. It is always most important, however, that the laundress does not stand in her own light.

There are three kinds of tubs on the market and it is a matter of individual choice whether a set of two or three tubs are installed and whether the tubs shall be of Porcelain enameled iron, of Alberene stone or of cement. There are various types and standards of these three different kinds of tubs which, like the height from the floor, are a matter of personal choice.

The electric wringer and washer, the

gas boiler and gas dryer should all be so arranged that the work carries continually with as little lifting as possible. I am very frequently asked to recom-

mend some especial electric washing machine, but there are so many on the market today it seems to me this too is a matter of individual preference.

> One of the little helps in the laundry that sometimes is overlooked is the short hose which can be used for filling the washing machine and the wash boiler.

The washing machine, when placed near the floor drain, can be very quickly and easily emptied by taking out the plug and letting the water run into the drain, thus saving time and energy otherwise required in lifting the pails of water.

NOTE.-An early issue of Keith's will contain a further article on laundry equipment.

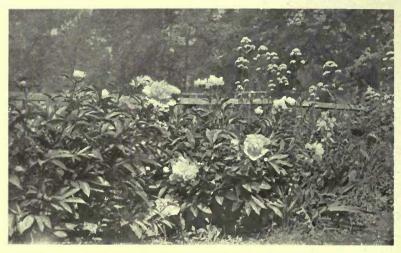
Garden Work for March

Adeline Thayer Thomson



HE month of March heralds the formal open-

ing of the gardening season in all states, at least, where the thermometer touches or exceeds the zero mark. Winds may
blow cold and keen, retelling again and again the grim, worn story of winter, never-the-less with the coming of March on e knows that



Uncover the perennials with the first mild days of March.

spring is only a step away and the enthusiast must begin work in earnest if the season's planting is to attain the best results.

March is the best pruning month of the year and the earlier this work is performed the better. The secret of pruning success is to do the work sparingly and to accomplish it before the sap rises. All hardy stock with the exception of the spring flowering shrubs and trees and berry bushes should have attention at this time. These varieties should not be pruned until after their flowering or fruiting season as the flower buds of such varieties are formed in the fall and if

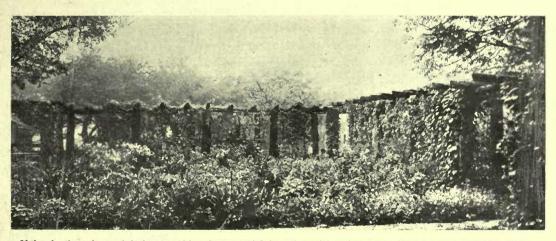


The early spring flowering bulbs begin growth above ground in March.

pruned at this time blossoms and fruit would be sacrificed. All dead wood and weak growth, however, should be removed from such varieties and from all hardy stock as well. A very easy pruning rule to remember when about such work is to sever a shoot just above a bud occupying a position on the outside of the branch in

question. The limbs of trees, however, must be severed close to the body of the tree.

If flower, vegetable seeds and various kinds of desired planting stock has not already been ordered, the matter should receive immediate attention. There is absolutely no advantage to be gained in waiting until actual planting time arrives, and there is a very marked disadvantage in following such a plan. During the months of April and May all nurseries forces bulbs and perennials into far too hurried a growth, and when their snug, warm shelter is removed, exposing their protruding, slender pips to the cold of fickle spring, they suffer cruelly and in nine cases out of ten unfold flower buds that are badly blighted. Now, on the other hand, if the winter's protection is removed early, before growth is actually started above ground, the plant will mature slowly and in season, gradually becoming hardened to the climatic changes



If the planting scheme of the home yard is to be successful throughout the coming season, work should be started in March.

and seed houses throughout the country are literally overwhelmed with business. To send in one's order for seeds or planting stock at this busy period means not only great danger of delay in receiving the goods, but one looses invaluable time in getting the stock safely planted. Timely ordering also guards against the disappointment of substitution—an experience which is very often experienced with tardy orders, because of an exhausted supply.

By the fifteenth of the month or even earlier if the weather is mild, covering should be removed from the spring flowering bulbs and perennial plants. There is far greater danger in leaving winter's covering on too long, than in removing it too early. The mild, warm sun, shining down upon such a mulch of early spring and will be enabled to safely withstand even a freeze-up with but little injury to plant or blossom.

It is very often desirable to change the location of shrubbery, perennials, trees or hardy vines about the yard. March is by far the best time for such work, when the frost is out of the ground and transplanting accomplished at this time will suffer no shock from the changes made. Perennials, also may be successfully divided during the month, thus materially increasing one's stock of plants for the coming flowering season.

The asparagus bed should be raked free of litter early in the month and be treated to a generous supply of coarse salt. Onehalf pound to the square yard is about the right proportion to use. Rhubarb, also, should receive a forcing-mulch of fertilizer which may be spaded in or raked away when three or four inches of growth is matured.

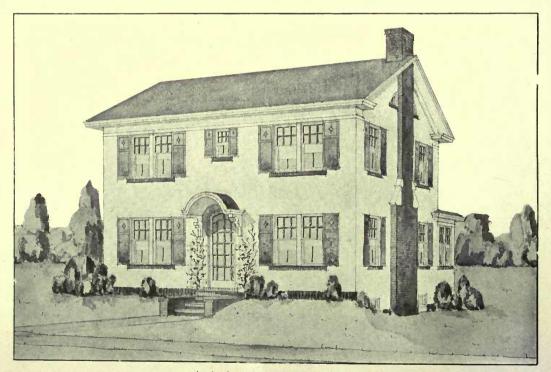
A hot-bed started as late as the fifteenth of the month, planted with annual and perennial plants will gain six weeks' growing start for the enthusiast and will repay one a hundred fold for the little extra trouble and work it costs. If a hotbed, however, is impossible, a big advantage may be gained also in point of time, by planting seeds in boxes early in March, growing the plants in a sunny window of the home.

A Tile House in Colonial Style

TILE is one of the constructive mediums which is increasing in favor and a tile house is not so much more expensive than one all of frame as one imagines. There are many advantages in favor of the tile as, warmth, complete or semi-fireproofness and the expense of general upkeep.

For an inexpensive type nothing excels the square house or one nearly so, with the entrance and stair hall in the middle. While this is a tile house covered with cement plaster and therefore more expensive than the same house built in all frame, many items of expense have been reduced to a minimum; there are no dormers to add to the expense of the roof for instance, no fussiness anywhere to increase the cost unnecessarily.

The white surface is relieved by the green roof, by the green painted shutters, and by the red brick which makes a very pleasing color scheme. The brick is used for sills, chimney and for a course at the



As simple as a true New England house.

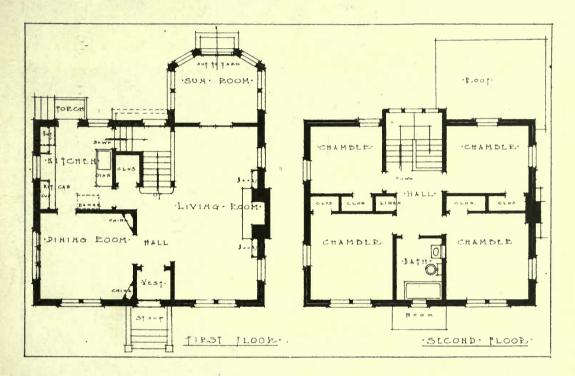
W W Purdy, Architect.

base and the entrance way. In front the ground is terraced up to reduce the apparent height of the house.

The tiny hood over the front entrance is simple and attractive.

From the vestibule one steps into the hall space but this is in reality part of the living room and the stairs are also made a part of this room by having them has two exits, to the outside, one directly into the tiny rear porch and one to a grade entrance, from which the basement is also reached. This basement is complete in every respect.

On the second floor are found four medium sized bedrooms, bath, linen closet and airy hall. Each room has a good closet.



start up with a broad shelf to enclose them. The fireplace, flanked on either side by bookcases, is the center of the room as, also, the center for the family life and the roomy sunporch, with its door to the garden, at the rear, makes this room unusually fine.

The dining room has two tiny corner cupboards, but they hold more china than you would think. There is a very roomy coat closet and the kitchen door, while convenient to the stairs, is hidden somewhat. The kitchen is well lighted, fitted with kitchen cabinet, closets, etc., and The floors throughout are of birch and the bath has a tile floor and wainscot. The finish is of birch, part of which is stained mahogany and the balance finished in white enamel.

Furnished with the reproductions of the fine furniture of our grandparents, if not with the genuine article, which we have inherited or found by purchase, one has here a home of which one need never be ashamed and also one, which, while not large, is adapted to both the home life and also the entertaining needs of the average American family.

Bungalow with Colonial Details

T HE East with its old-time Colonial houses which are being rebuilt and adapted to modern life and conditions with sun-porches and such modern things will soon find itself duplicated many times on the Western coast if the tendency to Colonial details conshingled roof and dark burned brick porch work with the brick laid in black mortar make a pleasing color arrangement, especially when added to this is a velvety lawn and some few arborvitae trees placed symmetrically to keep the dignity of the entrance way.



The covered entrance is exceedingly graceful in outline.

Bungalowcraft Co., Architects.

tinues. To those with a trace of New England ancestry in their veins there is an appeal in this style as from no other and the simplicity of this house illustrated has created favorable comment in many minds.

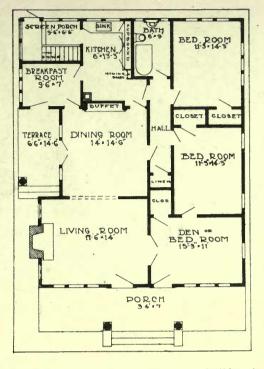
Its full length windows opening onto the terrace are charming without and within and the covered entrance way is exceedingly graceful in outline. Surfaced siding painted white, a moss green You can enter directly into either of the front rooms but the character of the door itself tells you which one to knock at if you are a stranger.

The living and dining rooms open well together, one having the fireplace as the center of interest in the room, and the other, the buffet; both are finished with hardwood floors, wood cornice ceiling and have the walls papered with a silver and crea n colored design, while the woodwork is painted and enameled in an old ivory, with dull finish.

The breakfast room which is one of the exceptional features of this house is cozy and convenient to the kitchen and it will be found to be a place which has many uses in the life of the family other than that which its name implies. The terrace upon which both this room and the dining room open, is roofed only by pergola beams, but with vines and growing things clambering up and over these it makes, not only a thing of beauty to look upon but forms, also, a pleasant retreat when the sun is high.

The kitchen has all the built-in conveniences, including an ironing board and it has in addition a screened porch connecting, from which the cellar stairs descend near the grade entrance.

The bath room is located next the kitchen which makes the installation of plumbing a simple matter. The bedrooms are of fair size and each has a good closet, while the linen closet also, is ample.



Meeting requirements of a California climate, this bungalow is estimated to cost from \$2,000.00 to \$2,250.00.

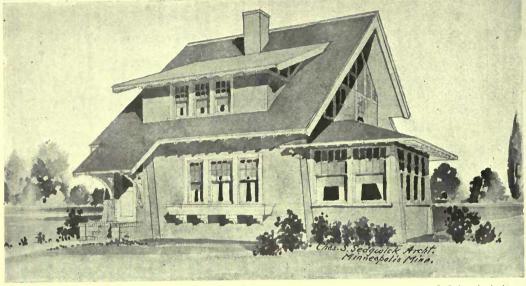
A Liberal Small House

HEN we use porches nowadays as living rooms and sleeping rooms, the livable portions of the house are increased by those additions. While this house illustrated has seven real rooms, it has three porches which make it in fact a ten-room house as far as floor space is concerned. Withal it is compact and will go in a forty-foot lot if necessary.

The long narrow platform across the front of the house where you and your friends had to sit in a row and converse as best you could, has given way to the glazed room, tastefully furnished and placed at the side where you can sit in a group and talk with semi-privacy. It is no longer a porch, but is a sun parlor, bright and airy and while it has not the substantial construction of the main house, it can be used nearly all the time and on especially cold days can be shut off from the adjoining room by the glazed doors. The outside door to the garden at the rear makes this one much more usable in the summer time when one wants to run in and out.

The front door thus becomes, at all times, the formal entrance and this one is attractively shielded from the sun and rain by the continuation of the main roof which comes much lower than the main cornice line and is supported by heavy timber brackets.

The vestibule protects the living room in the winter from the cold and the lo-



A front door protected from sun and rain.

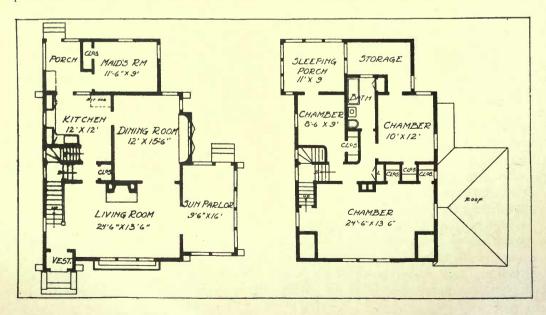
Chas. S Sedgwick, Architect.

cation of the stairs is very accessible to anyone entering.

Doing away with the formal hall and placing the entrance and stairs on the side allows the living room to really occupy the whole width of the house and this one measures twenty-six feet six inches by thirteen feet six inches. The fireplace in the center and the group of windows opposite are the two main centers of interest, while the openings into the sun parlor and into the dining room and up the stairway give attractive views and tend to increase the apparent size of the room.

The dining room is above the average in size for the small house and the full width of the room is available as the attractive buffet with the casement windows above is built as a projection.

The kitchen is well appointed with the



customary cupboards, space for the kitchen cabinet, stairway to the main stair landing, and it has additional working space in the glazed and finished porch at the rear which also furnishes a place for the refrigerator and a passage to the maid's room. While one can get to the rear lawn from this porch the tradesmen's entrance is the grade entrance, which also leads to the basement under the main stairs.

There are three bedrooms on the second floor, a bathroom, a sleeping porch and an extra number of closets, and also a low storage space in the rear.

The high sloping roof makes good attic space for storage and a stairway is provided to reach this from the front bedroom. This front chamber is an exceptionally large room, having light on three sides and two closets.

It is estimated by the architect that this house can be built for from \$3,200.00 to \$3,600.00, exclusive of heating and plumbing. The plan has recently been drawn and it is now being constructed, thoroughly well built in every particular, with oak finish and floors for the first story and birch finish and floors for the second. The main portion of the house is twenty-five feet six inches by forty feet in length. It is planned for a south frontage and has the sun porch on the right, which measures ten feet wide and seventeen feet in depth.

The outside is covered with cement stucco on metal lath, the trimmings painted white or stained to suit the taste and the shingles stained. A few dark oriental brick set in cement are used for the entrance way and buttresses and chimney top to add a touch of color.

The flower box beneath the front windows adds to the appearance of the front both from the standpoint of the passerby and of the occupant of the room within.

A Southern California Type

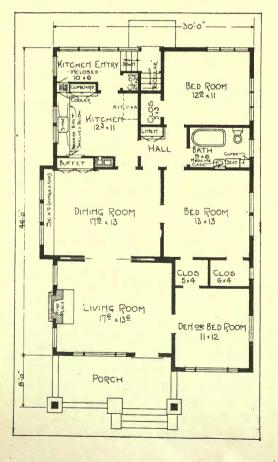
I N a trip through Southern California the traveler is amazed at the variety of styles in bungalows. House after house of this general type and all different and most of them attractive. It is no wonder that we have carried the name bungalow all over the country even if in different climates we have applied the name to almost any kind of a small house. The type runs all the way from attractive houses such as this one shown in this issue which is quite adaptable to any climate to the extreme which is entirely impracticable for a severe climate and perhaps not any too well adapted to its own location.

This one has six rooms and a porch at front and rear.

One enters directly into the living room which is well lighted and made attractive by the fireplace and the view through the wide sliding doors into the dining room and across that to the built-in buffet. The projecting window with the seat beneath light this room well and the seat is hinged and offers much storage space. The kitchen is directly behind the dining room and the buffet and a slide opening in the back of this saves many steps when the dishes are being taken care of. The enclosed porch at the rear which is both glazed and screened-in, gives additional working space and has a convenient closet opening from it. The steps going down from this porch to the grade entrance and onto the basement is an economical arrangement for space and gives the rear view of the house a snug and tidy look.

There are three bedrooms, but the front





With low, wide gables.

E. W. Stillweit, Architect.

one may as well be used as den or library and the opening into both the living room and through the closet into the second bedroom gives a freedom of passage often desired. All of the bedrooms are of good size and the rear room is especially well lighted and airy, having six windows. All the rooms, in fact, have plenty of light and there is even a window in one of the closets. The bathroom is fitted with several special things besides the regular features having a builtin seat, a closet for towels and a medicine cabinet.

The broad eaves of the low, wide gables make the exterior attractive and the finish is of wide siding painted gray with white trimmings. The stone piers of the entrance way with the broad cement steps give dignity to that feature. The house measures thirty feet in width by forty feet in length, exclusive of the porch, and Mr. Stillwell has placed an estimate cost of from \$2,200 to \$2,600 for California.

Homes One Would Like

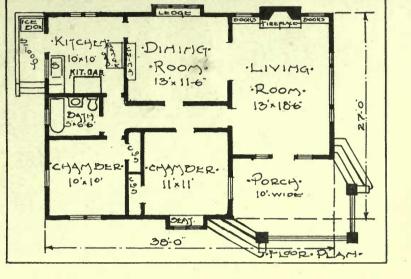


N this day of high prices for all ma-

terials the compactness of the plan of your house counts for much more than it used to do; one has to come to simplicity of form and line because one must if they keep within the limits of their pocketbook.

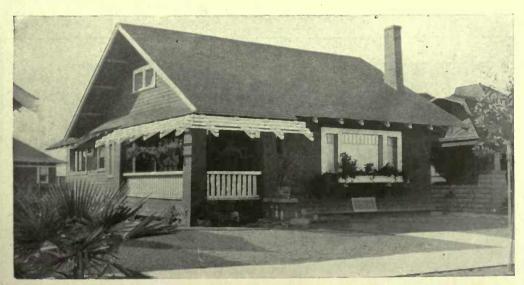
Every corner

adds and every gable adds and those, the man building the small house will do well to do without, as far as possible. In this little bungalow we have the most simple roof possible and it is really a square house as the porch is under the main roof. This has the rafter ends extended to form a little lattice for vines to climb upon and



when they do the porch will be well shielded and most attractive.

The house contains a living room, dining room, kitchen, two chambers and bath. A foundation of stone supports the structure and no basement is contemplated or heating plant, although, of course these two items could easily be in-

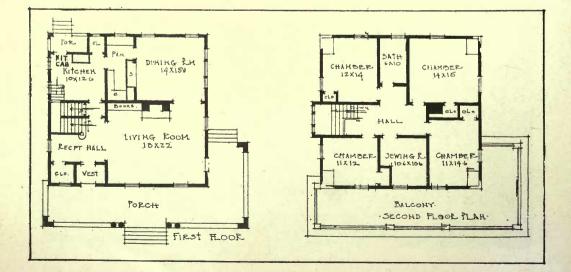


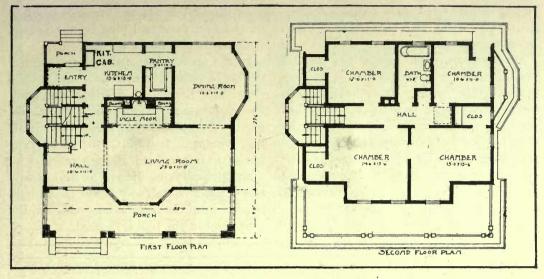
An attractive little bungalow.



A charming homelike residence.

cluded for the additional cost. Provision is made for a fireplace and kitchen range. The finish is of Georgia pine throughout, including floors. The story is nine feet in height. There is a good attic space reached by a scuttle. A stair, rather steep, might go up from the closets between the chambers. A family of three would be accommodated very nicely in this bungalow, the living room being of good size and with other appointments in keeping it would make a very pleasing home. Few designs are as quaint in appearance and as compact as this. The size is thirty-eight feet wide by twentyseven feet deep and the estimated cost is about \$2,000.00, not including heating and plumbing.





These two houses shown following are the adaptations of the same idea worked out in different forms. One house has some little changes which the other has not, but the general arrangement and appearance is the same. Do you want a vestibule and coat closet or will you sacrifice them for the sake of the more generous reception hall?

The stairway arrangement gives you about the same convenience. Each house

has a fireplace, but in one this is placed in an ingle-nook and this means that the house must accordingly be broadened out and this again has its effect upon the kitchen arrangements. Each house has a pantry, space for kitchen range and sink, kitchen cabinet, refrigerator space and little porch. In one house we have the expense of bays which add to the size as well as to the attractiveness and in the other the square form has been

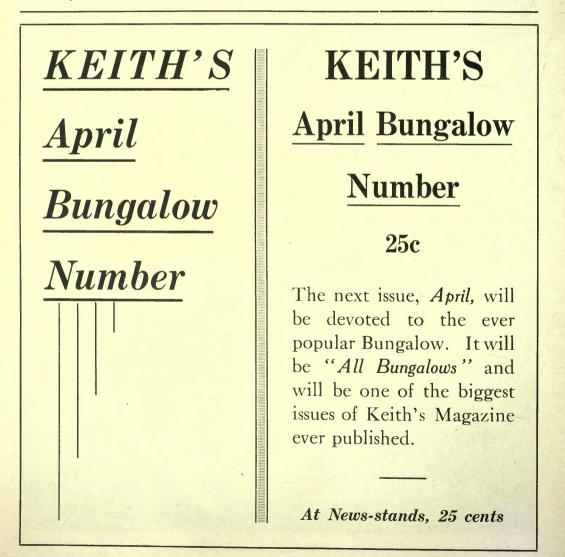


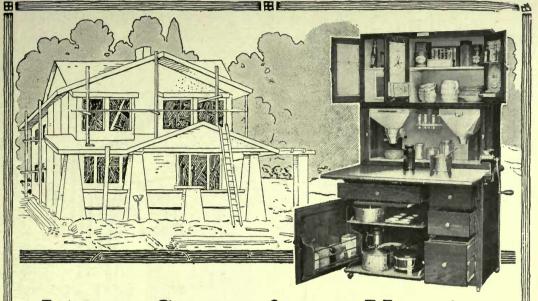
The plan re-drawn and a bit more expensive.

rigidly adhered to which reduces the expense and make the construction much more simple.

Strange to say the square and smaller house has the most bedrooms on the second floor, a sewing room having been built between the two front rooms, but these rooms are much smaller than in the other house. Again the porch in the square house has been brought around the corner. In both houses the story heights are nine feet five inches for the first story and eight feet three inches for the second story. In the first house the finish is of birch on the first floor and pine on the second with hardwood floors throughout.

In the second house the finish is either oak or birch on the first floor and second story hall, hardwood floors throughout. In this house there is a full basement under the entire house with hot water heating apparatus, fuel bins, etc., and a very fair attic is provided, though reached by a scuttle, only, in the end of the second story hall. A stairway could be built to go up into the same, however, at the other end of the hall if desired.





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In building or remodeling a house or apartment, don't make the mistake of omitting the greatest convenience in the present-day home. Many others have had to go to the extra expense of tearing out part of their cupboards to provide for the Hoosier Kitchen Cabinet. All because their architect was not a woman, or did not understand the miles of steps that the Hoosier saves.

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HOOSIER KITCHEN CABINET

88



Small Colonial hall, consistently decorated and furnished. Home of Miss Janet Lewis, Rowayton, Conn.



Decoration and Furnishing VIRGINIA ROBIE, EDITOR

Other People's Door Steps

ALLS have been likened to prefaces preparing the mind for what may be expected beyond. Often, however, they are libels on the

taste and hospitality of the owners.

A preface may be "skipped," but not a hall. Large or small, simple or elaborate, the outer threshold conveys an immediate impression.

What may one do with the average hall to give it distinction, yet to keep it well within the prescribed limits? First, is it a passageway, or a reception hall? An entrance of good proportions, or a tiny box of a place holding a hat rack and a door mat? Is there a vestibule preparing the way to the hall, or does the visitor. householder, or gas man enter with one step the sacred portal? There are all kinds of halls even as there are all kinds of people. Caen stone walls hung with rare tapestries and lighted by gilded torches solve the problem in some houses, just as the ever present hall-tree and rubber door-mat do in others. Between the two lies the hall with which most of us struggle-or let slip without struggle or thought.

Not long ago, I heard a well known architect say, "Door steps have gone out of fashion. Nine people out of ten live in apartments."

Quite true in New York and in several

other cities, but not true of our entire country. Door steps survive in many localities; door steps leading into detached and semi-detached houses, door steps leading into homes built in blocks, and door steps beckoning the passer-by into all sorts and conditions of cottages, and beyond the door steps are halls, sometimes justifying anticipation, sometimes quite the contrary.

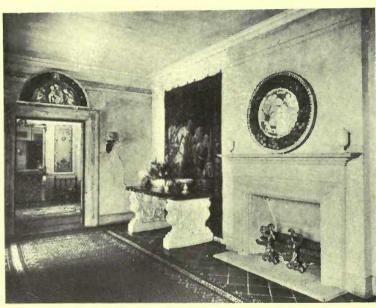
The long narrow hall with abrupt staircase rising inconveniently at the front door finds little place in the modern floor plan, but inasmuch as it exists in many old houses and apartments its presence must often be taken into consideration. Perhaps the most difficult type is the long, narrow cavern of the city apartment poorly lighted and ventilated, and offering little scope for originality. If very dark and narrow a light wall tint is the simplest solution of the problem; if fairly well lighted a landscape paper in which an effect of distance is simulated, is a better scheme.

I remember a hall in a Chicago apartment, three feet wide, where a paper in a bold landscape pattern in shades of gray was used. There were miles of distance apparently in the far-away clouds and mountains. In the foreground were high urns of flowers of deeper gray with a little green and pale orange in the compo-



sition. The dining room at the end of the hall continued the orange and green theme in a more pronounced way; pale orange walls, a green rug, and transparent curtains of green, gray and orange. Green was the dominant note of the living room in combination with deep yelfascinating path of interior decoration. If the hall is a key to all the rooms, as in this case, plan first its color treatment and build up the other rooms from it not necessarily on the lines suggested, but with a similar method.

If the hall is merely an entrance quite



A formal hall, holding an excellent suggestion in the use of plaster casts.

low and the strongest gray of the paper. Two bedrooms repeated the palest gray, one in combination with primrose yellow and lavender, the other with ivory and Gobelin blue. The woodwork throughout was ivory white. Nothing expensive was used except the paper, but as this formed the basis of the entire color scheme it proved a wise expenditure. The paper was a great aid to the amateurs working out the scheme for it gave them something definite to build upon, at once making impossible a lot of hazy plans. Such a purchase is recommended to those who walk with uncertain feet the very separate from the rest of the house, treat it as an independent unit. Let it have as much distinction as possible but do not sacrafice either the color scheme of the living room or that of the dining room for it. Halls thus placed are unfortunately rare. The town home of the detached variety -the usual type, except in the largest centers - is usually constructed with a semi - reception hall which opens directly

into the living room by folding doors, the living room opening directly into the dining room in the same way. Architects design this floor plan in their sleep, I am convinced—so many, many thousands dot this big country of ours. I have seen this dwelling in Springfield, Massachusetts, in Springfield, Illinois, and in many other places. There are practical reasons for building it. Such a house economizes space, is not difficult to keep warm in winter nor cool in summer, but few types are so difficult to decorate and furnish satisfactorily.

When it is possible to look into three

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rooms from the vantage point of the door mat, all thrown together, as it were, by large openings, every object in each room must be considered with relation to everything else. When, as often happens, there is a different wall, window and floor treatment in each room, the result is discordant and discon-

cordant and disco

One fairly safe plan to follow is to treat hall and living room alike so far as the walls are concerned, using an effective contrast in the dining room and repeating the dining room color in the furnishings of the hall and the living A simple room. scheme is to use the same wall treatment in all the rooms. gaining variety and interest by the use of contrasting colors in latter fills an important part. Even when the hall is tiny a well-placed mirror adds light and space apparently and is a convenience appreciated by every guest. A chest beneath the mirror will serve several practical purposes and if space permits is better than the usual hall table.



A well designed Colonial hall, slightly marred by an over abundance of figured surfaces.

the accessories. The trim should be alike in all the rooms and the furniture of the same general tone and character.

If the dining room were not a part of the vista the problem would be much easier. True, the folding doors may be closed; true, portières of solid tones may be used with a "dining-room side" and "a living room side"; also the hall may have it double-faced portières. There are many ways of dealing with the conditions and success is well worth the struggle.

The furniture of the semi-reception hall includes usually several substantial pieces —a sofa, chair, table, mirror, etc. The A rocking chair should not be included in the properties. In a large reception hall used daily as a sitting room a certain informality may be pardoned, yet even here the real purpose of the hall should not be overlooked.

The hall of colonial designs presents few difficulties. Whether paneled in wood or papered in an old-fashioned pattern it offers an appropriate background for mahogany furniture, old mirrors, portraits, etc. Yet even here we err on the safe side. Let the hall have too little rather than too much in the way of adornment.

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Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.

A LE the purple shades are to be seen in the decorative fabrics of the shops, amethyst, petunia, fuchia, plum, prune, heliotrope, wistaria, violet, pansy and lilac. If rather flowery in the telling there is no lack of character in the colors themselves. Other popular tones are flame, Mandarin yellow, deep orange, jade green, emerald green, and Dragon blue. These colors, it will be noted, are nearly all of corresponding intensity.

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The present use of brilliant colors would not be possible or permissible if the question of scale in tone were not carefully considered. The English poster showing the bright green motor and the violently purple lady and the orange Chow dog is an example. You may not like it, but at least it is well done. a unique way of doing up the books it sends out. Papers of the most brilliant hues are used, many of them Chinese, and the combinations are as striking as any Paul Poiret ever expressed. One book will show black as a foundation overlaid with bands of silver paper edged with emerald green. Again this same green, black and silver scheme will display discs of scarlet or half moons of orange. Gold papers are used and brilliant yellows dusted with gold and silver.

I watched a young woman wrapping, cutting, folding and pasting, and knew by her speed and skill that she was an experienced crafter. Sometimes the wrappers fit the subject as with such books as "My Lady of the Chinese Courtyard," by Elizabeth Cooper, or Blacker's

Orange, so long neglected, is found in every possible object of household and personal adornment. Many of the new books are bound in orange, taking the place, for the moment, of the time-honored red. One delightful book-shop, with a name like unto no other, has perfected

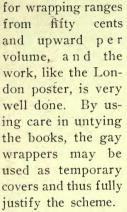


Copenhagen with openwork border.

"Oriental Porcelains." Again no attempt is made to be logical beyond the wish to afford the recipient a real surprise; and who would suspect on receiving a brown paper parcel that such a riot of color would shortly appear. Surprise boxes of books go out from this shop; sets



of Tagore, of the new writers of "Free Verse," of the charming Mosher publications—in fact any combination one may order. Invalids able to read might enjoy a group of little books almost as much as a box of brilliant flowers. The price zines or writing tablets. The tray is bound in wicker and shows beneath a glass covering a delightful Oriental lady in shades of gray and soft blue. This tray is reversible; the lower side covered with green baize may be used for soli-



Lacquered articles of all kinds are

among the season's offerings. A substantial armchair, built something like a Windsor, with a wide perforated splat may be purchased in either red or green lacquer for twelve dollars and fifty cents. It is made to last and could be used with oak or mahogany. A larger chair with arms and underbraces lacquered old blue, dull green or Mandarin yellow, is twenty dollars. Another good model, better known, is the Hongkong hour glass of peeled cane, seven dollars and fifty cents.

From the same shop comes the "Yeso" tip-table in black lacquer with Japanese decorations, price twelve dollars, and an antique Chinese dressing case, inlaid with mother-of-pearl, fitted with mirror and many drawers, thirty-eight dollars.

In a third shop wicker trays of many kinds were discovered. An invalid's breakfast table of wicker has a removable tray, and side pockets for books, maga-



Breakfast set in Royal Copenhagen. Tray and china, \$16. Wistaria pattern. taire or for writing. Really very convenient and not expensive for fifteen dollars. A cretonne lined tray is substituted if preferred or one showing the willow pattern.

So many attractive breakfast trays and breakfast sets are displayed that it becomes almost an

act of heroism to dress and descend to the breakfast table.

Few wares are lovelier than the Roval Copenhagen and new patterns keep step with the old. Fortunately the War has not made any noticeable difference with this importation. The output is varied and includes ornamental wares in soft gravs, blues, ivories and pale rose, table china of many designs and the colorful "Copenhagen Fayence," which is lightweight pottery. The latter is brilliantly decorated and relatively the most expensive. The standard fluted blue and white Copenhagen is one of the best of everydav patterns. A service of twenty-nine pieces may be bought for fifteen dollars, and as it is open stock, the purchase is a practical one. The new "fan fluted" blue and white is quite different. Held to the light one gets a varying thickness, a cutaway translucent effect not unlike some

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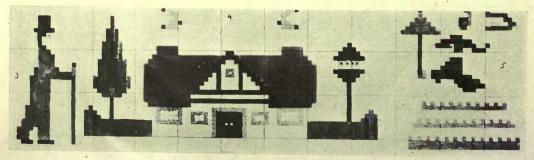
of the old Japanese porcelains. The tea service has the outlines of Josiah Wedgwood's black basalt, yet not slavishly copied. The decoration is entirely Copenhagen and of a beautiful blue which must have been suggested to the potter by the three sounds or belts dividing Denmark, and which you find symbolized on every piece of Copenhagen ware by the three waving blue lines surmounted by the crown. If you wish to place Copenhagen china on Danish linen and use Danish silver, the opportunity is yours. Also cross stitch embroideries of peasant execution in blue and white, green, red or white, may be selected to complete the purchase.

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A set of charming designs in cross stitch is the work of one of the most distinguished miniature painters in this country, Miss Laura Hills of Boston. A sampler calendar made by this gifted artist has delighted lovers of the quaint and queer for the past year and is repeated for 1917. Miss Hills in moments of recreation cross stitches the time away. Little girls in pantalettes and old-time frocks, boys with hoops and peg-top hats, birds, houses, trees, flower pots, bits of gardens, are some of her fancies. Many cross stitch patterns are on the market but I have seen none so full of spirit, dash and cleverness.

In a shop famous for its linen may be seen many beautiful table cloths. They are square but intended for round tables and are so designed that the main border outlines the circle. With few exceptions the center of the cloth is plain; many are of smooth satin damask with no pattern except the borders. The designs are charming and are called "Killarney Arbutus," "Myrtle," "Empire Stripe," "Carnation and Satin Band," "Smilax," "Wild Carrot," "Narcissus and Maiden Hair," "Ionic," "Garlands of Fruit," "Lilac and Ribbon Band," and "Old Willow," At last the historic willow pattern has found its way to the table cloth after more than a century and a half of intimate association with table china. The price of the willow in linen is seven dollars and twentv-five cents for a cloth two vards by two vards. Napkins twenty-two inches by twenty-two inches are ten dollars a dozen. There are large sizes in both cloths and napkins. The Killarney Arbutus is fifteen dollars in the small size, while the "Thistle and Tartan" in the two by two size is five-fifty. These are Irish linens of latest importations.

Among Maderia linens of finely scalloped edges and dainty cutwork embroidery are centerpieces, doylies, tea, luncheon and dinner napkins; oval and oblong tray cloths, and many luncheon cloths



From a set of cross-stitch patterns designed by Miss Laura Hills.

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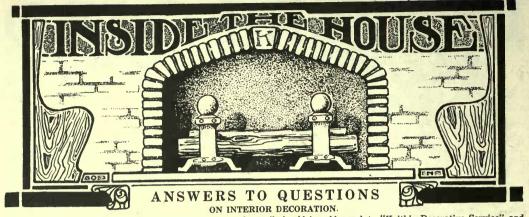
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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

Casement Windows.

A. D. K. Enclosed you will please find floor plan of new residence which is now under course of construction. You have helped many in decorating problems and I am writing for a few ideas.

Furniture in living room and dining room is fumed oak. For living room I have three nut brown wicker chairs upholstered in brown Spanish leather, a fumed oak davenport also upholstered in leather, a brown leather rocker, fumed oak library table and Victrola. For this room I have no rug as yet. The interior finish is red oak, plain sawed and we thought of having it fumed.

The dining room furniture is also fumed oak and for this room I have a brown rug with a touch of rose in it.

The den will have to be furnished throughout. The den is very small and I cannot put much furniture in it. Thought of a desk and two chairs. You will notice the open stairway in the den. The finish in dining room and den is also plain red oak.

Thought of giving living room and dining room fumed finish to match furniture but believe we would prefer something different in the den. What would you suggest? We expect to paper these rooms. What color scheme would you suggest and how worked out? What kind of rugs (medium price) would you suggest for living room and den?

We have varied from the plans somewhat and have all casement windows in living room. In place of two windows on side of living room there are four casement windows above davenport. How would you treat those windows and the ones in inglenook? Would you use draperies of any kind on these windows? Would you finish the upstairs in white or cream enamel?

Any other suggestions you can make will be highly appreciated.

We have been subscribers to your magazine for two years.

Later: In writing you a few days ago I failed to state that the house faces the west. This may make some difference in your suggestions concerning decorations.

Ans. Considering that you have such a wide opening between living room and dining room, it will be better to have the wood trim in fumed oak in the same tone as the furniture. Would suggest hanging the walls of living room in golden brown with the draperies in an old gold sunfast. The rods for the draperies may be secured to the casing above the casement windows with the draperies pleated and hung on rings, doing away with opaque shades which are bothersome on casement windows. The rods for laces may be fastened directly on the casement window with simple "all-over" net curtains hanging straight to the sill. The windows of inglenook may have either sunfast or net or both, and hung in the same manner. Also, use the same net on the French doors with rod top and bottom.

The dining room would be charming with the walls done in a warm yellow tan and the draperies in dull old blue, using



House on Fresh Pond Parkway, Cambridge, Mass. Charles R. Greco, Architect, Boston, Mass.



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the "all-over net" at the windows in a slightly different pattern. Your brown rug will work in nicely with this color scheme. The rug for the living room may be in an oriental pattern of domestic manufacture in tan, rose and a little green, with brown predominating.

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Your upper hall will require a light paper so would suggest that you use a warm gray extending this same paper down into the den and treating the den woodwork in a gray stain and wax finish. The wood trim in upper hall may be done in ivory enamel; likewise, the chambers. The draperies for den should be in deep old rose or mahogany with the same color predominating in the rug.

Later: We think you will not find it necessary to change the scheme in any way on account of the west frontage. Treating the dining room in warm yellowish tone, will give this room a more cheerful atmosphere than any other color.

If you prefer, you may use warm gray on the walls of living room with laces in ecru and draperies in plain deep old rose or mulberry. Our May number will illustrate a living room done in this scheme which is very popular at present.

Treatment for Old Burlap on the Wall.

C. A. M. Will you kindly give me some suggestions on color scheme for three downstairs rooms, sitting hall, parlor and dining room, which open together. Shall I decorate sitting hall and parlor alike?

Woodwork in all rooms is oak. Parlor furniture colonial; hall rugs in two-toned brown. In dining room I now have green burlap up to plate rail. Shall I remove plate rail and burlap and paper same all the way up? If so, what style of paper figured or plain? Ans. The hall and parlor with the wide opening to connect them, would look much better if treated alike. Considering your rugs, etc., would suggest a golden tan for the walls with the draperies in a russet brown sunfast fabric or soft silk. As you have plenty of sunlight in your dining room, this room would appear charming and would offer a delightful contrast to the parlor if done in dull old blue. Would not advise removing the plate rail, neither would we remove the burlap, which is always good.

If the burlap is not too deep a green, we would suggest experimenting with a dye. Purchase a small quantity of diamond dye in a dull old blue shade and apply lightly with a sponge. If it assumes a mottled effect, it will be all the more decorative. If the green kills the blue and necessitates too deep a blue to cover the green, then we must dismiss this idea.

If you can secure the services of an intelligent painter who does not know it all, have him give the green burlap a coat of liquid silver or common aluminum paint. When dry, apply a heavy coat of flat paint in the desired shade of blue. Cover a small space at a time and while still wet, crumple up a piece of burlap sacking (not a pad) and pound or stipple this wet surface. As the wall is struck with this wad of burlap, give it a twisting motion so as to disturb the paint and show glints of the silver through the blue paint and the effect will be very pleasing. When done to your satisfaction, have the painter mix a transparent glazing liquid and apply one coat over the dry paint. Do not have this glazing liquid too Above the plate rail hang a folglossy. iage paper in faded grayish blues with a gray ingrain ceiling.

Have plenty of deep blue in the rug,

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INSIDE HOUSE

dull old blue hangings of soft silk at the windows and if you install new lighting fixtures, have the trimmings in antique silver. If you decide to remove the burlap, would suggest grass cloth or textile effect for the lower, with a blended paper and border for the upper. Foliage papers are again very popular and may be used with the textile lower wall.

Oak Stains.

A. L.—We have been a constant reader of your magazine for a number of years and have always found it up to date in all its departments. We are just finishing a new home and we write to inquire which is the most popular shade for oak finish.

We are thinking of finishing first and second floors in oak. Are they using the dark stains as much as formerly? Would it be advisable to finish second floor the same shade as first floor?

Ans.—We are especially glad to give individual assistance to our friends of many years' standing, and hope your new home may prove a great satisfaction to you.

The finish for your oak woodwork should be considered in connection with the furniture which you will use in the various rooms. If you expect to buy new furniture, then you are free in your selection of the tone for the finish, but where you expect to use furniture which you now have we would advise that you finish the room in which it is to be used to correspond, though not necessarily to The very dark match the furniture. stains so much in vogue a few years ago have proved rather heavy and gloomy and are not so popular now as a tobacco brown stain. Since we know nothing of the furniture you may use, we will enclose a few "answers" to other inquiries which may help you.

The gray stains for oak woodwork are coming into favor, and if good with your furniture may be used for the second as well as first floor.



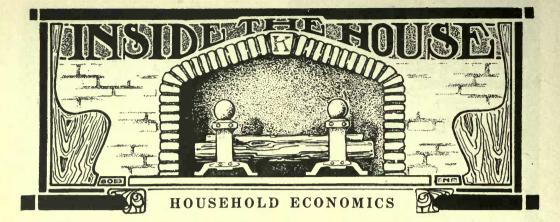
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Morgan Millwork Co., Baltimore Morgan Co., Oshkosh, Wisconsin

Exhibits of finished Morgan Model Doors in all principal cities. Ask for list.



A Delivery Cabinet

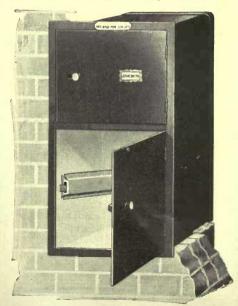


ID you ever have your Sunday dinner stolen because you were not at home when the delivery arrived and the

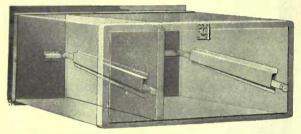
packages were left outside?

The prudent housewife usually waits until the groceries have been delivered and the milkman has come before she starts for a long day of shopping and so does not get down town until the shops are crowded.

You can have a delivery cabinet



Outside view of upright double compartment cabinet.



Showing how the lock works automatically.

installed which will look after all of these matters for you and which never forgets to lock the door. The cabinets may be set in the wall or in the door. They are made in several sizes to fit various conditions.

A cabinet may be installed in a brick wall, while the building is being erected, sometimes being placed under the kitchen or pantry window, or over the ice box. It is designed to conform to the brick course and does not require more time to place in the wall than a single brick. It sets flush with the brick outside and flush with the plaster inside the wall. There are both single and double compartment cabinets, set upright or horizontally.

The "phantom view" shows the locking device and how it connects the inside door with the outside and locks.

The method of operation is something like this:

Empty bottles are placed in small compartment. The milkman removes the

195



25 Beekman Street, New York

Made in U. S. A. Spells National Prosperity.

713 Erie Street

Huntington, Ind.



empty bottles and delivers your daily supply, pushes the doorknob to the left and the compartment is locked.

196

The grocer, butcher and other delivery men operate the other compartment in the same manner.

Opening the inside door to remove contents of compartments automatically unlocks the outside door of each compartment, which remains unlocked for next delivery, although the inside door is again closed and locked and the cabinet is ready for the next delivery.

A Water-Cooled Cupboard.

Where water is plentiful and ice not so easily obtained a water cooled cupboard gives good service.

The one observed was built at the north side and just outside of the kitchen porch. It consisted of a frame fitted with shelves about eighteen inches or two feet square and was enclosed with wire screening instead of wood. Over the wire screening and held away from it by strips on which it was tacked was stretched ordinary burlap, and the screened door was also covered with burlap.

The top of the cupboard was covered with zinc or galvanized iron, with a small flat square in the center and sloping down six or eight inches to the sides.

Over the flat square at the top a faucet was set to drip more or less slowly, as desired. When in operation, small strips of burlap carried the water to each of the sides except the door, saturating the burlap cover. In effect this made a cupboard enclosed on three sides by a film of water and the evaporation, more or less rapid, according to the heat in the air, kept the enclosed space of the cupboard comparatively cool.

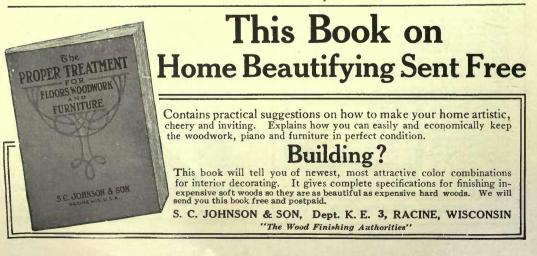
The construction of such a cupboard is so simple that any boy who is handy with tools could make it with the friendly help of the plumber or tinsmith in covering the top and setting the water pipe to place the faucet over the center of the cupboard.

Small Economies.

Here are some clever little economies or easy way of doing something which it is a real satisfication to pass on to others.

When the wind-shield of your automobile becomes cracked, have a glazier cut a nice shelf out of the remaining good portion for the bathroom. Little nickel brackets will hold it in place. A glass shelf is both attractive and sanitary.

Satisfactory, home-made, dustless dusters may be made from squares of clean cheesecloth dipped into a mixture of a tablespoonful of kerosene to a quart of hot water. Squeeze out slightly and dry in the open air. They are excellent to gather dust and to polish woodwork, and are easily washed when soiled.



Add to Its Attractiveness as Well as to Its Utility

YOUR FIREPLACE is the center of your home and is an important factor in the decorative scheme. Make it complete.

Select your fireplace furnishings from our complete stock as shown in our beautiful catalog. It's easier and more satisfactory because of our exceptional assortment. Only the very best of materials are used in their manufacture. We can give you any desirable period design as well as the modern up-to-date design. If interested, send for our beautiful catalog.



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Patent Pending

WE announce an addition to the Hess Pipeless Welded Steel Furnace by which a detached room, such as bathroom or kitchen, may be thoroughly warmed, even though the door is closed.

This overcomes the commonest deficiency of the Pipeless method, and perfects the system where the Hess Furnace is used.

We believe no other pipeless furnace can meet this requirement, for a separate small pipe, run from the heating chamber, will not accomplish the purpose, and that seems to be the last resort of the furnace builders.

Send us a sketch of your house and let us show you.

Special rates to contractors.

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No advertising is accepted for "Keith's" that you can not trust.



Lenten Menu Suggestions

"A little fasting now and then is relished by the best of men."

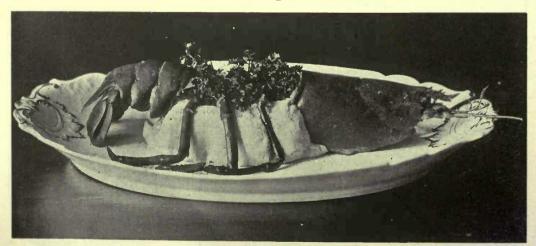
HE Lenten season affords a good opportunity to the housewife to tide her family safely over the digestive disorders often occasioned by too great indulgence in feasting during the holiday season. "Health and Happiness" lecturers the country over have been preaching the doctrine of less meat eating, and the cultivation of a liking for vegetables, fruits, and coarser breads. So that the custom of abstinence from meat

should be regarded as a most judicious

and sensible one, apart from its religious

significance.

Eating is so largely a matter of habit that it is immensely important that children be early given a variety of vegetables, and fruits, especially the fibrous ones, and those which can be eaten raw, and which contain the essential vitamins or life-giving elements without which one is not properly nourished. Some of these foods, good at all times and especially after the winter season, are spinach, celery, onions, cabbage, apples, dates, figs, greens of all sorts, ripe olives, nuts, lettuce salad, fruit salad, whole wheat bread, graham bread and brown bread.



A Lenten suggestion.



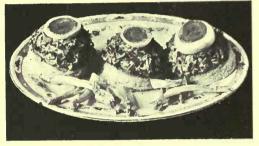
Northern Hemlock & Hardwood Manufacturers' Association 203 F. R. A. Building Oshkosh, Wisconsin

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A Delicious New Vegetable, Celery-Cabbage.

When in search of something just a little different for a Lenten salad, try the celery-cabbage, which is so deservedly popular just now. It is most appetizing when most simply prepared. Snip into pieces with salad scissors and soak in ice cold water, drain, and wrap in a damp cloth, and keep in a cold place until needed, when it may be served with a plain



Fish in tomato sauce.

French dressing. It has such a fresh, crisp look, and tastes even better than it looks, and, best of all, is not beyond the reach of a modest pocket-book.

Care in Buying Vanilla.

At the present time, the market is flooded with a great quantity of cheap and artificial vanilla extracts because of the failures of the Mexican vanilla bean crop. and the natural advance in the price of the vanilla bean. The real vanilla extract is made from a good grade of bean, which, in its original state, looks like a cross between a big green bean and a thin banana. These beans are dried and cured most carefully until they become thin and black. It was a little piece of this slender black bean that our grandmothers used to flavor their custards. Today the beans are chopped up, and steeped in alcohol and water to extract the flavor. For ordinary extracts, the liquid is poured off in a few days, but particular manufacturers allow it to stand for months, and even use the same cask for years to obtain a very fine flavor. Infinite pains are

taken to make high-grade extracts, which are not appreciated by the woman who buys an artificial vanilla.

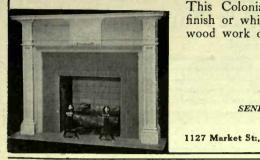
And what is an "artificial extract"? you Frankly speaking, it is a weird ask. compound sometimes containing an extract taken from a low-grade bean, such as the "tonka," mixed with coumarin (which is a coal tar product, and heart depressant), sugar and glycerine. Sometimes it has not even a speaking acquaintance with any variety of vanilla bean, being made from "artificial vanillin," a substitute for real vanillin (which is the active principle of the vanilla bean), made from a compound ether, or eugenol. This substance is in tiny white crystalline needles, which are dissolved, and the mixture is colored with prune-juice, or caramel (burnt sugar).

These artificial vanillas can be so easily detected that only carelessness or utter indifference to purity of food products can explain their universal use. Read If it bears the following the label! phrases, and if the extract has a heavy, sweet smell like that of the sweet Indian grass, it is unfit for use in the home. "Compound vanilla," "compound extract of vanilline, vanilla, tonka and coumarin," "artificially colored." These cheap extracts, which the unsuspecting housewife buys at a price to suit the Monday morning bargain counter, are infinitely inferior in flavor and aroma to the genuine, a little of which will go as far as a large amount of the adulterated kind.

Meatless Meals.

- Clam Chowder Pilot Biscuit Spinach with Poached Eggs Graham Gems New Green Onions Pineapple Tapioca
- Split Pea Soup Celery-Cabbage with French Dressing Date Pudding
- Fish Timbales Potato Garnish Whole Wheat Bread Ripe Olives Dandelion Greens Wafers Cream Cheese Strawberry Jam

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This Colonial design Mantel of selected birch mahogany finish or white primed, excellent proportions, is priced for wood work only

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It is absolutely wind, weather, storm, fire and lightning proof.

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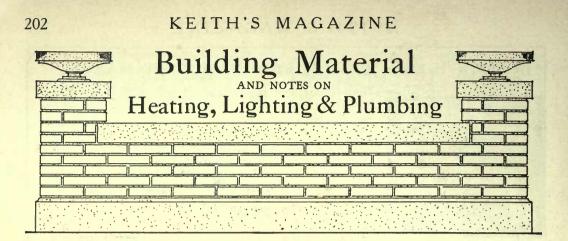
The World's Largest Makers of Metal Ceilings, Metal Shingles, Metal Roofing, Siding, Rolling Doors, Metal Lockers, etc.

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This home in Cincinnati is one of several hundred in that locality covered with "CREO-DIPT" Stained Shingles on roof and side walls. They all possess individuality.

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Points to Remember

John Upton

The Cellar.



HERE are some little details which may not be in the specifications and even if they are may be overlooked or even purposely slighted by those doing the work, so it is well to look out for them at the right time.

First a word as to grades and levels. In cities and large villages this matter is already established but elsewhere one has a choice and it is well to have the house set high rather than low, unless it is in the exceptionally well drained location, and here one must have light if not drainage.

A few inches difference in the depth to which the cellar reaches may make all the difference between a damp, dark place and a well lighted, dry one. It may take considerable more dirt or other materials to fill in and grade up around the house, because it is set high, but this can be managed in time, while a cellar built so low that it cannot be drained is a problem not so easily solved. It will help toward this filling to dig out under the porches and wall these places in so that they may be used as storage or for the stairs. Then there are always coal ashes, yours and the neighbors, which can be used. The top soil from the driveway will help too.

When the excavation is supposed to be finished and before the work of construction is begun, see that there is room outside the lines of the walls for the footings, this will also mean room for making the outside of the wall waterproof by a coating of cement mortar up to grade, if the wall is stone.

See that the footing course is not slighted as being out of sight, also that the wall is not left rough on the outside.

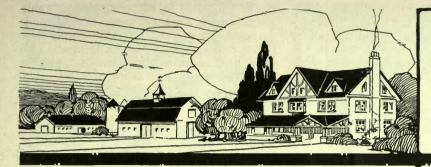
In some cases as on a hillside it will be best to put in a drain of stone or tile around outside the wall and below it so as to take care of the water seeping from the higher land.

Whatever the plan may call for it is up to the owner to see that there are enough fair sized windows to provide light where needed and ventilation when needed. They should be so placed as to light each room and also be right for receiving coal, and if possible on opposite sides to get cross drafts in summer.

You can have a choice of materials for the walls. A good and not costly wall can be made from concrete up to grade. Above this the concrete may be faced with brick.

See that the cellar floor has a proper slant toward the drain. The time to guard against dampness and darkness in the cellar is when it is built or before, not afterwards.

The sewerage pipes in the cellar should be of cast iron. If conditions permit and the work is well done there is no great objection to having them placed beneath the floor, but this should not be made an



YOU have heard of the man whose wife and daughters were so tired of the old place that they wanted to sell it, but who changed their minds after the man had it painted up so that it would sell.

There isn't an expenditure or an investment about your building that counts for more than good painting—or that counts in so many ways:

Increase in market value. Added beauty to the neighborhood. The example of thrift. Pleasure to your family and friends. Actual protection to your building. The prosperous look which helps bring prosperity.

To make sure of these results, use

Dutch Boy White Lead

Paint made by mixing this long-tested, reliable pigment with pure linseed oil comes pretty close to meeting every paint requirement. It makes a smooth, hard, beautiful, non-cracking, long-wearing film that sticks close to the wood and is ready for repainting without expensive preparation.



3

For full information on painting, ask us for Paint Points No. K. E.

National Lead Company

New York Boston Cincinnati Cleveland Buffalo Chicago San Francisco St. Louis (John T. Lewis & Bros. Co., Philadelphia) (National Lead & Oil Co., Pittsburgh) Red lead is the best known preventive of rust.

Dutch Boy Red Lead

comes in paste form like white lead, in steel kegs. Stir in linseed oil and drier and it is ready to apply. It will be money in your pocket to have a keg of Dutch Boy Red Lead always at hard to touch up the numerous bits of metal about the place. excuse for careless work. When drain pipes are slung along the ceiling they are supported by iron hangers and the points where the risers start for the vent stacks should have more hangers to take care of the extra weight, or the joints may open from sagging.

Cellars should not be less than seven feet in the clear and more would be better. If a hot air furnace is used this will give a chance for a good pitch to the pipes and with other systems of heating the extra height will help in keeping the pipes out of the way and will make the system more efficient.

The coal room should hold a year's supply with some room to spare. It should be made very tight so that the dust will not get into the other rooms. In the other rooms it is not well to have too many shelves and cupboards. They should be planned just to fit one's needs as otherwise they will become hiding places for odds and ends and make more cleaning.

It will be convenient to have a hose bibb at each end of the cellar so the water may be used for washing the floor and in case of fire, these would be useful.

Where there is no regular water supply it is well to have a cistern in the cellar. Some people object to this and put it outside, but when a cellar is well lighted and ventilated the cistern may as well be here. It is much more convenient to get to and if kept cleaned out as it should be, is not insanitary.

The stairs may lead down from a grade entrance, but in any case do not let them be made steep. The plans may leave this matter to the builder and he may have an idea that anything will do here because it is where it will not be noticed. But the fact is that we now use the cellar stairs about as much as the front ones and we want them right.

The Farm Buildings.

Do you know from experience what kind of job it is to put new sills under a barn? And did you ever realize that too often this work was made necessary by conditions which should not have been and could easily have been remedied? Many buildings are not set up far enough from the ground. Often the ground slopes toward them and so the water runs under them, and the conditions soon cause the sills to rot out. Then again there might well be more eave-troughs to catch the rain and conductor pipes to carry it away from the buildings. This need not cost much for one can buy the material and do the work himself. The slip joint trough can be put together without soldering as well as the conductor pipe.

If one has much use for it, a jackscrew will be a good thing to have, one of the rachet jacks is best for some work and does not cost too much if one needs it. Small buildings can be raised with prys, in fact, a pry will help even when you use a jack.

It is not a difficult task to move a small building a short distance. Get some timbers or planks for track and some pieces of iron pipe, say two feet long, and two inches in diameter. Use these for rollers on the track and set the jack at a slant against the sill. Have the track slant a little the right way and all will go well.

One can even turn a building part way around when desired by this means, by blocking one end and pushing on the other with the jack.

When the building is to go a considerable distance, one may use rope and pulleys to form a tackle, if a regular tackle is not at hand, and hitch a team on.

The Water Supply.

It is the fashion now to pump water with a gasoline engine or by electricity and we seem to forget that the wind is still the cheapest power we can get. do not know what the modern steel windmills will do as to years of service, but one of the early wooden wheel mills was recently taken down because of a break in the iron after thirty-seven years of faithful work. It had pumped the water for a large dairy for all that time and was still in good order until the break. Allowing any fair price as the original cost, and dividing this by 37×365 , you can figure out how much gasoline you use per day and keep the cost down equal to this. The mill had never needed any repairs.

Another cheap power for pumping water is the hydraulic ram. If you have a spring from which the water flows with a few feet fall, you can perhaps make use of this little machine which when once installed under proper conditions will de-

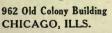


Is It Economy?

THE repair that will be forthcoming to put back this ceiling will be staggering. The replacement will never look as good as new and there's no assurance that the thing won't happen again.

This sort of accident can never happen if the plaster is laid on a base of







liver water where wanted, night and day for years at almost no expense. It will force the water a long distance and elevate it to a considerable height, just how much will depend on conditions. In some conditions it cannot be used to advantage. The manufacturers and dealers will be glad to send you information about a ram so that you can find out whether you can make use of one. With the instructions they send, any person can install one and the cost is not large. The needed pipe can be bought ready for use and about the only tool one need buy is a pipe wrench, which you want anyway, as it is a handy thing to have.

Photographing Interior Structure of Concrete Work.

Switzerland-Some successful experiments in photographing the iron reinforcements of concrete work with Roentgen rays, recently made by Inspecting Engineer E. Stettler of the Swiss Railway Department, are attracting much attention among Swiss construction engineers. The advantages of being able to make an examination of the condition of such reinforcements, or the proper disposition and situation thereof without destroying the concrete structure are selfevident, as well as the desirability of being able to make an inspection of the position of the reinforcing iron reds upon the completion of the cement parts of a new building or a new cement structure.

Engineer Stettler, by the use of special plates adapted to any construction, has apparently obtained serviceable pictures of the inner structure of cement blocks. To eyes accustomed to pictures with great detail and much light and shadow,



the first results of the Roentgen exposure may seem somewhat meager. However, the iron reinforcements in the pictures are shown in their proper size and situation, as also the connections and crossings, so that the imperfect connections can be clearly recognized.—U. S. Commerce Reports.

Discoloration of Stucco.

Stucco is primarily a porous substance. The pores, if left open, will be filled with the first substance which gathers on the face of the wall, dust, smoke or sootladen water generally being brought in contact with it sooner or later, with what effect even the unobserving person is familiar. This being a natural effect of the poresfilling process, the obvious method of avoiding it is to fill the pores with a white or colorless waterproof substance before the natural process has had time in which to fill them with soot and dirt.

There are two methods of waterproofing and filling the pores—the integral. The waterproofing paste or powder may be mixed with the cement in the preparation of the stucco, or the surface may be brushed the necessary coats of a colorless waterproofing; the liquor enters the pores and there deposits a clear, colorless, water-resistant substance which effectively protects it from rain and smoke.

To Remove Rust Stains from Stucco.

A solution of hydrochloric acid and tannous acid will remove iron rust from concrete and will not injure the concrete if the treatment is administered rapidly and the face immediately washed with clean water. The solution mentioned has an affinity for carbonate of lime; consequently it should not be used where hydrated lime has been incorporated in the mixture.

Rough finish cement stucco should be treated by spraying with the above solution as the result will be more thorough and the work more rapid than by the use of a brush, says Wildwood Magazine.

Very satisfactory results may also be obtained by diluting one of the commercial cement paints until it is thin enough to use in a spray pump, and painting the surface of the stucco by spraying the diluted paint upon it.



With A Great Deal More Comfort Into the Bargain!

Open space all around this big 10-room house. And in a part of the country where the mercury tries to drop clear through the glass in winter. Makes no difference to the Williamson UNDERFEED, though. A fifty dollar coal-saving and more comfort in spite of it all. Read the letter:

"Mine is a ten-room house, and always cost me over \$100 to heat with the old boiler. This winter cost \$50 with the UNDERFEED, and we had a great deal more comfort, 72 or over in the coldest weather. A fuel saver, time saver and dirt saver."

(Signed) DR. W. J. MORGAN, Mineral Point. Wis.

Furnaces VILLIAMSON UNDERFEED Boilers

Cut Coal Bills 1/2 to 2/3 Guaranteed

Please let this fact sink in: $A \frac{1}{2}$ to $\frac{2}{3}$ saving in coal cost is actually guaranteed with the Williamson UNDERFEED, whether you heat with warm air, hot water, steam or vapor.

That is partly because the UNDERFEED burns the cheaper grades of coal as effectively as others burn the costlier grades. That's a big saving at the very outset—money you save by keeping it in your pocket. Another reason is the scientific principle of combustion. In the UNDERFEED coal is fed from below. The hot, clean fire is always on top—never smothered or chilled by fresh coal being dumped on. All smoke, soot and gas must pass up through the fire and so be transformed into clean, usable, effective heat.

No waste whatever. No clinkers. No partly burned coal. No soot-encrusted pipes.

Money-Saving Book Free

And a boy of twelve can operate the UNDERFEED successfully. No stooping. All done from a stand-

successfully. No stooping. All one from a stand-ing position. There's an interesting book "From Overfed to UNDERFEED" which pictures and describes it all. Free for the asking. Simply send coupon. It will save you many a dollar when you come to install that new heating system. Remember, ½ to ½ saving in coal cost actually guaranteed with a Williamson UNDERFEED. Send the coupon <u>now.</u>

THE WILLIAMSON HEATER CO. CINCINNATI, OHIO **36 Fifth Avenue**

THE WILLIAMSON HEATER CO. 36 Fifth Ave., Cincinnati, O.

Tell me how to cut my coal bills from 1 to 3 with a Williamson UNDERFEED.

Name.....

Address

My Heating Contractor's Name is Heating Contractors: Let us tell you about the Williamson UNDERFEED and our new proposition. Both are winners.

For All Kinds of Houses

from bungalows and camps to suburban residences and country mansions, the deep, rich colors of

Cabot's Creosote Stains

are most beautiful and appropriate for the shingles, siding or timbers. The colors are clear and transparent and bring out the beauty of the grain of the wood instead of covering it as paint does. They cost only half as much as paint, can be put on twice as fast, the colors are lasting, and the Creosote "is the best wood preservative known."

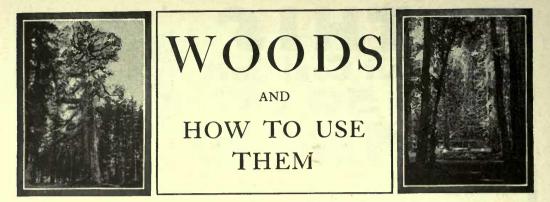
You can get Cabot's Stains all over the country. Send for stained wood samples and name of nearest agent.

SAMUEL CABOT, Inc., Manufacturing Chemists Boston, Mass.

Cabot's Stucco Stains-for Cement Houses.



Bonfoey & Elliott, Architects, Tampa, Fla. Stained with Cabot's Creosote Stains.



EDITOR'S NOTE. - When the building idea takes possession of you-and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH's staff of wood experts. This department is created for the benefit of KEITH's readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

"Fireproofing" Wood

HE story has been published that a druggist in a small mid-western town has compounded a substance which will render fireproof any material to which it is applied, and that he is being beseiged by paint manufacturers, film makers, and large eastern interests who want to buy his little formula.

It goes on to say that his discovery is a liquid which does not discolor even the finest fabrics, yet makes them absolutely non-inflammable. Hundreds of tests have been made and none have failed. What is most interesting to the lumber trade is that a common soft cedar shingle, treated with this liquid, will withstand a plumber's blow torch fifty minutes before the torch will bore a hole through it, but even then the shingle will not burn. A blow torch will bore a hole through steel quicker than through wood that has been treated. Even a sheet of paper or a piece of cheesecloth, treated with the liquid, will not burn when held over an alcohol flame. Canvas which has been treated and then soaked for thirty hours in water and dried out cannot be made to take fire.

This may be a "news story" to the daily papers but it is not news to the trade journals. A number of products have been manufactured and are on the market which make just these claims, yet the home builders are not in line outside of their doors to get this wonderful new thing which will safeguard the home from fire.

More than that exhaustive studies and tests have been made on behalf of the National Lumber Manufacturers' Association relative to the efficiency of fireretardent substances as applied to wood, also their permanence, availability, and cost.

A good shingle fire-retardent must be a compound which will be fire-retardent, permanent, that is, that it will remain unchanged on the roof, that it will not be soluble in water, so as not to contaminate water for possible use in cisterns, etc.; that it will have a neat and attractive appearance; and that it will be reasonable in cost.

For building lumber, insolubility in water is of less importance and, particularly with interior work, processes may be permitted which are too expensive for use on shingle roofs. The questions relating to the investigation are extremely complex and far reaching.

Up to the present time approximately 24 compounds have been tested. Two



IN planning the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

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series of tests have been in progress, one using red cedar shingles and the other using yellow pine panels 6"x12"x5%" thickness.

So far-reaching have been the tests that those making them say:

"If every fire-retarding compound offered at the present time was not included in these preliminary tests it was due entirely to our not knowing of the existence of such compound."

The conclusions so far reached indicate that several compounds are now available which, if properly applied to wooden shingle, will give a shingle roof a very high degree of fire-resistance. These same compounds at the present time have every guarantee of permanence, so far as this can be determined from a chemical investigation. They are insoluble in water and give a roof a pleasing appearance. For interior work, or for such places where direct weathering is of secondary importance, a very considerable number of compounds can be recommended, ranging from good mineral paints to more expensive materials. The strongest emphasis should be placed on the statement already made, that these results must be regarded as purely preliminary and that it will be absolutely essential to carry out some of the plans suggested before definite recommendations can be made as to the widely extended practical application of one or more of the substances investigated.

The results certainly indicate that there is every probability that a number of substances will be not only practicable, but fairly cheap, which with simple directions can be applied by the ordinary house owner and give him a high degree of fire



protection, whether on a roof or in a building. The time is here now when advantage should be taken of the facts so far ascertained by enlarging on the scope of the demonstration tests. When such enlarged determinations have been made, there will be no reason why the manufacturers of lumber should not go before the public with a perfectly definite and concrete statement as to what may be reasonably expected of their product when properly safeguarded.

Laurel for Interior Finish.

California laurel, suitable for interior finish, is now being placed on the market in considerable quantities, as some large tracts of this timber have been opened up by the new railroad built into Humboldt county. It is at present offered in San Francisco at about the same price as clear Oregon pine finish, and much cheaper than other hardwoods, which makes it very attractive to the builder, writes a San Francisco correspondent.

The laurel lumber, when properly cured, is very hard, firm, and fine-grained, of a rich yellowish-brown color, sometimes beautifully mottled. It takes a mahogany stain especially well, and is finished in that color in many homes now being built.

Dimension timber of laurel is being used for keel blocks in the new Union Iron Works drydock, owing to its ability to stand great pressure without splintering.—Building Age.

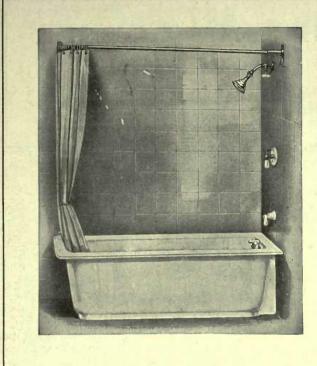
Forest Notes.

One ton of coniferous wood paste will produce from 15 to 25 gallons of 190proof alcohol.

The farm woodlots of the United States contain about 10 per cent of the total standing timber in the country.

The bark of black oak, or "yellow oak," as it is often called on account of the color of the inner bark, is now used for dyemaking.

Oak is the most suitable wood for carving, on account of its durability and toughness, without being too hard. Chestnut, American walnut, mahogany and teak are also desirable, while for fine work Italian walnut, lime, sycamore, apple, pear or plum are generally chosen.



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THE ARCHITECT'S CORNER

What Is YOUR Building Problem?

Put Your Home-Building Problems Up to Us, and We Will Give Them Careful Study and Reply Either Through These Columns Or by Mail When Stamp Is Enclosed.

A Brick Color Scheme.

G.T.—We expect to build us a home this summer and would like some advice as to color scheme before ordering material. Our house is to be a brick veneer. Our architect suggests a dark red or mottled brick. The gables are stucco and he has suggested a salmon color or terra cotta for all outside trimming and woodwork with window sash in bottle green and roof shingles in slate color. I have always been favorably impressed with the coloring of the California bungalow, namely, brown with cream or ivory white trimming and would like your advice in this matter. The architect has suggested a pebble dash for basement walls. Would it be possible to use cream brick for porch piers and chimneys and carry out the coloring of the California bungalow?

Ans.—With reference to the outside colors, I think your architect's idea, using a mottled brick in the dark red shades for the body of house with the gables in salmon color, very good. With the roof in a gray tone and the window sash in a deep green, this color combination will have much more character and style than the brown body with the white trim. 1 would suggest also that you use the same brick for the piers as used in the walls, and chimney, and avoid a patchy effect. If you wish a contrast, obtain it by banking high shrubs at suitable points.

Disappearing Windows.

R. R. H.—Please tell me all about disappearing windows. I read of them in Keith's "Rest Cottage." I am interested in your magazine, as am planning a home.

Ans.—You ask about "disappearing windows," which allow a room to be turned into a porch. These may be arranged in several different ways of which the so-called "street car window" is perhaps the best known.

Both sash of a double hung window may either slide up into a pocket prepared for it, or it may drop into a similar pocket below the sill, with the sill hinged to close down over the pocket. In this case provision must be made for the sash cord or "spring balances" may be used.

In order to allow both sash to slide either up or down the frame may be made three times the height of one sash instead of twice the height as is usual. The additional length of the frame is set either above or below the regular window opening, depending on whether the two sash are to push up or drop below the sill. In any case the whole space of the window may be opened, both sash disappearing.

Waterproofing the Basement.

J. W. M., Jr.—As a subscriber of Keith's Magazine, I take the liberty of writing, asking information.

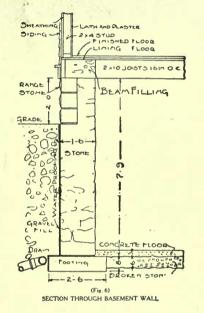
During the past few years we have had trouble from leaking basement wall. This past summer I excavated on the outside wall, same was brushed off and a good coat of cement put on and tarred on the outside and then filled in. At first this seemed to hold the water out, but during the past few weeks the water has been coming through the wall again, but not as bad as formerly. I was wondering if it would not be possible to cement up the wall on the inside with either cement or some waterproof material and in this way keep the water out, as excavating on the outside is more or less expensive, so if there is anything you know of that can be used on the inside of the wall that will hold on and keep the water from coming through, I would appreciate such information very much.



BUILDING the HOUSE

213

A Handbook Every Home-Builder Should Have



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Ans.—Probably the reason that your wall is leaking now—even though it did not leak when you first finished your cement plaster coat and pitch—is due to the fact that the cooler weather has come along and the contraction of the plaster has caused cracks which have broken or cracked the tar preparation you put on the outside.

The best way to repair this basement would be by applying a waterproofed plaster coat to the inside of the foundation walls. This should be done according to the manufacturers' specifications. The surface of the present concrete walls should be roughened by hacking or chipping with a mason's chipping hammer, and these walls thoroughly saturated with as much water as they will absorb before applying the cement grout necessary for holding the first waterproofed plaster coat. This plaster should extend down into the gutter which has been cut at the foot of the wall. This coat should be about three-eighths of an inch thick and should be scratched to afford key for the second coat and allowed to set for twelve hours, when it is to be followed by the neat cement and the second coat of water-proofed mortar.

This waterproofing of basement by a plaster coat of waterproofed cement on the inside of the basement wall, is a very simple operation but requires considerable care in order to get a perfect job. As you are not having any water come up through your basement floor-we assume this from your letter-we would advise the application of a plaster coat to the inside wall, keying this coat down into the floor slab so as to make a perfect joint and not let water force through at this intersection. Also if you found later on that the water was coming through your floor, you could apply a plaster coat -about 21/2 to 3 inches thick over your basement floor, connecting it to this wall waterproofing as specified without difficulty.

To Carry a Wide Span.

C. H. M.—Will you kindly tell me if a span of 34 feet between two stone porch volumns, supporting a gable over a 10 foot porch, is too long to be practical? Could it be trussed up so as not to sag? Or are intermediate columns a necessity?

Ans.—A span of 34 feet is greater than is usually allowed on a small structure. We should advise that you reduce the span; nearly if not quite half. Piers could be set several feet from each end and still leave a wide center span.

For any wide span, the supporting beam or truss should be carefully figured by one who has had some engineering training, and for a very wide span, a steel beam or truss should be used. A sagging beam spoils both construction and appearance.

Inside the Cupboard.

R. L. H.—My china closet (or buffet) occupies one end of my dining room and is to be white enameled. Will you please tell me how the inside should be finished? Will use mahogany table and chairs in dining room. The trim is white, with mahogany doors.

Aus.—As a general rule, it is better to shellac the inside of any cupboard, as it leaves a hard smooth finish and is not so liable to stick or make trouble later.

The edges of the shelves generally match the exterior. The inside of the cupboard may be given a mahogany stain before shellacing, or it may be lined with an inexpensive velveteen of the same color to give a good background to handsome china and cut glass. With your mahogany furniture the darker lining will not give too great contrast.

Zinc or Tin.

D. C.—Can you give me any information regarding the comparative durability of zinc and tin for valleys on a cedar shingle roof?

Ans.—Replying to your letter asking about the comparative durability of zinc and tin for flashing valley of the roof, the dealers tell us that the present price of zinc is practically prohibitive, but a good tin is satisfactory when properly treated. Use a good old style tin and paint both sides with mineral paint. It must be kept well painted, for its protection, whether exposed to salt air or not.



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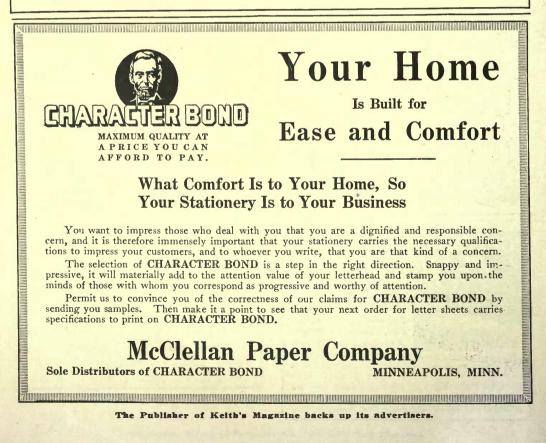
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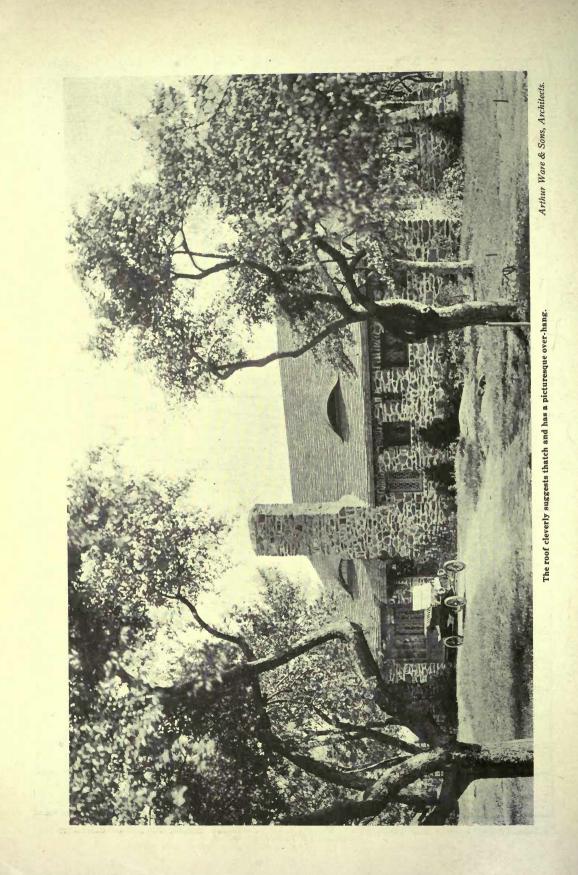
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VOL. XXXVII

APRIL, 1917

No. 4

The Simple Lines of the House

Katherine Keene



R A DITION is a mighty power and nowhere is it

more forceful than with the builder. Ask him why he does a thing in a certain way and he will look at you in astonishment and say conclusively, "Why, we always do it that way." There is nothing more to be said, that closes the discussion. As times change, and the mode of living, the original reason for



"that way," which was probably very good in its time, passes also, but the much used form is very slow in passing.

The accompanying photographs show a small house, it might even be called a bungalow, which was carefully designed, even to the small details, and yet very simply designed.

Notice the fireplace. Could anything be simpler than the plain brick chimney breast enclosing the fire opening with the recessed double row of tile above the opening and at the same time more attractive? Being recessed gives the effect of plastered piers on either side of the

The simple brick fireplace is recessed.

brick work. All through the house a horizontal wood band course is carried over the window and door openings, which is carried by the casings and makes the finish for the openings. There are no mouldings, nothing shaped so that it will carry and hold dust. Yet there is no austerity about the interiors. At the same time they are distinctive and have a certain dignity. This horizontal band may be grooved at the back so that it will serve as a picture moulding if desired. The base board is not moulded, simply beveled so as to hold as little dust as may be. The modern housekeeper has the



Four hinged doors separate the living room from the porch.

dust and germs on her mind and is not hospitably inclined toward them. She gives them no place of lodgment. She wants to be "sanitarily as well as socially clean."

Four doors, two of which are hinged together on each side of the opening, close off the porch, or when folded back give a wide opening between it and the living room.

The furniture is all carefully designed and is of especial interest. It has the simplicity without the crudity of the socalled mission lines. The table and settee in front of the fireplace speak for comfort.

The dining room furniture gives the feeling of simple dignity, in keeping with the rest of the house. The broad top of the

serving table, and its ample linen and silver drawers, and the long oak table show the individuality of the owners.

The exterior of the house is no less carefully designed than the interior. Wide siding from the grade to the sill course of the windows, narrow siding above, with stucco in the gables gives a very



The dining room carries the feeling of simple dignity.

pleasing effect. The siding is carefully mitered at all of the corners; is in itself distinctive, if one remembers the more or less clumsy corner boards so often The narrow seen. casing about the windows is nicely placed. The stucco and timber work about the second story windows is again distinctive in its treatment.

The corner supports of the porch are unusual in the

lattice effect between the posts. This belongs to the type of homes which show the thoughtful care which has been given to each detail, logical planning for well understood needs. Quoting from a recent writer: "Reasonableness and imagination recognized by the mediaeval buildwith beauty, or as Michaelangelo says it: 'Beauty must rest on necessities. The line of beauty is the result of perfect economy.' 'Beauty must be organic,' said the old architects. Outside embellishment can easily become a deformity unless introduced in the most sympathetic



A carefully designed small house is a pleasant thing.

Geo. M. Maher, Architect.

ers as the underlying principles of all great architecture, should be as inseparably united in the small home of today as they were in the great cathedrals of old. For the little house is an expression of thought,—though a very different kind, —as well as a cathedral. It is also an expression of art,—if beauty be combined with usefulness. Art was born, as has often been pointed out, when useful things were accurately and beautifully made, were formed with vision.

"Common sense must go hand in hand

of ways. This truth seems especially obvious in the small house. Large houses carry adornment better than the small ones, but even they reach to highest dignity when left free from what is generally termed ornament. The very word ornament, Pater points out, indicates that it is non-essential. A little home built upon a common sense floor plan with a simple exterior in which a delicate imagination and sense of proportion is expressed is one of the pleasantest objects to be seen in the whole world."

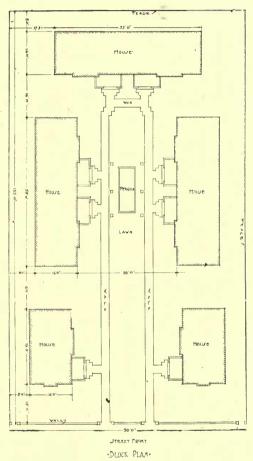
A Well Planned Inexpensive Bungalow Court

Charles Alma Byers



HE matter of planning the improvements for

the vacant plot of ground located in a city's residential section, where perhaps building restrictions prohibit the erection of apartment houses, flat buildings, and so forth, ordinarily constitutes a rather difficult problem. Since the ground itself comprises a considerable part of the ultimate investment, the improvements must be of such nature as to have a revenue value properly proportionate to the plot's size, location and value: and therefore to improve the property



with residences of the usual kind—that is, a single house to each lot—very frequently results in a rather questionable investment. A very satisfactory solution of this problem, however, is provided in the so-called Community Court, or perhaps more commonly termed the "Bungalow Court."

Community Courts may be variously planned. They may be designed not only to economically utilize almost any size plot of ground, but their houses may be also of such sizes and architectural styles as to meet every requirement of the particular locality in



An inexpensive bungalow court.

Harold Bowles, Architect.



The first bungalow on each side is single.

BED

IVING ROOM

TERRACE

28:0

BREAKFAS

ROOM 6/2,9

DED ROOM

TCHEN

BAT 1 51/2 × 7

CLOSE

which they may be employed. Moreover, they invariably comprise an actual credit to the community, for it is essential to the success of such undertakings that they be made and kept maximumly attractive. Aside from the fact that the houses them-

selves are usually artistic creations, their grounds are generally laid out by an experienced gardener, and, furthermore, the grounds are, in most cases, under the constant and experienced supervision of the owner's regularly employed attendant.

The Bungalow Court here illustrated is of the comparatively inexpensive type. It occupies a plot of ground equal only to two small city lots, or a plot but 90 by 155 feet in dimensions. Yet it embraces five houses, three of which are double ones—or a total of eight complete little homes. The total cost of the improvements, including the buildings, all walks and even the original garden work, was approximately \$7,600, which is equivalent to \$950 for each of the apartments. The houses are of a uniform style of architecture, and, considered in its entirety, the court presents a most attractive appearance. Referring to the plot plan, it will be observed that, tracing an imaginary line through the center from front to rear, each half of it

is an exact reproduction of the other, even to the arrangement of the walks. The first house on either side is intended for one family, and each of the remaining three is partitioned into two residences, of equal size. All are but one story in height, except the double house in the extreme rear.

The bungalows are of particularly interesting and rather unusual style, and their color scheme is most strikingly attractive. All possess a base course, of uniform height, composed of redwood shakes, and above this point the walls are of cement stucco over metal lath, while the comparatively flat roofs are covered with roofing composition. The front entrance of each, in all cases of identical de-

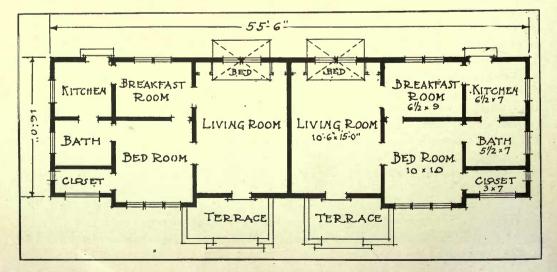


On each side is a double bungalow as above.

sign, consists of a small hood-like projection and a cement-floored stoop, while the front door itself is largely of glass. The front window groups are set in extended wall sections, and the corners of these extensions are made to project just above the roof in rather novel column fashion. The windows of these groups are of the casement kind, and are paneled similarly to the front doors. Each of the two first bungalows in the arrangement possesses a massively designed chimney in the gable facing the street, and, comprising still another interesting detail of construction, these chimneys are attractively ornamented with copings and inlays of red brick.

As regards the color scheme, the base courses and all other outwardly exposed woodwork are stained an olive-brown, the stucco is of deep buff, and the roofs are surfaced with crushed red roofing-tile imbedded in tar, while the cement of the entrance stoops is also a bright red. This combination of colors is especially effective.

Each of the two single bungalows contains living room, dining room, bed room,



bath room and kitchen. The rooms are rather small, but they are conveniently arranged and attractively finished. The living room contains a small fireplace, constructed of old-gold brick, and also a disappearing double bed, which comprises a seat when not in emergency service, while at each end of the space occupied by it is a tiny built-in book-case. Adjoining the bed room is a large closet, and also possesses a single large bed room on the second floor. The sizes of the bed room, bath room, kitchen and closet are the same as of those of the other houses, but the dining room is three feet less in one of its dimensions, while the living room, although the same length as the others, is three inches narrower than the dining rooms of the single bungalows, and hence three inches wider than those



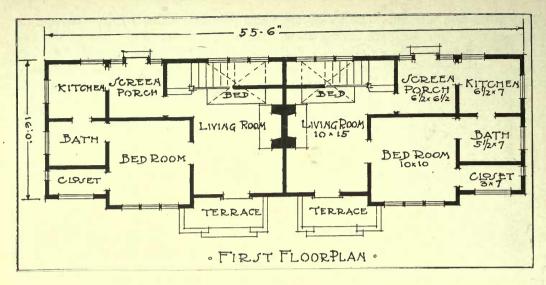
The double two-story bungalow in the rear.

the kitchen contains a water heater, considerable cupboard space and the customary sink.

The arrangement and the conveniences of each half of the next two bungalows beyond the single ones are practically the same, and there is no difference in the size of the rooms, except that the living room is six inches narrower. The living rooms in the case of these two double houses, however, have no fireplaces.

The two-story double bungalow in the rear likewise contains living room, dining room, bed room, bath room and kitchen, for the ground-floor arrangement of each half, but in addition thereto, each section of the other double houses. Here again the living room, of each section, contains a fireplace, but constructed of dull-brown tile, and from it rises the stairway, with the disappearing bed placed beneath it. In this case there are no built-in bookcases, but the usual seat is provided by the concealed bed. The up-stair bed rooms are twelve feet six inches by thirteen feet nine inches in dimensions, and each possesses a group of three casement windows in both the front and the rear walls and a pair of such windows in one end. In fact, they are designed as really open-air rooms.

For all the houses pine is used for the



interior finish throughout. Of the two single ones the woodwork of the living rooms is stained a dull transparent gray, and of the three double houses these rooms are finished, by treating the pine with wood dyes, in imitation fumed oak. The woodwork in all the other rooms, of all the bungalows, is enameled white, and hardwood floors likewise prevail throughout, except in the bath rooms and kitchens. The floors of these rooms are of pine, and are covered with linoleum. The walls of the living rooms are plastered and papered, of the bed rooms and dining rooms they are plastered and attractively tinted, and of the bath rooms and kitchens they are finished, to the height of the window and door frames, with smooth-surfaced hard wall plaster and enameled like the woodwork.

The houses are provided with all the modern conveniences, in the way of gas, electricity and city water, and are also completely and modernly equipped, in respect to electric-light and bath-room fixtures. This equipment includes a waterheater in every kitchen, in addition to the fixtures mentioned; and, while none of the houses has either a basement or a furnace, all are provided with gas connections in every room. The bungalows are maintained by the owner completely furnished and ready for occupancy. The rugs, drapes and furniture have been especially selected to suit the sizes and color schemes of the rooms, and in this way the interiors have been given a particularly attractive, cozy and home-like appearance. On account of the size of the homes, however, and also because of the several built-in features, very little in the way of furniture is required.

The grounds of this court are laid out and planted in simple style, but are kept in neat and attractive condition. Two cement walks parallel the center of the space, with short individual branches reaching to every doorway, and between the two center walks, near the rear, is an artistically designed pergola, over which a few vines have been trained. Against the front and side walls of the bungalows have been planted some low-growing shrubs and flowers, and grassy lawn comprises the remainder of the garden scheme.

As showing what may be done, through the utilization of the court idea, toward making the most of a plot of ground of this size and similarly located, this bungalow court, located in Los Angeles, is especially interesting.

A Pasadena Bungalow

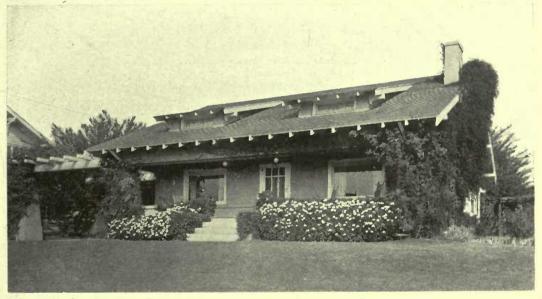
Helen Farley Brill

HERE is something very attractive about the house shown in the photos, with its simplicity, its long graceful lines and its soft

subdued coloring.

Charming on any site, long and low in design, the building is especially charming set as it is high above the street level. on the rose vines which clamber over the house and the flowers which bloom around it for variety and color. Both vines and flowers are aided in their contribution to the general color scheme by a well kept lawn.

The house faces West and the views from the front porch of the distant foot-



Light grey stucco and white trim in pleasing combination.

Although this is a story and one half house it has all the cozy appearance of a bungalow.

The exterior, as the illustrations show, is plastered with rough cast stucco and painted light gray. All the exterior finished woodwork is painted white giving a glint of white from the rafter ends, barge boards, brackets, and pergola beams. The shingles of the roof and second floor walls are stained light gray to tone with the plaster. The color scheme is as charming as it is simple, depending hills and the lofty mountains beyond are very beautiful. The house is raised high enough above the street level that there is little possibility of these views, which must be a delight to the owner, being shut out by later building.

The porte-cochere is pergola covered and is constructed with eight by ten inch main beams which rest on heavy tapering plastered posts. These can just be seen in the photograph, although they are almost hidden from view by the vines. These posts are three feet square at their base



Pergola beams are used for porte-cochere.

and taper to eighteen inches under the moulded cap with which they are finished. The cross beams are six by six inches, spaced about two feet apart.

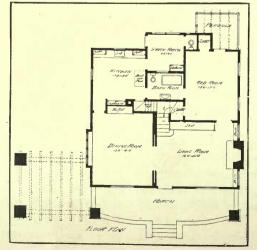
The dormer windows, which give light and ventilation to a large storage space under the roof, have purposely been kept low and broad to emphasize the graceful lines of the building. They are pleasing in the way they break the roof lines, and are nicely proportioned. The shingled walls at the side of the windows

strengthen the wide effect.

The roomy porch which extends across the whole front of the house is built in the form of a curve giving the greatest width at the center where it is most needed. The porch is eight feet wide at the center and six at the sides. The wall is built of concrete eight inches thick, plastered to match the house and finished with a four inch cement cap. The steps are cement, while the porch floor is wood. The porch ceiling is plastered on the inside and is almost completely covered with the small vine *ficus repens*, which can be seen in the photograph over the whole front of the porch. The illustration shows how it has grown across the porch ceiling down the walls of the house. There is a small porch opening off the first floor bed room which is also covered

> with a pergola, designed in harmony with the woodwork of the house and inclosed with a railing.

> Framing the beautiful views which make much of the enjoyment of the living and dining rooms are two large plate glass w in d o w s. These windows are six feet wide and five high, are not divided by bars or munions



and are stationary. A plastered belt course extends across the front of the house in line with the window sills.

The accompanying floor plan shows arrangement of the rooms. The stairs are cleverly planned to give easy access to the second floor from either kitchen or living room.

On the second floor bed rooms are entered from the staircase hall, and the sewbuilt of pressed brick without any ornament whatsoever. Above the five inch mantel shelf is a plate glass mirror set in a frame which corresponds with the trim of the room.

A point of interest in the living room and dining room is the originality of the trim of the doors and windows. Instead of the usual square casing, a tapered casing has been used. It is seven inches



The interest is centered in the simple fireplace.

ing room connects with the North bed room. The bath room can be entered either from the South bed room or from the sewing room, and access is had to the sleeping porch through the bath room.

The view shows the attractive seat in the living room and the staircase and a glimpse of the dining room beyond. The woodwork of this room is fir, stained dark brown and the plastered walls are tinted a light shade of tan, almost a cream color, above the plate rail. In the panels the color is somewhat darker bordering on a brown shade. The fireplace is wide at the base and tapers to five inches at the top, where the horizontal and vertical pieces project beyond each other. The plate rail round the living room, which is six feet above the floor line, is accented by the brackets placed above each rail that forms the paneling of the lower wall. The rails taper to correspond with the trim in an effective way. This paneled treatment is very effective and is an inexpensive form of decoration.

The finish of the dining room is much the same as that in the living room, but that it has a solid paneling below the plate



The arrangement of seat and staircase is very attractive.

rail instead of being plastered. In looking at the photographs of the living room, in which the dining room shows and the dining room itself, it will be noticed that the furniture is different. The first photograph was taken when the builder of the house occupied it and the dining room table evidently gave the motif for this particular style of tapering trim.

The color scheme in the dining room and living room is the same, that is the woodwork is stained brown and the walls are tinted light tan. Both ceilings are beamed but arranged differently. There is a seat in the dining room formed by the group of casement windows projecting about twelve inches. The floors are of oak.

The kitchen is finished in Oregon Pine stained dark brown and varnished; it is fitted with all the usual built-in cases and cupboards and has an exceptionally large sink. The large screen porch is finished in white enamel.

The bedroom on the first floor is finished in white enamel and the plastered walls are tinted light blue, which is very pretty for a sunny room. This room connects with a bath room which is also in white enamel.

A French door leads onto the porch at the corner of the house facing East and South.

There are three rooms on the second floor, as well as the bath room and sleeping porch. These rooms, with the exception of the sleeping porch, are finished in white enamel and the walls are tinted light cream. Judging by the exterior



The four casement windows flood this room with light.

views of the house, one would imagine that these are small attic rooms, but on the contrary, they are exceptionally good rooms, and have plenty of light and air.

The living room and dining room are heated by floor gas furnaces, in addition to the open fireplace. The register of the furnace can be seen in the view of the living room. The corner of the seat must be a very cozy place to sit on a damp or cold day.

There is a commodious garage at the back of the house; the walks and drives are cemented and have heavy cement curbs and in every way this house is most complete.

Eastern Bungalows

Virginia Robie



E-usually think of the bungalow as a western

product, yet an occasional, well-designed example in New England emphasizes the fact that the one-story dwelling is not confined to any one part of our country.

If we go back far enough in the history of the bungalow we trace its origin to the real East—that vast world located by Kipling on the other side of Suez;



The beauty of stone is brought out.

a place remote from the Golden West, where the long, low house particularly flourishes.

Granted that California has given fame and distinction to the bungalow and that all through the Middle West the type has been splendidly handled, it is well worth while to study certain examples scattered along the Atlantic coast or tucked away in the hills of New England and New York State.

Eastern architects do not take to the

bungalow quite as naturally as their western brethren. Building conditions differ, and the average client, east of the Allegheny Mountains, clings to a staircase and an upper story. Yet one of the first bungalows built in America still stands in a New England town. Its walls are of quarried stone laid in wide joints, its roof -true to traditionis long, low and over-hanging, its verandas, extending on

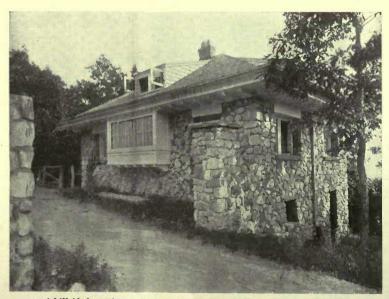
four sides, are twenty feet wide. No one called it a bungalow in the old days. "Tudor homestead" was its New England name, but every line of the picturesque design proclaimed its East Indian ancestry.

When the history of early American commerce is written, from the days of Elias Hasket Derby of Salem, who sailed to China in the "Big Turk," down to the final voyage of the last clipper ship, then someone will doubtless relate the story



A stone bungalow of beauty and distinction at Greenwich, Conn. Arthur Ware & Sons, Archts,

of skipper Tudor who carried ice and apples to India and came back and built a bungalow within a thousand miles of Boston. He copied the house he saw when in port, but he built, as did his first ancestor, on American soil—to last for generations. Eighteen inches thick are the walls, while the man who cut the timber cared not a rap for forest conservation. As for the broad verandas, the happy children—long since grown—who lived in the old homestead recall that twelve times around the house made a mile. Memory includes also the enclosed



A hillside bungalow at Cragsmore, New York, used as a summer residence.

garden where oldfashioned flowers and queer foreign herbs grew side by side, and the interior with its strange blending of Colonial, East Indian and ship-cabin architecture.

Many house builders have gained inspiration from the T u d o r homestead, and more than one country club has copied its generous lines. Pioneer as it was, it holds its own

with new bungalows and with all' manner of summer cottages.

Recently a stone dwelling of one story has been built at Greenwich, Connecticut, by Arthur Ware and Sons, architects, which has the fine proportions and beautiful lines of the old Tudor pile. One view is used as frontispiece. The design is quite different, and the methods of building quite unlike, yet something of the same-feeling is bound up in the long, low roof, the recessed windows and rough gray stone. Worthy of note is the roof, which so cleverly suggests thatch, and the low stone wall which so consistently relates the house to the site. The trees have been made a part of the design and add greatly to the beauty of the composition.

A stone bungalow of quite a different character is occupied by George Inness, son of the great landscape painter, at Cragsmore on the

Hudson. Here we see a studio-cottage built for summer use, an admirable model for a hillside location, where field stones are available. When the little house or big house looks as if it had grown on the site it meets one of the severest architec-



Beautifully adapted to its wild irregular setting, Palisade Park, N. Y.

tural tests. When it suggests that every stick and stone has been brought from some far-distant point it seems an exotic —even though well designed. We all know how out of place the stone house looks in the land of sand and scrub pine



Well fitted to the long low coast line of Cape Ann.



Often the lodge of a large estate offers many suggestions to the prospective builder of a small house.

or the marble residence a thousand miles from a quarry. Stucco and concrete do not produce this effect. They have a universal quality well suited to many sites.

Charming is the semi-bungalow at Palisade Park on the Hudson. Here timber and rough-cast have been most happily combined and set against a wild and woodland background, in perfect accord with the picturesque irregular design. Long and low, like the coast line of Cape Ann, is the Barber bungalow at Annisquan, Massachusetts. The tiled roof and the overhanging terrace, on the water side, are excellent features. No veranda of twenty feet is seen nor is one needed. As with the Greenwich bungalow the piazza problem has been met in a different way.

"Green Cote," Southampton, Long Island, while not strictly a bungalow, is

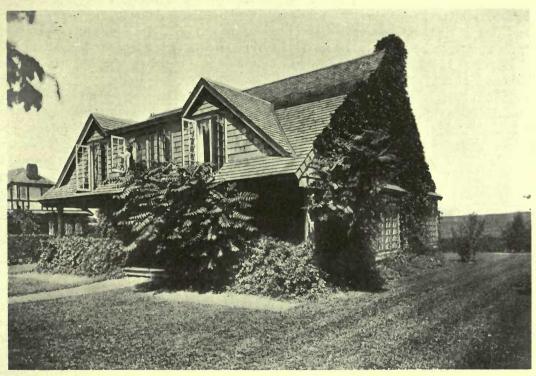


A delightful frame bungalow-the guest house of the Brady estate, Gladstone, New Jersey.

included in the group. Here Miss Zella de Milhau, a member of the artist colony, lives and works. Very attractive is this vine-covered cottage with its sloping roof and well-placed dormers.

The lodge on the Clifford Brokaw estate, Long Island, affords a distinguished example of the one-story dwelling. There is no hint of India in roof line or chimney, example, full of interesting hints and suggestions. The interior is delightful, having a comfortable living room, big, enclosed porch, and a number of attractive bedrooms.

Bungalow furnishing should be simple and direct and while not necessarily rustic, full of the frank, straightforward character promised by the exterior. Fussy



"Green Cote," Southampton, Long Island, home of the artist, Miss Zella de Milhau.

yet in the modern and very elastic use of the word "bungalow" this beautiful little building is covered.

Anyone planning to build a small house would do well to study the lodges and gardeners' cottages of large estates. Usually they are very well designed, having beauty of line, proportion, balance, and best of all that rare, but necessary quality, real simplicity.

The guest house of the Brady estate, Gladstone, New Jersey, is another fine interiors are abominable but particularly out of place and offensive in a bungalow.

If this type of building stands for anything it is honesty and simplicity. To fill the rooms with tawdry articles poor of design and insecurely made is to belie the spirit back of the bungalow movement. In spite of the fact that a few architects have erred, most bungalows are a protest against shams, ostentation and display.

Breakfast Alcoves

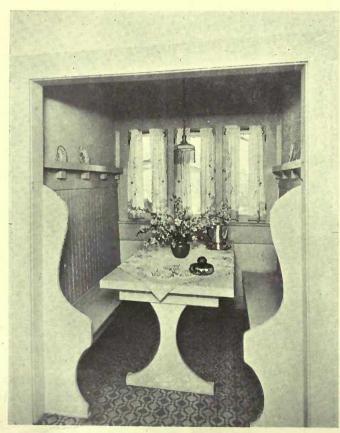
Gertrude Appleton Luckey



F all the modern improvements and space-savers in the arrangement of our kitchens there is one that stands out in practical util-

ity, convenience, and general usefulness, and that is the breakfast alcove.

As a rule these alcoves are tastefully designed and add considerably to the appearance of the kitchen or pantry, make the room more pleasant, more home-like and take away in part the bare utilitarian effect that these rooms ordinarily have. The space a breakfast alcove occupies is small; the most practical size is about



A dainty breakfast alcove.

six and one-half to seven feet square, an alcove of these dimensions gives comfortable room for six people, three in each seat, providing that the six people are of medium size! Allowing, of course, one to sit at the end. In a pinch, seven could be seated more or less comfortably at the table of an alcove six feet six inches square.

Though these convenient little nooks are called breakfast alcoves, it by no means follows that their usefulness begins and ends with breakfast. They are certainly very suitable for that purpose,

> as in most homes, breakfast is a meal that strings along for an hour or so, and it is more than convenient to have an attractive table close to the kitchen range, yet entirely out of the way. As well as being a minature dining room the alcove serves a variety of purposes: it is an excellent place for transacting the numerous duties connected with housekeeping. While comfortably seated one can prepare fruits, vegetables or other foods; or, while "keeping an eye" on the stove can indulge in the pleasures of dressmaking! Frequently in small homes the only available table space in a kitchen is the sink board which certainly is unsuited to these purposes.

> When designing a breakfast alcove don't make it too narrow. Nothing less than

six feet wide is practical and don't make the seats or benches so skimpy that one is tempted to swallow a meal in half time so as to escape to a more comfortable seat. Don't make the table so narrow that you and your neighbor across the table have to "dove-tail" dishes; and do

not, above all things, fasten the table to the wall so that it cannot be moved out. Have it made and set on castors so that it can be easily moved into the kitchen or pantry when you wish to sweep or clean the floor. In case this is not practical, put it in a small pantry for instance, having the end next the wall on strong hinges so that it can be folded up or down and be out of the way when necessary.

The most suitable width for the table is two feet eight inches, a little more is better but not essential. Two feet eight is also a good height. The seats should be eighteen to twenty-four inches wide, the latter width is the better if you intend to use cushions, and eighteen inches high. It will add to the comfort and appearance of the seats if the backs are made to slope about two or three inches in their height.

The accompanying illustrations show a variety of break-

fast alcoves and give one a good idea of how they are usually constructed. The table top can be made from eight or teninch boards one inch and a quarter thick, and finished on the edges with a sturdy two-inch piece giving a greater thickness at the edge. The legs can be made to suit the taste of the designer, those cut out of a two-inch plank are probably the most practical and can be made very graceful in appearance. It is advisable that the back should be either panelled or ceiled as shown in several of the photographs, and if it is finished off with a plate rail with small brackets the effect will be further improved.

At the end of the table there should be

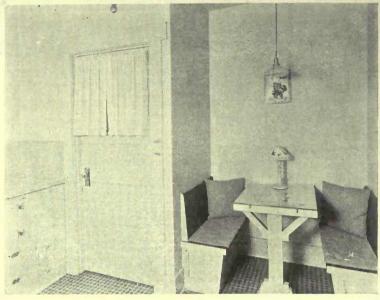


Breakfast nook in a diminutive kitchen.

one, or better still, two electric plugs for attaching percolator, toaster, or other electrical cooking device, and needless to state there should be a ceiling light over the center of the table.

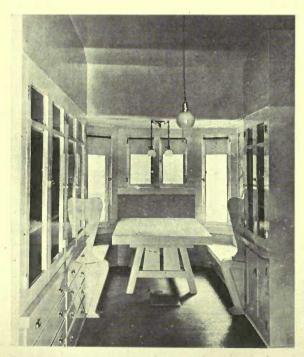
The first alcove shown is particularly attractive. The woodwork is finished in cream enamel and the walls above are painted white. The finish of the seat back is an interesting feature, and the plate rail with its plain square brackets and mould-

ing under adds considerably to its attractiveness. The table, which is on castors is two and one-half feet wide and the top is two inches thick; the shaped legs are also two inches thick. It is an advantage to have the space under the seats open, as in this nook, as it gives more room for ones feet, which, when the space is limited is a point that must be considered. The nook is lighted by a



The table top is plate glass with white linen underneath.

group of three casement windows, the center window is stationary and the two side windows swing in. This nook opens directly off the kitchen and is a good example of a practical and artistic breakfast



An alcove built in the end of the pantry.

alcove. The window hangings are dainty Japanese toweling.

The second illustration is in the rather diminutive kitchen of a small apartment house, it occupies the entire width of the

> room, which is seven feet. Our illustration shows the end of the sink board which though adjoining the alcove, in no way interferes with it. The woodwork and walls are finished in white enamel.

> The third alcove is entirely different in treatment. It is in the kitchen of a small bungalow in a bungalow court. It is much smaller than the usual breakfast alcove, but as it is in a three-room house it is quite large enough for its purpose. The table top is of plate glass with white linen under and the linen has blue birds worked on it. The design is repeated in the shade of the electric lamp. The cushions are tan colored monk's cloth and help to give this alcove a very cosy appearance. The design of the table is extremely simple and makes an excellent suggestion for a home made table.

The fourth illustration shows an alcove built in the end of the pantry of a large residence and is more elaborate than most of those illustrated here. The end of the room is built in the form of a bay,

it is seven feet six inches wide, so consequently the table is wider than the dimensions given. The construction of the table is very simple though the seat ends somewhat elaborate. are Where it is practical it is more desirable to plan the alcove in the pantry than in the kitchen. It can then be used for a maids' dining room or such an arrangement gives more privacy for the family and is more pleasant in every way; though in a small house where no help is employed it is usually better to have it in the kitchen.

The last alcove is also in the pantry, but in this case it is in the pantry of a sixroom bungalow. The table top is of white or sugar pine stained mahogany and polished, and matches the mahogany doors; the woodwork is white enamel. This alcove faces the morning sun and the outlook is par-

ticularly bright and pleasant and so makes a delightful spot for breakfast.

As a rule it is a very easy matter in planning a bungalow or even a large house, to provide space for a breakfast alcove, and the added expense is really very slight. It will be a surprise to know how much utility can be derived from this little arrangement. In many cases where the bungalow is real small, the dining room could be made a part of the living room and this alcove used for the majority of meals. One end of the living



Showing the details of both seat and table.

room could be used when more space is needed or in the event of a dinner party. All the furniture required is a table and two built-in seats, which any carpenter can construct, the extra wiring is not a serious matter, in fact, the whole expense is trifling when compared with the many advantages gained.



Turning "Blue Monday" Into "Joy Monday"

Edith M. Jones

Article II.

ROM the very beginning of the world mankind has been striving for a better place to live in. All the constructions of science as

well as the destructions of war have had as their real reason the comfort of humanity.

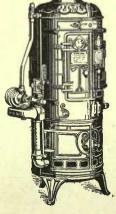
Indeed comfort is the first thought born to man, and from the earliest time we learn that every progressive step has been made for comfort's sake. It is true the more progress we have made, the greater comfort we have brought, until now, with the world in a state of development that would bewilder the cave man, we find our means of attaining greater comfort limited only to the extent of the limitations of our modern geniuses and inventors.

One of the greatest of the modern comforts is the hot water supply in the laun-

> dry, bathroom and kitchen, made possible in winter by the hot water coils in the furnace and in the summer by the tank heater or better still the automatic water heater.

> The first man who warmed his goat-skin on the sun heated sands, laid the foundation for the automatic heater, which is one of the greatest luxuries of the modern house.

> Many people enjoying this modern luxury can remember the time when the water had to



Automatic water heater.

be heated on the cook-stove, which meant rebuilding a fire, much labor, sometimes aggravating waits, often serious delays, and an insufficient supply.

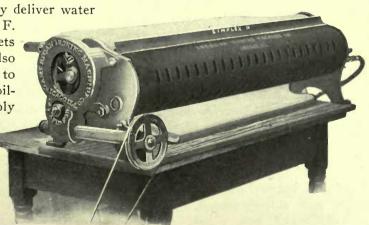


A very practical and efficient type of ironing equipment.

recommend them for household uses. The automatic heaters instantly deliver water

heated from 130° to 140° F. to all the hot water faucets of the house. There are also heaters that are attached to the side of the upright boilers which are remarkably

efficient. They rerequire no care except to be lighted about a half hour before the hot water is required. They have the advantage of being inexpensive to



The home ironing machine is a great time and labor saver.

install and to operate, but on the other hand, there is the disadvantage of the half hour delay of service which is the great recommendation of the automatic heater.

Many people prefer to install the hot water tank and the heater in the laundry. This removes one more dust catcher from the kitchen and is very practical where the kitchen is sufficiently heated.

Gas and electric irons are among the greatest of labor savers. The operator stands at the ironing board, saving hun-

dreds of steps that were formerly required when it was necessary to walk to and from a stove for heated irons. The internally heated gas Gas water heater attached to tank. iron is the most economical.

-the average expense being about 1-3 of a cent for an hour's use. There are several good makes on the market, but possibly the one with double point is in many respects the best. This iron is especially

good for certain kinds of work as the heated "double point" makes the back-

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ward as well as the forward stroke possible and effective. The electric irons have very desirable features and are very popular. The weight of both of these irons vary according to the choice of the individual and the kind of work to be done.

A closet in the laundry is a great convenience. The soap, starch, irons, etc., can be kept on the shelves; the utensils needed for starch making can be hung up and drawers for the ironing sheets provided. An ideal way of protecting the ironing board is to hinge it and fold it back in the closet when not in use. This is done very much in the far west where so many of the ideas of compact arrangement of household appliances originated.

The type of ironing board shown is easily the most practical kind on the market. The substantial iron base is so balanced that it need not be fastened to the floor and the end of the board free from a floor support allows the garments to be easily handled. The steel spring arm of the electric iron keeps the cord out of the way of the operator's arm, and the iron rests with the sponge and waste cup makes this a complete outfit saving hundreds of unnecessary movements and and about half the time ordinarily required in this tedious work.

Enough cannot be said in favor of the mangler where time and labor saving is any object at all. What would take three hours' ironing with sad irons can be accomplished in twenty minutes. When the mangler is operated in conjunction with the clothes dryer the clothes when taken from the dryer retain enough moisture to make sprinkling unnecessary, thus saving more time and extra handling.

LACE

Evelyn M. Watson

LACE! the poem of a weaver's craft, the poetry of a weaver's art, LACE! LACE! A Sprite once danced and leaped and carried with him the gossamer of early morn. Along a flowery path he danced and over hills he danced and close by rivulets he skipped along till he came to the home of a weaver.

And the Sprite held before the Weaver's misty eyes the gossamer he had brot, and the Weaver's hands touched the dainty thing and they both smiled together. Anon, from off the loom and from the needle there came a map of fairy land, a bit of lace, a filmy thing, soft as a cloud and dainty as a shaft of moonlight and magic like shadows at evening.

They called it lace—a wonderful thing made up of bits of web all soft and thin and garlands of posies and ribbons playing among them—leaves and sprays and pictures of silky waterfalls with dainty, foamy spaces of plain mesh. A spider could not have made anything finer and a frost could not have produced a lovelier design.

A bride wore this first lace, and as one would imagine from her it passed to her daughter and grand daughter. Bit by bit old man Time, jealous of all loveliness, took this first lace and now only the tradition remains, but down through all the ages beauty has been wrought into lace and people have used it for weddings and christenings and for all festivities.

The Picturesque Small House

Anthony Woodruff

THERE has always been a fascination about the picturesque oldworld houses which has appealed strongly to the American home lover in his travels. Much of this fascination, to be sure, whether in the homes of the peasantry or baronial castles,—a fascinaesque by the kindly help of Mother Nature.

The present generation are learning to build so as to co-operate with nature; to invite her to spread her beauty over the work, beautiful and carefully designed as it may be in the first place, and where the vines and the flowers will feel at

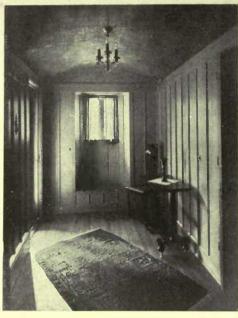


With the charm of the old-country houses.

tion which has made them the subject of the painter and the model for the architect, is due in large part to nature rather than to man. The picturesque spots in Normandy which the painter was wont to select for his summer's work were not so much notable for their architectural lines, nor perhaps for details and finish, but rather for the kindly mantle which time had spread over their early defects or later ruins, which goes to show that any home may be made beautiful and picturhome, even though their fostering beauty is not needed to delight the eye.

The stucco house with the picturesque gables which is shown in the photograph is one of unusual charm in its architectural lines. It suggests the fascinating old-country houses in its picturesque composition, yet at the same time it looks wonderfully livable according to American ideals; a combination not easily found. While the window group is very attractive from the outside, the interior

is even more so, as shown in the view of the living room. The whole treatment of the interior has a dignity and a simplicity which continues the charm of the exterior. The fireplace is most unusual with its brick and plaster treatment. The slightly raised hearth and the flattened arch over the opening are interesting, together with the wood treatment of the upper arch and mantel shelf, and the un-



The paneled vestibule.

broken chimney breast. The window treatment is dainty with its touch of color around the opening; and the small win-

satisfying that one is likely to see in many a day's travel. Small houses such as this are the hope of American domestic archi-



The living room has dignity and simplicity.

dow recessed above the seat.

The other interior shows the unique vestibule, paneled to the height of the doors, the head casing making the cornice of the room under its unusual ceiling line, and the window beside the entrance. This window is also recessed and paneled. The panel treatment is unusually interesting.

The house as a whole is one of the most interesting and



A picturesque club house.

tecture. The country is to be congratulated on the number of architects who do such charming work and their number is being constantly recruited from the younger men in the profession.

The next bungalow shown is in reality a club house, yet so homey does it seem that the fact is hardly distinguished but for the swinging sign. The fact, however, gave a certain latitude in the design and gives reason as well for the unusual square pier-like corner which so effectively receives the projection of the eaves and the bower of vines which reaches and covers it. The blossoming hedge at the side adds not a little to the picture.

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It might be noted that here as in so



Large windows frame the view, like pictures in the room.

many places the cement or other walks to the door and the driveway are at the side of the building, leaving the beautiful sweep of the lawn unbroken before the house itself.

The last view is very picturesque surely, and very suggestive as to the value of shrubbery and planting with the long low sweeping roof and the casement sash.

The bungalow is so built that from the inside, the pictures which surround it are framed by the large plate glass windows. These are stationary, in reality a part of the wall with the square paned casement sash on each side. As is not unusual in California, in order to save the trees and have the shade where it is especially wanted, the roof and especially the projection of the eaves are built around the trees in several places and this is true on the other side of the house as well as the side shown in this picture.

There is no projecting porch at the entrance, only a terrace raised a few steps above the level of the lawn. Here are seats, under the shade of the trees or in the sunshine, according to the day. Even the chimneys show the unusual treatment of this bungalow.

Hillside Bungalows

E. W. Stillwell, Architect

NO type of house seems to give more universal satisfaction than what used to be called the "story and a half" house. But the story and a half house of the present day is very different from what the term used to imply. The difference lies in the fact that now houses are planned and in the old days they used — like Topsy — to "just grow." Clever treatment of dormers and gables enables the architect to arrange rooms with full head space on the second floor while yet giving the appearance of a small house under a comparatively simple roof.

The small house seems to grow in fafor. Even when a considerable amount of space is necessary to the require-



Especially adapted to the hillside.

ments of the family. the rooms are so arranged as to reduce the seeming size of the house. There is an attraction in the low roof lines and the simple sweep of the gables. Possibly part of the attractiveness lies in the fact that a small house seems to lie more easily within the possibilities of the prospective builder than does the house of seemingly



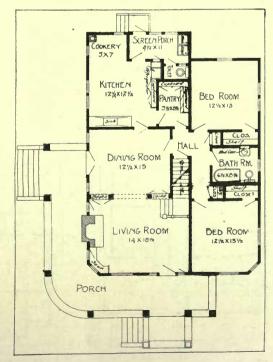
The stucco work was especially successful.

larger proportions. This hope is not without foundation. Other things being equal no form of house is more economical to build, nor to keep up and to heat, than the story and a half house. (The foundation is the same as that for a house of one story and the roof is not much more.)

In studying designs for homes it is often interesting to know what the home builder himself has to say about his home after it is completed, so we quote from a letter from Pennsylvania: "The enclosed photos are taken from a design received from you some two years ago. While your design was frame, I made all of the outside work of stucco, floors as well as outside ceilings, using our local cement.

I take some pride in showing these photos, for while I got my design all from you, I placed just some few frills to suit my taste.

I have built many homes here, all of which, before this, were of our eastern brick style.. This one was for myself and I have long desired something different, and all on one floor. This plan covered practically what I had been looking for. My second floor contains two sleeping and one storage room; first floor has living room with open fire place and seat,





As built on a hillside.

and china closet and bookcase dividing the center from dining room, two bed rooms, bath, kitchen, pantry, inclosed back porch. Cellar is cemented and all under the house, as the east look for big cellars.

My cement work has been especially a grand success both as to stucco and pavement.

You will note I am on a hillside especially adapted to a one story bungalow according to your type."

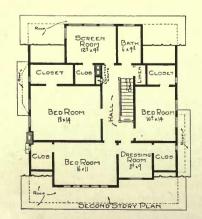
The second home is also of a design which lends itself particularly well to a hillside location and a picturesque situation among shrubbery and old trees.

The floor plans are well arranged in the easy communication among the rooms by means of the central hall. The entrance hall is eight feet wide and connects on either side with the living room and den by sliding doors. A fireplace with an outside chimney is in one end of the living room with bookcases on either side of it and casement windows above the book shelves. A wide arch separates the dining room from the living room. One end of the dining room is filled with windows, two of which being on an angle insures light from three directions. There is a

built-in buffet at the end of the room.

The kitchen and breakfast room are cleverly arranged so as to give the breakfast room window exposure on two sides and yet to give two good windows in the kitchen. The c o m u n i c a t i o n among the rooms is very good.





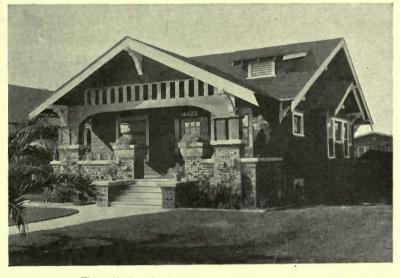
The kitchen is well arranged with the sink between the windows and convenient cupboards on either side. The ice box is built in place. On the screened porch are the laundry tubs, a very convenient arrangement.

In addition to these rooms there is a bed room and a den on the first floor, each with convenient closets. On the second floor are three good bed rooms and a screened room, each with good closets. The front bed room has a dressing room and closet opening from it as well as the closet from the room.

The owner who has built this home in a Virginian city comments on its attractiveness saying, "We frequently see passers-by take snapshots of our home."

A Broad Looking House Adapted to a Narrow Lot

HEN vou build your house in the country you have usually only the problem of getting what you want in the way of the amount of space enclosed, but when you build in the city you have the problem of putting the space you require in the form of a long narrow oblong to adapt it to the narrow city lot. A forty-foot lot



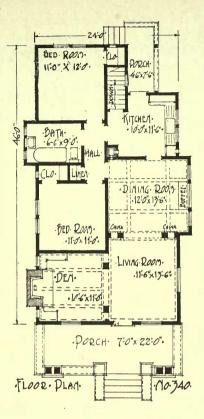
The porch gives the character to the whole exterior. Jud Yoho, Archt.

seems to be the width we are commonly restricted to and to get six rooms well arranged and still leave light and space on the sides is the problem the designer has met here. This house shown, measures twenty-four feet in width, by forty-six feet in depth. Still it has the appearance of a broad and roomy house from the outside.

One enters directly into the living room, which, through wide columned openings, is connected with both the den at the left and the dining room behind. The effect is of much space and roominess. Both the den and dining room have beamed ceilings and are fitted with built-in bookcases, seats, buffet and china closets so that the view is attractive from every angle.

The kitchen is immediately behind the dining room and connects with a tiny porch behind and directly with the cellar stairway. One reaches the bedrooms through a tiny hall which connects as well with the dining room and kitchen. Both bedrooms have a closet and a linen closet is also arranged for. The den

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could easily be arranged for a bedroom if the chimney were to be moved to the other side of the house and the columned opening closed up. A tiny window is put in the closets to give light and ventilation.

The wide porch across the front of the house will appeal to those who like this feature and the details make it ornate and impressive; the heavy stone work, the double piers and the beams and wide eaves. This porch gives the character to the whole exterior of the house and the slope of the gable is repeated in that of the main roof and again in the smaller roof of the projecting dining room. A stairway could be arranged to utilize space under the ridge if it was desired and windows put in the place of the louvres now shown. The exterior is of wide siding, 'stained dark brown and the trimmings are white.

This would make a very convenient home for a family of three or four.

The New Type of Bungalows

Bungalowcraft Co., Architects

Solution of the state of the style in bungalows as Paris or New York sets the fashions in other things. Be that as it may "Colonial bungalows" are becoming quite "the rage" in Southern California. In this connection the term Colonial seems to stand for the simpler type of building, a few delicate moldings in the trim, a box cornice; and that the bungalow be painted white. The new bungalow seems to be painted while almost as universally as the earlier bungalows were stained brown.

Here are shown two bungalows of the newer type. The first is a six or a seven room bungalow if the breakfast room counts as a room. The living room is twenty-three by fourteen feet, and opens into the den with French doors on one side and has a wide arch to the dining room on the other side. An open fireplace of tile, with book cases on either side, fills the end of the room. The dining room has a built-in buffet and china cupboards and a glass door leads to the terrace. The breakfast room is very well placed in relation to the kitchen and dining room, and also opens on the terrace.

The kitchen is planned with particular care. A plastered hood is built over the range. An ironing board is built in, which folds into a cabinet in the wall. The cooler is beside the cupboard and the sink is placed under the windows. The rear porch is screened in and connects with the basement stairs.



White bungalows are very attractive.

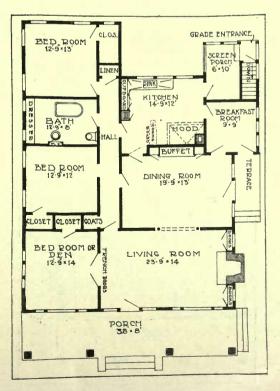
On the other side of the house the bed rooms and bath are separated from day rooms by a passage way, from which opens the linen and coat closets. There are three bed rooms each with good closets and plenty of windows. The bath room is very roomy and has a unique feature in the dresser which is built across the entire end of the room. The fixtures are not crowded as so often is the case. The medicine cabinet is over the basin.

The interior wood work throughout the house is finished in old ivory enamel, with two panel mahogany finished doors. The walls are papered and have a Colonial cornice at the ceiling angle. The floors are of oak.

The exterior is built of 10" three-lap siding. Only the center portion of the porch is roofed. The remaining parts are pergola covered, as is the carriage entrance. The outer posts of the porte cochere do not show on the plan.

The second design is a patio bungalow,

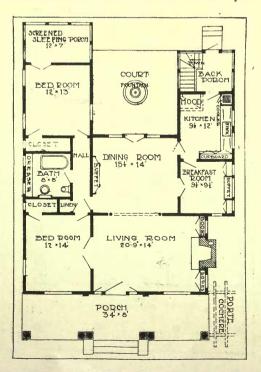
with a fountain in the court. The plan of the front part of the house is not un-





The patio bungalow shows a hospitable entrance.

like that of the first design, but the dining room opens to the court and fountain, with the vista from the living room. The breakfast room and the kitchen both open



from the dining room. The breakfast room has a built-in buffet as well as the dining room.

In the kitchen a plastered hood is built over the range. The sink is placed between the windows, and has wide sink tables. The cupboard is conveniently placed at the end of the sink. The back porch is screened and connects with the stairs to the basement.

Two bed rooms connect with the day rooms and with each other by a short hall, from which opens the bath room and linen closet. The closets from the bedrooms are unusually large, large enough in fact that an additional closet for coats could be made if desired. The bath room is provided with medicine cabinet and a dresser across the width of the room, similar to that in the first design. The second bed room opens onto the court and connects with a screened sleeping porch beyond.

The court thus enclosed between the two wings of the house is in itself the unique feature of the house. Protected from the winds yet receiving the sunshine, it is an ideal place for out-of-door living. It makes a particularly attractive feature from the dining room and living rooms, being in full view from both. The fountain, another unique feature, adds much to the court. The main rooms are all finished in old ivory enamel, and have $\frac{3}{8}''x2''$ clear oak floors. The doors are mahogany finished, made in two panels. The walls are papered, with bordered panels in the bed rooms and with wood cornices in the living and dining rooms.

Small and Cozy



The exterior walls are of shingles, stained.

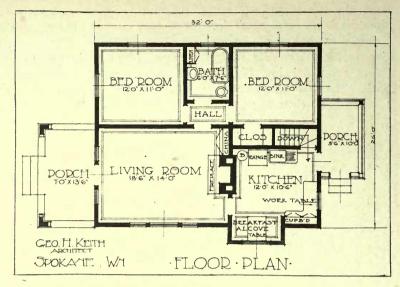
Geo. H. Keith, Architect.

THIS residence, built in the state of Washington, is a four-room shingled bungalow in a setting of fruit trees and overlooking the Okanogan River.

The cottage contains a generous sized porch, combination living and dining room- (so popular in the western modest home), two bed rooms, bath, kitchen with breakfast alcove and screened rear porch. The advantages of a combination living and dining room are very apparent when one stops to think of the small amount of time proportionately spent in eating. A separate dining room is an extravagant use of space when space is limited. The breakfast alcove is a cozy little feature for the small family and will be found pleasant as well as a step-saver. Many meals besides the breakfast can also be served in this alcove and the dining room used only for the more important occasions.

There is a half basement. Foundation is of concrete and the cottage rests close to the ground. The living room contains a cobble-stone fireplace and built-in china cabinet.

The interior finish is of western fir stained and varnished and fir floors. The outside walls are shingled, stained brown, and laid in alternate narrow and wide courses. The roof is stained green and the trimmings are painted ivory. This cottage was actually built at a cost of \$1,250 and will appeal to the seeker of so modest a home.



Two Minnesota Homes

Lindstrom & Almars, Architects

INNESOTA has a reputation for its climate, as well as many other advantages. The nature of the climate in the month of January is well depicted by the accompanying photograph of a truly Minnesota residence. The query is often put regarding stucco as a suitable exterior wall for localities where the winters are severe, and in the showing of this Minnesota home, an all cement design, we give a pretty good answer to that query, for this home is only one of thousands built in Minnesota where stucco walls are used. It is a wall which is readily adapted to almost any style of architecture and particularly to houses using a gable roof treatment. The gables offer the opportunity of working in some attractive paneling or half timber work.

Cement has been used in the construction of this house in as many ways as it could be used to advantage. All of the basement walls and footings are of concrete both for the house and the garage in the rear which is an integral part of the house proper. The floor of the garage of course is also concrete and its ceiling reinforced concrete construction on account of the wide expanse. There is a fine large room over the garage, reached by the combination stairway. This house is frame construction with two coats of stucco work over metal lath. The roof is shingled. The frame rests upon a twelve-inch brick base and there are brick copings for the porch and brick trimmings on chimney. The wall body is in rough cast cement. The trimmings are sand coated. There are flower boxes located under the sun parlor windows which are also cement coated.

The interior finish is birch. The flooring is maple throughout both first and second stories. The sun porch is intended also to be used, if desired, as a sleeping porch, thus increasing the bedroom capacity of this home to four rooms.

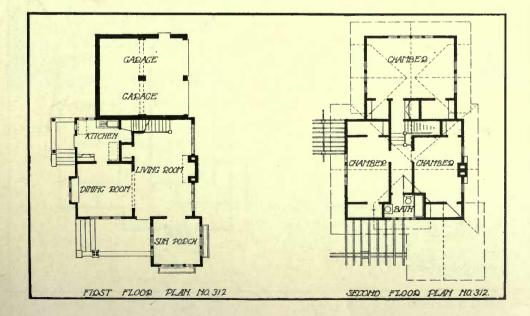


The garage is an integral part of the house.

This room is plastered and finished same as the balance of the lower floor. The garage, as will be noted, is provided with double doors and has capacity for two machines, in addition to ample space for work bench and other equipment.

The kitchen is compact in its arrangement and is well provided with cabinets, shelving, etc.

The second of our Minnesota homes is also a cement cottage on the bungalow order, there being two good bedrooms secured on the second floor. In this house the construction of the foundation wall is poured concrete up to grade, from there up to the first story window sills. The concrete wall is 8 inches thick, faced with a rough surfaced brick of dark red color. The imposing chimney is a prominent feature of this design and helps to balance the broad gable extending out over the porch at the right side. Be-

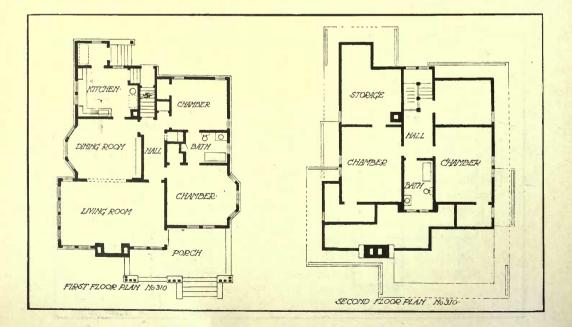




The exterior chimney is very imposing.

tween this gable and the chimney is a well proportioned dormer, giving the necessary head room and light for the bath room on the second floor. It will be noted there are two bath rooms in this cottage.

The grouping of the short porch columns is attractive, they rest upon brick buttresses. The floor of the porch is seasoned fir, and the steps are of brick. Shingles stained are used on the roof, and with a green stained roof the natural gray cement walls and the dark red brick work with cream trimmings make a beautiful combination for this attractive residence.

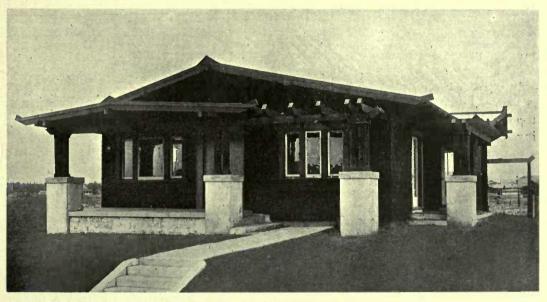


All of the interior finish is in hardwood. The living and dining rooms are finished in red oak. Birch doors are used throughout with pine finish painted in the kitchen and bedrooms. One will be particularly attracted to the large amount of light in all of the lower rooms, particularly the living room with southern exposure is ideal in this respect and is virtually a sun-parlor.

Three Summer Bungalows

THE month of April is an especially suitable season to present suggestions for the building of bungalows designed with special reference to the making of a summer home. Summer one closer to nature and makes one feel that life is worth living after all.

In this group of three designs we have an interesting variety in the treatment of each and they will undoubtedly be



The cement work adds pleasing color to the exterior.

homes are increasing in proportion each year. Many flat dwellers see the disadvantages and discomforts of the apartment in summer and are building bungalows at nearby lakes. In many cities, real estate firms are promoting enterprises for the opening up of large tracts of lakeside property for the sole purpose of erecting summer homes. The cost of such a home will be many times repaid in the added health and happiness of every member of the family. It brings studied with interest by those who seek a home of modest proportions and inexpensive in construction.

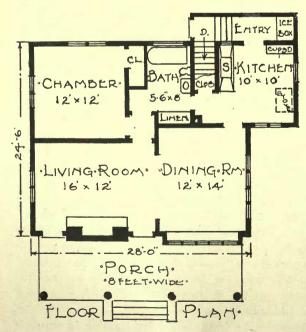
The reader will note that casement windows are used in all three of the accompanying designs. Casement windows are gaining in favor rapidly and are especially suitable for use in summer homes. This can be readily appreciated as the full benefit of the window opening can be secured.

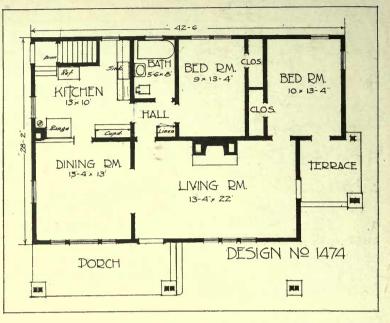
An important consideration in summer

home building is the porch. Do not make the mistake of building it too small. It virtually becomes the summer living room and should be so built as to allow for its being screened in.

The first is strictly a western bungalow both as to design and construction. The treatment of exposed rafter ends, heavy beam work and shingles being characteristic. The lower half of

porch supports are boxed in and cement coated, thus giving a somewhat more substantial air to the front. The porch is built up solid from grade by filling, on top of which is laid four inches of grouting, surfaced by a rich mixture of cement. All timber work is left in the rough, stained. Casement windows prevail in the



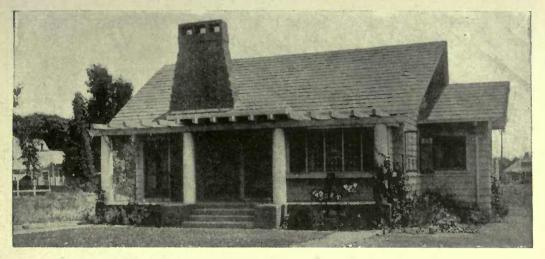


living room, dining room and chambers.

The interior is well arranged for a summer residence as the wide cased openings between living and dining rooms make an open airy expanse of 35 feet. There is a small basement and no attic.

The second summer home is rather small but at the same time very artistic

and picturesque. There is a wide porch across the whole front with pergola effect and the walls are sided. The brick chimney is an interesting feature with a suggestion of the Dutch in its design. It accommodates a brick mantel in the living room. The fireplace is one of the most important features of a summer home and should never be omitted. It is the gathering place on all cool or damp days, many of which will occur during the summer season. The dining room is in connection through a wide cased opening and communicates with the kitchen direct. In the entry is the ice box, and the stair leads down to the basement, which occupies only a small portion of the ground area.



The brick chimney is picturesque, with a suggestion of Dutch in its design.

A small furnace might be installed, if desired. There is a good chamber, a bathroom and linen closet. The finish and floors are of pine throughout. Just for two, this would be a very charming home.

The size is 28 feet wide and 24 feet 6 inches deep, exclusive of the projection of the kitchen. Height of story, 9 feet. A scuttle leads to the attic space.

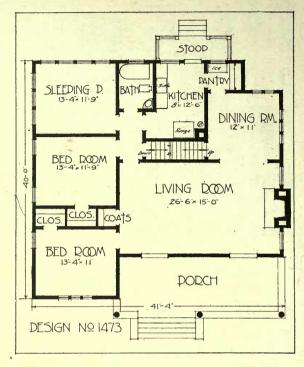
One of the coziest little homes in this group of bungalows is the six-room seaside bungalow with outside walls covered with shakes exposed twelve inches to the weather. Strictly a summer home though easily converted for winter occupancy.

The porch columns rest upon a broad



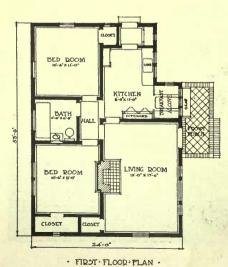
plank rail with the front and end boarded up from grade and covered with cement. Chimney is built of common brick and surfaced with cement. Casement windows are used in front bedroom and dining room. French doors lead onto porch from the generous living room.

The interior arrangement is compact and all floor space is utilized to the best advantage. Finish is in soft wood stained. Floors are laid with hard pine. The fireplace is of plain design in keeping with the general simplicity of the design. Provision is made for stairs to the second floor in which one quite large or two small bedrooms could be finished off. These additional rooms will come in handy for the accommodation of guests.



An Unusual Bungalow

Shown by courtesy of the West Coast Lumbermen's Association







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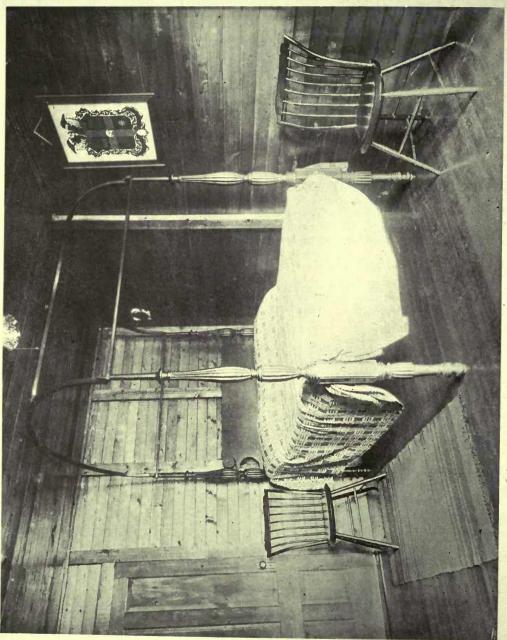
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Bedroom in a seashore bungalow furnished in quaint old New England things.



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Bungalow Bedrooms

ROADLY speaking good taste in a bungalow is the same as good taste in a regulation house. The underlying principles of simplic-

ity, coherence, balance and proportion, apply to dwellings of all kinds. Naturally period furnishings find little place in a bungalow. On the other hand, unless the location is rustic—seashore, mountains or woods—the very rustic note in furnishings is usually absent.

The bungalow, occupied all the year, often with a second story, is in reality a house with a bungalow pedigree. It retains many of the best features of the original one-story structure with the conveniences of the modern floor plan added.

Sometimes this dwelling has a natural trim throughout, fireplaces of rough stone, and bookcases and settles, which have been made an integral part of the structure. With such a setting the fitments must be planned in accordance; furniture of straight lines, rugs of craft feeling, fabrics of coarse weave and direct patterns, lighting fixtures of the plainest type, and a vigorous sturdy note in all accessories.

Possibly the bungalow is of different character—with an interior trim painted gray or white, fireplaces faced with smooth brick or tile, and walls papered or finished in flat tone. Here the setting calls for something quite as distinctive as the other treatment, yet on different lines. Mahogany furniture of simple design, wicker, chintz, cretonne, these and kindred things seem to gravitate toward this type of background.

Sometimes the rooms of the lower floor are finished in natural wood and the second in white paint. This scheme makes for greater variety but not always for unity. Much depends on the plan of the interior.

Recently several bedrooms in a bungalow occupied all the year have come to my notice. They are rather a departure from stereotype schemes and well worth studying. They are furnished with the essentials for comfortable sleeping, and little besides. Such rooms are in the interest of health, even tempers, and comfortable housekeeping. While compact in the best use of the word-without waste space-they are not at all contracted. The arrangement of the furniture and the placing of the lighting fixtures were planned before the house was built. These two important points are often neglected or remembered when it is too late.

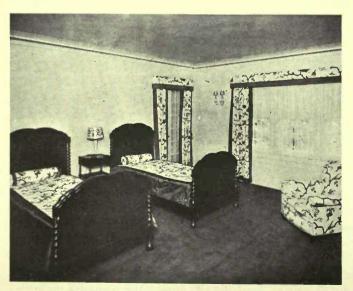
The electrician left to his own methods will usually locate the dressing-table fixture as far as possible from the windows



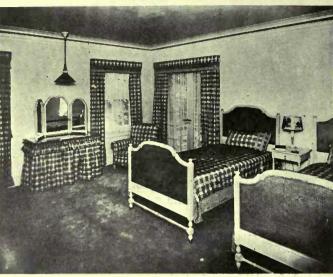
forgetting the crying need for a good light by day. Architects have been known to forget the bedstead and, as a final resort, the headboard is placed against a closed door. Such oversights mar the beauty of a house to say nothing of the daily inconvenience.

The two bedrooms illustrated have painted walls, plain floor coverings, and window hangings and bedspreads of chintz. In one room the twin beds are of cane with painted frames, and in the other of dark wood with spiral uprights.

The additional furniture has been carefully chosen to accord with these pieces. The chintz of one room is Chinese-Chippendale of gay pattern on a light ground, that of the other is in a striking plaid.



Bedroom in a bungalow furnished on unusual lines.



Plaid curtains and bedspreads in a bungalow bedroom.

Each room has a big chair upholstered to match the curtains and each reading lamp has its appropriate shade.

So many questions are asked regarding the making of bedroom curtains that

> it is gratifying to be able to illustrate some good examples. An old fashioned lambrequin without fulness is used over full side hangings. The Chinese - Chippendale chintz is bordered with a plain fabric repeating a prominent color in the pat-This combination tern. works out well on the beds which are thus made a part of the color scheme. Both rooms are very attractive in color and on this point a black and white reproduction does not do them justice.

Architects often protest

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against concealing the trim of a window. Decorators argue that curtains aid in the proper balance, and often give a needed note of repetition. Much might be said on both sides. Certain it is that curtains of the type illustrated must be carefully chosen, well made, properly hung, and kept in immaculate condition. Then, as in these rooms, where walls and floors are plain and the appointments few and very simple, they are extremely effective.

My own preference would be for rugs rather than one large floor coveringboth on the score of beauty and utility. The plain carpet, for such it is in spite of its new name, is greatly favored just now by many people. Its color is usually tan, sand, twine or putty color, and its texture is like that of a Scotch rug.

There are many rugs in these tones, both of Japanese and domestic make, which are well worth considering. The Japanese "Bungalow rugs" of jute are attractive and inexpensive. American makers have specialized in weaves for just such dwelling as we are discussing.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.

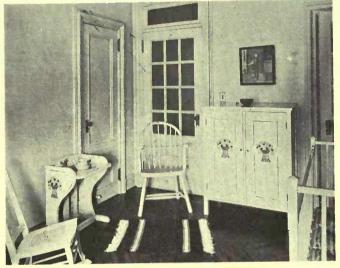
THE shops are in Spring livery and gayer than tulip gardens. American dyes, we are told, are responsible for much of the brilliancy, but this is only half the story. Steadily, over a period of seven or eight years, guided by the Futurist movement in France, colors have been growing stronger and stronger.

There is something refreshing about pure, unmixed, unadulterated color. The danger lies in using it in large quantities, or combining it injudiciously. With wicker furniture, for instance, which for years held to browns and greens with an occasional porch chair in red, whole sets of wicker now greet the shopper in vivid orange, pure scarlet, peacock blue, apple green, and orchid. One or two of these pieces closely related to the color scheme of a room might be interesting or, under favorable circumstances, a summer breakfast room or enclosed porch might be made very attractive with this gay furniture, but its indiscriminate use should be avoided.

One shop well known for its willow has of late made a special point of native pieces. While many of the tones used are brilliant, no crude, harsh colors are seen, and the upholstery in the way of cushions, chair backs, pads, etc., are chosen with much taste.

Among articles suitable for summer rooms and porches, to be found in this shop, the Labrador hooked mats made under the direction of Dr. Grenfell, were noted. These are full of primitive charm, showing a simple, direct, almost childlike rendering of trees, mountains, fields, birds and animals. The prices range from





Nursery showing furniture designed by Helen Speer.

nine to fifteen dollars, according to size.

It is pleasant to record the success of a gifted craft-worker who has specialized in the furnishing of children's rooms, and in the making of every kind of toy and plaything art, craft and ingenuity can devise. Helen Speer, who a few years ago

decorated and furnished the public play room in the Hotel Vanderbilt, a departure in hotel rooms, has carried her work to a high point. Other hotels have followed the example of the Vanderbilt, while many children's rooms in private houses have been furnished under her di-In the "Helen rection. Speer Shop," a fairyland for small people and fascinating for grown-ups, a profitable morning may be spent studying nursery and playroom furniture, toys of every kind and description, books, dolls, cut-out games, etc. Just at present Mrs. Speer is working on toys to be used in connection with a sand box. A sand table, long and low, in waterproof white enamel and decorated in lively crabs, star fish, lobsters and other deep sea things is a useful The young gararticle. dener has been remembered. A wheel barrow, dog house, weather vane, bird house, scare-crow and garden tool chest are provided for him.

Many of the cupboards and toy chests have been designed to teach the child

order and that abused and neglected maxim "a place for everything and everything in its place." On this theory is constructed the Mother Goose Clothes Tree of wood. Each arm or branch is in the form of the long neck and head of a goose upon which are

> small hangers, white like the tree, and decorated in gay colors. The head of Mother ' Goose in high pointed hat surmounts the top. As with all the furniture the dimensions are carefully planned for the prospective owners. Other good pieces are the "chiff-robe" and the washing stand shown in the illustration of the nursery. All of the furniture is made of white pine, which Mrs. Speer has found to give the best results. The body colors are white and French gray attractively stenciled.

Colonial urn paper.



Several new wallpapers showing Colonial revivals are now available. One pattern appropriate for a large dining room has a paneled background two shades of in gray. The border panel linés are blue and within the panels are blue urns filled with white grapes surrounded with olive green leaves. In one room where this paper is to be used the glass curtains will be



In the present fad for Mandarin yellow, this bird paper is to be recommended for bedrooms.

oyster gray net with over curtains of blue linen. Another variant of the Colonial urn, suitable for a rather formal room, is the pattern illustrated herewith. This paper will be used as a background for a set of old cane furniture, the frames of gray enamel picked out in light green. The bird paper with its glazed background of Mandarin yellow and gay but softly blended tones will be placed in a breakfast room where the furniture is painted dull black. Each chair is fitted with a flat cushion and pad of gray blue repp—the color of the birds. The rug is blue with narrow black lines.

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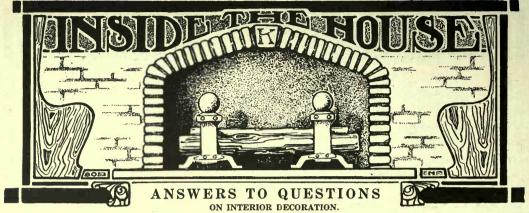
Among interesting reproductions of the handiwork of another century are the new Chelsea, Crown Derby and Spode tea sets. In Chelsea the pheasant pattern is attractive, in Derby the well known dark minor-blue with gold borders compares fa-

vorably with the old, while in Spode the beautiful dark blue, scarlet and gold decorations of Josiah Spode, the elder are successfully set forth.

From Mexico have recently been imported a number of water jars each accompanied by its drinking cup or mug, which, when not in use, fits over the top of the jar. The price, two dollars and fifty cents, seems moderate for articles so useful and interesting.



Recently the Copeland factory has reproduced the old Spode tea sets in scarlet, deep blue and gold.



Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

Blue and Gold.

O. H. I am enclosing a rough pencil sketch of our house. I should like very much to have my dining room walls in old blue, yellow curtains, blue and old gold rug, dull ivory white woodwork, mahogany doors and mantel, furniture mahogany, Sheraton design.

You will notice my dining room is on the north side; will old blue be too cold a color?

Would a brick fireplace, or tile be better, and what color? The wall will not be papered but painted.

I should like my living room to be in gray. The woodwork in this room will be birch, stained mahogany, with oak floors. My furniture is mahogany, the two largest pieces upholstered in tapestry. The mantel in this room is to be tile. What color of tile should I use?

Should woodwork in dining room be same as the living rooms, since they connect by French doors? What color shall I use in my sun room?

On account of terrace, would it not be advisable to use cement porch floor? In one of your magazines I notice you suggest cypress for porch floors. The terrace I shall have like the one top of page 21, "Beautiful Interiors," with its flower boxes and palms.

If my house is as beautiful as the picture I have in mind, I shall always feel greatly indebted to your magazine whose help I have relied upon.

For back hall and breakfast room, please suggest color for woodwork, which will be pine; also for walls. The exterior will be stucco with perhaps brown shingles for upper story, carrying out color scheme front cover of your magazine for August, 1914. What color of roof would you use? I suppose we will use tile or shingles.

Ans. The scheme you have planned for your rooms as outlined in your letter, will prove very pleasing. While you have a northeast light for your dining room, I think you can, with perfect safety, treat this room in dull old blue providing you use plenty of golden yellow in the draperies and rug. Take note of Chinese rug in blue and old gold. You will have a very charming room if you finish the wood trim in old ivory enamel with the doors, etc., in mahogany. Also, would suggest that the hardwood and lighting fixtures be done in antique silver.

As for your living room, you will not go wrong in using gray for the walls. Do not select a cold gray but have it in warm gray with a suggestion of rose in it when viewed from different angles. The hangings for the windows should be in a deep old rose or mulberry. With this room treated in warm gray and mulberry, would suggest that the fireplace be laid up in faience tiles in a mat glaze finish. The tiles should be in soft luminous gray with tones of rose in the under color. The sun room may be treated in a cool gray with hangings of chintz or cretonne.

Instead of using cement for the porch floor would suggest that you lay it in 6 inch tiles, which would be very serviceable and also make a very pleasing treatment. Almost any tile concern will furnish you



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with interesting information if you will write them.

The rear hall and breakfast room on account of the exposure should be done in Colonial yellow or a golden tan with the wood trim in ivory enamel.

If your dining room is done as we suggested, with the walls in blue and wood trim in old ivory, you will find that a brick fireplace will not be dainty enough for the scheme. Would suggest that you write to some of the firms mentioned in our advertising pages, giving them a rough drawing with the necessary information as to colors, etc., and also ask them to mail you a small sample of what they think would be appropriate. We would suggest using a faience tile with a dull glazed surface in a dull silvery gray color with dull blue in the under color. Possibly a slight suggestion of cream or amber mingling with the blue would be a pleasing note. The same tile in a somewhat thicker mould may be used for the hearth.

Would suggest a large or medium size square tile with a wide mortar joint in blue-gray. A wide joint gives the tiles more of a hand-moulded effect. Inset tiles in high or low relief on each side of opening would be very effective as shown in the February number.

A Vestibule and Kitchen Entrance.

E. H.—Am enclosing herewith a copy of a plan that is very much to our liking with the exception that we would like a vestibule, a kitchen entrance so as to allow a space for the ice box, and a grade entrance to the cellar from the outside. We have your kind favor of the 5th inst. in which you state that you want us to feel at liberty to ask you any questions and to submit plans, and this is one instance that we are going to take advantage of your good will.

Ans.—In reply to your letter of the 19th inst., we would suggest that you enclose your kitchen porch to make an entry and place for refrigerator. Perhaps the size could be increased to give you the porch for working space, if you wish,

and use sash in enclosing the upper part of the porch.

A vestibule to the living room could easily be arranged by extending into the living room for a part of its depth—perhaps eighteen inches—and taking the rest from the porch. With a ten-foot porch it will not crowd you at all and it gives the advantage of seeming to recess the end of the porch.

Your sketch indicates that there would be room for a coat closet in the vestibule, unless you would prefer the open space.

Your plan is well arranged and we hope will make you a satisfactory home.

Furnish a Small Apartment.

J. E. T. We are soon to occupy a small apartment and must use only pieces of furniture that are absolutely necessary for our comfort and pleasure.

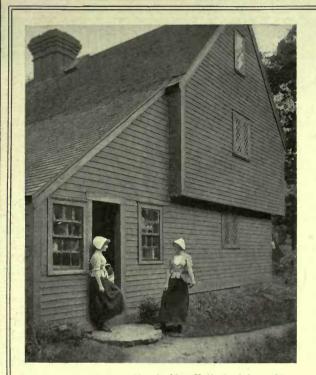
The woodwork throughout is hard pine finished in a "between" shade, neither as dark as early English nor so light as fumed oak. And the pieces I have are so mixed I can see nothing other than a Jacob's coat effect.

I send you small sketch of floor plan so you may see size of rooms, also exposure. The living room is papered in tan with some green in border and mantel with tiles of soft tan unglazed.

The furniture I have consists of piano and bench, desk and chair in mahogany, flower stand, and two rockers in brown wicker upholstered in floral pattern of dark tan and green. Several sections of bookcases and library table in dark oak.

Which of these must I eliminate or change. The bookcase might be placed by the chimney. Have moss green rug (9x12) with ivory tan and brown in border. Could I use it in this room? Is the room too small for overdraperies at windows? Suggest arrangement of furniture.

Bedroom opening from living room has cream white ceiling and tile hearth, pink rosebud border. For this room have modern poster suit in mahogany, also a rug 9x12 with pink center with cream, tan and green in border. Could change paper



JOHN WARD HOUSE at Salem, Mass. Built in 1684.

Words could not portray the lasting qualities of White Pine as graphically as this remarkable photograph. The exact date of the unpainted, weather-beaten siding is not known, but it is certain that the siding on the main portion of the house is from 150 to 200 years old and stands now as originally built, with practically no repairs. The siding on the lean-to is of a considerably later date, but it will be noted that there is no appreciable difference between it and the siding on the main portion of the house. Both are in splendid condition today and good for service for many years to come.

Photo by Mary H. Northend, Solem, Mass.



"White Pine in Home-Building" is beautifully illustrated with old Colonial and Modern homes, full of valuable information and suggestions on home-building, and gives a short, concise statement of the merits of White Pine. Send for it now. There is no charge for it to prospective home-builders. THE same quality of White Pine used in the John Ward House is still abundantly available today, at prices that make it the most economical wood for home-building.

WHITE PINE

through three centuries, has proved that it can withstand the ravages of time and weather more successfully than any other wood. It lasts indefinitely, without warping or cracking or opening at the joints and takes paint perfectly.

By all means learn about White Pine before you decide on the wood to be used on the outside of your house, whether you are building a new home, or remodeling the old one. If your lumber dealer is unable to supply White Pine, we would appreciate the opportunity of being helpful to you in securing it.

Address, WHITE PINE BUREAU, 1420 Merchants Bank Building, St. Paul, Minn.

Representing The Northern Pine Manufacturers' Association of Minnesota, Wisconsin and Michigan, and The Associated White Pine Manufacturers of Idaho



or rug, either if necessary, for a pretty effect. I much prefer blue or yellow to pink and yellow, but being a north room I don't know which to do. Am very fond of mirrors. Can you suggest a place where I might use one to advantage to give distance?

Ans. The sample of paper submitted for your living room should prove very satisfactory. A four inch border with straight edge (not cut out) in shades of green, mahogany or red and a little tan, will prove very complimentary to the paper.

The window would be pleasing if hung with soft sheer scrim or voile glass curtains, with a narrow hanging of soft silk on each side in soft olive green or brown in the same shade as the stripe in the paper. The piano may be placed between the windows on the north wall with the library table across the southwest corner to balance it. A pretty mahogany reading lamp with silk shade in soft tan, trimmed with old gold would be a pleasant note in the room.

The desk might fit nicely into the angle next to the bedroom door with the bookcases arranged in the space north of the mantle. If they do not fit, I would remove them and have a tier of simple shelves built in with silk curtains sliding on rings and rod. Only the edges of the shelves will show, so would not suggest anything elaborate. Your wicker furniture will lend itself nicely to this scheme, with possibly the addition of a lightweight overstuffed chair with a loose slip cover of some bright colored chintz.

The sample of paper you have submitter for your belroom is in my estimation not appropriate for this room. You have a north light and with your mahogany bedroom suit a warm creamy yellow would be ideal. Select a paper with 3⁄4 inch stripes in cream and corn color alternating, with a linen mesh effect which is pressed into the paper, and use a soft faded yellow rose border at the picture moulding. The draperies may be in soft silk in a solid corn color in a slightly deeper tone with soft white muslin glass curtains.

The most satisfactory floor covering would be a large self toned rug with the body of the rug in rich warm buff with the border made of two bands of buff in still deeper shades. See illustration ot rugs on page 197 and 198 of our March issue.

It would be an easy matter to have a full length plate mirror secured to the door opening into the hall. This should be well padded and after being hung a small grooved moulding finished to match the wood trim may be placed around the edge for a finish.

French Doors.

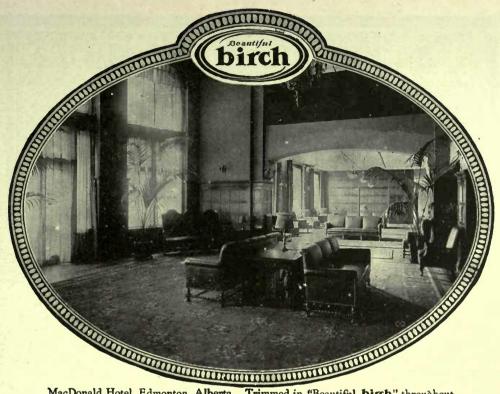
• H. M. P. I am sending rough plan of a house which has recently come into my possession. The house is about 35 years old, of no particular style of architecture and with many faults.

I have numbered the rooms 1, 2, 3. In the old days, number 1 was used as a parlor (formal), numbers 2 and 3 were living rooms, with large openings and old fashioned sliding doors. Now I wonder if it would be attractive and sensible to make those openings smaller and put in French doors, which would enable me to close off the rooms as I wished? The rooms are about 13x15, ceilings $9\frac{1}{2}$ feet high.

If you think French doors advisable what proportion should they be for the size of rooms given? Also kindly tell me should they open into rooms 1 and 3 from room 2, or should both sets open into room 2?

Ans. With reference to the French doors, would say that they will make a charming addition to your rooms. These doors should occupy about a 5x7 or $7\frac{1}{2}$ foot space. You could use metal muntins instead of the wood muntins and with some border design in preference to the small square panes, if you wish.

The two pairs of doors in room number 1 should swing into this room, while the doors between numbers 2 and 3, should swing into number 2.



MacDonald Hotel, Edmonton, Alberta, Trimmed in "Beautiful birch" throughout

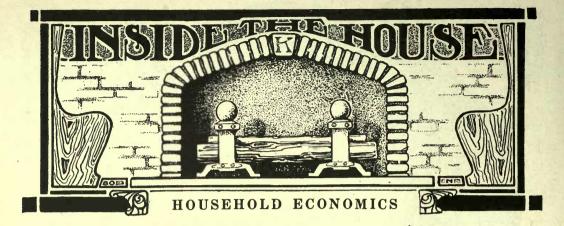
"Beautiful birch" for Beautiful Woodwork!

Have all your hardwood trim in "Beautiful birch"! The builders of this magnificent hotel did not select "Beautiful birch" on the score of price, although its price is gratifyingly low for a fine cabinet wood. They could have had any wood they wanted-yet they picked out **birch** because they wanted its effect of comfort and refinement, its satiny beauty, its durable hardness, its ability to show in perfection every finish, from white enamel and the new silver gray stain, to dark brown, with every shade between. YOU want beautiful birch in your home for the very same reasons.

> FREE: That you may know at first hand what a beautiful wood birch really is (in spite of its reasonable price) we shall gladly send you sample panels in many finishes, together with a fine illustrared booklet. Send today.

The Northern Hemlock & Hardwood Manufacturers' Association Offices, 203 F. R. A. Building - Oshkosh, Wisconsin

No advertising is accepted for "Keith's" that you can not trust.



A Kitchenette Table

N the modern kitchen almost everything can be folded out of the way. Here is a table which folds and closes into a panel in the wall

when it is not in use. When unfolded and in position for use it is 22 inches wide by 3 feet 6 inches long, and stands 30 inches from the floor.

The table when spread is supported by the door or lower panel of the cabinet, to which it is attached by hinges. It is held



This is a folding table enclosed in a cabinet.

firm in position by this means, and cannot lean or upset.

The table itself is in three panels. The two outside panels fold together, reducing the table to the size of the cabinet which fits into the wall between the studs, making the door of the cabinet flush with the surface of the wall.

It does not require the wall space necessary for a drop table, and shows simply as a panel or door in the wall when not in use. It is set in place with the other mill work and finished with the woodwork of the kitchen. It may be placed in the pantry if preferred. Placed on the screened porch it converts it into a dining porch for a small family.

Combination Ironing Board and Table.

Some kind of a device by which an ironing board may be folded into a cabinet in the wall has been in use for some time. Here is a cabinet which holds a combination of things; a folding table, which when it is open supports an ironing board, and besides this a sleeve board. These are all built into a cabinet 5 inches deep, which sets into the wall between the four or six inch studs as the case may be. The cabinet is finished with the other wood-

The cut shows the combination ironing board and table, with the ironing board in use. This shows sleeveboard in place in the cabinet when not in use. The sleeveboard is built in 5 inch cabinets only.

TT

This Book Will Settle The Mantel Question For You

Whether you are building a new home or remodeling your present one, you should consider the beauty and comfort of your fireplaces. At least, you will be surprised at the number of attractive house refinements shown in our catalog.

It will show you how to attain cozy effects you never dreamed of.

For the benefit of the contractor it contains full directions for installing all the mantels and accessories offered.

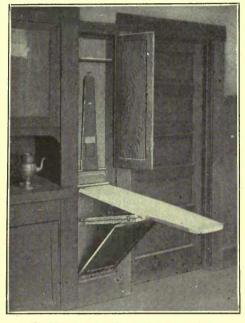
This Company enjoys a long-standing reputation for the exceptionally high quality of its goods. Its prices are very reasonable.

If you care to learn of some of the attractive treatments possible with open fireplaces, simply fill out coupon below, and mail. It will bring you our handsome catalog, indispensable to house owners, house builders or contractors.

	HORNET M	IANTEL CO.
	Largest Mantel House in the world.	1117 Market St., St. Louis, Mo.
		HORNET MANTEL CO., 1117 Market St., St. Louis Mo. Send catalog to—
A	A on A	Name
()))))))))))))))))))))))))))))))))))))		Address City
		State



As shown in this cut, the ironing board, when in use, rests upon the table extended, to which it is attached, when in this position, by hidden steel pins. This greatly strengthens the support and holds the ironing board firm in its position.



Combination ironing board and kitchen table.

Each article of this combination may be used at pleasure, and all fold up neatly and close in cabinet when not in use.

How surprised the grandmothers of the last generation would be if they could have stepped into a modern kitchen. Probably they would have thought that daughter was playing at dolls and dishes rather than doing real work.

Electric Attachments.

Before attaching electric irons, vacuum cleaners, cooking utensils or any other electrical device to your lighting circuits or sockets, consult an electrician as to the ability of your wiring to withstand this additional load. Electric wiring systems are designed to carry only a certain current, and if overloaded may cause fires. Numerous fires have been caused by leaving electric irons with the current on. Disconnect them immediately when through using.

Static Electricity and Gasoline.

Did you ever see an experiment by which an electric spark was produced by friction and a piece of silk? That is what sometimes happens while cleaning silk in gasoline with dire results. The greatest caution should always be exercised when washing anything, and especially silk, in gasoline. Such agitation is liable to produce a spark of static electricity which will ignite the vapor. Never rub silk briskly when cleaning with gasoline. Numerous fires and loss of life have resulted from sparks generated in this way. Gasoline, and especially naphtha, aids in production of such sparks.

Gasoline should never be used in a closed room.

Gifts For Wedding Anniversaries.

The "Silver Wedding" and "Gold Wedding anniversary" are quite commonly observed. An exchange gives the following list of gifts as appropriate to the gathering year:

First anniversary of the wedding-gifts of cotton.

Second—paper. Third-leather. Fourth-fruit and flowers. Fifth-wood. Sixth-sugar and sweets. Seventh—wool. Eighth-India rubber. Ninth-willow. Tenth-tin. Eleventh-steel. Twelfth-silk and fine linen. Thirteenth-lace. Fourteenth-ivory. Fifteenth-crystal. Twentieth-china. Twenty-fifth-silver. Thirtieth-pearl. Fortieth-ruby. Fiftieth—gold. Seventy-fifth-diamond.



Before You Order the Stucco for Your Bungalow

OU should know the tremendous difference in stuccos. If you want to be positively certain that the stucco you use will not crack from wall settling or from changes in temperature, that it will not loosen or break off under punishment from the weather, quickly ruining the beauty and value of the building, then there is only one stucco for you to use and that is Kellastone.

It is the one ideal surface covering for any bungalow, because it retains the perfection of its surface indefinitely and keeps the building looking as new as on the day the



was, applied. It bonds perfectly to all building surfaces. It sticks to window and door casings and panel work, preventing openings and cracks which allow the rain to get in behind the stucco and cause its rapid deterioration and injury to the backsurface effect or color scheme can be secured with it. It is not mixed with water. Any plasterer can apply it.

Kellastone contains no lime, gypsum or cement, and is free from the faults of these stucco materials. We will send you illustrated book about Kellastone, free To Dealers: W

Write for our selling and distributing plan.

NATIONAL KELLASTONE CO., 583 Association Building, Chicago, Ill.





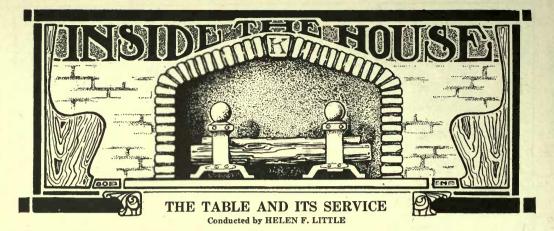
Summer Home of W. O. Horn, Bradley Beach, N. J.

HE basement of this home will always be dry because the walls and floor were waterproofed with Ceresit. The use of Ceresit gives perfect protection against water penetration. Cement stucco, to be permanent, must be properly waterproofed, and Ceresit will do it.

There are seven C. W. Co. products for waterproofing and dampproofing all kinds of buildings and for the protection of concrete floors.

Write for "The Ceresit Waterproofer"

CERESIT WATERPROOFING CO. 904 Westminster Bldg., Chicago



Planning Meals

HY not apply the ideas underlying bungalow construction to that too often nerve-racking task of planning meals? Does this seem a far-fetched application? But just consider with me a moment the ideas of convenience, compact arrangement, and minimum expenditure of time, labor, and energy which the bungalow embodies, and see if you cannot apply them with happy results in the way of better and more varied meals for your family. In planning the bungalow, forethought has been expended to save steps. Can you not plan meals a week in advance, thus minimizing your daily orders, as well as time expended in thinking of each meal? For convenience and compact arrangement, buy a card-index, and arrange menus under headings to suit you needs. For instance, "Winter Breakfasts," "Summer Breakfasts," "Sunday Breakfasts," "Simple Luncheons," "Company Dinners," "Light Refreshments," "Meatless Meals." Still further subdivisions might be made such as "Salads" grouped under "Fruit," "Vegetable," "Meat," "Fish," "Desserts," arranged as "Starchy," "Fruit," "Frozen," etc.; "Vegetables," under "Nutritive" and "Succulent." Good combinations may be thus filed for future use.

Study the essential food principles as given in the chart below, and see that

PROTEINS	CARBOHYDRATES	ARBOHYDRATES FATS & OILS		VITAMINS	
Build and Repair Tissue	Furnish Heat and Energy	Heat and Energy and Store Heat as Fatty Tissue	Regulate Body Processes	Life-giving Elements Essential to Health	
Meat Fish Eggs Milk Cheese Dried Peas Dried Peas Dried Lentis Wheat, Oats (in bread and cereals) Nuts	Starches and Sugars: Rice Corn Potatoes Macaroni Tapioca Sago Dates Figs Raisins Prunes Honey Molasses Candy Chocolate Bananas	Fats of Meats and Fish: Butter Cream Lard Oleomargarine Bacon Nuts Olive-oil Corn Alligator Pears Chocolate	Vegetables Fruits Eggs Small amounts in all foods. Largest amounts in: Spinach, all greens Beets, Onions Celery, Cabbage Lettuce, Apples Lemons, Oranges Prunes, Raisins Figs, Dates, Grapes Milk, Egg Yolks		

FOOD CHART

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OAK FLOORING

Beautiful — Economical — Durable Three Vital Qualities

Owners and builders find it a clinching argument to say—"It's floored with OAK FLOORING." It means that the tenant or the buyer is willing to pay 10% to 15% more. In color it is rich and cheerful and imparts an air of refinement and elegance to a home. It is the modern flooring.

OAK FLOORING ⁸/₈ thickness by 1¹/₂ or 2ⁿ faces can be laid over old floors in old houses or over sub-floors in new homes at a very low cost. It is cheaper than carpets or pine flooring.

OAK FLOORING laid 40 years ago in houses and public buildings, after very hard service, is still in good condition. For durability OAK is the best.

A carpenter or handy man can lay OAK FLOORING successfully. It makes a very profitable side line for any carpenter.

Write for folder that tells all that's worth knowing about OAK FLOORING

"America's Best Flooring"

Oak Flooring Service Bureau 1603 Union Trust Bidg., CINCINNATI



Light, air and sunshine are essentials in the modern home. They bring health and cheer.

French doors give you the maximum of these good things—and they are decidedly in vogue.



French Doors

are made in many designs, sizes and woods. Discriminating buyers insist on Morgan Doors for all uses, because of their beautiful selected woods, their exclusive All White Pine Core and their patented Wedge Dowel Construction. And because they are guaranteed.

Suggestions for Beautifying the Present or Prospective Home

You don't need to build a new home to enjoy the beauty and service of Morgan Doors. "Adding Distinction to the Home" gives suggestions for improving the present home.

"The Door Beautiful" is a book of suggestions on doors, interior trim and interior decorations for prospective builders.

Send for either, or both booklets.

Morgan Sash & Door Company Dept. C. 33, Chicago

Morgan Millwork Co., Baltimore Morgan Co., Oshkosh, Wisconsin Exhibits of finished Morgan Model Doors in all

principal cities. Ask for list.



each meal is well balanced, that is, that it contains some of each element necessary to properly nourish the body. In your card index might well be placed lists of foods belonging to each class, arranged, in this day of high prices, as "Cheap Protein Foods," "Medium Protein Foods," and the same with the heat and energy foods, and those supplying mineral salts and vitamins.

What the Government Does for the Home-Maker.

Few housekeepers realize what a wonderful service has been developed for their benefit through the home economics office of the States Relations Service. This office maintains a laboratory, and trained investigators, who are working out invaluable information in regard to the selection, preparation, and handling of foods. These data are published in bulletins, some of which are free for the asking, others may be had for five or ten cents. A collection of these pamphlets should form an important part of the kitchen library. Some of the most valuable and interesting bulletins will be discussed in this department, and directions given for obtaining them.

Economical Use of Fats.

The United States Relations Service has just issued a bulletin with the above title which contains much information and recipes of interest and value to housekeepers. The substitutes for butter are discussed, and suggestions given for their use. Recent investigations have shown that butter may contain diseaseproducing bacteria, hence the housewife should demand butter made from pasteurized cream, and properly handled and stored. The haphazard way in which many women buy butter really results not only in a poor grade being used in many homes, but also in discouraging the progressive and honest dealer, who complains that the average woman does not appreciate the difference between firstgrade and inferior products. The words 'made from pasteurized cream" should

be on the package and the buyer should also know that "renovated," or "process" butter is not fresh butter.

A copy of this bulletin may be obtained for five cents by addressing the "Superintendent of Documents, Government Printing Office, Washington, D. C." Ask for Bulletin No. 469, "Fats and Their Economical Use in the Home."

A Vegetable Bulletin.

In the spring the housewife's fancy should turn to thoughts of the succulent green vegetables which help to purify the blood after the heavy winter foods. And here the government has met her need with Bulletin No. 256, "Preparation of Vegetables For the Table."

This discusses the composition of vegetables with relation to their food value, and the principles underlying their preparation for the table, as well as type recipes, which have been carefully tested for cooking many vegetables. Do you eat and enjoy lentils, celeriac, kohl-rabi, Swiss chard, Brussels sprouts, artichokes, spinach, kale? Would you like to try fourteen new vegetable soups? And six six different salad dressings? Then add this bulletin to your kitchen library. Address "Division of Publications," U. S. Department of Agriculture, Washington, D. C.

Use Corn Meal.

Corn, like rice, has not soared in price, so the use of this highly nutritious cereal which under the names of "samp," "Indian meal," "hominy" served as the staple food of our New England ancestors, should be revived. The refined product on the market has been treated so as to lose much of the mineral matter, fats, and protein, and has not the high nutriment and characteristic flavor of the old-time meal. Fortunately a few firms are again putting the latter on the market. Give the children corn meal mush which has been well cooked. With milk or cream the proteins lacking in corn are supplied. Stories of its use by the little Puritan children will stimulate an interest in "hasty pudding."



A Clear View **Of All Outdoors**

-from the inside of your porch, parlor or bedroom-a clean sweep through the house of the balmy Spring or Summer breezesthese and many other advantages you enjoy when you have casement windows that are installed with



Windows so installed open outward, out of the way of screens, curtains, shades and furniture, folding together in pairs and each pair can be easily moved to either side of the opening. No mullions between them are required. The whole side of a living room or sleeping room may open in this way. With our up-sliding screen arrangement, you can easily operate these windows from inside of house.

When closed they're absolutely tight and stormproofthey never rattle or slam shut-they always work smoothly and noiselessly-can be easily cleaned from the inside of the house.

We make and sell only the patented hardware. You can use any style sash. The double-glazed sash has two panes with quarter inch dead air space between and keeps your home warmer than storm windows possibly could, besides keeping out the oppressive heat in summer.

Write for interesting portfolio of window ideas.

If East of Mississippi, address-If West of Mississippi, address-

Whitney Window Corporation, 311 Fifth Street South, MINNEAPOLIS, MINN.

> This shows sliding pivot hinge in position on top edge of sash. This shows sliding pivot hinge and water-proof metal track in position at bottom edge

sash.



H. E. Holbrook

Company,

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Have the Home Complete

F you are planning to build or expect to remodel your home give comfort and completeness first consideration by installing



There is no other device affording so much real comfort, convenience, economy and safety to the entire household.

Takes complete charge of the drafts and dampers of any style of heating plant-hot water, hot air, steam, vapor or vacuumburning coal or gas.

Its accurate automatic operation means even, healthful temperature at all hours of the day and night.

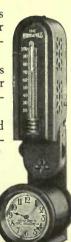
The clock attachment enables one to secure the higher or lower temperature of any exact degree at any set hour.

Has proven its merit in tens of thousands of homes for 32 years—a marvel of convenience.

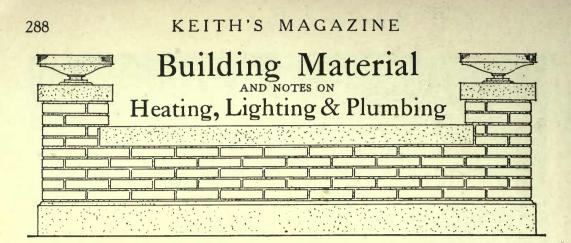
Sold, installed and guaranteed by the heating trade everywhere.

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Minneapolis Heat **Regulator** Co. Wm. R. Sweatt, President 2725 Fourth Avenue South Minneapolis, Minn.



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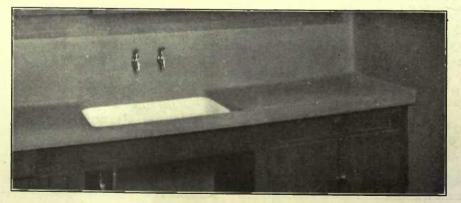


The Bungalow Sink and Kitchen Fittings

HE matter of the kitchen sink and its drain boards is one of great moment to the housekeeper. A material which is easy to keep in good condition is most desirable; one which is sanitary and hard, and yet on which dishes will not be easily broken, one which finishes in coves instead of angles, one which is durable and economical. On the Pacific coast a plastic material is largely in use which seems to fill these conditions in a satisfactory way. It has been used for twelve or fifteen years in California, and a very large number of the newer bungalows, small apartments and bungalow courts are finished in this way, as well as many of the large buildings and hotels, and its use is spreading to other parts of the country.

In its nature it is a composition material, possessing in a large degree the elasticity of wood, though non-porous, hard and smooth, as well as durable and sanitary. As it is fireproof it may be used on a range table, taking the place of a zinc covered shelf. It is applied in plastic form over wood, hollow tile, brick or cement foundations, usually being laid three-eighths of an inch to a half inch thick. When laid on wood it is reinforced with steel wire. When there appears any settlement or shrinkage of timbers the wire reinforcement tends to spread the tension thus caused so that it may be taken care of in the elasticity of the plastic material rather than allowing the material to give way in one place and form a crack.

Being laid in a plastic state it becomes one solid sheet, practically a seamless tile with a fine grained smooth surface. It is claimed to be impervious to heat, cold and



Sink drain-board and back all in one piece.

You'll Need No Bucket Brigade

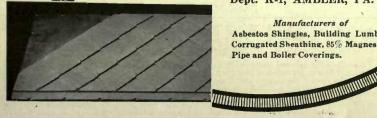
> to put out the fire on your roof-no matter how far you are from Fire Company or water connection-if your roof is covered with

AMBLER **Asbestos Shingles**

Nothing to Burn

because they can't burn. When you roof with them, you roof for your grandchildren. And you leave them a home that is free from all roofing troubles and all roofing expense so long as the house The first cost of an Ambler Asbestos Shingle roof is the stands. Ambler Asbestos Shingles are weather tight, wind and last cost. storm proof, as well as absolutely fireproof. Hold an Ambler Asbestos Shingle over a fierce flame-it will not burn, shrivel, crack or warp. Let us send you samples and interesting facts.

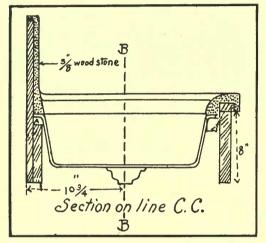
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Manufacturers of Asbestos Shingles, Building Lumber, Corrugated Sheathing, 85% Magnesia Pipe and Boiler Coverings.

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moisture. It is not slippery and has proved very satisfactory for floors. The kitchen and bathroom floors can be laid with a continuous cove at the angle with the wall and a base of the same material. It is claimed that owing to its great elasticity, it will outwear floors of the character of cement and marble; that for the same reason cracking or chipping does not occur nor does it disintegrate nor loosen from its foundation. It is said to outwear 8 or 10 applications of linoleum.



Section showing how material is joined to sink.

It can be laid on old wood floors which require renewing, thus rendering the floor fire proof and water proof. Owing to its elasticity it is pleasant under the feet and does not tire one unnecessarily, as do some very hard floors, and it is also dustless.

It is made largely into drain boards and sink back in one piece as shown in the cut. These may be 7, 8 or 10 feet in length. It is also used for stair treads and risers, wainscoting, table and counter tops, as well as in bath rooms.

It made in colors to harmonize with almost any decorative scheme, cream, buff, brown, in green and blue as well as gray and white.

Crayon Stenciling For The Bungalow.

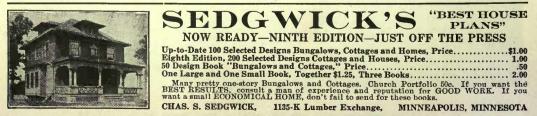
Announcement has been made of a new development in stenciling by which crayons are used instead of paints or dyes. The crayon gives the soft, iridescent appearance of block printing, but the work does not require the care of manipulation that block printing demands. Stenciling with crayon can be done rapidly. It is especially well suited to wall decoration, ornamenting of screens and the stenciling of pale colored fabrics.

Crayons can be used on stencils made of thin material. Old holland shades may be utilized for making the stencils for crayons. If they were used for paint or dye, they would become limp after the first application of color; the advantage of using such a material as holland, or wrapping paper, is that the stencil may be cut with sharp, pointed scissors, instead of with a knife, which simplifies the cutting.

Crayons must be chosen that have little wax in their make-up. It is best to experiment with one color of the best makes. In this way the worker will be able to find which is the best before she lays in a stock of colors.

When stenciling a fabric, put the material on a drawing-board and place the stencil over it, holding it in place with thumb-tacks; then take the smallest size crayon and outline all the spaces, holding the crayon upright. The stencil may then be removed and the side of the crayon may be utilized for filling in the pattern.

When the stenciling is finished, it must be pressed with a very hot iron. This causes the color to sink into the threads and makes it soft and hazy in appearance. When stenciling on paper, ironing may be done, if it is stenciled before being put in place; but, of course, when it is done on the wall, the pressing has to be omitted. The iron must not be pushed on the fabric, but held over the color and lifted again in order to press the rest of the pattern.



KEITH'S MAGAZINE Eleven Rooms Heated for \$35

It tells its own eloquent story of guaranteed saving Just read the following letter. and comfort with a Williamson UNDERFEED. Then remember, there are over forty thousand other Williamson UNDERFEED users enjoying this same economy and heating efficiency. Here's the letter:

The UNDERFEED is built on the right principle for obtaining all of the heat from the coal. The cost of heating my residence, consisting of eleven rooms, three stories high, for the past three years has been only a trifle more than the ice bill of the summer, the average for that period being less than thirty-five dotlars a season." (Signed) Clay H. Alexander, Counsellor at Law, Kansas City, Mo.

And, what is more, the Williamson UNDERFEED means less work. No stooping. A few easy strokes of a lever from a standing position replenishes the fuel supply. Easy to operate when the man of the house is away.

Furnaces III IAMSON (INDERFEED Boilers Cut Coal Bills 1/2 to 2/3 Guaranteed

The UNDERFEED effects a first great saving by burning the cheaper grades of coal as effectively as others burn the costlier grades.

Because of the scientific principle of combustion, as explained to the right, there are no clinkers, no partly burned coals. Gas, smoke or soot-valuable heat elements-are consumed as they pass up through the fire. Ashes clean and white.

Money-Saving Book Free

It is called "From Overfed to UNDERFEED" and pictures and de-scribes the scientific UNDERFEED principle. Send for this book now, it will save you good money some time, whether you heat with warm air, hot water, steam or vapor—a saving of ½ to ½ in coal cost— guaranteed with the UNDERFEED. Send coupon NOW—no cost— no oblication. no obligation.

THE WILLIAMSON HEATER CO. CINCINNATI, O. **46 Fifth Avenue**

Cut-out view shows how the UNDERFEED burns coal on the candle principle. Fresh coal is fed from below. Clean, hot fire always on top in di-rect contact with most effec-tive radiating surfaces. Fire never choked or smothered. All heat utilized instead of disappearing up the chimney in the form of smoke, gas and soot. soot.

The Williamson Heater Co.

Name_

Address_

46 Fifth Ave., Cinclnnati, O. Tell me how to cut my coal bills from ½ to % with a Williamson UNDERFEED. Warm Air..... Steam or Hot Water...... (Mark X after System interested in)

My Heating Contractor's Name is.....

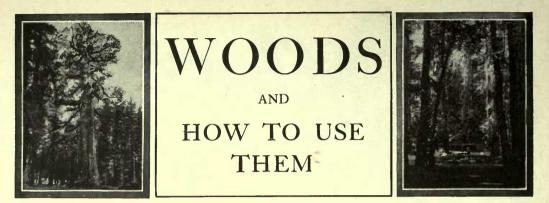
Another Guaranteed

Inderfeed



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EDITOR'S NOTE. —When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts. This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords. The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

New Hardwoods for the Bungalow Finish



ITH the opening of the forests of the Orient, and the farther reaches of Mexico and Central America, a wider range of hard-

woods and of interior finish is placed before the home builder. Many millions of feet of hardwood logs are annually imported from Japan, Central and South America, Mexico, the Philippines and the South Sea Islands, and manufactured into many varieties of lumber and veneers.

Even among woods of the same species there is the greatest distinction in figure, texture, color and quality between woods of the same species obtained from different parts of the world. The Oak of Japan, for instance, has a greater uniformity of color and a distinctive "figure." It has a "flaked" appearance in the grain due to the cutting of the medullary ray which is quite different from the American wood. The Japanese oak is close grained but soft. For this reason it is easy to work in the mill. It may be cut and selected to give a large or showy figure if desirable but the present demand is for the fine grain with a tiny characteristic flake. Most of the Oak exported by Japan comes from the great forests of the Hokkaido, in the northermost part of the Empire. The winters here are very cold, for the hard-

iest, finest specimens of the Oak are native only in regions of rigorous temperature.

Here the Oaks, unmolested by man for many centuries, have grown to their mightiest stature and most rugged strength, favored by both climate and the firm rocky soil of the country. The wood of these Oaks is the delight of every hardwood craftsman, as it is uniform in texture as well as color, and easily worked. It is susceptible to a high polish, and where a fumed finish is desired, is unexcelled.

Up to 1907, very little Japanese Oak was exported, and the vast forest reserves of the country were jealously husbanded. Since that time a new policy seems to have prevailed, and now millions of feet of logs go out in all directions every year. But Japan has enough timber to supply the world for many years to come, even continuing the present rapid pace.

The logs, which come from Japan, principally oak and birch, are from the Island of Hokkaido, where the people and vil-lages are still very primitive in appearance, and form a quaintly picturesque setting for the gigantic logging operations that are carried on there. Customs and



PAINT is a mixture of a pigment and a vehicle. The pigment is the solid part of paint. The vehicle is the liquid that binds the fine particles of pigments together.

Pure white-lead, as the pigment, and pure linseed oil, as the vehicle, yield the paint par excellence. Spread out in thin layers, it dries solid and protects the surface to which it clings.

The white-lead to use in paint for your property is

Dutch Boy White-Lead

Mixed with pure linseed oil Dutch Boy white-lead makes the substan-

tial, the economical, the lasting paint,—the kind that sticks unbroken through all extremes of weather. No blotches, no scraping or burning off when you want to repaint.

On inside walls and woodwork Dutch Boy white-lead mixed with turpentine makes possible in any home the soft, rich, velvety—and yet washable—finishes which give such a charming background to your furniture, draperies and pictures.

For valuable information on painting ask us for Paint Points No. K. E.

NATIONAL LEAD COMPANY



New YorkBostonCincinnatiBuffaloChicagoSan FranciscoClevelandSt. Louis(John T. Lewis & Bros. Co., Philadelphia)
(National Lead & Oil Co., Pittsburgh)

Dutch Boy Red-Lead

293

In paste form, for use on all metal work will save many times its cost by preventing rust. Simply stir in linseed oil and use like white-lead paint. costumes of a century ago are still in vogue.

The logging operations, carried on in the winter when the snow lies deep on the ground, are generally conducted in a more or less primitive manner, the work being done largely by man-power.

After the great trees have been felled in the forests of the Hokkaido, and sawn into convenient lengths the logs are drawn on sledges or rafted down the streams. The logs are squared, never reaching this country in the round.

Arrived at the mill it is fascinating to watch one of these great logs in its journey through the mill.

As the first slash is taken from its rough hewn side, the man at the saw must instantly appraise the character of the wood, and decide its destiny, whether its final end is to be in quarter-sawn lumber and veneer, for furniture and cabinet work, or in the sturdier forms of flooring, plain Oak lumber, or timbers for oil-well rigs and car building.

Often the slash of the saw exposes to view a figure, color and texture of rare beauty, in which case the log is promptly quarter-sawn into lumber, or "flitched" and sent to the veneer mill, later to embellish the top of some costly table, the panel of a door, or the case of a piano.

The veneer mill is an especially interesting part of the plant. This is where the highest degree of operative skill is required. Extreme care and an ever watchful eye are essential here to guide the "flitch" safely through the mill without the variation of a hair's breadth in the thickness of the cut. Perfectly manufactured veneer is the delight of the cabinet man and manufacturer, as upon this accuracy of manufacture depends the amount of effort that must subsequently be expended in applying the veneer.

In addition to Oak, Japan also supplies Birch, Ash and Poplar in large quantities. The Birch is a rich red in color, with very little "sap" or white, and the logs are of such size as to produce exceptional widths when manufactured into lumber, which is a particularly desirable feature.

Mahogany from the Philippines, from Mexico and from Central and South America, Rosewood from the tropics and Circassian Walnut from Russia, added to the long list of woods from our own forests, gives a wide variety of woods from which to choose the finish for the American home.





"Try it before you buy it" Saves the heat lost up the flue with other make dampers. Write for Circular

Our catalogue "N" shows a full line of Fireplace Fixtures.

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SLIDETITE Garage Door Equipment

A Unit of the Famous R-W Line

Provides doorway equipment which operates conveniently in a small space and adds to the attractiveness of the garage. Doors fold and slide back inside the building out of the way. Can't sag. Weather-tight. Keep out meddlers. Equipment accommodates 3, 4, 5 or 6 doors in an ordinary opening, to suit conditions.

Patented.

North Carolina Pine

For public garages, equipped with electric opener and closer manipulated by push buttons from any place in the garage.

> Complete book of information and name of dealer cheerfully furnished.

Write today and we'll mail them tomorrow.



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Richards-Wilcox Canadian Co. Ltd. London Ont.

F interested in home-building, you should have our two books-one containing exteriors and floor plans, the other showing interiors in which wood has been used extensively.

Solving the Question of High **Building Costs**

Of the really first-class woods, one of the less expensive is North Carolina Pine. Moreover, it has great natural beauty which can be still further enhanced by stains and enamels. It is the one best solution to the high cost of building.

Ask for the books by name-Home-Builders' Book and Book of Interiors. Either or both on request.

North Carolina Pine Association 102 Bank of Commerce Bldg. Norfolk, Va.

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ST.LOUIS

The Publisher of Keith's Magazine backs up its advertisers.

THE ARCHITECT'S CORNER

What Is YOUR Building Problem?

Put Your Home-Building Problems Up to Us, and We Will Give Them Careful Study and Reply Either Through These Columns Or by Mail When Stamp Is Enclosed.

A Square Stucco House.

F. W. P.—I wish to ask you if the square type of house would look well in stucco. The roof, of course, will be square too. Should you advise a slate roof with stucco? My husband does not care for the ordinary shingle roof compared with slate.

We do not intend to have an attic, and I would like to know if this will make the second floor hot in summer.

Is it necessary to have cellar under a built-on pantry?

I would like also to know if sliding doors are still popular. I'm having French doors between dining room and living room, and would like to have an opening between living room and reception hall also, and thought a single sliding door sufficient.

I am having an upstairs porch (without roof) built over pantry and back porch, and would like to know what the floor of this porch should be made of.

Ans.—A square or oblong type of house with a stucco treatment is not uncommon and may be very good if the design is well handled. With these simple lines of the house, you should give a strong accent to the important feature. The roof of a house is the most important feature after the main lines of the walls have been decided upon. One should feel that importance in looking at the house. Slate makes a good roof, also asbestos shingles.

You do not intend to have an attic you say; then give your roof a low pitch and a wide projection to the eaves, three of even four feet. Be sure to give it a rigid support so the corners will not sag This will cast a strong shadow line and give interest to the house. Insulate the roof thoroughly with some good building quilt, as Cabot's Flaxlinum or Linofelt, preferably a half inch thick. This should be placed over or between the rafters, but do not allow it to get wet before the roof is completed. Put a louvre some place in the roof or build the chimney large enough to enclose it. This with registers in the ceiling of second story, will give a circulation of air. The insulation keeps the attic space from getting so heated and prevents quick changes of either heat or cold.

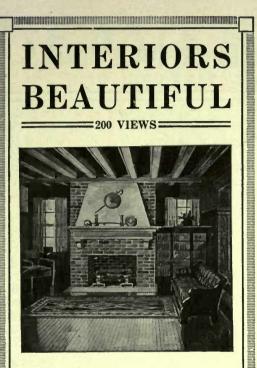
The windows are the next important feature of the house. If they are grouped together they are very effective on the inside and do not give a spotty appearance to the outside.

Any part of the house which does not have cellar under, as you suggest with the pantry, must be very thoroughly insulated to prevent the wind and cold driving through, under or around the projection.

Sliding doors are always liked by people who wish a certain amount of seclusion in their homes without having doors swinging in the way. We should advise the sliding door you suggest. A sliding door always requires a partition thick enough to allow the door to slide between the studding.

For the floors of an enclosed porch, a cork tile might be recommended but for an open balcony where you do not want to use tin or a patent roofing, a heavy canvas laid in white lead and painted, makes a very good covering or you can get a roofing canvas especially prepared for the purpose.

.



IN planning the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

Fourth revised edition, just off the press, is beautifully printed on enameled paper and has embossed paper cover. 112 pages. Size $7\frac{1}{2} \times 10$.

Contents:

Halls and Stairways, Living Rooms, Dining Rooms, Sleeping Rooms, Dens and Fireplaces, Billiard Rooms, Kitchens, Outdoor Living Rooms and Garden Rooms.

Price, \$1.00; postage, 8c.

With a Year's Subscription to Keith's Magazine-\$2.50

M. L. KEITH 828 McKnight Bldg., Minneapolis, Minn.





Boston Chicago New York Kansas City Jersey City Minneapolis Lowe Brothers, Ltd., Toronto, Canada

Made in U. S. A. Spells National Prosperity.

SPLINTERS AND SHAVINGS

Conserve Daylight, Is Ambitious Plan.



MOVEMENT to put forward the clocks of this country one hour in summer, to conserve daylight for the ordinary activities of life, is

being pressed by many influential persons and organizations.

Some of the advantages named for the proposed conservation of daylight are: It will substitute a cool morning working hour in summer for a warm afternoon hour; increased daylight in hours of fatigue will tend to lessen tuberculosis and will reduce eye strain; it will increase personal efficiency and decrease the number of industrial accidents.

Why not make the clocks accommodate mankind? Why arbitrarily work a disagreeable hour when it is possible to choose another hour that is more agreeable? The proposed change is working well in Europe. It might be even more effective in this country.

Good Roads and Fire Protection.

A new argument for good roads was recently furnished by a severe fire at Jersey Shore, Pa. This fire threatened to burn up the business section of the town, for the local waterworks furnished water under a pressure inadequate to fight a real conflagration. The town's fire department, supplemented by companies from neighboring towns, could do little because of this low pressure. Help was summoned from the city of Williamsport, sixteen miles distant, and in thirty-eight minutes after the call was received a large automobile engine from that place had reached the scene and its powerful pumps saved the town. In the old days of horsedrawn equipment, it would have been necessary to take the engine to the railroad yard, load it on a car, hunt up a locomotive, make the run over the railroad as well as the train service would permit, and then unload the equipment at the place needing help. All this might possibly be done in thirty-eight minutes, but there is very little probability of it. Un-

der the new conditions, a road may be the means of saving a burning town; if bad, it delays the needed help, and if good it means safety. In the Pennsylvania case, the road was not a good one, but it was not a bad one, either. About half a mile has been improved, but the remainder is nothing but a hard shale road, kept in as good condition as possible with the materials at hand. This maintenance of the road is what saved Jersey Shore from greater loss, for persons familiar with firefighting agree that every minute saved in checking the spread of a conflagration is equivalent to the saving of a large financial loss.

It's You.

- Whether the day gets started gray.
- Or leaps to a beaming hue,
- The tale that it writes as it joins the nights
 - Depends altogether on you.
- You can make it go with a face aglow Into the dark beyond;
- You can make it crawl thru the gathering pall

Like a hopeless vagabond.

Whatever it shows when the shadows close

And it waves its last adieu,

Isn't luck or chance—isn't circumstance— It's you, you, you.

Birthplace Of Pottery In America.

Perth Amboy, or South Amboy, just across the river from Perth Amboy, is supposed to have been the place where New Jersey's pottery industry had its origin more than a century and a half ago. Now the locality has three potteries, whose output brings Middlesex County up to second in the state. Mercer County in which Trenton is located is first. Other burned clay materials constitute a larger portion of the output in and about Perth Amboy now. Architectural terra cotta and fireproofing are very important. The men engaged in these enterprises are live wires and allow nothing to be left undone which will improve their industry

BEAVER BOARD FOR BETTER WALLS & CEILINGS

The Room You've Always Wanted

If you only knew how easy it would be!

To turn that old room with its dingy walls and ceilings and cracked plaster into the kind of room you have dreamed about!

No tearing down of plaster with all the attendant muss and litter, when you remodel with Beaver Board! No wasted time waiting for plaster to dry. For Beaver Board goes right on over the old walls and is ready to decorate the moment it's applied.

Beaver Board contains nothing but pure wood-fibre, fresh from the spruce forests. It is built up into large panels of manufactured lumber, knotless, crackless, and without a blemish. Protected against moisture, front and back, by patent Sealtite sizing process.

Send for booklet-"Beaver Board and Its Uses."

THE BEAVER BOARD COMPANIES 146 Beaver Road Buffalo, N. Y.

Canada: 346 Wall St., Beaverdale, Ottawa, England: 4 Southampton Row, London, Australia: Builders' Exchange, Sydney, N. S. W. United States Branches at Boston, New York, Baltimore, Cleveland, Detroit, Chicago, Minneapolis, Kansas City and San Francisco.

Manufacturers also of Beaver Greenboard, Beaver Blackboard and Beaverbilt Utilities



Od a barbinster



You can't expect Benver Boardresults unless this trademark is on the back of the board you bny.

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Advertisers in Keith's Magasine are reliable.

Loss of "Red Tape."

The present attitude of the British government seems to be eliminating formalities. An English paper has this notice printed in large type on its cover: "When done with, this copy may be handed over the counter of any post office—no packing, address or postage being necessary. It will then be sent either to our brave sailors or to soldiers at the front."

Capacity never lacks opportunity.

In five cases out of ten, my brethren, what is called genius is just common sense.

The Community Spirit.

While the community idea in this country should not exactly be called a negative expression, its development to date hardly warrants terming it a positive en-The Garden City and Town terprise. Planning Movement has reached the highest point of effectiveness in England and has proved something more than a successful experiment. The model villages of Letchworth, Port Sunlight, Bournville, which provide homes, real homes for working people, are artistic creations of men possessed of splendid imagination and sympathetic understanding. Add to these, Hempstead Garden Suburbs, Fallings Park Garden Suburbs, the Garden Village near Cardiff, with their picturesque winding roads and vine-covered dwellings, and one may look in vain for their counterparts in America. They are nothing less than fairy-garden spots.

The difference between the Garden City and the Garden Suburb is that the first is a separate entity, a self-sustaining unit; the latter lies on the outskirts of large cities and becomes a part thereof.

There is no distinct and overwhelming element of philanthropy as a basis for the creation of these Model Towns. They are paying investments from the practical point of view. The plan has been for a number of manufacturers to co-operate in the founding and building of a Garden City, and these promoters have realized a fair profit from rentals. The enterprises have been divorced from the idea of charity as they have from the taint of paternalism, the rock on which certain developments in this country have come to grief.

The time has never been more opportune for American manufacturers to give serious thought to the furthering of the Garden City movement. The congestion in our large cities, contrary to all natural laws, has about reached its limit. We can no longer excuse ourselves for past errors in town planning on the theory that this is a young country. New towns are being laid out today with the same pitiful lack of constructive imagination as heretofore; paralleled streets giving the aspect of a great ugly checkerboard; no civic centers, no playgrounds, insufficient parks.

The Garden Cities that are destined to bloom in America and that are to be the result of a movement fathered by American industrial institutions should be lacking in no respect and should be equal, if not superior, to any like developments anywhere in the world.

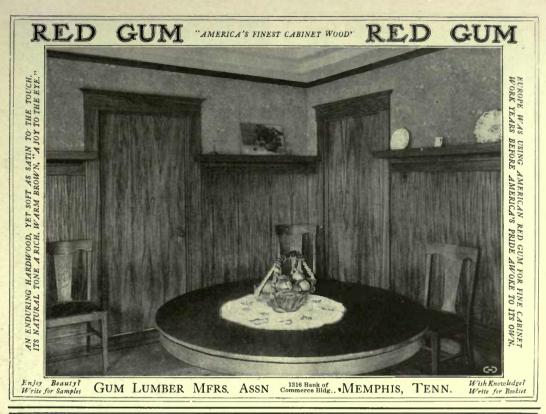
W. J. Hoggson.

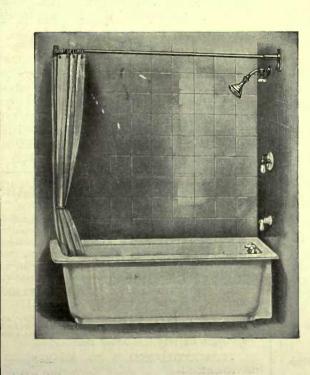
American-Made Mastic Taking Place of Imported Product.

"On account of the war" has become a household phrase in America. It is used to explain advances in the prices of commodities as well as our inability to get certain things at any price.

But it is an ill wind that blows nobody good, and one advantage of the situation has been the development of a number of industries that will hereafter be independent of foreign sources of supply. We have also found that custom or habit, rather than economic necessity, has been responsible for considerable foreign trade.

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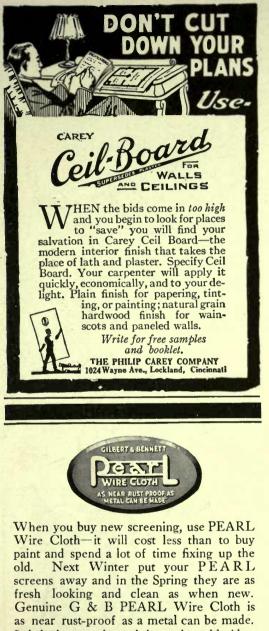
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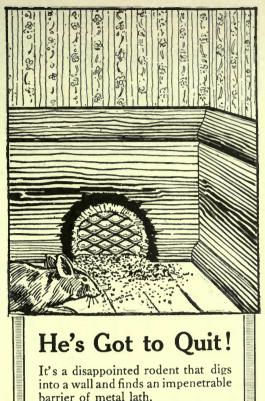


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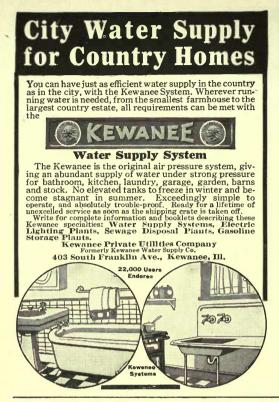
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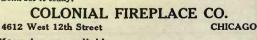
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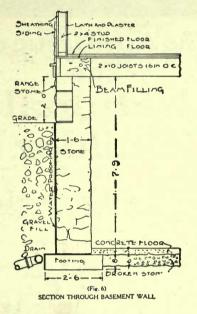
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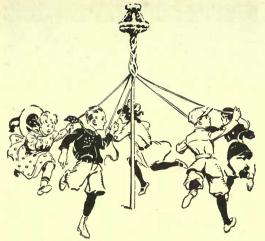
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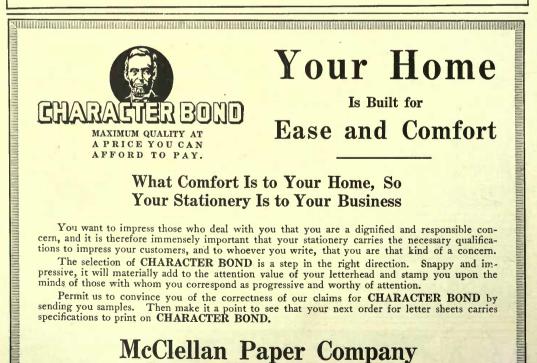
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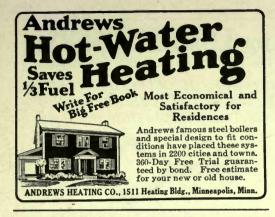
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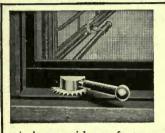


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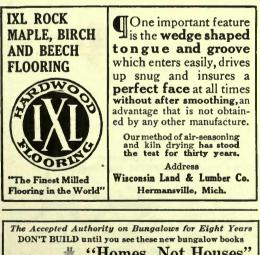


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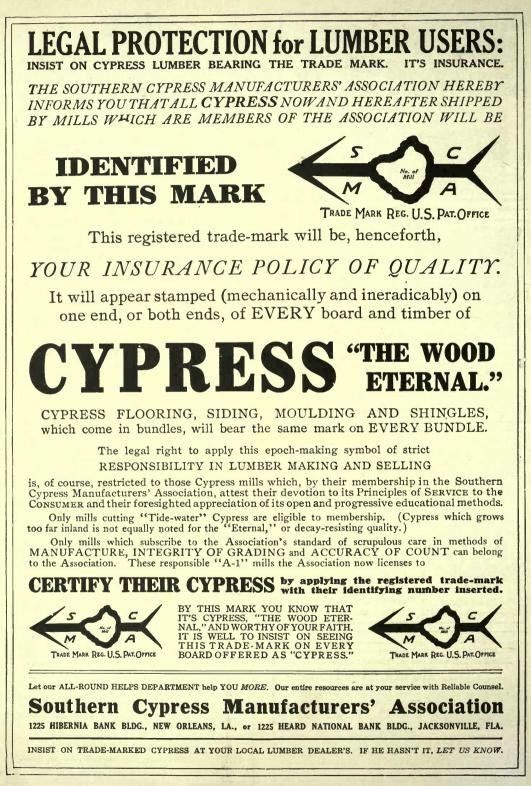
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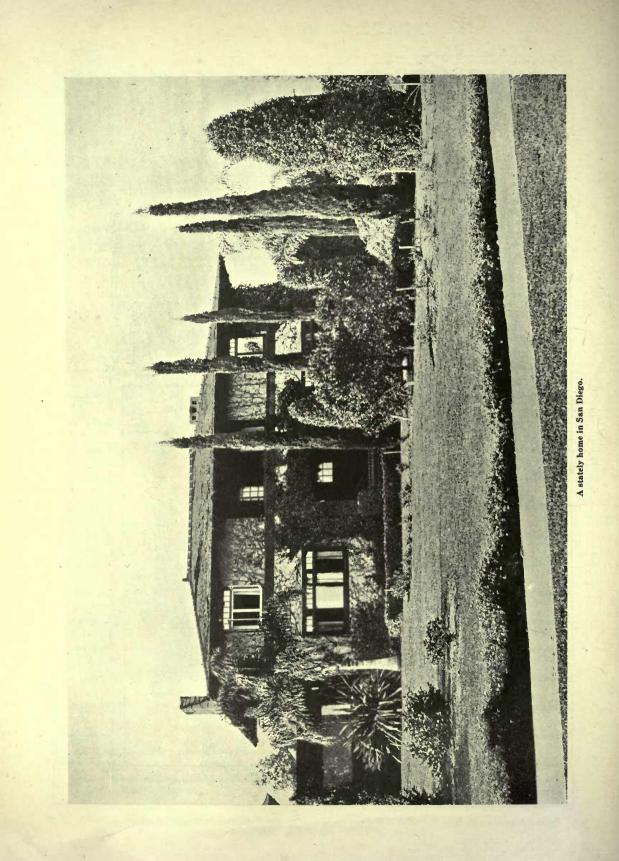


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VOL. XXXVII

MAY, 1917

No. 5

Homes They Build in San Diego

Henry K. Pierson



A modern apartment house in San Diego.

HEN Father Marcos, 400 years ago, first sailed into the Bay he called San Diego—and when 250 years later Father Junipero Serra

began there his noble mission work among the Indians—they little dreamed of the beautiful city that now lies along the slopes and hillside canyons that fringe the lovely bay.

A modern and sophisticated city of 65,000 people, it yet has the charm of an almost foreign atmosphere, partly from its mixed ancestry of Spanish, Mexican and Indian forbears and partly because its wonderfully picturesque and romantic setting has been made the keynote of its landscaping and architecture.

Artists have seized with avidity upon its hills and canyons to create romantic environments.

One is captivated by the framing of the picture—by the brown and purple mountains circling round, by white-walled Coronado across the blue bay in the distance, by the flower-carpeted Mesas, and the rugged rifts of the canyons.

A veil of romance hangs over all of California, but here in San Diego one quite falls to it.

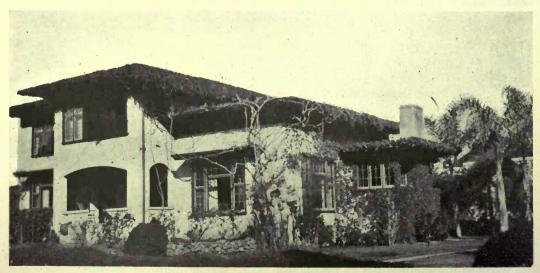
Everyone now is familiar with the



A Spanish bungalow on a San Diego corner.

Dream City of the San Diego Exposition, its architectural loveliness and perfect setting. But the private homes of this fair city offer a field of wide interest. We present a few of these, as seen in a day's ramble.

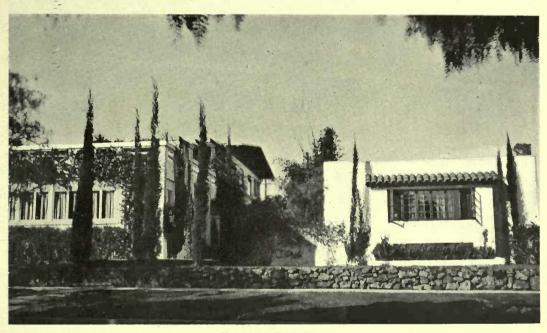
Surely one would imagine this modern apartment house—with its battlements and embrasured openings, its arches and court, its severity of wall and outline, to be some Spanish castle, set among the rugged hills of Old Granada. But it is only a very up-to-date apartment house, near the Park, and we see only half of it. Each apartments rents for \$85.00 a month, unfurnished, which is certainly prosaic enough to quite take the romance out of it.



With square Spanish openings and a terraced roof.

Naturally the Spanish type is a favored one in the architecture of this section, for all the contour of the country is so strongly reminiscent of Spain.

San Diego, in its "lap of hills" for background—its precipitous canyons, bare and rugged, but betwen them green vegas or plains covered with smiling orange groves and gardens—all these irresistably suggest the white pavilions which gleam from among the trees, the veniences within, nor the rent of \$150.00 a month, furnished, which the owner received while traveling abroad. The view is from the side of the house and the large center arch of the front part is a deeply recessed window with English ivy running around the inside of the recess and framing the window. The arches flanking this on each side are separate entrances. An interesting feature is the treatment of the garage which does not



Homes of father and son.

square towers and flat roofs, the long arcades, the embowered terraces and Moorish Courts of old Spain. The local architects have been quick to seize upon these romantic motifs and to adapt them to American ideas of comfort and practicability.

Take for instance, this charming Spanish bungalow, with its flat, sunny roofs, its arched openings with narrow iron balconies beneath, the tall feathery palms casting delicate shadows on the white plaster walls—all this is Spain. But not the velvet of the perfectly kept lawn, the cement drives and walks, the modern conappear in the picture. It is set at the far end of the wide cement drive, which on one side is close to the house, a 2-foot projection of the house wall even extending over on the drive—the lot line on the other side separated from the adjoining property by a high 8-foot cement wall overhung with masses of ivy.

Adjoining this home on the left is shown a quite different type, with the more severe but more truly Spanish square openings and the roof in a succession of broken terraces. The black and white of the photograph only faintly conveys the charm of this home—from the

cornices of each roof terrace, hang like a fringe the foliage of the begnonia vine with its deep green and orange colored blossoms. The vines are kept trimmed to a length of about 2 feet so as to produce the fringed effect. An unusual arrangement of the sun room forms a projection in front with chimney carried through its roof—the whole thing a mass of clipped ivy trained so as not to obscure the windows. light fixtures each side are of pierced copper, blending with the redwood trim.

The approach to this entrance is a walk of smooth bright red brick, bordered by a close-cropped, low edging of pale, sage green Santaluma, a species of ornamental sage—the combination forming a fascinating color note. All the way up the walk stand tall, slender cypresses, the type of the Italian and Spanish garden, so in keeping with this architecture. The



A pinkish red brick, with a quality of charm all its own.

On the wide lot adjoining, a father and son have built most artistic homes, each different, but a gem of its kind. There is a space of 30 feet between the houses most charmingly treated, but so deeply in shadow as to fail of reproduction in the picture. The garage is at the rear of this space.

The entrance to the larger house, which rises to two-story height in the rear, is on the side and is very beautiful. It is wide and deeply recessed with great doors of natural redwood. Within this embrasure, on each side the doors stand the slimmest of tall young cypress trees, and lacy vines cover the walls. The electric sun parlor is projected nearly across the entire front and circled with vines. From its roof, through glass doors, open all the upper rooms, and set about are lounging chairs and great tubs of growing plants.

The interior of this lovely home is full of charm. The finish throughout is of California redwood, untreated in any way. Its soft velvety brown duskiness is guiltless of all stain or varnish, yet in that climate it is perfectly preserved. The housewife does have to use care to avoid spotting with water. It is said that passing a hot flat iron over the boards will prevent this, but I do not vouch for it.

All the rooms of the lower floor open



A San Diego bungalow of conventional type.

through double glass doors on an inner court or quadrangle, which is filled with choice and curious plants.

The smaller house is full of charm. Its pure white plaster walls are surmounted by a roof of red.

The low projection in front is flanked on either side by the slim, tall cypresses that stand in the angles, in delicate relief against the white walls. A low cement wall extends out on one side, crowned by rose vines from whose top pink roses nod. Against the white wall of the main house a group of tall papyrus plumes spread their feathery foliage.

The garden wall in front of the property is laid up in the "hard-pan" of this section. Much of the soil is so hard that basements have to be blasted out with dynamite. It is broken up into chunks and used as stone.

The stately home shown in the frontispiece is on this same street—a charming cul-de-sac which terminates in Balboa Park. The upper wall only is of plaster and the roof of brown shingle. The lacy vines of the *ficus ripans* on the walls, the latticed casements, and the stately approach bordered by the tall cypresses alternated by wonderful foreign trees are striking features.

The last of this series of homes, though in the same location and environment, is of a totally different type. It has, however, a quality of strength and unusualness not without charm. Its very severity gives it interest. It is new and lacks the softening effect that foliage and vine will give it. When the lacy ficus ripans covers the inside of the wide entrance arch so deeply recessed, and when the white frames of the quaint, short casement windows under the roof eaves swing out between roses and jessamine, this house will have a distinction all its own. A broad drive sweeps round in front and encloses a wonderful garden filled with the yellow glory of many varieties of acacia trees in full bloom.

The regulation bungalow, of wood, and cobble with ruberoid roof, prevails throughout California, and San Diego is no exception. We show an attractive example, which should be included in any category of the homes they build in San Diego.

The Spirit of the Bungalow

Katherine Keene

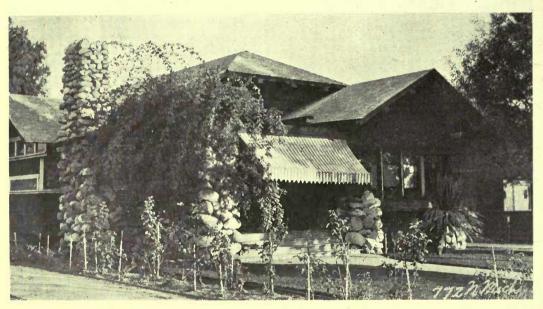


ERHAPS no word in the language, certainly no word in the builder's vocabulary, has been so

severely overworked as the word

"bungalow." The word, as well as the attractive type of home for which it what its size or style, for her built-in conveniences, possibly for her sleeping porches and sun rooms, which the bungalow has tended to popularize if it did not originate.

The bungalow has an individuality all



Boulders are the effective ally of the bungalow.

stands, swept the country, in its early days, like wildfire. It was the reaction from the big two or three-story rambling house. To the housekeeper it meant relief from the burdensome care of many rooms and long passageways, and it meant the saving of many steps and much climbing. To the householder it meant reduced expenses in upkeep and to both it meant relief in the servant question. In effect it has revolutionized the entire building thought of the country. It is the spirit of the bungalow which the housekeeper of today has to thank for her compact, convenient house, no matter its own which associates it and makes it stand for a home rather than just a house. Even the commercialism of the real estate investor, who builds one or many bungalows, for sale or rent, does not altogether rob it of the home feeling. An empty bungalow is never quite so depressing as a big, empty house.

The early type of bungalow made a feature of its seeming crudeness in construction; the exterior was made rough and stained, in mute protest against the elaborate or near-gingerbread finish and shiny paint so commonly used at that time. It has developed through many



Cobble-stone corners with clinker brick.

phases since then and the builder of the first bungalow would scarcely recognize the original bungalow idea in its present dress. But the spirit of the bungalow pervades the modern Colonial bungalow in its coat of white, with its delicate Colonial moldings, as much as it does the so-called Mission type.

Through its whole development the cobblestone, and more especially the boulder, has been a most effective ally of the "bungalow" builder. A good piece of boulder work is always a thing of beauty in itself, whether it is a wall, a chimney, or piers and buttresses about a porch.

The boulder work shown in the photograph is very interestingly laid, as one sees it through and beyond the vines. These are not cobblestones, but **real** boulders, many of them large enough to be split and laid into a regular stone wall. Stone masons tell us that no wall



The chalet type is very popular.



Stucco bungalow with low-pitched tile roof.

is so hard to lay as one composed of stones of a rough or irregular size, where a stable bed must be found for each individual stone, and one where its weight will not put a pressure on its neighbors, tending to push them out of their places in the wall. With boulders, this is often a difficult task and herein is often found the expense of boulder work. At the same time, no treatment is more effective, and even a small piece of boulder work is the salvation of what otherwise would be commonplace.

Cobblestones and boulders with clinker brick is a favorite California treatment, which has been accepted elsewhere and is always effective. Boulders used for the corners of piers and chimney with clinker brick filled in between is a very logical use of both materials and is very pleasing as well.

The chalet type of bungalow is very



A charming flat-roofed bungalow.

popular, and justly so. It is attractive and very livable. It allows more room on the second floor than the earlier type of bungalow, without losing the low effectiveness, and low porch eaves, which is one of the charms of the bungalow. Oftentimes there is only a single room or sun porch on the upper floor, with the whole space opening to the sun and breeze.

The stucco bungalow, with or without a cornice and with a flat roof, or with a and its stucco surface has attracted the vines which have also attached themselves to the surface of its sturdy stucco pergola posts. The roses clamber up their sides to make a bower over the rafters, projecting pergola-wise under the eaves. Certainly nothing could be simpler or more charming than this flat-roofed stucco bungalow.

Not all bungalows are compact, however. In milder climates where a base-

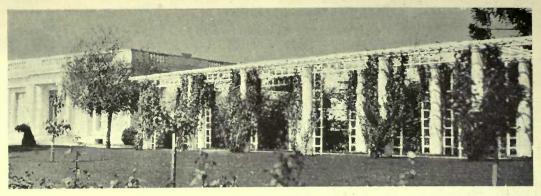


A bungalow in the foothills.

very low-pitched tile or other roof visible, are types which are greatly favored all over the country. In the photograph shown, the center portion is raised with an interesting effect, above the low wings at either side, forming an entrance court, which has been given a pergola treatment. The vines have only started their tracery over the stucco, to which each year will add beauty. The space under the main eaves will be wonderfully effective when it has acquired a frieze of these dainty vines.

The bungalow which hugs the ground has its own charm. The one shown is raised only two steps above the lawn, ment and a warm construction is not necessary, a bungalow may ramble over a considerable area. As one architect expressed it, you put the rooms wherever you want them for the view, or the shade of the trees, or the location generally, and then connect them. That would not mean a long distance between the kitchen and dining room, for each group of rooms is made as compact as possible.

This freedom of treatment is especially charming among the foothills, where the mountains give a background, and the hillside gardens give full latitude for the individuality of the owner where he may cultivate his pet hobbies.



A delectable garden.

Living Out of Doors

ITH the lure of spring in the air and all-out-doors inviting and urging one away from the shutin places of the winter work and

play, the thought of living out of doors as much as possible during the warm season impells one to plan for such living.

Long walks and drives into the country and through the woods are delightful, but for the busy man and woman they must be planned in advance and fitted to the weather man's schedule as well, and many fine trips do not materialize. It is only where one can slip out of doors at any convenient moment into a restful satisfying nook that one can have any sense of living out of doors. There may be only chairs and a table under a spreading tree,



Where one can slip out of doors.

or it may be a delectable summer house in a garden; it does not require a great deal to give one a sense of comfort and satisfaction with the breath of spring in one's face.

The sleeping porch has done much for us, and the sun room has brought summer brightness into the winter, but in order to have out of door comfort during the warm season it is wise to plan for it in the spring, and to carry the plans from season to season. This may be done in a very simple way and may be elaborated to any extent. Trees or vines give the shade, and seats, a hammock, perhaps chairs and a table provide for one's comfort. In a garden or on a spacious lawn the summer house may be easily provided

for, but with the small lot it is an even greater necessity.

Here are some suggestions which have been carried out with satisfaction, and which fit into usual conditions. These photographs have been taken before the vines have covered the construction so that it is easy to see how they have been built.

The umbrella frame has been built around an old tree which had to be cut, and the rustic seat placed around the base. The umbrella

frame can be either solidly covered or latticed over to make a frame for vines. It can be wide spreading or compact, in the open or under the trees as circumstances may dictate. A place for books may be made in the trunk of the tree, especially if it happens to be hollow, or a little cabinet can be built in it. It is the individual application of any idea which gives its greatest charm.

The pergola covered seat shown may be built either of cement or of wood. The columns may be mill made; they may be rustic posts, or they may be cement or stucco piers. The rafter ends may be elaborately cut or they may be simply rustic poles. The chief requirement is a support for the vines which shall shade and seclude the seat before the heat of summer comes. Quick growing vines will give protection the first season, and may be used until the slower growing vines which have been selected for beauty of blossom or for their winter appearance have attained sufficient growth. A variety of vines growing together when so much space is to be covered often gives the effectiveness of each.

The placing of such a rest-spot is of the utmost importance as, when it is vine

covered, it essentially closes a vista and should be placed both with reference to its part in the picture framed by the house openings as it is seen from the living rooms of the house, and also as to its own outlook. It will naturally become a focal center of the garden and its possibilities are only limited by the resources and individuality of the owner.



Around the old tree trunk.

While the home is the necessity of the owner, the garden and out-door spaces are his diversion. Here his own individuality has full play and he may make the most of the resources which surround him. If he has access to the woods he may bring in and plant in his garden all manner of wild things, and he may utilize unusual growths for rustic seats, fences or for the pergola.



How the pergola framework is built.

The Lure of the Loom



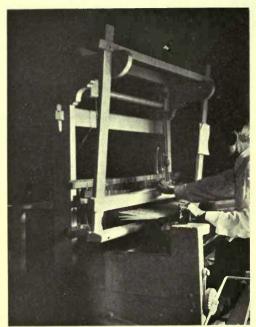
HERE is a littleoldlady who lives in a certain

small city of the middle west, who sits at an old-fashioned hand loom and treads and throws the shuttle and beats in the thread for as many hours a day as her daughters will allow her. From that old loom come most beautiful linens. This rather wonderful little old lady is nearly eighty and learned her art in her vouth in Sweden.

It is the joy of her

declining years that she may once more, in this far-away land, create beautiful things. The snowy linens turned out of this family shop, in which one daughter does the designing and the other the finishing, are decorated with the most elaborate designs of flowers and twining vines in color, done by the process of inlaying, which consists of laying in short wisps of the bright colored threads between the weft threads and beating them in. This process, by the way, is exactly the one used by the ancient weavers in making brocades of rich and costly texture.

The knowledge of the loom and of weaving craft has entirely vanished among American women. In the days of our great grandmothers, the loom and the spinning wheel played an important and necessary part in every household. From



An old-fashioned hand loom.

the earliest time the loom and the shuttle, the warp and weft, spinning and weaving were symbols of life, with which every one was practically familiar. The lure of the loom was a real thing, giving women a field for satisfying the creative instinct in the performance of the necessary routine of the household. A knowledge of fabrics, and of the beauties of texture became an innate sense to the women who spun and wove all of the

household linens and the fabrics for most of the family clothing.

The fascination of the loom seems to take possession of the daughters of today who once take an interest in it, and they are astonished to find how much it enables them to do in furnishing and decoration for the home. There is a prophecy that the loom will again become a household article.

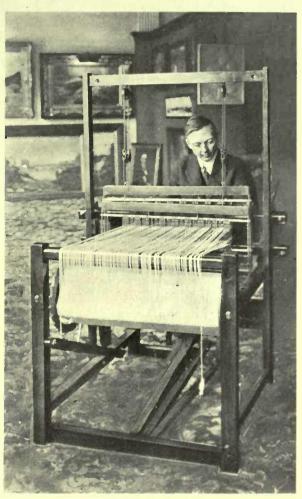
A certain young woman, visiting her sister in a New England village, discovered an old loom, literally an heir-loom, in a neighbor's lumber room. The sight of it, with it's curious accessories, fired her imagination and ambition to possess and to operate it, and so the ponderous thing was moved to the sister's attic. There, with no previous knowledge and practically no instruction, she mastered the matter of warp and warping, after heart-breaking tanglements and wasted warp. Of course the days of time that were also entangled in that warp were charged to experience.

The lure of the old loom still held her and in fancy she was again in that old world when the loom was young, and back of that, through the ages of weavers of purple and fine linen. She persisted until diligent search revealed at last an old woman who had some home-spun tow, that is, flax. She rummaged it out of her attic, a gunny sack full of it, which had lain there for twenty vears or more, and this earnest worker at last accomplished her desire. At the end of the second summer she had produced not only the cloth for a coat which did service for many years, but a pair of blankets with home dyed borders and a pair of portieres, which are still her prized possession. That was ten years ago, and circumstances have made it impossible for this enthusiast to go back to the old loom; but she treasures her experience, as an education, spiritually and mentally.

As the writer has sometimes had occasion to weave in public places, he has been interested to find how many women either had used a loom and wished to weave again, or who expressed the desire to learn. To the uninitiated the first impression is the

mystery of the evolution of the fabric and pattern, then admiration of its beauty and then, naturally, the desire comes to do it. It is creative instinct.

There are very few women, brought up in this country, who have ever seen a hand loom enough to understand it's workings, much less to operate one. This is, of course, due to the fact that we have our textiles, in infinite variety, ready to hand on the counter, and this very infinitude has caused us all to accept cloth as we do sunshine, rather as a product of nature than as having any significance as a work of the brain and hand of a specific worker.



A lady-loom of Danish make.

Women do not recognize a well woven fabric, they seem to have lost the textile sense which belonged to the time when women understood the art of weaving. A practical experience of weaving creates an intelligent interest in and knowledge of textiles to be gained in no other way.

Aside from any utilitarian purpose, there is no form of handicraft for the home that will yield so large a return of pleasure for the investment as this historically romantic and beautiful art.

The rythmic beat of the reed and the flash of the flying shuttle establish at once a fellowship with households of other days, whose environment was less complex, though human nature was the same.

The dreams and fancies, the memories and hopes, of the modern weaver may be woven into the weft of the fabric as truly now as they were in New England or Old England, Rome or Nineveh or ancient Egypt.

Weaving as carried on in the great mills, or as practiced by our forefathers, under the pressure of necessity, may be a montonous and soul killing toil; but the use of the loom for the joy of the working is a fascinating pastime. The interest of the work is in the infinite variety secured by change of materials. Flax, wool, cotton, silk, jute, in all their varieties of color and texture are ready to the weaver's hand. The joy of creation and the desire for expression are implanted in all of us, by the Creator and the way to the satisfaction of these cravings, for many a restless soul, is the Way of The Loom.

To return to the practical: it is not a difficult matter to learn to weave. A course of ten or twelve lessons with a good teacher will ground one in the technical details and the rest must be worked out for one's self. After the lessons, books will help, but books alone might presage much heartbreaking and unprofitable experience. The loom itself may cost anywhere from five to fifty dollars, the former being the price paid by a friend of the writer for an hundred-yearold relic found in a disused barn loft and the latter amount purchasing a dainty little lady-loom of Danish make, with turned spindle frame and ebony finish.

The additional equipment need not be expensive nor cumbersome. Very good small looms can be had of American makers for twenty-five dollars, but the matter of really buying a loom can well be left till after the lessons. It may thereby be cheaply discovered if there be the divine spark of the Weaver's Spirit, and if so, there will be found a way to acquire the mechanical means to do the work.

Of a subject on which much more than a five-foot shelf of books has been written, it is impossible to treat in the limits of this article; but in the hope that there have been thoughts sown by it that will bear fruit in joy and beauty, this suggestion is offered.

It is time we stopped looking for some new thing and turned back into the past to find there the things that have endured through the ages, to the end that beauty and comfort should not be lost and not allow ourselves to be robbed of our inheritance by steam power and machinery. Many of the old ways are good ways and the love of the Loom is one of them.





Turning "Blue Monday" Into "Joy Monday"

Edith M. Jones

Article III.

I present the unventilated hot gas plate and separate wash boiler

are used in the majority of home laundries for the boiling of clothes. As most housekeepers know the flames

of the gas burners are rarely in proper adjustment and when the cold boiler is put on the hot gas flame, the flame becomes chilled and a quantity of pure gas is necessarily given off. This accounts for the unpleasant odor of gas that is often noticed in the laundry and can only be avoided by turning the flame low. This delays the process of boiling, however, and requires more time to turn out the work.

Then, too, the bottom of the boiler acts

as a deflector, forcing into the laundry a large quantity of heat that should be utilized in boiling the clothes, thus adding further to the discomfort of the operator.

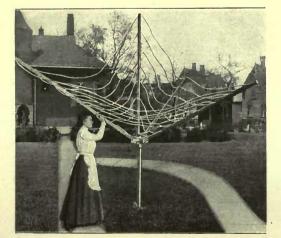
But the greatest objection to this method of boiling and one which makes wash day a day to be dreaded by every member of the household, is the so-called "wash day odors." These are carried by the steam which escapes from the clothes boiler. This steam laden with vapors of soap-fats and alkali permeates every part of the laundry and in spite of the greatest care too often finds itself in every part of the house.

All of these objectionable things are overcome by a new recently patented ap-



The new wash boiler has the gas plate enclosed.

pliance known as the Sanitary Ventilated Gas Wash Boiler—a welcome piece of equipment for the up to date laundry. This appliance requires a gas connection and a vent pipe connection with the chimney. The burner is located in the bottom of a galvanized iron chamber and is lighted by a pilot-light from the outside. The round wash boiler sets inside this chamber just over the forty-foot gas consump-



The post and reel can be taken down.

tion per hour gas burner. Holes are punched at the top of the boiler allowing the vapor laden steam to pass into the chamber. A lid covers the boiler and chamber preventing the steam, gas fumes and excessive heat from passing into the laundry—forcing them out through the chimney vent, leaving the air in the laundry pure and applying all of the heat to the boiling of the water. Altogether this is a most satisfactory appliance.

The weather has always played a vital part in the successful wash day. A rainy day may delay the whole plan of the

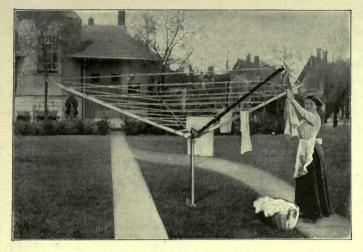


The vented outer shell enclosing burner and the inner vessel for the clothes.

week's work, an unexpected storm or a cloud of dust, etc., may make the drying process not only uncertain, but will very often undo in a few moments the hard work of an entire morning.

So the question of a suitable place for the drying of clothes is worthy of serious consideration.

Of course sunshine has a wonderful magic and when the day is fair this revolving reel made of steel makes an ideal



Hanging the clothes in the sunshine.

clothes hanger. It eliminates unsightly clothes posts in the yard as the arms, post and reel can be taken down at a moment's notice and stored in the house. The arms when opened lock automatically in position and stretch the braid cotton clothes lines ready for use.

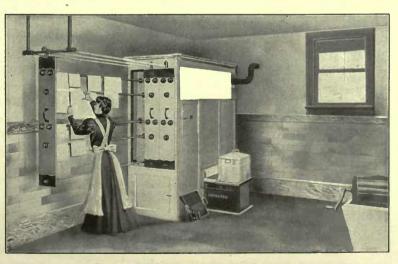
But as we have said all wash days are not fair and there must be a place provided for these other days. A room with heat can be provided in the basement, a rear porch can be screened and glazed, or a place can be made in the attic, but the ideal modern convenience is the heated laundry dryer. There are several dry-

ers on the market and I am sure they have met a long felt want. They are adaptable for stove, gas, electricity or steam. The sanitary features are largely dependent on the ventilating system, the best ones insuring a constant circulation of air in the drying cabinet at all times so that moisture, odors, etc., are quickly carried away.

The machines are made of metal and are dust and germ and fireproof. Many people use their dryers the year round as it is a great saving of the laundress' time and energy. The clothes are dried as they are being washed-that is, the laundress gets one batch of clothes ready and hangs them in the dryer. While she gets the second batch in readiness the first is being dried and the result is that when through with the

washing the clothes are ready for ironing, by which time and many steps are thus saved and the laundress accomplishes in one day much more than is possible otherwise.

I am frequently asked about clothes chutes—whether I like them or not. I always answer yes and no. Yes because the idea is a good one and no because I do not like the idea as it is ordinarily worked out. I think there should always be two well ventilated bins provided one bin receiving the bed linen, underwear, etc., from the second floor chute and a second bin receiving the table linen,



The heated clothes dryer meets a long-felt want.

etc., from the first floor chute. I am sure if the laundress washed and boiled the clothes without sorting them a good housekeeper would complain most emphatically, but a one-bin clothes chute allows the clothes to remain without sorting for days at a time and this does not seem to me satisfactory, nor is it up to the standard of model housekeeping.

This subject of the laundry equipment is certainly an interesting one. The supply of the market is constantly meeting the demand of the housekeeper for new and better appliances all aiming to make the necessary wash day one to be less dreaded.

Garden Vegetables

M. Roberts Conover



ANY home gardens give space to a great variety of vegetables to the exclusion of potatoes. Yet

delicious new potatoes are often expensive to buy even in ordinary seasons. Considering their present high cost, if space will possibly permit, some part of the garden should be used to grow round or Irish potatoes. They are not hard to grow if their needs are met and they so completely shade the soil that hoeing is out of the question after the blossoms form. The potato wants plenty of nitrogen and it wants potash. A deficiency of potash and too much nitrogen will favor great vine growth and small tubers.

My garden has not what a potato grower would term a good potato soil. It is too light and is greatly deficient in potash. Yet by putting into the soil some poultry manure and a later application of wood ashes I grew enough potatoes on a small corner patch, 24 x 24 feet, to supply my family of five and often six persons with this vegetable for two months serving it in some form at least twice a day.

The plot was treated thus: One-fourth of a one-horse load of cleanings from the poultry house (including absorbent earth) was spread upon the ground and turned under and the ground harrowed. Rows two feet apart were marked off and furrowed. The seed, cut into chunky pieces of two eyes each, was planted about 14 inches apart.

As soon as the young plants appeared above ground the soil was regularly stirred between the rows and a mulch of soil thrown between the young plants without cutting into the row.

When the plants were some 5 inches high about a bushel of wood ashes taken from the kitchen stove was spread between the rows and hoed in. Hoeing ceased when blossoms appeared.

The vines made splendid growth, averaging over three feet in length. Their rapid growth carried them into luxuriant foliage before the bugs came and but one bug-killing application of Paris Green was made. A second application, at least, should have been made toward extermination but the plants did not suffer much from the bugs that remained.

When dug August 1st, they were found to be well set with good sized potatoes. The potatoes were not all dug at one time but basket by basket as they were needed.

The little plot yielded about eleven half bushel baskets of fine mealy potatoes.

On that part of the plot where beans were grown the preceding summer the potatoes were the largest.

The yield and usefulness of some of

our garden vegetables is increased by pinching back certain parts of the plant.

With some vegetables this top pruning favors a stouter growth and better setting of the fruit. With others that are useful for the edible root or foliage, the fruit, blossom or seed portion may be pinched back so that the quality and size of the food portion may be improved.

When the top of a plant is pinched back, the root system exists in a much larger proportion to the foliage top and in order to re-establish the equilibrium between root and foliage, the plant speedily forces its latent leaf buds into activity. This results ultimately in a more expansive top growth and is usually favorable to a greater fruiting area. Then with bulbous rooted vegetables as the onion and its kin, the development of seed terminates its life cycle and growth, hence pinching back the seed stalk when it first appears, prolongs the period of growth.

One of our garden vegetables that responds profitably to top pruning is the tomato. Many tomato plants when ready for transplanting from the green house or hot bed will show buds, blossoms and even tiny fruit at the top of the plant.

If left unpruned, this fruit will develop, of course, but it is often inferior in size and imperfect in form. If, however, this tender tip is pinched out at the time of transplanting, the plant at once begins sending out branches from the axils of the leaves along its stem. These grow so vigorously that the point where the original top grew is lost sight of.

These branches develop buds, blossoms and other branches and the plant comes into bearing with more room for the placement of its larger fruitage.

Members of the gourd family as melons, squashes, cucumbers, etc., can be made to produce more lateral branches by pinching the tips of the main branches. On some vines this will give a larger yield of fruit. Some vines of the squash, muskmelon and cucumber seem to produce more blossoms of one sex than of the other and vines producing more pistillate flowers are helped to a larger yield by pinching the main vines when they have grown to a length which allows room for laterals.

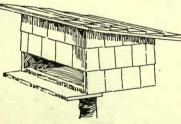
Inviting the Birds



HOME which has trees and shrubs about it can always be

can always be made inviting to the birds and these blithe little songsters will certainly repay the small effort required to make

them feel at home. The coming of the spring time is hardly realized in its full meaning without the arrival of the little feathered friends and their almost frenzied joy in getting back again, as it seems to their hosts and landlords, especially



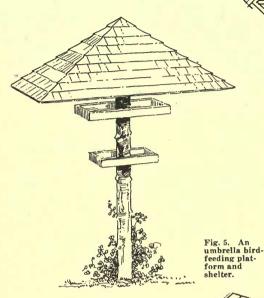
A clever covered bird feeding platform.

if these be little folk.

With a box or two and a few poles, some light bits of lumber and a bundle of shingles, any boy who is handy with tools can build bird homes, and other requisites to their comfort and pleas-

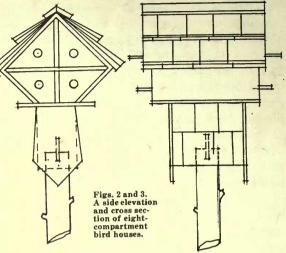
ure, for which they will repay him in their own way and time.

A boy who has had a course in manual training now so commonly taught in the schools can be very independent and build an endless variety of pretty and comfortable homes for the birds, and may find his own materials in his hikes across country, or his rambles in the neighboring



woods. Fascinating bird houses are made of birch bark, or from a branch of a tree which is or can be hollowed out. All sorts of woodsv things can be adapted to such a use, either in the building of bird houses or of feed platforms, for the bird lover has discovered that feeding and bathing resorts are very inviting to the little feathered guests.

F e e d i n g platforms may be designed in even greater variety than bird houses, and are apt to be very picturesque. By noticing the little shallow pools in which the



birds delight to bathe one may easily provide little pools which will be attractive to the birds.

These cuts show how to make a few types both of bird homes and ingenious feeding places, and the will be able to design boy many others, taking as a especial size motif the or shape of box or other material which he has available.

Figures 2 and 3 show a Bird A partment House with eight compartments. It is made simply of a box which is set on edge and divided off both horizontally and vertic-

ally and through the center, and covered with cedar shingles. The whole is supported on a block which in turn is covered with shingles, for ornament and to protect it from the weather.

The feed platform and rustic shelter shown in Figure 4 is a rustic affair very easily made and is clearly shown

Fig. 4. A rustic bird-feeding shelter and platform.

in the drawing. This can be made square, three feet each way for the frame, with the top feed platform eighteen inches square and the lower platform twelve inches square.

Figure 5 shows an "umbrella" shingled feed shelter. Build the frame on the ground, four feet square, and lift it bodily into position on the pole. The apex of the shelter may

be a solid block, pyramid shaped, on which the 2x4 or 3x3 inch hip rafters can be solidly nailed; thus the block and the four hip rafters, the 1x4 battens nailed on them and the shingles, compose the entire umbrella structure—a thing very simple to build and very effective. Two



or more platforms may be placed under it.

Figure 6 shows a simple, exposed feeding tray which is round in shape and set solidly on top of a post and which may be set on any convenient post.

Figures 7, 8, and 9 show a section, elevation and roof plan of a bird home which is to be nailed against the trunk of a tree. The bracket, made of 2x4 lumber is clearly shown. The house is a box with a roof over it, resting on a block sawed from a log. The flag pole can be made of a metal rod or of wood.

Figure 10 is a more elaborate feed shelter with the lower part used as a feed floor. Its design is quite clearly shown.



Flg. 10. Bird-feeding platform and sand house.

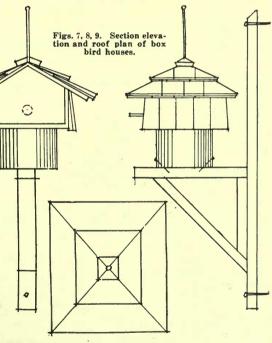
The hanging platform shows possibilities in other designs.

The West Coast Lumber Association has interested themselves in bird building, and issued instructions concerning it. Through their courtesy these carefully prepared drawings are shown.

Any ingenious boy who is industrious in building these little structures may attract

beautiful birds, which will make their homes each year, in season, in his garden.

We are told that he may even choose the



bird family he wishes to entertain by making preparations which will especially attract the birds that he likes the best. If he wants blue birds for his guests, for instance, he will build the type and size of houses which attract the blue birds.



The simplicity of the exterior is refreshing.

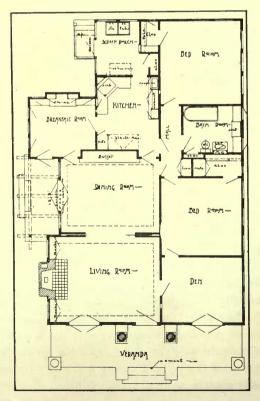
H. H Whiteley. Architect.



OR many yearsthe term "Colonial" meant,

architecture, a in certain very beautiful type of details applied more especially to the entrances of the house, to porches and porch details, to cornices and window trim and also to dormers. on the outside of the house, and applied to all of the interior finish of the house. A house of any type to which these details were applied was popularly called a "Colonial house," though ultra

Modern Colonial



modern in every respect—even to the colonial details.

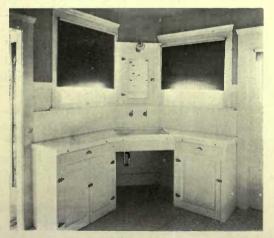
To the lover of things beautiful when he first saw those wonderful old Colonial houses which had stood for a hundred years, they were a revelation to him of the builder's art. It is no wonder that on the first opportunity the architect tried to reproduce them for his clients, and the home builder wanted to copy them. For years a constant succession of students made careful measured drawings of the

details: the houses were photographed as a whole and in parts: and so called Colonial houses sprang up all over the country, many of which are lasting monuments of beauty. But the first enthusiasm for Colonial was often only skin deep. It copied the beautiful details only and forgot the spirit in which they had been created.

The Colonial builder worked honestly and earnestly to fill the needs

which he found. He used the material at hand and made it as beautiful as he could, with such success that his wooden houses were more beautiful than many of the stone and marble mansions which followed them, and the houses built of brick and stone are lasting monuments.

The spirit of the modern colonial endeavors to return to the simple form and materials, and to build to fit modern conditions as the Colonial builders filled the



The corner sink.



Vista from living room door.

conditions of their times and expressed the dignified living of Colonial times; the times of Washington and Jefferson, with their high ideas and fine living.

Some beautiful work is being done in modern Colonial. Homes are created which express the finer living of the present times; homes which have dignity without ostentation; homes which express the individuality of the owner and fit themselves closely to his needs.

Such a house need not be large and it will not be elaborate. The first essential requires that it be honest; sincerely planned and honestly built.

The simplicity of the exterior of the home shown is refreshing. With a cement terrace across the front the entrance only is covered. An awning gives the protection needed elsewhere. The pergola at the side gives entrance to the dinning room and breakfast room.

The plan is well worked out. The entrance is at the end of the living room so that on entering one need not disturb a group around the fire place. Sliding doors allow the dining room to be closed

from the living room if desired. A photograph of the interior shows the vista through the dining room and the breakfast room beyond. The interior treatment is pleasing with its white woodwork and mahogany furniture. The edge of the mahogany doors can be seen at the opening which is six and a half feet wide, The buffet is nicely planned giving ample serving space, yet with good cupboards above. In the living room is a wide tile fireplace and bookcases.

The den, opening as it does off of both the living room and bed room makes an excellent utility room. The suite of sleeping rooms and bath are well arranged. The corner bed room, with windows filling two walls, becomes an out door sleeping room. The closet arrangement is particularly satisfactory. The bath room arrangement is also very good.

In the kitchen the corner sink and cabinet over it is so unusual that we show it by photograph. The sink table and back is all of vitrolite. A plastered hood and vent is built over the range, and beside it is a roomy pan closet. A cabinet is built in and on either side is a cupboard and a built in cooler. Beside the kitchen door on the screened porch is the ice box and a good closet. Stationary tubs are set on the porch, and an ironing board is built into a cabinet in the wall, with an electric plug beside it.

A Stucco-Shingle Cottage



HE design shown in this illustration is very livable with the owner's suite of sleeping room and bath on the first floor and two

bed rooms on the second floor having excellent closet room.

With a total width of 26 feet this home is adapted to even quite a narrow lot. The arrangement of rooms is well suited to a south and west front, with a glazed sun room on the corner which opens by French doors into the living room.

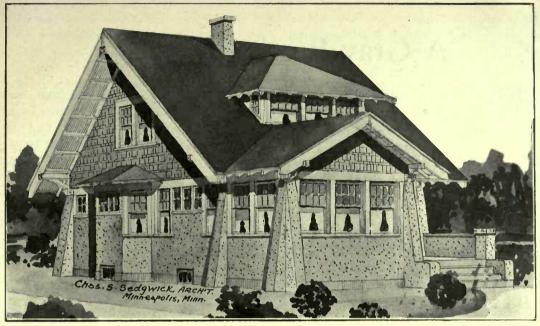
The entrance is from an open porch or terrace into a vestibule. The coat closet has an outside window. The main stairs go up from one end of the living room near the vestibule door. The windows across the other end of the living room are planned with especial reference to the furniture and the center windows are high over the piano. Beyond the living room and connected by a wide cased opening is the dining room. One end is filled with a group of windows and on the other is a built-in side board with cupboards on either side filling the entire space.

The kitchen opens directly into the dining room. China cupboards and work table are built into one side of the kitchen. The sink is under the window by the porch. Wall spaces will accommodate the range and a kitchen cabinet if desired. There is space for the refrigerator on the rear porch, and the stairs to the basement are from this enclosed porch with an entrance at the grade level.

A roomy linen closet opens from the passage way between the kitchen and bath room which also communicates with the bed room and a smaller closet.

The bed room is particularly attractive. It opens from the living room on one side and has a bay of windows which insures its being a sunny room. It has a good closet, and communicates very directly with the bath.

The general style of the house is low and pleasing. It is well built and has a full basement under the house. The ex-

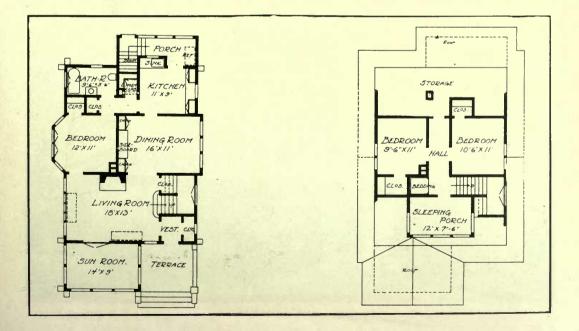


The design is pleasing.

Chas. S. Sedgwick, Architect.

terior is of stucco to the heads of the windows. The stucco is of a cream tint and may either be trimmed in white as shown in the perspective or the wood work may be stained brown in keeping with the shingle stain, which is creosote of dark reddish brown. The shingle gables add to the low effect of the whole.

The main floor is finished in oak, while the two chambers and the sleeping porch are finished in birch. The floors throughout are of hardwood.



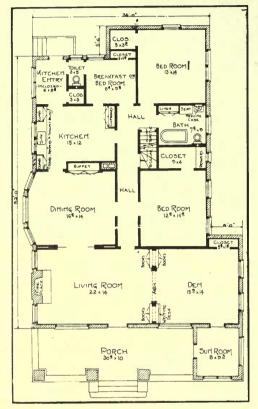
A Gray Brick Bungalow



HEN the wall surface is so relatively small

as in this many-windowed bungalow, there seems no reason why it can not be built of brick at a moderate cost. The ten per cent additional, which has been given as the increased cost with the use of brick for the outside wall, would give a return in several ways.

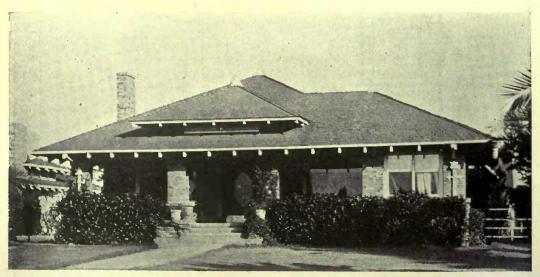
The plan is a little unusual in the brick walled sun room inclosed on the sunny end of the porch. The central hall allows every room to



be reached from the living room. The den is separated from the living room by an open archway, with an unusual amount of space devoted to books and built-in writing desk. Opening from the den is a very useful closet.

In the dining room is a built-in buffet. One end of the dining room is filled with windows, set in a bay, thus insuring sunlight which can hardly be obstructed by the "house next door."

The cupboard arrangement in the kitchen is very satis-



The roof comes low over the brick walls.

E. W. Stillwell, Architect.

factory as to convenience as well as being very good looking, and giving good light and room for the sink. The wall spaces are well arranged. A closet and toilet open from the kitchen entry, which is inclosed. This arrangement is particularly good with reference to the small room adjoining, especially if it be used as a maid's room. It is also good as, in case of sickness, this room can be completely isolated from the rest of the house, since it has the necessary plumbing and easy access to the rear entrance.

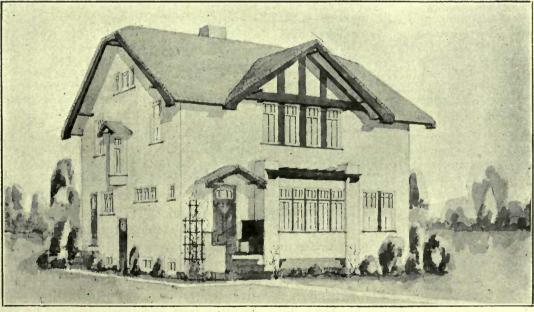
The sleeping rooms and the day rooms are separated by the central hall, and the

bath room is centrally located. The linen cupboard is in the bath room and a very convenient bench is included. The closet opening from the front sleeping room is large enough for a dressing room, with a window and a case of drawers. The stairs both to the cellar and to the attic open from the hall.

Though the roof is designed low, still there is an unfinished attic about 8 feet high in the center.

The exterior is hard pressed face brick, with gray predominating, but with enough variation in shades and surface to produce a beautiful mottled effect.

A Practical Floor Plan

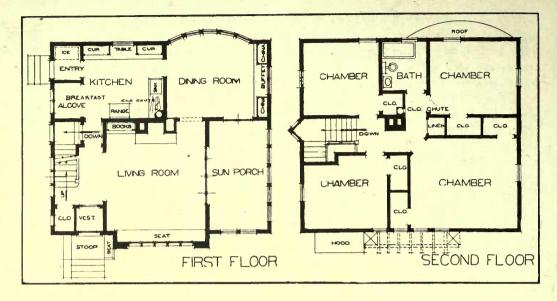


The shingle roof has the effect of thatch.

W. W. Purdy Architect.

HEN the lot is at least 50 feet in width, the broad side of the house may be turned toward the street. This very practical floor plan is

arranged for a west frontage, thus giving, the south west corner to the sun porch and an east exposure to the great bay of windows in the dining room. The vestibule, which is entered from the stoop, is just large enough to give room for the inner and outer doors, an arrangement much needed in the colder northern climates. Adjoining the vestibule is a roomy coat closet, very convenient to the front door. The stairway also is near the entrance. The hall is vir-



tually a part of the living room owing to the wide opening. Beyond the hall a passageway connects it with the kitchen and the stairs to the basement and grade entrance.

The wide bay and seat fills the front of the living room opposite the fire place in a most attractive way, the space under the seat being occupied by the radiator. The fireplace is built of brick with an attractive book case beside it. A group of French doors fold back on each other opening the living room to the sun porch, and a pair of French doors connect it with the dining room. In the dining room a buffet is built in across one side of the room with serving table under the windows, and a curved bay fills one end of the room.

Particular attention has been given to the arrangement of the kitchen. The range is near the chimney which takes care of the living room fireplace, and has good light. The sink is conveniently near. A cabinet of cupboards and work tables fills the side of the kitchen around the windows. In addition a breakfast alcove has been arranged with two windows, and seats may be built in. In the rear entry is space for the refrigerator, where it can be conveniently iced and also removing it from the heat of the kitchen.

On the second floor are four chambers each with windows on two sides. Each room has a closet and the largest chamber has two. The bath room has good size, with the tub tiled in. The floor and wainscot are also tiled. A clothes chute and linen closet open from the upper hall.

In the basement is the laundry, a fruit and vegetable room, furnace room and storage space.

There is heighth under the roof and a scuttle provided in order to reach it. In case a full stairway is desired it could be built from the front chamber or, by a slightly different arrangement, from the hall, going up over the main stairs.

The exterior is plastered with tan cement stucco over metal lath; with a shingle-thatched roof. At the grade is a "soldier course" of brick.

A Small Six-Room Bungalow



O the person limited to a small outlay for home building purposes the little bungalow here shown should prove interesting.

It is distinctive in interior arrangement and is provided with well designed builtThe walls and piers of the porch are constructed of blue brick laid up in gray mortar. The outside chimney is of similar design and construction and the house itself rests on a concrete foundation.



A bungalow, simple in detail.

Bungalowcraft Co., Architects.

in features. Conveniences of this kind always make a considerable saving in the matter of the necessary furnishing. They likewise help to make the interior cozy and attractive in appearance. Considering the cost this bungalow is warmly and durably constructed, and is a home.

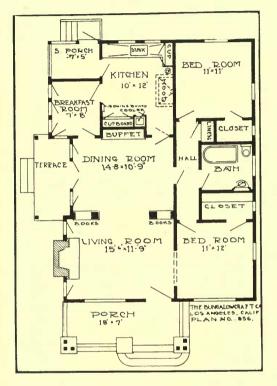
It has good structural lines, and the interior is well planned, both for convenience and size. It is only twenty-eight feet wide, so is well adapted to a narrow lot. A 7-foot veranda extends across two-thirds the entire front of the house. This is roofed and floored with concrete. The house walls are covered with resawed siding, painted white and the trimming is light brown. Considered in detail the house presents a pleasing appearance of general attractiveness from the outside.

In addition to the living room, dining room and kitchen, there are two bedrooms, breakfast room and bathroom, besides the usual screen porch in the rear. The front door, as will be observed by referring to the floor plan, opens directly into the living room. Between this room and the dining room a broad colonnade

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opening is introduced, containing the book cases.

A short hall, with a door leading into it from the dining room, connects the two bedrooms with the bathroom. This



is the only space used for passageway purposes. The arrangement is simple and convenient and, for a small, inexpensive home, the rooms are of fair size and well proportioned.

In the matter of built-in conveniences, the interior deserves study, as its equipment in this respect is good. The living room for instance possesses an excellently designed fireplace, of pressed brick construction. The dining room has a built The doors of both the buffet in buffet. and the living room bookcases are of leaded glass. The kitchen is of the cabinet kind and, besides a great deal of cupboard space and the other customary conveniences, has a draught cooler and a hood for the range. To the side of the kitchen also is the screened porch with stationary laundry travs, and the breakfast room. Each of the bedrooms has a wardrobe closet, equipped with a shelf and hangers. The connecting hall contains a linen closet and in the bathroom, besides the usual fixtures is a built-in medicine cabinet with a mirror door.

The woodwork finish of the interior is entirely of pine. There are hardwood floors in the living room and the dining room. Pine is used for the floors elsewhere. The woodwork of the two main rooms just named is finished with wood dyes to resemble fumed oak in color. The walls of the dining room are provided with a paneled wainscot, finished with a plate-rail. The plastered portions of the walls of the two rooms are covered with paper predominating in dull buff and brown shades and the draperies, used at the windows and for the portieres, are of golden brown. The wood work of the other rooms has an enamel coat. The plastered walls are tinted, except for the lower portion of the kitchen and bath room, where they are finished with hard wall plaster and enameled. A pale rose tint is used in the front bedroom, a pale green in the other bedroom and a dull blue in the hall and the main living rooms.



A Group of Distinctive Houses



EVERAL unusual features mark the first house of this group, of which may be noted the forward projecting porch which is not, and

can not be made a passage way, though it provides the entrance to the house. The prominence of the projecting bay which ing room at one side of the buffet corresponding to the door to the kitchen on the other side.

Placed as it is back of the living room fire place, the range in the kitchen uses the big central chimney which also carries flues from the furnace and the fire



A home which has considerable individuality.

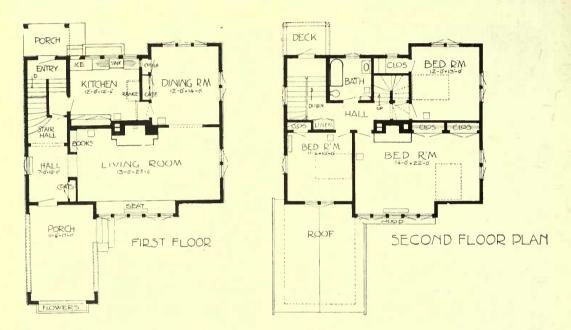
extends two stories, gives a pleasing impression of a light and rather unusual interior.

This group in the living room faces the fireplace. The projection is sufficient for a deeply recessed seat. A bookcase is placed near the fireplace. The main axis of the dining room is at right angles to that of the living room, which always gives a good effect. The rooms are connected by a wide cased opening, and each gives an interesting vista from the other. A china cupboard is built into the dinplaces. Cupboards are built into the kitchen beside the chimney. The sink and ice box are placed under a bank of high windows which fill one side of the room, and there is wall space remaining for a kitchen cabinet.

The rear entry is at the grade level and connects with the kitchen and front hall through a closed passage way, the basement stairs going down under the main stairs. The stair hall may be separated from the front hall by a portiere and may be used from kitchen and living room. On the second floor are two fair sized bedrooms and bath and an unusually large front chamber with two closets and a fireplace.

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 wardrobesare a feature of the large front chamber, which is a veritable sun-room in itself. The plan is practically a square, being 30 feet each way. The entrance is through the vine covered porch into a vestibule and on into the living room. One end of the living room is set off by sliding doors for a library and has a case of bookcases across the entire end of the room, with windows over them.

Back of the living room and connecting with the kitchen is the stair hall. A light



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

This exterior is attractive in a rather unusual combination of wide, roughsawed siding, stained brown with cement plaster above the upper window sills.

The unusual placement of the windows in two long groups and the unusual depth of the porch projection is quite effective.

The cottage design which follows is most picturesque with flowers and vines climbing upon it. The arrangement is somewhat unique and will appeal to many on account of the vista obtained from one room to another. roomy coat closet opens from this hall. The basement stairs are under the main stairs, reached from the kitchen entry.

Beside the fireplace in the dining room is a small corner conservatory, closing the vista from the living room. A pantry with a work table and cupboard connects the dining room and kitchen in a very convenient way.

In the kitchen the sink is built in beside the icebox, which brings it directly under the bathroom plumbing on the second floor.

On the second floor are two good chambers and a bath room, a linen closet, and ample storage space under the roofs. The heights are 9 feet for the first story

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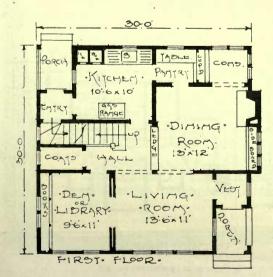
An inviting cottage.

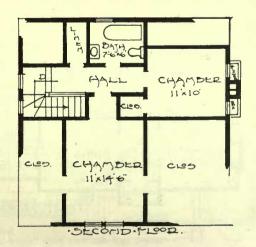
and 8 feet 6 inches for the second story with lower heights in the closets.

Georgia pine, stained, is used for the finish and the same wood is used for the floors throughout.

The exterior is shingled and stained with white sash for the windows..

The third house of the group is perhaps the least usual of them all in treatment, using as it does so largely of nature's building material, cobble stones. A shingled frieze is carried under the eaves above the window heads. In plan this design is most attractive in its practical arrangements, for the entire front is really one magnificent living room, and this provides for a ground floor bedroom and private bath. In case a different arrangement is desired the dining room could be placed where bedroom is shown, sleeping porch used as a breakfast room, and the bath room as a pantry. Then if the space now devoted to living room and hall were sufficient, dining room could be made into a den or office, or the dining room, pantry and sun porch turn-





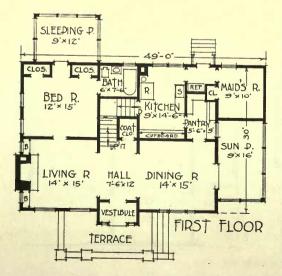


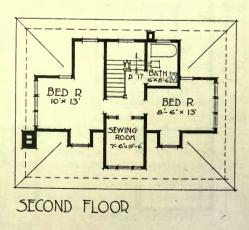
An attractive and practical home.

ed into the sleeping apartment, if such a readjustment seemed better on account of the view or some local consideration.

The service end of the house is carefully planned. The butler's pantry has good cupboard space and provides ample serving space. The kitchen cupboards are also ample. The maid's room is well placed, opening from the entry yet convenient to the kitchen. On the second floor are two bedrooms, bath, and sewing room, with windows in the dormers. The closets are low, under the roof.

There is a full basement under the entire house, with hot water heating plant, laundry, and servants' toilet, besides the usual complement of vegetable bins, etc. An outside cellar entrance is arranged at the rear of the house.







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A well placed decorative panel makes a strong accent at the end of a vista.



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

The Open Door Versus the Closed

The Use and Abuse of Vistas

NDOUBTEDLY the man who invented the sliding door conferred a benefit on mankind. But, like Pandora, he precipitated a lot of

trouble. Many architectural sins, to say nothing of those committed in the name of interior decoration, may be traced to the wide doorway.

When several rooms are shown in sequence the opportunity for success or failure is great. That many people fail merely shows that the problem of house furnishing has not been approached with the right viewpoint. Each room has been considered by itself, while the big decorative idea, the series of rooms as a whole, is completely overlooked.

Seldom in an old-fashioned house with real doors is it wise to treat one room independently of the others, and in the modern dwelling it is impossible to do justice to the architect or to one's own taste with the usual checkerboard effect of varying wall tones.

The present vogue of one dominant wall color throughout the house is a protest against this checker board, a swinging of the pendulum from one extreme to the other. Extremes are dangerous and should be avoided. To use one color successfully through an entire first floor demands almost as much skill as to combine successfully a number of colors. Yet it is undoubtedly true that the "one tone theory" is a great aid in the house of sliding doors. I use the term "sliding" rather than "folding," for the word "folding" means several different things when applied to a door.

In my second illustration is one of the new folding or "screen" doors, a little like a French window a good deal like a screen, and making possible a very picturesque addition to a house. The real French window leading usually to a porch is familiar to everybody, and for several years architects have urged doors of the type illustrated, rather than the regulation sliding door which must either be kept opened or closed.

The great advantage of the screen door with its glass panes is that it gives a certain privacy yet preserves a vista which has always been the strongest argument for the sliding door. A well planned vista is a beautiful thing, well worth securing. It plays a decorative part similar to a climax in a story leading up to something not at first expected. But, like the climax, it must be of sufficient importance to justify itself.

Naturally there are many kinds of vistas. There is the vista provided by nature which one glimpses through a door or window. There is the purely decorative vista of one room seen through another



or, possibly, of a third room seen through several openings. The greater the perspective the greater the value of the vista, provided it be a good one; the greater the detriment to the beauty of the house if it be a poor one. And the poor vista exists in far greater numbers than the beautiful. Usually it is a haphazard vista, a room decorated and furnished without taking into consideration its ever present place in the interior scheme.

Often this vista room is a dining room seen through the living room from the hall, a combination mentioned in this department last month. In many houses where this arrangement is found there would be a decided gain in beauty and convenience if the dining room could be shut off from the living room in some other way than by closing the sliding door. Here is where the screen door with its transparent panes would be a real boon to the housekeeper, adding at the same time attractiveness to her house.

There are many variations of this type, those of many panels, so hinged that they may turn either way, and those that are scarcely more than double doors. In either case they may be closed securely by a knob or latch, and opened quickly and easily. No matter how simple there is opportunity for effective hardware in the way of hinges, knobs, etc. This point is important for well designed hardware adds distinction to anv room.

The more thought that goes into the shell—the structural part of the house the greater the permanent beauty, and oh, how much easier the furnishing!



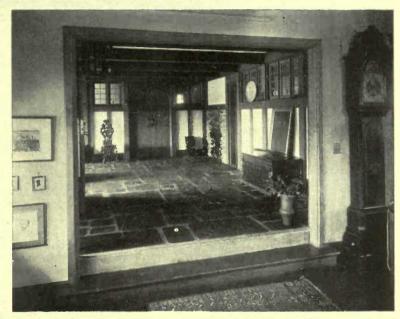
Where doors folding like a screen lead from living room to dining room.



Well proportioned rooms with well placed doors and windows, carefully selected lighting fixtures, and good hardware, make a foundation so pleasing and satisfying that very simple, and often inex-

pensive things may be chosen later. while all the wisdom of the ages, backed up by a big bank account, cannot transform poorly proportioned, badly designed rooms into places beauty. Color of will help a great deal, it goes a long way, but it cannot do everything.

So in the beginning when the house is scarcely more than a castle in Spain, or a rough sketch on a sheet of note paper, think about the doors, not only the that satisfies the brain, heart and soul of the inmates of the dwelling that makes for greater privacy. It is the difference between the walled garden and the garden that every passerby may love and enjoy.



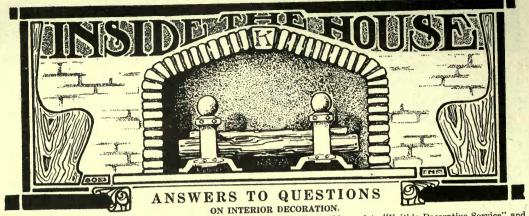
A wide opening unadorned by doors or portieres showing an entrance hall from living room.

entrance and what you wish it to express, but the interior doors and what they must contribute to the beauty and utility of the dwelling. Think of vistas, their real use and their undoubted abuse. Consider whether the beauty of the vista is sufficient to offset the loss in privacy. In other words know quite definitely what your little house or your big house is to express.

There are arguments on both sides. True there is something friendly and charming about the house that shows hospitality in every wide opening, the heart of the house, as it were, bared to cvery friend. And there is something Perhaps there is just a bit of selfishness about the walled garden. Doubtless there is a middle ground in gardens and in houses which it would be well to seek.

Probably in America we err on the side of considering outsiders and their viewpoint and feeling toward our possessions rather than that of our own. This attitude in the past has undoubtedly led to ostentation and display. on the part of the rich and to unrest and discontent on the part of many others. But slowly and very surely the American ideal is growing to something higher and better and already has found expression in our homes.

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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

Wall Board.

G. W. W. I am about to build a story and a half bungalow and would be very glad to have some advice on interior and exterior decoration. Am inclosing a sketch of floor plans. Have decided to use wall board throughout in place of lath and plaster. The inside trim and panel mouldings will be of slash grain fir with floors in yellow pine. Fir plate rail in dining room. The exterior will be of stucco with roof of composition shingles in a moss green shade.

We have a rather miscellaneous collection of furniture: Buffet in fumed oak, dining chairs and table of oak in a lighter finish, bookcase and table in fumed oak and two or three chairs in wicker, also an old fashioned bedroom set of black walnut, very heavy, with marble tops, etc. We have been able to postpone buying any rugs or curtains until the new house is done and the proper things can be chosen.

We are inclined to tans or brown shades for living and dining rooms with wood work and floors stained and dull finished, and ceilings in buff or cream. Bedrooms with white trim and light walls in suitable blues and tans.

For the exterior walls a rough cast stucco seems the wisest finish as the local builders appear to get much better results with this. Is it advisable to use some waterproofing compound in the stucco?

Ans. As your furniture is somewhat varied, I fear that it will be a hard matter

to obtain a harmonious treatment. I would suggest that you insert a blind "AD" in your local paper and I think you will get good results in disposing of your furniture at fair prices, as I have seen this done repeatedly.

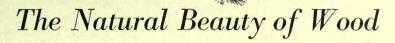
For the living room, I would use a golden tan on the walls with fancy yard net for the windows, with the hanging in golden brown sunfast. Blue would be ideal for the dining room, using the soft faded blue tones in the hangings. The walls may be in flat paint using the darker shade below the plate rail and a still darker tone in the rug.

The den needs plenty of character, so would have the walls in burnt orange with draperies in copper or mahogany colored silk.

The walls of both chambers may be painted in flat oil, one in a soft light gray and the other in a delicate tint of blue or pink with the draperies of a pretty chintz.

Metal lath should be used for all exterior work. There are several patented materials which are excellent for the exterior. It is advisable to set the metal lath away from the sheeting on narrow firring strips, so as to permit an air space between.

A good waterproof paper should be used over the shathing, before metal lath is applied and an insulating quilt is advisable between studs. A galvanized metal lath is not so likely to rust. Much is being said in favor of waterproofing compounds, but such treatment is not essential with a good stucco with good waterproof paper.



is a most important consideration when choosing the material for the interior finish and trim of your home. That beauty is dependent principally on the texture and "grain"—the varied arrangement of the fibres in individual pieces.

Because of its close, even, velvety texture and its wonderfully varied and pleasing grain, the ideal wood for interior trim is

Southern Yellow Pine

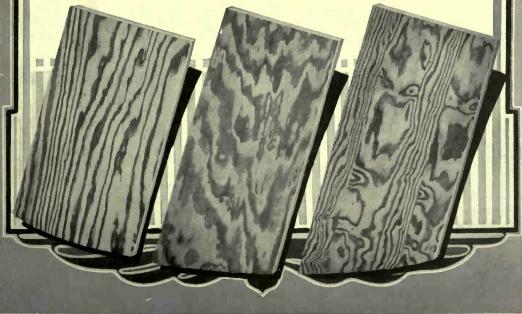
Southern Yellow Pine not only makes a handsome appearance finished in its natural color, but because of its light tint, it is especially suited to staining. It takes stains, varnishes, paints and enamels perfectly, and there is absolutely no effect of color or tone that cannot be obtained with its use.

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Chestnut.

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N. P. D. I have just purchased a home and the walls are tinted and stenciled. The dining room needs to be refinished and I thought perhaps you could make some suggestions. In the first place the woodwork is chestnut and I am thinking of buying a mahogany dining room suite. What colors should the walls and ceiling be painted? Would you stencil a border or would you use any moldings? The room is about fifteen feet square.

Ans. Chestnut makes a very handsome wood trim if left in the natural color or stained a soft brown and then varnished and rubbed down to a dull finish. Or, if you do not care to go to the expense of removing the old finish, you may enamel it in old ivory with splendid results. As we do not know how much sun you have or what the exposure is, would be difficult to advise you definitely.

With the new dining room suite in mahogany, we would favor a golden or russet brown paint for the walls with soft silk or sunfast draperies in golden color.

Suggestions.

P. M. W. We are building a new home and have been reading your magazine but find it hard to decide on a color scheme for the first floor.

Am enclosing a rough pencil sketch to show arrangement of rooms. The finish is in fir stained to match my furniture which is fumed oak. I must have new rugs and draperies. I am somewhat tired of browns and tans, but do not know if anything else would be suitable. Had thought of getting a few new wicker chairs. Should they be in a brown finish?

What color shades should I use? The exterior of the house will be brown with ivory trim. Had thought of ivory shades. Are duplex shades much used?

Ans. As you do not care for browns and tans, I would suggest for the living room walls a warm gray or putty shade with the hangings in deep old rose or mulberry with the wood trim in either fumed oak, or a grayish tone. The rug for this treatment should be a good domestic Wilton in an oriental design with deep rose predominating in the background. With this scheme the rug must carry a great deal of color. A few wicker pieces in this room would be ideal, done in old ivory enamel or stained a soft tobacco brown.

The dining room, facing southwest, would be charming in dull old blue. Do not get intense blues or your dining room would be too striking, but keep to the dull faded blues, using a grass cloth paper for the walls, with the hangings in soft silk or light weight sunfast.

The den, being a man's room, should have lots of character, so would suggest that the wood trim be stained a soft olive green with the walls hung with a soft oatmeal paper in dull burnt orange shade with the border next to picture moulding, carrying plenty of green, some red and a little orange. A soft silk in mahogany, or copper color would be ideal for the draperies while the floor covering should be in dull reds, similar to the colors in a Khiva rug. The living room treatment may be extended to the vestibule. Ivory shades would be very satisfactory with your outside color scheme or you may use a neutral tan. Duplex shades are used very extensively, so would suggest that the inside of all shades be in cream white.

With Old Mahogany Furniture.

F. C. I. Am sending under separate cover sketch of floor plan for proposed bungalow, and would greatly appreciate suggestions in regard to interior finish of living room, dining room, stairway and den. Furniture for den and dining room will be oak, but for living room we have a set of fine old mahogany we wish to use. It will require new upholstering. We have a Wilton rug for living room, in tans and browns. Other rugs will be new.

We would like to finish above rooms and stairway in birch, finished natural, but would that be right? This bungalow will face the West, and will be the first of twenty we intend to build on a plot of ground admirably located for bungalows, and would like to have the treat-



Home of C. M. Fitch, 620 W. Minnehaha Blvd., Minneapolis, Minn. Designed by Lindstrom & Almars, Architects, Minneapolis, Minn.

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ment of this one as near perfect as possible. Walls will be tinted, and our favorite tints are creams, tans and browns.

Drawings show cove molding at ceiling angle of living room, and beam ceiling in dining room and den. Should dining room have plate rail, paneling, or should both be omitted? Den is planned to have red or golden tapestry brick fireplace. Tops of all windows are set in line with tops of doors, which are 6 feet 8 The drawings call for square inches. columns at the entrance of stair hall from living room, 7 feet high. As this will bring the cased opening above the line of doors and windows, I think I would prefer to make the height 8 feet instead of 7, which will give better view of stairway. Would that be all right?

For outside treatment of this bungalow had thought of using red asphalt shingle on roof, wood shingle on sides, stained tobacco brown, with white trim. Have you a better suggestion?

Ans. Considering the set of old mahogany and the fact that your living room is somewhat detached, we would suggest that you use a birch trim in this room and treat it in ivory enamel in an egg shell finish, with the doors to den and vestibule stained mahogany to match the furniture. With the walls treated in an ecru or light tan and the furniture upholsteredin a brown and olive green tapestry in a Colonial pattern, you would have a very charming room.

As you intend building twenty of these houses, you must consider the tastes of the public, so would advise using fumed oak in den and dining room, as this treatment seems to be generally pleasing. The den would look well in a rich golden brown which will harmonize nicely with the brick fireplace and the oak trim. The dining room would appear to better advantage with a plate rail and the lower wall divided into panels. Blue for dining rooms would appeal to your clients, so would use a fabric effect in paper, in dull old blue for the panels, with a Tiffany blend for the upper, finished at the picture moulding with a decorative border.

Tapestry papers are very much in favor again, so would also suggest that you consider a foliage effect for the upper wall in faded blues, gravs and tans.

The arch to stairs would be more effective if made 8 ft. high and if you use the ivory treatment would suggest carrying it up the stairway with the risers in ivory enamel and the treads in mahogany; also finish the pilasters in the archway in mahogany.

Your outside color scheme is good, but would suggest that the wood trim be a cream instead of white.

A North Frontage.

C. A. B. We are about to build a new home and have several unsolved problems with reference to interior decorations, upon which we wish your help.

The building has a north frontage set back from the side walk line, with no shade trees on the lawn.

All the second floor will be finished in birch, with fine sand finished walls, with exception of the bathroom. the The northwest room for the daughter, we expect to finish in white enamel and carry out the color scheme in blue. The northeast room 12x15 with two windows on the north and one on the east, will be a guest chamber. We want to finish this in silver gray, but do not know what color scheme or what furniture would work out well with such a finish. We will have to buy everything new for this room, so will not be hampered in carrying out any suitable plan.

The southeast room will be our room, 12x15, and in this we thought to use birch finished circassian walnut. What color scheme would go well with the walnut finish? The furniture we have to use in this room is quarter sawed golden oak.

Ans. Regarding your interior we suggest a silver gray stain on the birch trim for guest room and furniture in .gray enamel, either plain or with inset panels of cane. With this we would tint the wall a soft rose shade, not pink, and use rose and gray cretonne draperies, top of dresser, two upholstered wicker chairs, etc.

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Residence of \dot{Mr} , W. E. Crawford, Wabash Ave., Evanston, Cincinnati, Ohio. Sides covered with Ambler Asbestos Shingles "Honeycomb" Method; Roof of the same material applied French or diagonal method.





For the rug, deep shades of rose, body Brussels.

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The northwest room is a poor exposure for a blue treatment, but it could have old ivory, yellowish cast, woodwork instead of white; walls tinted deep cream; old blue rug and hangings and mahogany furniture.

The southeast room will be very good in the walnut finish and here a soft old blue tint on the wall with white ceiling would be very good. Then for hangings, an old fashioned chintz with blue bachelor buttons, etc.

A New England Type.

E. P. G. I am enclosing a floor plan of a new house we are expecting to build in the near future. Outside to be white with green blinds placed in center of lot 110x 180 feet. Down stairs to be dull natural finish oak. Upstairs, white enamel.

For my living room I have library table, desk, and 5 chairs, in Flemish oak. Would get two wicker chairs stained to match. Now what should the walls be: west, north, and south exposure; also rug, room is 13.9x23; also curtains. My idea is to make the room livable. Shouldn't the reception hall and living room walls be alike. I have two oriental rugs for hall. The dining room has an east and south exposure. A built-in sideboard of natural oak, table and chairs of Flemish, French doors leading to sun parlor on east. How about color of walls, rug, hangings.

I am very fond of colored chintzes. This house is a New England type of a house. I want it to be simple and beautiful. In the upstairs what do you think of rag rugs, especially "hit and miss" type in a room with old mahogany furniture. Please tell me, too, what you consider best electric fixtures for that type of house.

Ans. You failed to enclose your floor plan, but we will answer your questions in a general way.

First, the question of woodwork: We hope you will reconsider the decision to finish the oak trim natural. While it would be possible to use your dark Flemish furniture with an ivory or even white trim, it is utterly incongruous with natural oak. Your house cannot be "beautiful" with this combination, though it may be comfortable. Moreover, the old New England type of house was never so treated. Either the woodwork was white with or without dark doors, or it was very dark, black walnut commonly. Now a walnut stain would be beautiful with your Flemish oak, or if you do not want so much dark woodwork, use white casings, frames, etc., and walnut doors. This would be truly Colonial and beautiful.

With such woodwork, a scheme of gray walls running through the house would be Colonial and "beautiful." Gray grasscloth in living room, a Colonial landscape paper in grays and rose tints in dining room, etc., with the chintzes you like for relief, and some small patterned Colonial tapestry on living room pieces.

The electric fixtures in plain brushed brass except in dining room, where dull and bright silver is lovely with the table silver and glass.



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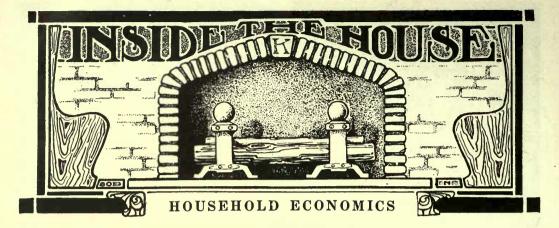
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Hot Water and the Summer Camp



ODERN enthusiasm for the Simple Life is not willing to forego the satisfaction of modern plumbing. The porcelain tub and the hot water heater must follow one into

the lake regions and even into the hunting camps. Running water in the house is expected in the most primitive sur-

roundings and can be accomplished without great difficulties or expense. when it comes directly from the mountain stream or lake. Cottages used only in the warm season and closed before there is danger of frost in the fall can readily be fitted to a hot water system, more or less primitive, which can be drained and left in comparative safety. But for cottages to which house parties come through all the good weather, sometimes as late as Christmas time, the hot water problem is more complicated. Here is the solution which was worked out in one cottage where the bath room was added some years after the house was first built. To get hot water pipes

from the kitchen to the bath room would have meant carrying unsightly, dust catching pipes through the other rooms of the house, and could not be considered. Cold water was brought from outside the house and the bath room must be complete in itself. As kerosene was the fuel used for cooking it was the log-

ical fuel for heating water. In order to have a hot water tank which could be emptied and thoroughly dried on the inside when not in use, a six or eight gallon can was made to stand on a single burner kerosene stove of the low burner type which brings the blaze directly under and close to the plate. The tank was fitted with what proved to be a very ungainly looking faucet but which nevertheless extended far enough to reach beyond the oil receptacle of the burner. The cold water pipe was carried up and over the top of the tank as may be seen in the photograph, and the removable lid of the tank was pierced for the inflow of the water. The piece



Dutch Boy Paint Materials

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Dutch Boy White-Lead is pure white-lead—nothing else. Thinned to painting consistency with linseed oil, it is durable, tough and waterproof. It penetrates into the wood, clinging firmly with innumerable tiny tentacles, thus becoming, for practical purposes, part of the wood itself. It does not crack, chip or peel. It retains its beauty. It wears.

In the same way, Dutch Boy Red-Lead is the paint for metal. It is the deadliest enemy of rust. You will be surprised how many house fixtures like gutters and railings, how many implements, pieces of machinery and of structural steel you can save from the scrap heap by a timely coating of Dutch Boy Red-Lead.

Interiors Made Beautiful

On your interior walls and woodwork Dutch Boy White-Lead gives you an unbounded range of choice in color. It also places every desirable finish and texture at your disposal-dull, oil gloss or enamel, smooth or stippled, plain or stenciled, mottled, glazed, Tiffany, etc.

And whatever the style, white-leaded walls are durable and washable. They wear for years, become like new every time they are washed.

Paint is the most important factor in protecting your property from decay and rust. And equally important in beautifying property, both exteriors and interiors.

Is you are interested in painting economically and well, write for Paint Points KE.

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of rubber hose from the end of the pipe which passes through the opening in the lid was removed before photographing. A "gate valve" in the pipe within easy reach turns the water into the tank. In use only a few inches of water generally stands in the tank, for it must serve as an instantaneous heater. A home made float shows the amount in the tank.

For instance if "the man of the house" wants to shave he lets out the water or adds, so that only a quart or more is in the tank and it will heat very quickly. In case he is going to fill the tub he turns the tank around, so that the faucet is over the tub instead of over the basin, before filling the tank.

The shelf on which the burner is set is placed between the basin and the end of the tub so that the extended faucet will reach either, as desired.

In practice it has been discovered that the extended faucet was really quite unnecessary for it is much more satisfactory to use a piece of rubber hose on it and allow the water to reach either the basin or tub without moving the tank.

New Problems

Watching the rapid development of the science of aeronautics it is suggested that public aeroplane landings and private landings and hangers will soon be furnishing new problems to architects and engineers.

Some one suggests that we should have a Lincoln airway in America as well as a Lincoln highway; that the Lincoln airway should follow the course of the Lincoln highway, with aeronautical grounds and stations at convenient distances. Will we see the day when the automobile will be relegated to the background—used perchance by the farmer who jogs to town at a snail's pace of 25 miles or so an hour with a few crates of \$2 eggs, while the family of moderate wealth takes a week's-end outing to Glacier National park in a 12-cylinder aeroplane that readily maintains a speed of 200 miles an hour?

Plans have been prepared, it is reported, for a 57-story building, capable of housing 10,000 people in hotel rooms and offices. Plans call for a 27-story hotel and 57 stories of offices, running up into a tower, 808 feet high, as compared with 789 feet at the Woolworth building, New York. Two aeroplane landings 50 feet wide by 620 feet long, will be located on the roof, according to the architect.

Milk as a Lubricant.

A Chicago gear factory has, it is reported, found milk to be a better cutting lubricant than oil. This factory is manufacturing blind nuts out of a soft machine steel.

A New Device.

To protect the contents of store windows from burglars, a Chicago inventor has patented a metal curtain which drops simultaneously with the breaking of the glass.

A Drain Tile as a Lawn Roller.

Some utilitarian has put a drain tile to a new use by converting it into a lawn roller. A little carpentry by the handy man will fit it with a long handle bar, and it may be weighted to any desired amount in case its own weight is not sufficient. In this particular case wooden ends were fitted in the drain tile through the center of which was passed an iron rod. Over the ends of the iron rod a push-cart handle was attached and, presto, you have a lawn roller.

One Dollar for a Practical Suggestion

H AVE you achieved some really new and practical solution of one of the old, or one of the new household or garden problems? If so, Keith's readers would like to hear about it, and we will pay one dollar for each suggestion accepted as satisfactory for publication. Let these suggestions cover items of general helpfulness, or of novel or attractive effects. They must not exceed 300 words in length, and must be written on one side of the paper only. In order to insure their being practical send a photograph which shows how the suggestion actually worked for yourself, if it is something which can be photographed. If you want the photograph returned in case it is not used, send with return postage to "DOLLAR SUGGESTIONS," KEITH'S MAGAZINE.

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NOT ONE COMPLAINT TO 2000000 FEET USED MOT ONE COMPLAINT TO 2000000 FEET USED Modern and Artistic

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Upsonizing is specified by many leading architects as the most modern, effective and economical way of lining interiors.

It is the easiest method, too. Upson Board cuts, saws, and nails much like real lumber. Any carpenter can apply it easily and quickly. There is none of the litter and upset of plastering.

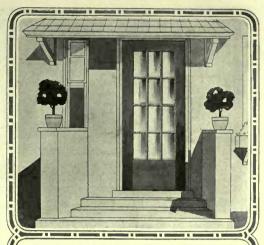
All the Board you need for your cottage can be packed conveniently in a single wagon-load.

Ee sure you do get Upson Board, however. Because this is the one wall board that is genuinely waterproofed, proferly seasoned by kiln drying, and requires less paint than other boards so that when finished it is actually the least expensive board on the market. It is the one wall board, too, that *looks, feels, works* and *acts* like lumber.

If you have an old plastered ceiling that needs re-covering, just try out Upson Board on it now.

Write us for handsomely painted Upson Board samples and valuable book, "Interiors Beautiful," free to you.



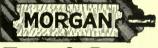


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The illustration shows Morgan French Door No. M-127

French docrs have *always* been used extensively by the best architects in fine homes. *Today* there are few homes built —large or small—without French doors. No other doors have ever enjoyed such universal popularity.

And it is not a passing fad. It is an appreciation of their exceptional beauty and all-around utility.



French Doors

are made in many designs, sizes and woods —for the outside and inside of the home. Discriminating buyers insist on Morgan Doors for all uses, because of their beautiful selected woods, their exclusive All-

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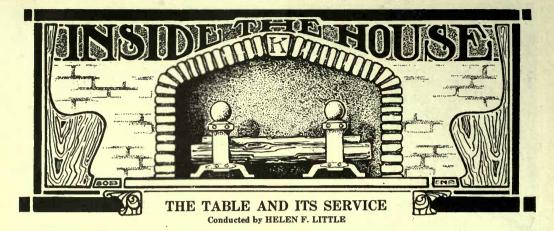
You don't need to build a new home to enjoy the beauty and service of Morgan Doors. "Adding Distinction to the Home" gives suggestions for improving the present home.

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Meals Based on Calories

HE calorie is no longer a scientific high-brow, for even the railroad diners are offering meals containing the proper amount of these food units for the traveler, and in our larger cities, restaurants are giving the calorie values of their menus. The calorie is simply a unit used to measure the heats and energy supplied to the body through food. It is the amount of heats which will warm a liberal quart of water two degrees, or the amount of energy it takes to carry one hundred pounds thirty feet. In other words, the calorie value of a food is its "punch," or capacity to drive the bodily engine to do the day's work.

So we see that the number of calories we need in a day depends upon the work we do. The scientists have estimated exactly how many calories we use up when sitting, standing, working, etc., so we can accurately compute our totals for the day. If we are above or below the normal weight for our height and age, less or more calories are needed. For example, a man or woman weighing one hundred and fifty pounds, doing no work, requires 2,000 calories per day, while a man at moderate work, requires 2,700-3,000 calories. The average woman doing light housework requires 2,400 calories, while a recent investigation showed that boys from twelve to eighteen consume from 4,000-5,000 calories.

Tables can be obtained which show the calorie value of each food, and an intelligent use of these will give a good working basis for meals; planning, as the foods are arranged in hundred-calorie portions. For example, the following breakfast contains all the food elements with calorie values.

	Ud	10116
Shredded Wheat Biscuit (1)		100
Bacon (4 strips)		
$\operatorname{Egg}(1)$		
Muffins (2)		
Thin cream (small glass)		
Butter (1 inch cube)		
Prunes (4 stewed)		
Coffee—no fuel value		
	_	

Total 775

The Story of Spinach.

Along with spring poetry usually comes the old story that "Spinach is so good for one." Nevertheless this bromidic statement will stand analysis. Let us play the small boy and ask "why" all this fuss about a rather messy looking dish of greens? It all originated in the fact that spinach contains iron, which builds up those exceedingly important red corpuscles in the blood. A diet rich in this vegetable should prove a guarantee against anemia. Then, too, it need not look messy.





Here are two attractive ways of serving spinach, one of which is a salad. When it has been cooked and seasoned and chopped finely it may be moulded by packing in a "Turk's head" pan, or a substitute made by placing a bowl in a shallow pan. After moulding the spinach fill the center with celery and salad dress-



Spinach mould filled with salad.

ing or an egg salad. The cooked, seasoned and chopped spinach may also be shaped into small cakes with a hollow in the center into which a hard cooked egg may be fitted or the half of a deviled egg. White sauce is delicious poured over this dish.

The Avocado or Alligator Pear.

A salad fruit, rapidly growing in popularity, is the avocado, a tropical fruit, native to Mexico, and South America, but now grown in Florida and other Southern States.

Imagine a large pear weighing up to four pounds, with a tough skin, sometimes yellow, dark purple or red, but oftenest green, and a firm, buttery flesh of bright greenish-yellow color, and you will have a mental picture of the alligator pear. The flesh contains ten to twenty per cent of oil, and when ripe is about the consistency of well-made butter. This easily digested vegetable oil makes this fruit exceptionally nutritious, and it deserves to be more widely used.

If you would know when the pear is just right for use, press the skin gently.

The flesh should yield slightly, and the skin be easily peeled off.

In the markets of our large cities, alligator pears are obtainable nearly all the year round, and the hostess will find it an appetizing solution of her salad problem. To serve cut in halves or sections, to be eaten like canteloupes with salt, pepper, and vinegar, or with a little lemonjuice and sugar, or better still, cut the flesh in slices or cubes and serve with French salad dressing. If the flesh is cut into little grooves with a sharp knife, the dressing will be more easily absorbed.

A Bulletin on Nutrition.

The housewife of today is realizing the need of a speaking acquaintance with such terms as "calories," "proteins," "ash," "nutrients," etc., and is often confused by the more technical books on the subject. She will find this need for simple information about nutrition answered by a bulletin, No. 142, "Principles of Nutrition and Nutritive Value of Food," issued by the Department of Agriculture, and sent for the asking.

This bulletin contains tables giving the composition of common American food products, so if one is planning a meal, and wishes to know the exact value of carrots, or salmon, or whole-wheat bread, she has but to turn to this food table. Some of the headings are most suggestive just now. For instance "Needless Use of Expensive Foods," "Waste of Food," "Danger of a One-Sided Diet," "Adapting Food to the Needs of the Body" and "Errors in Cooking."

What Is "Roughage"?

The woody fibre or cellulose in vegetables, cereals, and fruits is being given much prominence just now under the above name. Too many people in sedentary occupations are eating rich, heavy food suitable only to those who exercise. Consequently the body becomes clogged with poisonous wastes, and "roughage" helps to remove this, and stimulates the muscles of the digestive tract. Hence the popularity of bran muffins, graham, and whole wheat breads.



THE SHARP ROTARY ASH RECEIVER CO., Inc. Dept. 12, Binghamton, N. Y. Districts open for representatives

Louve Pm HIGH STANDAR LIQUID PAINT IVORY 29 This illustration painted for the Lowe Brothers Company by D. Latham Kidder. Fit for Finest 375

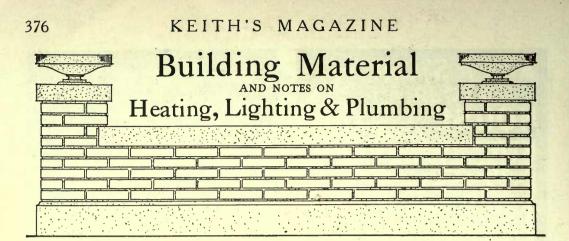
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Building the Chimney



NE of the most important items in home building is the proper construction of the chimney. In most climates a house which can-

not be satisfactorily heated is almost without value. Nothing is more discouraging to the owner of a new house than an unsatisfactory chimney. Many a fireplace has been torn out and rebuilt at a considerable expense and a great amount of trouble because the builder tried to save a few bricks or a little space. The flue is built to give a definite amount of draft to the fire. If the flue is contracted in any place in its entire length, the draft is reduced by that much. The builder will sometimes reduce the size of the flue between the throat of the fireplace and the straight flue in order to get by another flue. Experience tends to show that such reduction is always fatal. The smoke pours back into the room because its progress upward is stopped or obstructed.

The importance of proper chimney construction lies in two directions: that it shall properly perform its function; and that it shall be safe against the danger of fire.

Fire Hazard.

According to the statistics of the National Board of Fire Underwriters, over one-fifth, on an average, of all the dwelling house fire losses are due to defective chimneys, and sometimes the ratio is as high as one-third. We are told that the worst single cause of fires in every state in the Union is defective chimneys, including flues and stovepipe connection.

Flue Lining.

To prevent fire hazard good builders generally have adopted the custom of using a flue lining made especially for that purpose. The flue linings are an inch in thickness and care must be taken that a large enough size is specified. It is often customary to speak of the size of the flue lining giving the outside dimension. This is very misleading, as the flue size is smaller by the thickness of the tile.

Most Common Error in Chimney Work.

The most common error made in regard to chimneys is that of not proportioning satisfactorily the size (which governs the volume of smoke they can handle) and the height (which determines the intensity of the draft). A chimney may be high enough, yet with an area too small to do the work required. On the other hand it may be large enough but too low to produce a draft of the strength required to pull the air through the fire and up the chimney at a sufficiently rapid rate. Either fault, or a combination of both, will result in unsatisfactory service.

Basic Principle Involved.

The easiest way to understand the operation of a chimney is to consider the great laws of Nature governing its operation—for there is, indeed, nothing so very mysterious about the process. The



you've come to associate with plaster and stucco-those are a few of the many qualifications that have established Kno-Burn Expanded Metal Lath as the standard wall base.

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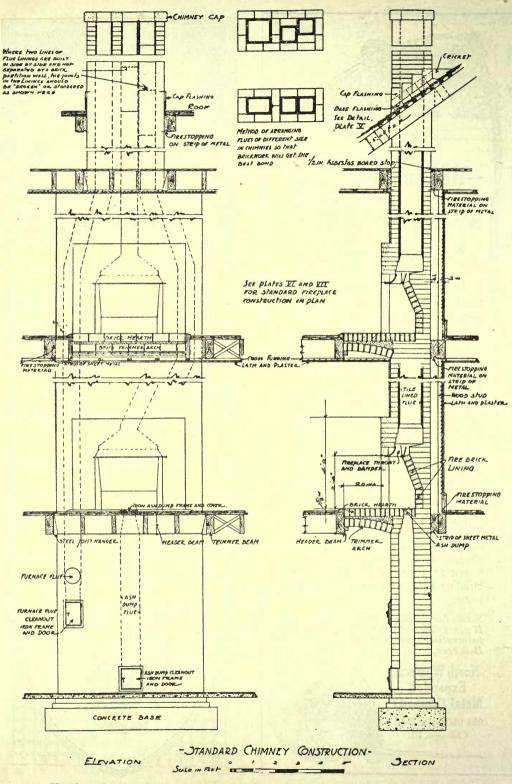
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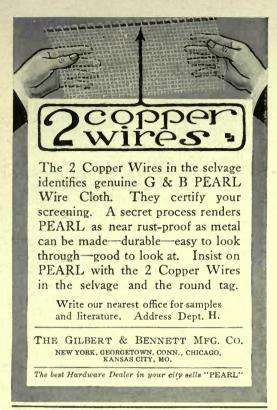
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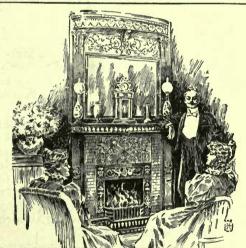
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1 LOali



Elevation and section of an interior independent chimney showing construction recommended by the National Board of Fire Underwriters.





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same force which supports the toy balloon and operates the hot air furnace causes the draft in the chimney. This is the simple fact that heated air expands and occupies a greater volume than the other air of a lesser temperature. Therefore, if a cubic foot of air outside the chimney weighs 0.07 lbs. and a cubic foot of the chimney gases at their higher temperature weighs only 0.04 pounds then every vertical foot of air in the chimney means an unbalanced pressure of 0.07-0.04 or 0.03 lbs, per square foot at the base. This unbalanced pressure has a tendency to equalize by the rising of the lighter gases, but, since their place is taken by more heated gases coming directly from the fire, the temperature, of course, never does equalize and the action continues its operation as long as the fire is kept burning.

From this basic principle all chimney action is governed and many chimney failings can be explained. For instance —the draft of a chimney is never as good in summer as in winter; because the outside air is colder in winter, the expansion of the chimney gases at the same temperature is therefore relatively greater and the intensity of the chimney draft is consequently increased.

Ordinary residence chimneys have little trouble on account of height owing to the fact that most residence heating systems burn large size anthracite coal, which makes a very hot, clear fire and offers little resistance to the passage of air through the fire bed. In fact, many of the older railroad stations and similar places used coal stoves with only a stove pipe extended through the roof, this pipe seldom being over 10 feet in height. But an attempt to burn smaller sizes, such as pea and buckwheat, would be doomed to failure under such conditions.

The flue lining should start from the bottom of the flue, or from the throat of a fireplace and be carried up continuously the entire height of the flue. If the thickness of the masonry surrounding the throat be less than 8 inches in any part, the lining should start at bottom of the lintel. Masons are often careless about lining the flue even where the specifications call for it, and are apt to omit it until they get to the straight part of the flue. This makes the flue dangerous at its hottest point. Watch chimney construction carefully, and see that details recommended are not ignored by the mason.

Size of Flue.

The size of the flue should be carefully proportioned to its use. Good authorities say that the area of the flue should be at least one-eighth the area of the front of the fireplace and that it is better to make the flue even larger.

The front opening in the fireplace should be wider than it is high. It is advisable to have the back of the fireplace narrower than the front with the back wall curved toward the front at the top. In this way the heat will be reflected and radiated out from the fireplace much better than where a square opening is built.

When a dome damper is used it should be set as high in the roof of the fireplace as possible, and an angle steel should be used below the front edge of the damper to carry the first row of brick. Set the damper high in the throat of the fireplace, so that when the smoke rolls forward it will strike the angle steel and the front of the damper and be forced up the chimney. The opening in the damper should be either in the center or in the front of the damper.

The National Board of Fire Underwriters, in their book, which gives construction specifications which should properly protect dwelling houses against fire, give the following sizes—which should be the clear opening of the flue:

"It is recommended that a minimum flue area of 64 square inches (8x8 inches) be furnished where the fuel used is wood or coal. In some cases where a single medium-sized coal stove is connected to a flue, an area of 56 square inches may be permissible. This can be secured by use of a $7\frac{1}{2}x7\frac{1}{2}$ -inch flue lining, which is one of the standard sizes."

Furnace and fireplace flues should be not less than 96 square inches in area, and for the latter 144 square inches would be a better minimum; greater areas are often necessary. A generous sized chimney produces a better draft; a poor draft is a great annoyance and is difficult to remedy after a chimney is built.

Build all chimneys from the ground up. None of their weight should be carried by anything except their proper foundations.



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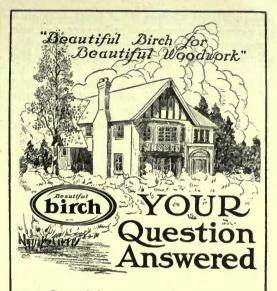


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Northern Hemlock and Hardwood Manufacturers' Association 203 F. R. A. Building, Oshkosh, Wisconsin Foundations should be at least 12 inches wider all around than the area of the chimney. The foundation for an exterior chimney should be started well below the frost line.

382

Build all chimneys to a point at least 3 feet above flat roofs, and 2 feet above the ridge of peak roofs, and provide a proper capping of stone, terra cotta, concrete or cast iron.

Unless the top of brick chimneys be capped or the top bricks tied together in some secure manner, the mortar joints will loosen by the action of heat and weather, and in time will fall out. This will loosen the brick and form holes between them, thus making a place for soot to accumulate and render the chimney unsafe. Chimneys with plain tops will last longer and are safer than those with courses of brick corbeled out near the top for ornamental effect. The lack of good bond allows such brick to get loose and in time they are liable to drop.

If chimneys are not lined it is imperative that the brick wall be 6 inches, and better be 8 inches thick.

The walls of stone chimneys should be at least 4 inches thicker than required for a corresponding brick or reinforced concrete chimney.

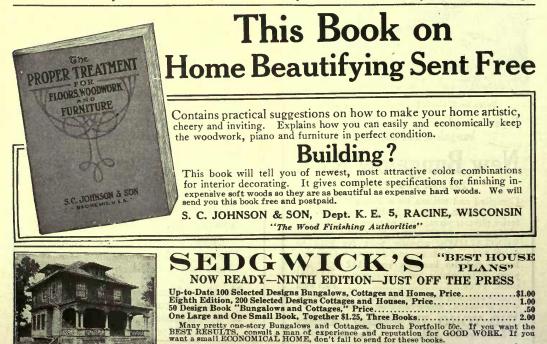
Care and Repair of Old Chimneys.

A chimney in any existing building that becomes too hot to hold the hand against comfortably, is dangerous if there is woodwork touching it.

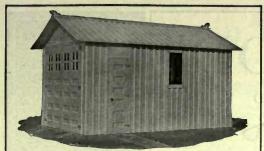
Where soft coal is used, it is often necessary to rebuild chimney tops every few years. In order to ascertain if chimneys need rebuilding, climb to the top and look inside. An electric torch or a lantern let down on a string is an aid in detecting defects. If mortar has fallen out from between the bricks, it will soon do so all the way through the wall. Take an ice pick or other sharp implement and try to push it through the mortar; if you can do so, rebuild at once as follows:

Tear it down to a point below the roof, get tile flue lining of the same size as the inside measurement of the chimney, set it in the top of the flue and build up with good brick and Portland cement mortar. This will make a solid chimney through the roof, where there is most danger, and is the best that can be done unless torn down to the ground and rebuilt, which is quite expensive and seldom necessary. Preserve a clear space of at least 1 inch between the woodwork of the roof and the chimney wall, and connect the chimney with the roof by metal flashings.

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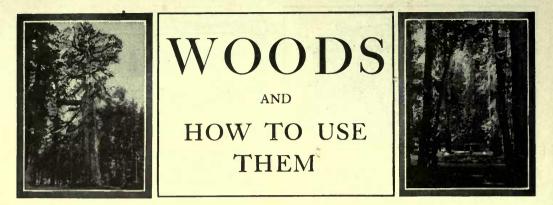
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EDITOR'S NOTE. - When the building idea takes possession of you-and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH's staff of wood experts. This department is created for the benefit of KEITH's readers and will be conducted in their interest. The information given will be the best that the country affords. The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring

about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users,

Our Rustic Fence

Samuel Masters



HEN Boy came home from Yale for his vacation he was tired and in a run-down condition, physically and mentally. He had made

tentative plans for a summer's work at his chosen vocation in the chemical laboratory of a local factory, but it was felt that the long mornings of rest, coupled with a moderate amount of out-of-door exercise, would be better for him than a "job" elsewhere and he was very willing to fall in with our plans to that end.

We had been in our new home in New Britain's Stanley Quarter for a few months, and the excellent top soil which had been spread over the yard had enabled the grass to grow quickly and thickly, so that a good greensward covered the ground. In the front, our lawns and our neighbors' melted into each other without the need of a perceptible division, but at the sides and rear it was voted



The gate attracts admiring attention.

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The Union Jack panels next to the Gothic arches, and the tepee panel are Nan's design.

that we needed a fence, both to mark the boundary and to provide a suitable background for Nan's flower beds. Boy was elected to build this fence in his vacation.

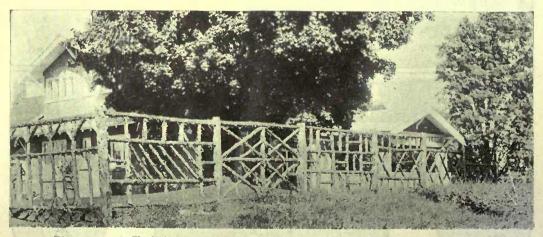
Over in the west part of the city, beside the park, there is a fence built under the trees which blends into the sylvan effect of the park. It was made of round cedar poles with the bark on, and the dull grays and browns of the fence with the dark greens and dusky red of the clambering vines form a harmonious whole. Nan liked it immensely. Boy was certain he could provide a fence for our yard which would be as appropriate and as desirable. I hardly knew whether it could be done or not and rather doubted-but two against a doubtful one made the vote unanimous and it was made clear to me that my part was to provide material and to approve plans. To approve would be to show myself a person of judgment and

taste; to criticize or doubt would evidently simply win for myself the reputation of being a contumacious kicker,—and so I decided to approve.

Neighbor Donahue was prevailed upon, for a consideration, to part with his pile of cedar poles, and a man on the mountain cut and brought down a hundred little trees, which gave all the material required.

Except nails. And the only tools we had were a hunters' axe, such as the Boy Scouts carry, and a very fine-toothed hand saw. A coarser hand saw, a buck saw and a saw buck, a hammer and ten pounds of nails (afterwards increased to eighty pounds) sufficed to bridge this void. It was deemed by me cheaper to hire a man to dig the post holes than to buy the necessary implements—a decision cordially endorsed by Boy and his mother.

Now, a line fence may be a source of trouble with one's neighbors. I have



The double diamond is mine, but most of the other panels are Boy's.



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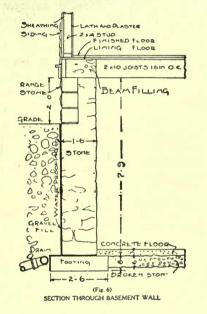
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found that if a fence is built just inside the line the neighbors have no particular interest in the matter, except an esthetic one, and need not be consulted.

So a line was drawn along the boundaries and the big cedar posts carefully set on our own side of the line. They towered nine feet in the air, and looked like the timbers for a pier, but if the neighbors felt any uneasiness they hid it under a cloak of friendly interest and withheld their judgment. They're mighty good neighbors, anyway.

"How high shall we make it? What design shall we use?" These problems had been the subject of much animated discussion from the moment that the type of fence was decided upon.

"High enough for grape vines and rambler roses." By moving a pole up and down between posts it was found that six feet was as high as would look well and that anything lower would not give the trellis- properties desired. So six feet the fence should be.

But the design! I took pencil and paper and drew a panel which pleased me immensely and filled Boy and Nan with scorn. They seized the graphic instrument and in turn produced designs which suited no one but their creator. They made a pilgrimage to the Park to see the original fence which has given them their inspiration, and I went trailing after, but the style of that fence would not do for ours. We drew some more. Still no decision. Then—

"Why should they all be alike?" Nan "Why not have some of yours, asked. some of Boy's and some of mine?" and it was so decided. The illustrations will show the result, and I maintain that the panels I designed are the ones which give distinction and character to the whole. The early Gothic arches shown just above the pile of sewer pipe are mine. So, too, is the sunburst in the middle of the rear fence, with the pole for the martin house running through it, though it is true that the design was inverted by Boy from the original drawing. The heraldic or Union Jack panel next to the Gothic arches is Nan's and so is the Teepee panel beside it. The Double Diamond shown in the next view is mine and so is the one to the right of it, the others on this side being Boy's. The idea of the gate shown in the front view is also mine, but Nan and Boy would not consider my design and fussed up this one between them. It looks pretty good, all things considered, and even as 1 write, it is the subject of admiring comment of a group of boys from town just passing by. "Oh, look at the ga-a-a-te!" cried one, admiration in his tones. Smart looking lad, he is. We shall hear of him again—probably as a famous architect or landscape gardener. His hands show a liking for the soil.

The fence was not all designed at one time. In fact it was hand-to-mouth or inspiration-of-the-moment affair. Usually a panel was built each day, or perhaps a start made on a second. I took special pains to have a number of perfectly good, workable designs lying around handy, but Nan frequently found them inartistic or Boy considered them too intricate, and they scrabbled something together more to their liking. It was a vacation job pursued in leisurely fashion for the love of accomplishment and there was plenty of time to cut and drv.

Nan's is an eager spirit and her ambition often far exceeds her strength, which is not great. She and Boy worked together on the fence. Her enthusiasm and interest helped to make the building of the fence a game instead of a task, and house. I came home one afternoon just as they were finishing a panel, and as Nan in her ardor laid hold of the hammer handle I heard from behind the curtain of a neighboring window, "Now, she is going to get her wrist slapped," to my amusement and Nan's and Boy's chagrin.

"I declare," she would say to me, confidentially, amusement struggling with exasperation, "it is too provoking. If I do a single thing he grabs me and leads me into the house. He takes such strides with his long legs that he fairly lifts me along and he hurts my wrists awfully," and I could understand her feelings and sympathize with them.

"I can't help it, father," Boy would confide in me. "I can't stand it to see a woman working around like a man, and she will do it. If I take the saw up she takes the hammer, and if I take the hammershe picks up the saw. It isn't right or necessary." With all of which I could heartily agree.

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SPLINTERS AND SHAVINGS

Bandelier National Monument.

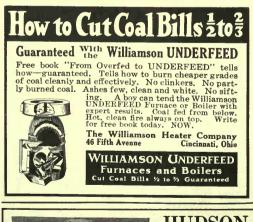


NEW name has been added to the long list of Americans who have done things by the proclamation of President Wilson setting aside a tract of land in central New Mexico as the Bandelier Monument.

Bandelier laid the foundation for a real history of the Indian and Spanish southwest. He lived among the Indians for years, leading their rude life, sharing their good times and bad, speaking their language, adopted by them into their tribes. He had the mind of a scholar and a scientist with the temper of a pioneer.

He traveled on foot and horseback over the wildest regions of the southwestern United States forty years ago, when the Indians of that section were still on the warpath. He carried no weapons but a light stick a metre long, that was graduated for making measurements.

The tract just set aside as the Bandelier National monument includes certain old cliff dwellings near Santa Fe, N. M. It was long believed that the inhabitants of these caves in the rock belonged to a



race since dead and vanished. Bandelier proved that the cliff dwellers were simply the forefathers of the present Pueblo Indians, and very much the same sort of people. The scene of his novel, "The Delight Makers," is laid in these old cliff dwellings, and the characters are drawn from real Isleta Indians, whom he knew The work he did later in intimately. Peru and Bolivia was of the same nature.

Fires Raise the Cost of Living.

With an average of more than one reported fire for every minute of the year, and a daily destruction of approximately \$600,000, the United States is subjected to an economic drain that affects every detail of its business and social life, and is a large, though unrecognized factor in the cost of all commodities.

Furthermore, it cannot be overlooked that a vast number of people are interrupted in employment, and hence in earning power, from the same cause.

To Thaw Pipes.

The announcement is made that electricity is the only agent that will thaw frozen water pipes without disturbing the ground in which they are buried.

Correction.

Marston and Von Pelt are the architects of the Picturesque Small House "With the charm of the old-country houses" shown in the April number and Myron Hunt and Elmer Gray are the architects of the "Picturesque Club House." The names were inadvertently omitted from under the cut. These designs are of such interest that we take this occasion of giving credit to the architects.





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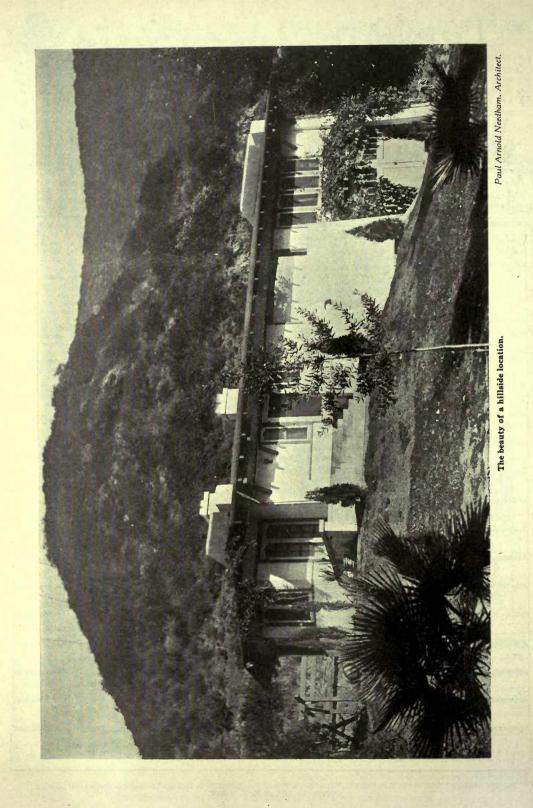
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VOL. XXXVII

JUNE, 1917

No. 6

An Attractive Hillside Bungalow with Basement Garage

Charles Alma Byers

HE planning of a home for a hillside location frequently constitutes a somewhat difficult problem, and suggestions for solving

some of the attending difficulties are, therefore, always worthy of attention.

In the attractive little bungalow here shown the hill-side problem is handled in a particularly satisfactory manner. Not only is the house so planned as to make excellent use of the sloping ground, but it is also of decidedly pleasing architectural style; and, all in all, it is a most charming inexpensive home, with many delightful and rather unusual features both inside and out.

An especially interesting feature lies in its basement garage. The ground rises from the roadway in front rather steeply and a little unevenly, and hence are provided excellent natural advantages for a very roomy basement, with convenient entry thereto from the front. The garage, reached by a slightly inclined graveled driveway is, therefore, given a most desirable location. It, however, occupies but a portion of the available space, and consequently, to utilize the remainder of the



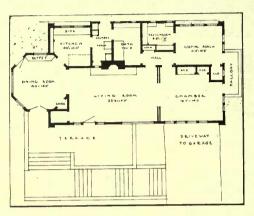
As seen from below, showing garage.

Paul Arnold Needham, Architect.

basement area, there is also provided a large storage room, with an intervening partition. Both the garage and the storage room are floored with concrete, and the former is quite satisfactorily lighted by a partially glassed door and two tiny

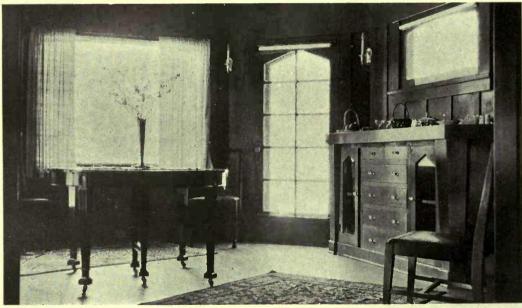
windows, while a number of small windows in the partition help to light up the adjoining room also.

On the main floor level of the house is a delightful front veranda, which is reached from the garage driveway by a series of ascending cement steps. The



The structural lines of the house are gracefully handled, and its color scheme is unusually attractive, although quite simple. The walls are of creamy-white cement-stucco over metal lath, and are of such plain and massive design as to give

> the structure a very substantial appearance. However, they are relieved of any undue severity by the numerous windows and a rather prominent display of wood trimming, all outside woodwork being painted a rich shade of brown. The roof covering is of



The buffet has end cupboards and drawers.

veranda, enclosed by a low wall, is floored with cement, but is without overhead covering, except for such as is provided by the rather wide overhang of the main roof. Accessible from the main floor also is a small balcony, at one end, which, likewise without overhead protection, is enclosed by a wooden railing. tarred paper composition, surfaced with crushed red tile, and above its mildly pitched level rise not only the two cement chimneys but also the gabled ends of the house walls.

The rooms of this bungalow are living room, dining room, bed room, sleeping porch, a small dressing room, bath room, kitchen, and the usual rear screened or laundry porch. From the front veranda direct access is provided to both the living room and the dining room, and the end balcony is reached from both the bed room and the sleeping porch. Sliding doors intervene between the living room and the bed room, and a very short hall forms the connection between these two rooms and the sleeping porch and bath room. The arrangement utilizes the floor possesses a most complete built-in dresser, as well as other shelf and drawer space; the bath room has a wall medicine case and a cabinet for linen; the connecting hall contains the usual linen closet. The kitchen is equipped with much cupboard room and all the other customary conveniences, and the laundry porch is provided with a number of small closets for brooms and other household articles, as well as the usual stationary laundry



The fireplace has a raised hearth.

space economically and conveniently, and the numerous windows and glass doors light up the interior in a truly charming manner.

The house is also provided with many delightful built-in conveniences. Besides the excellently designed fireplace, the living room has a small corner closet for wraps; the dining room contains both a buffet, composed of end china cupboards, several drawers and a sideboard shelf, besides a separate corner china closet. The bed room has both a wall bed and a small closet; the sleeping porch also has a closet, while its adjoining dressing room tub. These features are all excellently designed, and are so located as to take use of very little floor space that would be of value for any other purpose.

The woodwork of the living room and dining room is of California redwood, finished with a dull waxed surface and left in possession of its natural color. The latter room is virtually an octagon, and is provided with either windows or glass doors in five of its eight angled walls. It is connected to the living room by a broad open arch, and the same chapel effect of the flat arch is maintained in the design of nearly all the windows and outside



The end view showing character of location.

doors—a very interesting detail. The walls of the living room are finished with a paneled wainscot, with the surface above covered with paper, and its ceiling, of chapel design following the roof lines, is boarded and battened. The fireplace, of simple lines, possesses an elevated hearth, and is constructed of dull soft-brown tile.

In all the remaining rooms the woodwork is of pine, which is enameled in old ivory, and the walls of the bed room and dressing room are papered, while those of the kitchen and bath room are finished, to a height of six feet, with hard wall plaster, marked off into tile-like squares and enameled like the woodwork.

Hardwood floors prevail throughout the house, except in the kitchen, bath room and laundry porch; pine, covered with linoleum, is used in the bath room and kitchen. The house is modernly equipped with electricity, gas and hot and cold water. It is heated from a floor gas furnace, but, because of its roomy basement, a hot-air furnace could have been installed at a slight increase in cost.

This bungalow is located in the suburbs of Los Angeles, California, and was designed and built by Paul Arnold Needham, architect, of that city. For a hillside location, the bungalow is especially charming and well planned. Its white stucco walls contrast admirably with the green foliage of the background hills, and in every other way is it well moulded into its environments. With its basement comprising a very naturally located garage, the arrangement is also particularly convenient, as well as economical in the matter of cost; and, all in all, the home affords a most workable suggestion for all who may be confronted by a similar problem.

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The Garden Entrance in New England

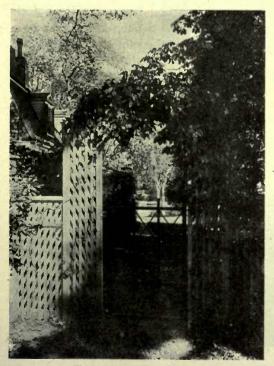
Katherine Keene



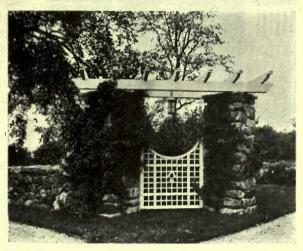
ERHAPS there is a bit of selfishness in the walled garden, but it seems rather to give the zest which al-

ways seems to belong to that which is not readily attainable, or which requires an intentional effort. Those people are rather rare who have the same appreciation for the wild flowers growing untended in the open fields that they have for the cultivated garden. One loves a mass of yellow in the garden and will go to considerable trouble in order to attain it; but a vacant lot yellow with dandelions,—

that is quite a different matter. In its first flush of blossom it is a beautiful



The Endicott garden entrance.



A white garden gate.

thing but,—it is not with our eyes alone that we see, and even in a garden the psychology counts surprisingly.

The enclosed garden makes for vistas. The enclosure may be little more than a line, but it unconsciously leads the eye along preconceived ways. Individual flowers and bits of background are not taken by surprise, as it were, and forced into unintended associations. In the old New England gardens lattice was of prime importance for this reason. It guided the eye rather than shutting out the glimpse of color and of greenery. It is of value also on account of the background which it gives to almost any effect.

The garden entrance, in this way, accents the point of view which the garden invites. It may or may not be a bar against dogs and intruders, but it gives the sympathetic visitor opportunity to treat it fairly; to see it first from the chosen point of view.

Old stone walls are among the dis-



The trellised arch at Manchester-by-the-sea.

tinctive features of the New England landscape; where someone has called them the "ruins" of America, so picturesque are they. Naturally this element has been utilized in the New England garden, new and old. The vines in every wayside have appropriated the old stone walls as their particular province. They fall into place as a matter of course in the garden, making a background as well as an enclosing wall; emphasizing the entrance; and appearing again in the rock garden or around a pool. Nature's trellises they are in very fact.

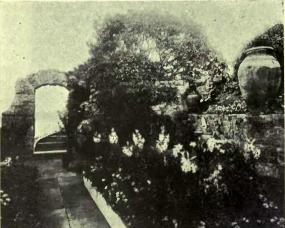
The white garden gate hung between the stone piers, pergola covered and vine clad, gives a pleasing note in the photograph of a New England garden entrance.

The latticed archway which gives entrance to the Endicott garden at Danvers, Massachusetts, tells us of the Colonial time to which it belonged and makes a charming frame for the picture-like and changing vista. The trailing vine seems to appreciate the latticed trellis. We are told by those who know that the diamond-shaped openings of the old-fashioned lattice gives the vines a better chance to mount upward than where the strips are set at right angles.

Colonial feeling still predominates in New England, and we hope it may through a long time to come, for its beauty and restfulness is so distinctive a feature as to have almost a foreign quality in some other parts of the country.

The trellised arch over the entrance at Manchester-by-the-Sea, while manifestly modern, has a Colonial feeling which fits the old-fashioned garden which borders the path to the stately mansion. The roses and vines will make both fence and archway a bower of blossoms.

In quite a different vein was the North Shore garden, conceived and carried out with its statuesque effect, which the stately lilies seem to embody. Here the stone wall has been given due prominence, yet treated in such a reasonable way that it seems only to be carrying out the plan which nature outlined. The stone archway tantalizes and teases until one feels that he must get a peep at the view beyond, though at the same time he realizes that the greatest value of the entrance arch is in its relation to the constantly changing picture which it frames.



A garden on the North Shore.

Old Colonial Interiors

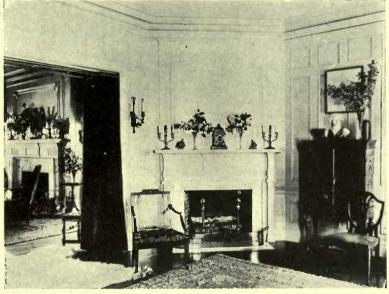
Anthony Woodruff

RCHITECTURAL traditions have been one of the most powerful forces in all types of building in this country, and none have been more satisfactory in their practical

application than that of the Colonial interiors.

It is always interesting to see the old Colonial interior treatment at its best. with its white woodwork and delicately moulded details; its beautiful fireplaces and wonderful wainscoting often paneled to the ceiling, vet without seeming elaborate, and its quaint old-fashioned closets for china, and the old landscape wall paper, which still remains on some of the old New England walls.

wood instead of stone as in the classic of the Greeks and Romans. Thus the mouldings are very delicate, with subtle curves and carefully proportioned spaces. Many of the courses are enriched with carving and dentil courses, often giving a close



Two Colonial mantelpieces

It is worth while studying these old rooms somewhat in detail, both for the treatment of the room and for its furnishing. Many modern houses have been copied so closely from the best of the early houses that they are of almost equal value historically with the whimsical crudities omitted that are sometimes found in the early houses, though even these may be also copied.

Colonial details are essentially classic in type, derived through the Georgian period of England and transplanted in the colonies. They are generally based on the five "Orders," developed for use in texture in the light and shade. Many intricate dentil courses are characteristic of the period. These are so called from the "toothed" effect of the little blocks of wood cut out or set together in many ways, and were often very elaborate, making a rich band under the projection of the shelf or cornice, giving an interesting play of reflected lights.

The first photograph is so taken as to show the mantel pieces in both of the two adjoining rooms. Each is strictly Colonial, yet they are very different. In both cases a single panel covers the chimney breast over the mantel shelf and is enriched only



A characteristic Colonial interior.

in the corners. The paneled wall has a moulding at the height of the window sills so characteristic of Colonial rooms. The fireplace in direct view has delicate Ionic capitals and fluted columns with a wide entablature under the mantel shelf.

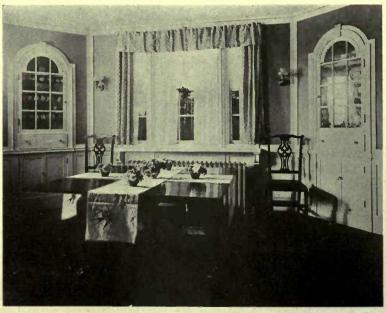
The fireplace seen through the opening is much more elaborate with carvings and flutings.

The mantel shown against the landscape paper in the second photograph illustrates the effectiveness of this treatment. The low wainscot is at the window sill height and has an elaborate cap, as was so usual, and the mouldings of the mantel are enriched.

When one visits these old houses many interesting stories are repeated concerning the carving on the mantels, the care which has been given to the woodwork so that it has not been repainted for,—possibly fifty years, and the consequent "mellowness" of its tone. Sometimes even the carpet has been on the floor for an historic period without showing the usual signs of wear.

When wall paper was used in Colonial times much of it was imported from Paris for the well-to-do colonist and was printed on paper made in squares. Where it still remains on the wall, as it does in some places, attention is called to the squares where the paper is joined as it is quite different from the present mode.

In the dining room perhaps no treatment is more satisfactory than Colonial woodwork and mahogany furniture in keeping with it. The dining room, which is shown in two views, is nicely worked out. It has a simple corner fireplace, and is made into an octagonal room by cutting off the other corners. The corner closet for china was rather usual with the Colonial builders and it was often treated in



Two corner closets for cl ina.



The corner fireplace in an octagonal room.

the way shown in this dining room, or if there was only one cupboard, a room door on the other side was given a similar

treatment. The round-headed door with the square divisions of glass is always effective. The deep drawer above the wainscot moulding was often used in such china closets with the cupboard below. Then of course the cupboards must be filled with old-fashioned dishes. gold band, willow, or perhaps an "Indian tree" pattern, all of which have come into favor again, if in fact they have ever really been out of favor. Of course, as a matter of fact, "old-fashioned" has become a term of highest commendation, and often signifies the most satisfactory mode of the period. The dining room has a low wainscot around the room, paneled without mouldings, and capped with a chair rail.

A quaint bed room is shown in the last illustration, with a four-post tester bed such as graced the "spare room" in the well-to-do Colonial household. The bureau, table and chair are all old pieces such as used to be found in many old homesteads, and which are now treasured as heirlooms.

There is something beautiful in the spirit which has preserved much of this old furniture through the period when it was scorned more or less by the oncoming generation, and by the new-rich class, who bought the new things and discarded the old, or in the

days of roomy attics, put them in the safe keeping of these veritable storehouses.



A quaint bed room.

Our Household Watchmen

Edith M. Jones



NE of the problems of our modern civilization is the proper disposal of garbage. To meet sanitary requirements and supply a

long-felt want modern invention has evolved the incinerator. There are many

kinds of garbage burners on the market, but this particular type, shown in the cut, well deserves the high place it holds because in every installation it has fulfilled the tests and demands made upon it. The upkeep and maintenance (one of the chief problems in the incinerator evolution) is very small with this burner and the monthly bills are apt to run anywhere from 55 cents to \$1.00 for family use.

This economic statement and the fact that the back yard can be rid of the ill-smelling, flybreeding, insanitary, unsightly garbage can is

indeed good news to the householder, and he welcomes the efficient mechanism which can banish this evil.

Along with other appliances I am reminded of three small but most valuable inventions of modern times which most of us have in our homes and which hour by hour are measuring out the stored-up energies that go far towards making our lives comfortable. I am speaking of the gas, electric and water meters, and we may call them, if you please, the agents or representatives of these three corporations in our homes.

But do you read your own meters? If not, are you applying good business principles to an important feature of your domestic or commercial establishment?



A garbage burner.

This should be done for the same reason that no wise housekeeper would think of paying the bills of the grocer, the butcher or the milkman without previously checking the accounts.

There is nothing difficult about meter reading, nor is there anything mysterious about this mechanical device. The person who investigates is always deeply impressed with the simplicity and accuracy of the meter which performs the delicate task of measuring so intangible and invisible a commodity as gas and electricity.

The mechanism of the gas meter is especially

interesting and a visit to the meter shop of your local gas company would be not only an interesting but an instructive experience. After thoroughly studying the gas meter, the Housewives' League Magazine says of it:

"We cannot accuse the gas companies of 'fixing' the meter. In the upper part of the meter just behind the dials is the registering mechanism. Below is a pair of bellows, or diaphragms, which inhale and exhale air just as the human lungs do, except that they operate alternately. While one is filling up the other is discharging its contents into the service pipe. Each, when inflated, holds a fixed and definite volume of gas and measures the invisible and intangible substance just as we might measure water with a pint dipper.

"This alternate opening and closing of the diaphragms sets in motion a train of gears which records the amount

of gas passing through the meter, and as this motion must cease when the gas ceases to flow it is obvious that the hands of the dials cannot move unless gas is either being burned or is escaping.

In reading the gas meter each of the three dials is divided into equal parts, numbered from one up to ten, and each has a stubby, little pointer which tells the story.

The dial on the extreme right

measures gas by the hundreds of feet, and when the "lungs" of the meter have breathed one hundred cubic feet of gas in and out, the hand goes to the figure one. When they have breathed one thousand feet, the pointer has moved beyond the nine to the "O" and the cog wheels behind have moved the pointer on the second dial up to the figure one.

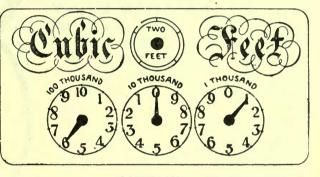
This second dial deals in denominations of one thousand. Each time the first pointer goes around its dial once, the second pointer advances one division.

When this second pointer in turn has made the complete circuit of its dial, 10,000 feet of gas have been used and the pointer on the third dial so indicates, having moved along to its first figure. Each division on this last dial thus indicates 10,000 feet of gas, and when the third pointer has made one complete revolution it indicates that 100,000 cubic feet of the illuminant have been measured.

In reading the meter, remember that no matter how far past a figure the pointer may be, that figure is still the one taken for the reading until the next figure is actually passed.

Make a note of whatever figure your first reading gives you and subtract it from the figure obtained on the second reading. This will give you the exact amount of gas that has passed through the meter since the last reading.

If the size of the figures at the first

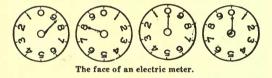


Gas meter dials.

reading alarms you, remember that it isn't the grand total you are paying for, but the difference between the first reading and the second reading and between the second reading and the third reading, and so on. For gas meters can't be turned back and they must measure their full 100,000 cubic feet before all the pointers stand at "O" again and the machine makes a new start.

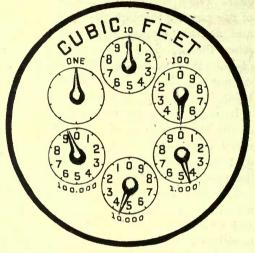
Having verified the reading of the meter, as shown by your gas bill, you may desire to make a comparison with previous bills. This is easily done, if past bills have been preserved; but if such a comparison is to be of value, the varying number of days between meter readings must be taken into consideration. The failure to do this is often the cause of suspicion as to the accuracy of the meter. To illustrate: The bill dated January 1st may include the consumption of gas between November 25th and December 22nd (27 days), while that dated February 1st may cover gas used between December 22nd and January 30th (39 days). The average consumption per day for both periods might be the same, say 10 cents per day; yet the January 1st bill would be \$2.70 and that of February 1st \$3.90. It is obviously a mistake to assume that because the latter bill is nearly fifty per cent larger than the former, the meter has registered nearly fifty per cent "fast."

To avoid any tendency to confusion arising from this unavoidable difference in time between meter readings, it is only necessary to reduce the amount of the bills to the average daily cost, and then compare the cost per day for one month with that of another. You will observe that each bill contains the date when the last reading was taken. Each bill covers the days from the date of the last reading on the preceding month's bill to the date of its own last reading. To arrive at the average cost per day, divide the amount of the bill by the number of days it covers. A comparison of average costs, as above suggested, will seldom reveal a difference in consumption which cannot readily be accounted for.



Electric energy is measured in watthours. A kilowatt hour equals 1,000 watt hours, and it is in this unit that most meters register and upon which service charges are based.

On the counter-face of the electric meter are four small dials, as shown in the cut. The hand on the dial on the left reads thousands, the next to the right hundreds, the next tens, and the last one on the right, units. If it be remembered that the hand on each dial revolves in an opposite direction from that of its adjoining neighbor, the reading is extremely simple. The cut shows a dial meter which has its pointers set in position to read 8800. The way to take the present reading is as follows: The pointer on the first right hand dial points to 0. Write down this figure, then read dial to the left. This pointer is also at 0. Write down the figure and you have 00. Then read the next dial to the left. This pointer is at 8, so you have 800.

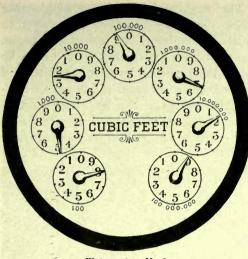


Water meter-No. 1.

Then read the next dial to the left. This pointer is between 8 and 9, but remember no matter how far past the figure the pointer may be, that figure is taken for the reading until the next figure is actually passed. So the reading stands 8800.

To find out how much current has been consumed during a certain period, whether it be a month, a week or a few hours, all you have to do is to read the meter at the beginning and at the end of the period and subtract the first amount from the second.

There are several types of water meters out. The cuts on this and the opposite page show the "A" style of dial. They register cubic feet—one cubic foot being 7.48 U. S. gallons—and are read in the same way as the counters of gas meters.



Water meter-No. 2.

The following examples and directions may be of service to those unacquainted with the method:

If a pointer be between two figures, the lesser one must always be taken. When a pointer is so near a figure that it seems to indicate it exactly, look at the circle next lower in number, and, if the pointer in that circle has passed "0," then the count should be read for the figure indicated by the higher circle. When the first circle is marked "100," it is necessary to add one cipher for the 10's place. Each division of any circle stands for 1/10 of the whole number indicated by that circle.

Let it be supposed that the pointers stand as in the cut, No. 1, then the reading would be 94,450 cubic feet. The figures are omitted from the dial marked "One" because they represent but tenths of one cubic foot, and hence are unimportant. From the dial marked "10" we get 0; from the next dial marked "100" we get 5, and from the next dial marked "1000" we get 4; from the next marked "10,000" we also obtain the figure 4; from the next marked "100,000" we get the figure 9.

The correct reading of example No. 2 is 91,692,480 cubic feet: As the lowest circle in this dial begins with 100, it is necessary to add one "0" for the 10's place.

Thus by acquiring the habit of regularly reading their meters housewives not only feel better about paying the bills at the end of the month but very often are able to stop unnecessary waste that they might not otherwise discover.

Keep a Garden Diary and Scrapbook

Adeline Thayer Thomson



F there is one thing above another constituting success with flowering plants and planting stock of all kinds, it is close

familiarity with the characteristics and requirements of the individual variety.

The amateur comes face to face with this truth very early in his endeavors. The absolute necessity of such knowledge, however, especially overwhelms him when attempting the accomplishment of a harmonious color display or an unbroken flower succession throughout the season,—unless he possess a pocket-book fat enough to embrace the services of an experienced nurseryman or a landscape gardener.

There are two simple agencies that may be employed by the amateur throughout the coming months which will easily provide a real fund of this coveted knowledge and will prove of the greatest practical assistance in the attainment of a satisfying planting scheme, harmonious in

color effect and in uninterrupted flower succession. Such agencies are merely a garden diary faithfully recorded during the coming spring and summer months, and a garden scrapbook well stocked with practical, workable information gleaned from publications on gardening subjects.

A garden diary! A garden scrapbook! How tiresome and uninteresting the The ways and happenings of planting stock should be recorded from start to finish throughout the growing season. Especial emphasis, however, must be given the planting location, condition of soil, environment, and treatment of individual varieties. No less important is the collection of careful data relative to the ensuing success or failure of such



In early spring,

statement appears, and how exaggerated, perhaps, seems the claim of usefulness. Such records, however, not only actually do give the practical service mentioned but the work becomes a quickening incentive to keen observation, leading to an ever increasing intelligence of growing things, and hence to better planting achievements.

Now, as to the matter of a garden diary: No two persons, of course, would keep it in precisely the same way, one's own individuality, naturally, largely governing the form and mode of procedure. There are, however, important points which must be covered in order to gain the greatest benefit. stock under the noted conditions, preserving a complete list of plants which are thus found to flourish in open, shaded, dry, moist, or partially shaded locations. It may be remarked, in passing, that the practical working knowledge of plants gained from such an analysis alone, is well worth the time expended on a season's diary. The month of flowering, the duration of bloom, the color and size of the blossom, and the height attained by the individual variety should receive painstaking attention. Such information at the command of even a veritable tyro, impressed on his mind by personal observation, will not only easily aid him at the end of the season to work out an



The garden changes with the season.

unbroken flower succession but one also which may readily be made harmonious in form and in color effect. I find it a great convenience for ready reference and guidance in the work to recapitulate on the last page of each month's entry the completed list of varieties flowering throughout the month together with their duration of bloom. By way of illustration let me quote my diary record for June 30th. Notes should be made also of bare, unsightly places in the season's planting and the names preserved of carefully observed varieties which apparently would remedy those defects. Memoranda should be made throughout the entire diary of all noticeable planting needs, together with suggested plans for their betterment. Also one should make the practice of visiting other planting displays, those of friends, the public parks, etc., ob-

	1st to 15th	15th to 20th	20th to 30th
Perennials	Foxglove Iris Early Columbine Lemon Lily Peony Valerian Spice Pink Oriental Poppy	Late Columbine Bronz Lily Agrostemma Penstemon Delphinium Madonna Lily Jobs-Tears	Late Columbine Hollyhock Coreopsis Achillea Agrostemma Tinctoria
Annuals	Corn Flower Sweet Alyssum Pansy Sweet Pea	Corn Flower Sweet Alyssum Pansy Sweet Pea Poppy	Corn Flower Sweet Alyssum Pansy Sweet Pea Poppy Petunia

Plants Flowering Throughout the Month of June

serving all of the good features and keeping a faithful record of pleasing varieties, blossoming periods, and suggested usefulness, which might be introduced in one's own planting display. One can scarcely doubt that a record overflowing with such practical information could be anything else but vastly helpful in meeting the individual problems of the home yard.

While it is true that personal observation and experiences teach, perhaps, most effectually, the planting accomplishments of the enthusiast would be hampered indeed were he confined entirely within the scope of his own knowledge. Here it is, that the garden scrapbook plays its important part, supplementing one's own information with that of others. But why must one go to the inconvenience of making a scrapbook someone may question, when the suggestions and skill of others are placed so easily at one's disposal through the floral publications, magazines, and even the daily papers? The truth is, however, that in this form, desired material is not readily accessible for reference when it is needed. Publications become lost in various ways and even when they are carefully saved few persons will expend either time or energy searching through piles of papers for a half-remembered article, however helpful. read perhaps months before. On the other hand, if live, inspiring articles are embodied from time to time in a scrapbook which is alphabetically indexed and compiled, desired information is at instant command, thus becoming a useful, permarent, inspiring force toward higher planting attainments and ideals.

An account book, old ledger, or any book of fair size and durability will answer the purpose. If there is no index attached, one may easily be made by pasting the letters of the alphabet (printed in ink on small pieces of paper) on the edges of the leaves throughout the book, allowing several leaves for each letter. More space, of course, should be given the letters most often used in subject matter. Articles should be pasted in alphabetically and numbered and grouped according to subject matter as far as possible. To illustrate: Under the heading A., would appear timely, helpful articles on the Aster, Achillea, Annual plants, etc., etc., while under G., gardening in general might be treated together with information relating to the Gallardia, Golden Glow, etc., and so on throughout the book. Alloting generous space for pictures of especial appeal as worthy of emulation, will add materially to the attractiveness of the book and such pictures will also be found greatly helpful.

When a cross-trail has once been blazed and the goal reached securely, it is not only safe but wise, in point of time, at least, to follow the short-cut. By actual experience I have been enabled through the aid of a garden diary and a scrapbook to work out in a single season not only an effective planting scheme but one presenting an unbroken, harmonious flower succession from early spring until frost.

Who Builds My House?

Who builds my house? Why a thousand hands From the carven wood to the chiseled stone,

A hundred tribes from a hundred lands, For no man buildeth his house alone.

One dreamed the dream in his artist brain,

One pledged the treasure, one called the crew, And men like spiders on cable and crane

Wove through the air till the dream came true. --Charles Leroy Edson.

A New England House



H O U S E which had actually been built within

the last three years and which had not exceeded \$5,500 in cost was the unusual subject of a competition held at the Complete Building Show New York in in March, 1917. The exact location of the house, state, city, street and number must be given upon the drawing; and a summary of costs given in detail with

Detailed	Statement	of Cost.
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Excavating	\$30.00
Masonry work	522.00
Carpentry	1,977.00
Roofing	60.00
Painting	226.50
Plastering	174.00
Plumbing	235.00
Heating	240.00
Wiring	36.00
Electric fixtures	59.00
Hardware	61.00
Window shades	21.50
Sidewalks	48.00
	\$3,690.00

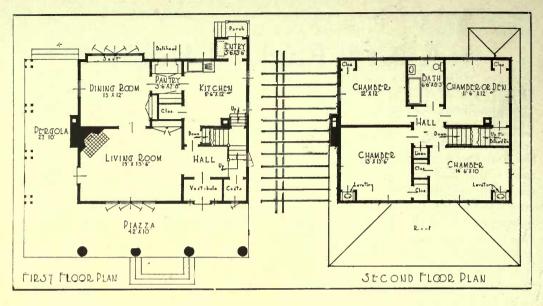
e x a c t expenditure for the various items. These were all carefully checked by the judges in relation to the location and required to compare logically with the size and type of house shown in order to be considered.

The house combining the best in design, plan and cost, —the best house for the money expended, in the opinion of the judges, whether its cost was two thousand or five thou-



A house built in New England, since January, 1914, for the above cost.

H. E. Mason, Archt.



sand, received the reward. Here was to be no question of estimated cost and problematical building. The home must have been actually built and completed since January, 1914, detailed costs being required and analyzed with reference to the locality in which it was built.

A drawing of the house, plans and section was required by the judges. This material seemed so authentic and so valuable to the prospective home builder that some of the most interesting designs will be published with the detailed figures. These have been selected as pleasing low cost homes irrespective of prize or mention awards by the judges.

In order to make these of even greater value we have asked for a photograph of the house as it stands. It was not possible to get a photograph of the house receiving the first prize just now as, the architect explained, the owner was a bit of a carpenter himself and as the house was of hollow tile with only a little wooden detail he is doing the carpenter work as he has time, and the front entrance is not ready to be photographed. We are promised a photograph as soon as it is ready. The architect promptly sent us photographs of this house, which was built at Keene, New Hampshire, for \$3,690, the detailed costs of which are given. H. E. Mason designed this home.

The house is modern Colonial in type as seems proper for a New England home, very compactly and well planned. It has the vestibule required by the northland. The stair landing may be reached either from the front of the house or the kitchen, with the basement stairs under. There is a fireplace in the living room with French doors to the pergola-covered veranda. There is a pantry between the dining room and kitchen. There is convenient closet room on the first floor, and on the second floor are four bed rooms and bath under the gambrel roof.

The exterior is white with green shutters, with a red brick chimney and a brick terrace wall under the porches.

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A Successful Design



HE plan of this house has successfully met the needs of the average size of family. Having the living and dining room across

the front of the house is the most satisfactory arrangement for many families and in many locations, especially where but anyone preferring to go down cellar from the kitchen might reverse the stairway arrangement, but a roof dormer would then be required for attic landing room. The attic is about $7\frac{1}{2}$ feet high in the center.

This plan is unusual in having three



The exterior is attractive with its white woodwork.

'E W. Stillwell, Architect.

the central hall from the living room gives separate access to each room in the rear.

Living room and dining room are separated only by an open arch, with place for books. The living room has a fireplace between two windows. The dining room has a built-in buffet and a bay of windows across the front.

The kitchen is on the side with an enclosed kitchen entry with space for laundry tubs and refrigerator. Cupboards and sink fill one side of the kitchen, with a cooler beside the sink.

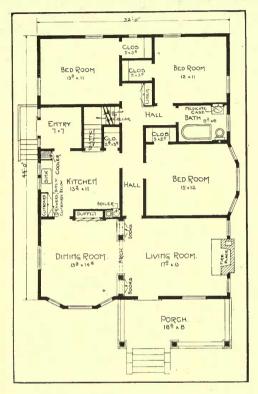
Stairs to attic open from the kitchen

sleeping rooms in a small house. The hall from the living room connects all of the bed rooms and the bath room. The kitchen also opens to this hall. The linen cupboard is in this hall and the stairs open from it. There is a 7-foot basement under the house.

The exterior is attractive with its dark body and white woodwork. The porch is so arranged that one end of it is more or less secluded by vines, where chairs and even a tea table may find room on a bright afternoon.

If so desired, material lists can be ob-

tained showing materials and quantities required. When contractors figure on such material lists their bids are put on



a more equitable basis than where it is left for each contractor to go to the additional labor of drawing off such a list of materials. Especially is this true when the cheaper workmen are likely to omit and skimp the materials and when the job is finished and these omissions discovered, he has only to say, "Yes, but that is what I figured on for my price," and the rest must be added as "extras." For this reason a higher bidder often proves the cheaper man. There has been a movement in this country looking toward the adoption of something similar to the English system of Quantity Survey, which should systematize the materials, their cutting and their use, to avoid waste and mismanagement. This requires the establishment of an entirely different and very responsible business. The additional cost, while not large, is obvious, while the savings, both to the owner and to the contractor, which might run to very considerable figures to the owner, and would certainly cut out much time in estimating for bids to the contractors, does not show on its face.

A Two-Story Stucco House



RADITION says that the square house is an economical house to build. In plan the long living room fills one side of the house,

with the entrance through the porch into a central hall whose apparent width is enlarged by the wide openings into the living and dining rooms. These openings give vistas in each direction the full extent of the house.

The stairs are placed at the back of the hall with a wide landing up two steps. A passageway from the kitchen meets this landing, and a coat closet opens from it.

The living room has windows on three

sides with the fireplace in the middle in the center of the outside wall, and a ceiling moulding at the angle with the wall. The dining room has a beamed ceiling and a bay for the buffet or serving table, with high windows above.

Beyond the dining room is the kitchen, fitted with ample cupboard space and the sink conveniently near. The refrigerator is placed in the kitchen entry. The basement stairs are under the main stairs with the entrance at the grade level.

On the second floor are four chambers, each with windows on two sides giving cross ventilation. The chambers over the



Hard burned brick and stucco.

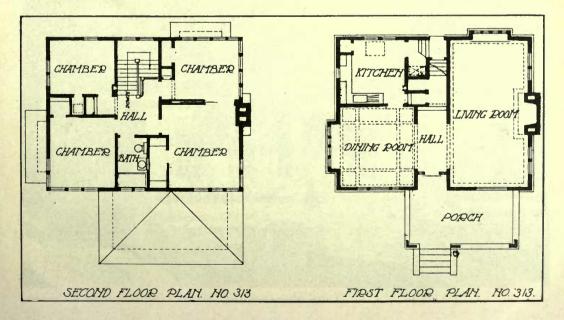
J. W. Lindstrom, Architect.

living room may be thrown together by means of a wide sliding door. The front room has a very large closet, and the rear chamber, which is virtually a sleeping porch, has both a closet and a cupboard. The linen cupboard is beside the door to the rear chamber. The groups of windows on the corners make all of the chambers very airy and pleasant.

On the exterior hard-burned brick is

used for the foundation. The wall above that is stuccoed. The cornices and wood trim are all in white. The wide horizontal band under the upper window sills gives an interesting treatment.

It is unfortunate that this photograph was taken before the shrubs and planting had been set. A few years' growth of vines and greenery will make the house as attractive as it is convenient.

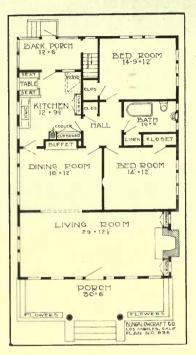


In White and Green

ERE is a white shingled bungalow with a green roof. The illus-

tration shows an attractive bungalow built along so-called Colonial lines. The plan and exterior do not conform to the historical type, but have many California features to commend themselves.

Only the central portion of the porch, over the entrance door, is roofed. The terrace on either side is inclosed by flower boxes. The entrance is into the long living room, which extends across the entire front of the house.



The plan is well arranged, having a square central hallway which opens to all of the rooms except the living room. It opens from the dining room on one side of the buffet as the door to the kitchen opens on the other side. There is a wide opening between the dining and living rooms. The living room is really a sun room, so numerous are the windows. The fireplace and bookcases fill one end of the living room.

The kitchen is planned with particular care. It has good cupboards and



A white shingled bungalow.

Bungalowcraft Co., Architects.

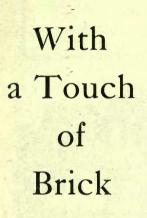
the sink is well lighted. A hood is built in over the range. But the most notable feature of the kitchen is the breakfast nook. From the utilitarian point of view it is "handy both to the range and to the sink." At the same time it gives a semiretired place both for breakfast and for the many things which the housekeeper may find convenient to do in the kitchen.

The rear porch may be glazed in dur-

ing the cold weather, and it makes a convenient entry to the basement stairway.

In the square central hallway is a very useful closet. There are good closets from each of the two bedrooms. The linen closet opens from the bathroom.

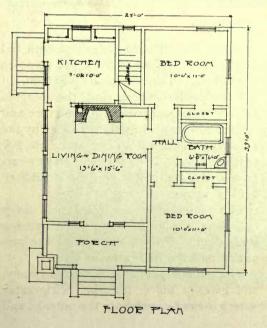
The interior wood work throughout the house is finished in old ivory enamel paint. The walls are papered and the ceilings tinted.





The brick pier is the unusual feature.

Jud Yoho, Archt.



EALIZING that the living room is the most important feature of the bungalow home, the designer has subordinated the prominence of the

other rooms of this rather unique residence to emphasize that of the living room. Entered from a wide porch through a solid door flanked by high, narrow leaded glass windows, this room is found to include dining apartments as well. A series of five windows on the side give ample light and afford a view of the outside from every corner.

The kitchen is tucked away behind the fireplace, where the chimney can be used for both. The stairs leading to the basement open from the corner of the kitchen. The sink and cupboards are well arranged across the end of the kitchen. Opening from the living room is a hall which connects the two bed-rooms and the bath-room, retiring them from the living part of the house. The exterior is worthy of a few words, as the pyramid column of corner forms a very unusual feature and adds an effective touch to the front.

Other than the living room, which is 13

feet 6 inches by 15 feet 6 inches, the rooms are not large, though they are well arranged and, in compensation, the exterior dimensions are not large. A house which is only 25 feet by 33 can be well placed even on a narrow lot and at the same time it can not be very expensive to build compared with houses larger in area.

Effective Houses



Unusual by reason of its simplicity.



OME houses get their effectiveness by means of the points which they emphasize by making features of the house, while others

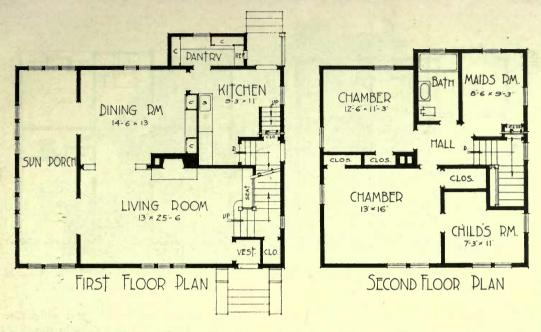
are equally effective through an opposite process with simplicity, good proportions and an absence of features.

The first house shown is unusual, but it is so by reason of its absolute simplicity of design and treatment. The picture shows that it is also attractive.

First, the exterior color treatment, though extremely simple, is wonderfully effective. The light gray plaster is very soft in tone. It is relieved by the warm red of the asphalt shingles and the touches of brick work. The small terrace and steps of the entrance are edged with red brick; so is the walk from the steps to the street. The white of the trim, of the lattice decoration, and the pergola rafters of the sun parlor, give a grace and lightness which is greatly enhanced by the rose vines that trail up the lattice, the ivy that veils and softens the long plaster surface of the sun parlor and the shrubbery banked against the wall.

The interior arrangement is very charming, the large living room opening with double French doors into the sun parlor and the dining room also.

The outside pantry is light and roomy, and gives a place for the refrigerator where it can be iced from the outside, and



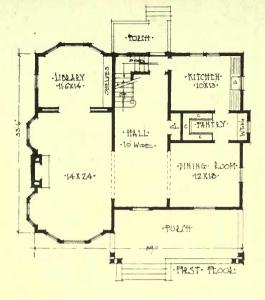
is equally available from the dining room for serving and from the kitchen in the preparation of the meal. Stairs to the basement and a short run of steps to the main stair landing both open from the kitchen.

All the windows on the first floor are casements, there being fourteen in the sun parlor alone, except a double mullioned window in the dining room, and these casements have proved a delightful feature. The woodwork is birch, part mahoganized, part ivory white enamel. The treatment of the stairs is unusual, as a recessed hall effect is given by throwing a beam across this end of the room, with a seat beneath.

A scheme of gray tones runs through all these main rooms, the living room wall being of gray tapestry in self tones, and the dining room a foliage design in grays, dull greens and blues above a plain



A feature has been made of the gables and dormers in a balanced treatment.



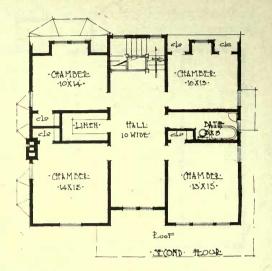
gray wainscot. The walls of the sun parlor are tinted the same soft gray and have a fresco decoration, handwork, of the green leaves and brown stems of woodbine trailing over the windows. The breeze sweeps through these casements in summer and an immense radiator makes this a winter as well as summer sun parlor. The soft, indirect ceiling light is ideal for entertaining.

On the second floor are two good sized chambers with a child's room opening from the larger one, a maid's room and a bath room. The upper floor is finished in white enamel.

The basement contains a maid's toilet, besides laundry, furnace and fuel rooms and fruit and vegetable closets.

In the second illustration a feature has been made of the gables and dormers in a balanced treatment. On the first floor a feature has been made of the bays, on either side of the fireplace and at the ends of the two rooms thrown together by a wide opening.

The entrance from the porch is into a wide hall, with the stairs set well back so as to give easy access from the rear of the house both to the basement and to the second floor.



This central hall is 11 feet wide running clear through the house, a depth of 24 feet. To the left is a large living room with fireplace on the south side. A good sized library is closed off from the living room by sliding doors, and there is no reason why the library as located should not be very quiet and secluded.

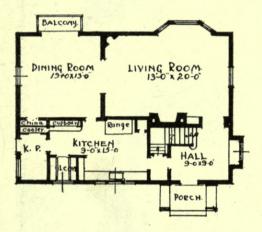
The other end of the house is occupied by a dining room, in front, kitchen and pantry between. This house was built on the Western coast, where exceptionally large hallways are in favor, as shown by the treatment in this plan, both on the lower and upper floors. The four corners of the second floor are given to good sized chambers, each provided with closet room.

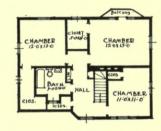
The foundation wall at the front of the house is brought up to the window sill on the projecting bay and is used at the same height to inclose the porch. Shingles are used for both stories as well as in the gables.

On the interior, Washington fir is used for the inside finish. This wood is stained, varnished and rubbed dull. Fir flooring is used throughout. Hot air heating plant is installed and complete laundry equipment. There is no attic, but a full basement.



Édwin J. Ivey. Architect,

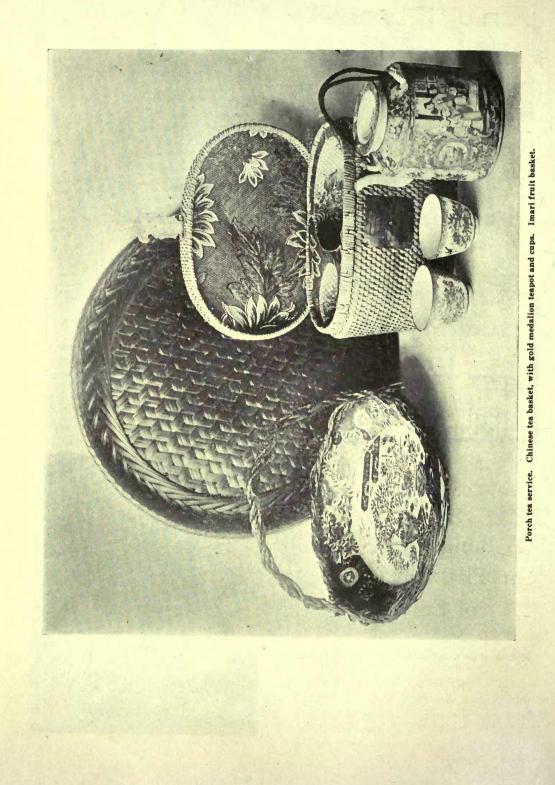




A Bungalow Unique in Plan and Details of Entrance

(Courtesy of the West Coast Lumbermen's Association)







Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

Wicker Furniture

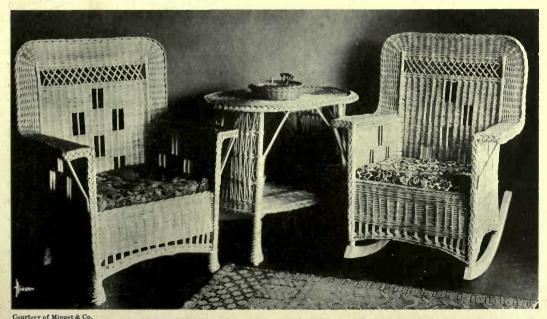


EW things contribute more to the comfort, beauty and cool appearance of the porch than wicker furniture. So great has been the

improvement in designs that no housekeeper can afford to neglect this phase of summer treatment.

Complete sets of wicker, while sometimes highly interesting, are hardly essential. A few well selected pieces carefully placed are sufficient for the average outdoor room. Many different styles are on the market, including willow, rattan, bamboo, cane, rush, fibre and prairie grass.

Some of the designs are imported outright, more are made in this country of native materials, while a third class comprises a blending of foreign and domestic. It is possible to purchase willow furniture which is entirely an American product, and it is equally possible to possess chairs, tables and settees of foreign-grown willow made up into furniture in this



Darien chair and rocker, and Eastport table. - Japanese miniature garden in shallow basket.



country. The same may be said of reed which just now, in both painted and stained designs, is exceedingly popular. The mesh of reed is fine and compact; that of willow large and open. Both styles in the best grades wear exceednishings which one has already on hand.

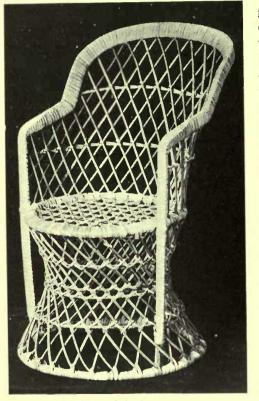
From China come the various "hour glass" shapes, usually classed as "Canton," also delightful porch rugs in rush which harmonize perfectly. When a screen of Japanese reed is added and

ingly well and are suitable not only for summer but for winter use as well.

India is the home of the finest reed and the way it is grown, gathered, cured and exported, makes an interesting industrial story. India also gives us in a limited way an attractive type of rattan furniture variously classed as Bombay, Calcutta, etc.

Importers will tell you that reed and rattan are near kin that rattan is merely reed with the peel retained and reed rattan with the peel removed. This all seems very simple until one discovers

that several manufacturers in this country call a long western-grown rush reed. However, as most of the shapes are quite distinctive, and as the imported furniture, particularly that from India, China, Japan and the Philippines, is told at a glance, the confusion of names, here and there, is not important. The main thing is to seek comfortable, durable designs and of a character to assimilate with the fur-



Canton chair of rattan.

cushions of Magagascar grass, the combination is extremely consistent. English or American cretonnes are less attractive with these fitments than cotton crepes and prints from the Orient. India, by way of Punjab, sends printed cottons in the form of couch covers. cushions, table squares, portieres, etc., all of which are interesting in design and color, and of great durability. From Java are received cottons of primitive pattern and quaint color schemes.

For the blue and white porch, the Jap-

anese toweling is particularly appropriate. Inexpensive and very attractive are the many characteristic patterns which are to be found in this material known in Japan as Tenugui. On hand-twilled cotton with a linen finish are stencilled by hand motifs, such as "bamboo," "plum branch," "willow," "flying bird," "wild duck," etc. Inexpensive as this toweling is,—one dollar per bolt—there is great spirit and

430



charm to every subject. Of late stencils in green and in pink have been added. A discriminating use of cotton or linen fabrics increases the beauty-of the porch, while suitable rugs in the many weaves made expressly for summer use, are an important factor.



Trianon settle.

A ramble through the shops brings to notice a wide variety in everything pertaining to the convenience and pleasure of summer living. The use of wicker furniture is by no means confined to porches. Furniture for cottages and bungalows of every description may be purchased, and of a quality to last for years.

It is interesting to gather up a few facts regarding the making of willow. One large firm uses willow grown in Pennsylvania, while an-

other imports from France all the raw material it uses, preferring the slow methods of the peasants who peel the strands by hand. Both outputs are exceedingly fine in design, workmanship and wearing qualities.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.

GARDEN tools and all garden accessories are numerous and very attractive this season. Even if one possesses no garden the lure of many of these articles is hard to resist. In bird baths alone there is a great variety from the beautiful "Sanctuary" bath made by Annetta Johnson Saint-Gaudens in commemoration of the "Bird Masque" at Cornish, New Hampshire,—to comparatively small and inexpensive designs in concrete and coarse pottery.

The "Bird Masque," it will be recalled,

was written by Percy MacKaye and presented in picturesque Cornish, a few years ago before a distinguished assembly which included President Wilson and many other notables; the occasion being the dedication of "Sanctuary"—an immense woodland as a bird conserve.

Mrs. Saint-Gaudens' interesting work has taken the form of a Mexican water jar capped by a removable basin, or bath, which has been exquisitely designed to follow the logical lines of the tall jar. A frieze, classic in spirit, depicting the



characters in the masque in bas-relief forms the ornament.

The original "Bath," made of bronze, has been placed in the Sanctuary, while replicas, in terra cotta, may be purchased by those fortunate mortals who possess gardens fitting for such a bird scheme. now black as iron. The July day on which the bird enthusiast sauntered by was hot and sultry, and birds, squirrels and idlers—all well-known Common products were rather wilted. Around the rim of the highest and smallest basin were sparrows and other small birds,



massed in a thick circle and violently splashing. Around the next lower, and much larger basin, were pigeons of every known plumage thickly massed, and splashing with equal vigor and delight, while around the lowest and biggest basin children of many nationalities, in all kinds of costumes, leaned over the low iron railing and imitated sparrows and pigeons. Other children waited with more or

Corner of porch, showing fern box and two excellent pieces of furniture. The cushions on the chair and couch are the new circular type.

What did the birds do in the old days before people considered their important tubbings. Fountains helped a good deal, particularly fountains with shallow basins where the most cautious bird could get a partial wetting.

Several years ago a delighted bird lover watched a regular bath carnival at the old Brewer fountain on Boston Common. Those familiar with the design will recall its three-tier basins held in place by monumental figures in bronze. Copied from a famous fountain in the gardens of the Tuileries, more than fifty years ago, its beautiful bronze work is less impatience their turn. Nearby trees were full of chattering birds crying something that sounded like "Next." The grass was covered with well-bred waiting pigeons while quantities of earth sparrows filled the brown path, quarreling amiably.

The bird lover vowed to erect baths in his own and all his friends' gardens and not to forget the charming impromptu carnival of the old fountain.

Many of the baths placed in gardens are too deep, forming excellent swimming pools for goslings, but not alluring to the small feathered tribe.



A garden trellis painted green and surmounted by a bird in two colors—twenty-four inches high for two dollars and thirty inches high for three dollars—is an outgrowth of the bird garden-stick of last year. The trellis is equally useful and more decorative.

Garden baskets of all kinds greet the would-be gardener. There are the shallow Japanese baskets, scarcely more than trays with high handles equipped with huge shears. These are excellent for the "cutting" garden which is seldom a part of the ornamental garden. This relegating to a corner the flowers set apart for the interior of the house is a helpful scheme. No one's feelings are hurt when the actual cutting takes place, and the beauty of the landscape is preserved. Gathering flowers every day for decorative purposes keeps the plants and shrubs vigorous and adds greatly to the beauty of the house. Doubtless an interior decorator first thought of the cutting garden. The idea never emanated from the soul of the real dig-in-the-earth gardener. For



Jungle Plate, designed by Mary Bacon Jones-"The Cub."



Jungle plate, designed by Mary Bacon Jones. "The Bottle-Tailed Rikki."

the latter there is a tool basket fitted with a trowel, a fork, a bulb-planter, a daisy grubber and a "dibbler." The price of twenty-five cents for anything called a "dibbler" seems too cheap to be true, but this is the price on the tag.

The receptacles to hold flowers are of many designs and all prices. The fad for brilliant colors has reached the flower vase, and glass of every possible tone is to be found in the shops. Very interesting is a new American product almost as opaque as China and yet unmistakably glass. So rich and glowing are the shades that only with the greatest care can the jars, bowls and vases be used. To add flowers to anything so colorful would seem impossible, yet violets in the mauve bowls, nasturtiums in the orange bowls, primroses in the yellow vases, sweet peas of certain shades in the deep pink jars, creamy white flowers in all the green receptacles are charming while certain combinations, worked out as one goes along, with the color scheme of the room



in mind, will be found well worth trying. One color which might be called "tomato," for lack of a better name, needs no adornment unless it should be something like "Queen Anne's lace" or mignonette.

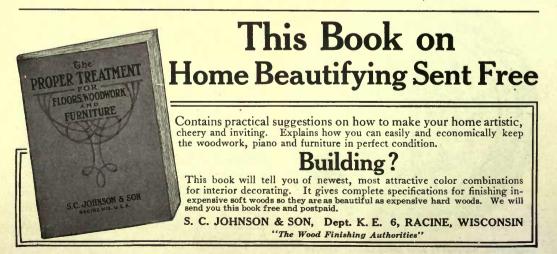
Black glass has been on the market for some time. Baskets filled with fruit are very effective, while certain flowers are attractive with the lustrous black. For those who like rather extreme things there is a table decoration in this glass, consisting of a bowl ten inches in diameter with a flower block, four black candlesticks, four black and white candles and two white China birds to perch on the rim of the bowl, complete for five dollars.

This shop, well known for its glass and china novelties, has many interesting things in mahogany. A mahogany fern stand long and narrow made to fit into a window, lined with tin and with a lower shelf is ten dollars. A wicker stand of similar design and same price is shown in the illustration of the porch. Several good pieces of furniture are seen here, including an excellent porch chair upholstered in black cretonne with an over pattern in birds and flowers.

American cretonnes may now be found in great variety and many of the patterns are charming. A dwarf pink rose of the Dorothy Perkins variety against a black and white trellis is twenty-five cents a yard. Another, and at forty cents, shows leafy boughs with birds' nests and birds in soft yellow greens and golden brown.

The drawing in the forty-cent material is very spirited. Naturally the cheaper grades do not wear as well as the higher class linens and cottons. If temporary effects are wanted it pays to buy the patterns which please at first sight, even if they do not stand sun and frequent tubbings. On the other hand, if you are buying with the wear of several years in mind, it is more economical to spend more on the initial purchase.

This season is a transition period in dyes. With many manufacturers the years of the war have led to interesting and in some cases very important experiments. Eventually we shall probably do our own "dyeing" and by present indications it will be well worth while.



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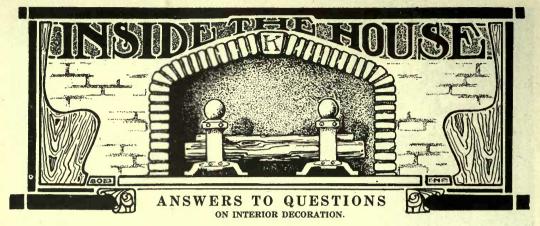
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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

After the Fire.

J. A. P. I am sending plan of my lower floor for your help. Our home was partially burned. We have to use the same plan, but the decorating has to be done over. Part of each set of furniture was saved.

There is an oak mantel in the living room and the drugget is tan, red or old rose, and green (oriental design). Α settee and two chairs (oak) were saved, but have to be upholstered. Please suggest what color. In the sitting room my mahogany piano, music cabinet, table and Victrola were saved, I did not save drugget. In the dining room I have green drugget with red and tan border, and oak furniture. You see the rooms all have southern or western exposure and are very light. The walls are to be plastered. I had thought of old ivory woodwork, cream walls and in dining room have buff below plate rail, then shade on up to cream ceiling. I wanted old rose to predominate and had thought of getting small oriental rugs in old rose for sitting room. Please tell me also about the draperies for windows and folding doors.

Ans. The conditions outlined in your letter are extremely interesting. We deplore your loss by fire, but trust that your rooms when redecorated will give you much satisfaction. Our advice is to make use, as far as possible, of what you have in the way of furniture and rugs, selecting the new to blend with the old, yet giving the completed rooms a new character. You are fortunate to have so much light and space, tremendous aids in the working out of any decorative scheme.

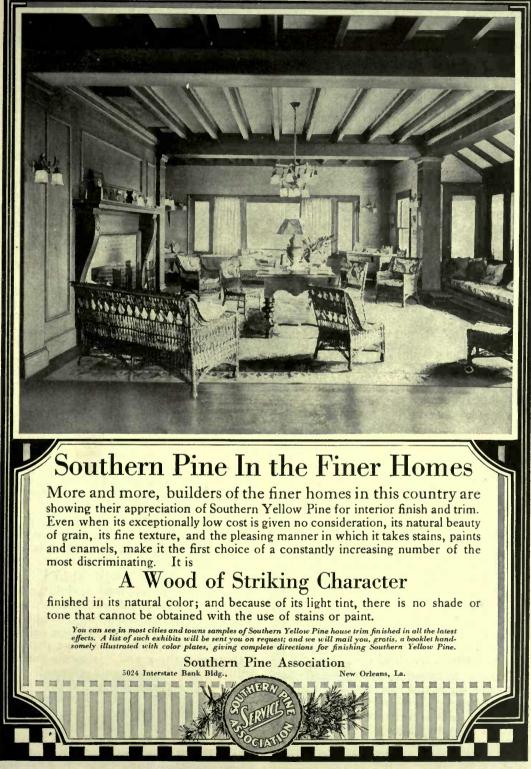
Ivory wood work with cream walls would make an agreeable foundation in the sitting room, with ivory and tan in the living room and buff and ivory in the dining room. This makes a well related scheme for a working base, but would be monotonous unless made interesting by the use of contrasting colors in the furnishings.

In the living room, with the rug in tan, old rose and green, use green at the windows, in the sitting room, rose and green at the windows with rose predominating in the rugs and in the dining room, carry on the green and old rose with a little gray blue. Chintz and cretonne are advised in the dining room and a plain green material in the sitting room.

At the folding doors use double-faced portieres, green on the living room side, rose on the sitting room side, and in the dining room portieres blue on the dining room side and rose on the other.

Enamel Over Old Finish.

N. W. M'C. In case I should dispose of my golden oak before building and get fumed with a few pieces of wicker, would you still advise silver gray woodwork or would you suggest something else? Before building we are going to live in a house we have been renting out for a while and want to fix it up some, and would like to fix it with as little expense as possible. The living room, hall and dining room are finished in pine and hard



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oiled. The bedroom has a mahogany stain. Could a silver gray enamel be put over this hard oil in living room? What would you suggest for refinish of woodwork and wall paper in all three rooms, also draperies?

Ans. The silver gray is simply the color of the stain applied to oak woodwork; the same as fumed oak stain and then varnished or waxed. Using the silver gray or fumed oak effect with the fumed oak furniture is simply a matter of taste. For my part I would prefer to have the oak trim and furniture the same, using the silver gray for some smaller room, such as den or sun room with furniture in same stain.

The William and Mary and the Early Jacobean style of furniture invariably comes in dark oak and would suggest that the wood trim of dining room be in red oak and finished to match the furniture. Natural oak is proper for the floor, finished in a dark oak stain to balance with the wood trim.

With reference to wood trim of the other house which you intend to occupy for the present, will say that you can apply the enamel over the old finish, first sanding the old finish so that the coats of flat paint will have a good foundation and then applying the enamel. The gray enamel should be a French gray.

We would finish the living room and hall in golden brown with hangings a little darker. The dining room would look well in an ecru with the draperies in a dull old blue. For the east bedroom we would advise gray walls with the blue in the border and in the draperies. The wood trim of kitchen we would finish in a glossy white enamel with the walls painted in Colonial yellow; ceiling same as side walls.

The east bedroom upstairs with the oak furniture we would set aside for a man's or boy's room with the walls in a gray tan paper and draperies of a gray crash or linen decorated with a border cut from a cretonne or chintz. The west bedroom should be done in old rose and the south chamber in blue. We would suggest using enameled furniture in all of the chambers; have some variation in the color of finish.

A "Greenery"

H. A. W. Please send me information concerning the decoration of a small den or flower room off of my living room. French doors lead to it from living room, which is to be putty-gray plaster and brown oak work. This woodwork is hard pine and I am at a loss as to how to treat it. The windows are casement. We would like to use wicker furniture. What color should walls be made? This is a southeast room.

Will you kindly suggest color and furnishing scheme for sun-parlor, living room and dining room. Woodwork in dining and living room flat sawed oak and sun room hard pine. I expect to furnish this last small room in wicker and have flowers in window. How shall I treat the woodwork and walls to go well with the living room. We shall give the walls a sand finish and would you tint or paint them? I wish to get the nut-brown Jacobean furniture for dining room. How should wood work be treated to combine well with this set? Would you advise the "built-in" buffet? I like the Jacobean buffet, but I feel that the built-in one would be more practical.

The house faces the north. Is putty gray a warm color and is not a soft ecru a light buff? The fireplace brick is very rough and "autumn leaf" color.

I have a black upright piano, large black leather rocker and several golden oak rockers; also black leather couch with oak frame but will perhaps dispose of couch. I do not like the golden oak finish. Later on expect to change piano to mahogany baby grand. It seems that the autumn leaf brick would go well with buff or soft green walls. What finish would you advise for the floors as being practical with children? What kind of bed would you use with birdseye set?

I am puzzled as to what light fixtures to select. Our architect advises inverted bowls, indirect light, but I like the



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candle lights. Please give advice in this line. This magazine has been extremely interesting and helpful to us.

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Ans. We should make of this room a "greenery" with many ferns in hanging baskets and boxes. Some flowers, but ferns are easier and the effect will be prettier.

The hard pine woodwork we would stain green, either Bog Green or a brighter Forest Green, as you prefer. We think the latter. Tint the walls soft gray the ceiling white, and have a large plain ground glass close to the ceiling for the ceiling light fixture. We should make the window sash white and also the sash of the French doors. No curtains, except a width of the cretonne on the outer sides only of each group of windows, the south group and the east group. Then paint the floor dark green and have a 4x7 gray Fibre rug on it.

Wicker furniture, the natural wicker, by all means; upholstered in the same cretonne as the window draperies. You must, of course, have regular shades set on the sash, green opaque, at these windows.

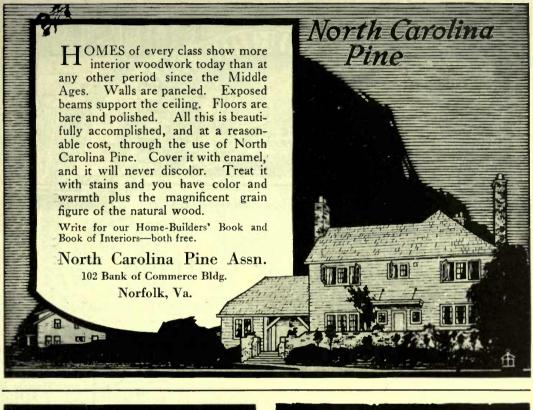
The rather heavy and miscellaneous character of your living room furniture necessitates wall tint of some strength. As you suggest—either a soft ecru or a putty gray. No, ecru is not buff, but the color cards have nothing but buffs. Ecru has a more grayish tone and so is softer. We advise you, howeevr, to use putty gray on living room wall. The putty gray is a warm gray and, as you see, is fine with the brown oak. The mulberry tint would be excellent in dining room. Mulberry is fine with Jacobean Oak. The chair seats should have tapestry, rich dark colors, wine and mulberry. The woodwork should be deep old ivory with ivory ceiling. A very beautiful room.

The lower hall should not be tinted but have a paper, a tapestry design in grays and mulberry, thus bringing the two rooms together. You could run the up along the stair wall to paper head of the stairs and tint the above a light gray, with white woodwork in upper hall. Some of the floor varnishes are good if you have children. and are not likely to be slippery. We prefer bowls and indirect light for the ceiling fixtures, but there is no reason why you should not use sconces with candles on the side walls. We suppose dull brass is the only bed to use with Birdseye Maple unless you can get a bed in the same wood.

We prefer tints to paints, though nowadays they call tints, paint. In regard to built-in buffet, it is entirely a matter of convenience or preference. If you have no buffet, then you would probably prefer to build it in. Many people prefer the movable piece of furniture, especially if it is handsome.

The dining room woodwork must be fumed like the other but it will harmonize with the Jacobean Oak and be good with the Mulberry wall, though not so pretty as ivory. The ceiling can be ivory though it would make no difference about the wide opening into hall in using a paper. You should have hangings in this opening. We send small samples of what we would like for hall and living room walls. However, you can use the putty gray tint right through.

Decorative Service W HERE detailed plans for HOUSE DECORATION are desired with samples and prices of wall paper, fabrics, window drapes, etc., the moderate fee of \$1.00 per room or \$5.00 for the entire house will be charged to defray the expense of our decorator's time in working up the plan, securing and mailing samples. Address Keith's Decorative Service, McKnight Bldg., Minneapolis, Minn.



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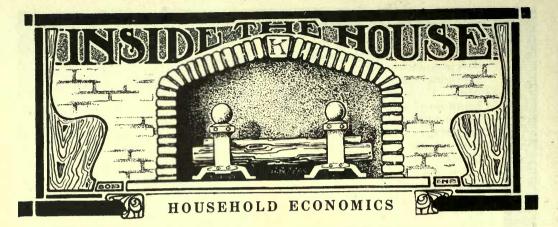
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A Portable Cottage

ACATION trips and vacation plans will probably be very different this year than in other less troubled times. There is a greater uncertainty as to the summers ahead and the plans that can be carried over into them. Yet never was there such need for the vacation rest.



A portable cottage with a porch.

Possibly a portable metal cottage may help solve the problem of the summer plans; one which can be easily set up where you want it and can be taken down and placed elsewhere for another year without economic waste in taking it down and rebuilding on a somewhat different location.

Portable metal shelters, with no esthetic claims, have been on the market for some time and filled their own especial need but have not taken the interest of the home builder, though such a garage has been used for some time and very acceptably, especially on account of its fireproof qualities.

A cottage has now been designed, with a porch which may be more or less inclosed as desired. The design is such that the building can be supplied in different lengths and widths to provide any number of rooms of varying size. Buildings can be any width up to 20 feet, and any length desired, all in multiples of 2 feet. Windows can be of the doublehung, sliding type, casement windows hinged at the side and opening out, or a standard push-out type. Interior side walls, ceilings and partitions come in standard 2 feet wide panels which may be covered with wall board. Plaster may be used if desired. This requires a special stud to which metal lath can be attached.

It has been the aim of the design to so arrange the various members and sections that even the most unskilled persons can assemble them properly by following the instructions, all parts being carefully marked. The procedure is practically the same as when erecting a wood frame building. The sill is put down first and fastened at the corners, the studding is then bolted in, then the roof trusses, the eaves pieces, the sub-ridge, the siding sheets, the gable, the roof sheets and ridge finish. The doors and windows follow, everything is tightened up, and the job is done.

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For Unusual Wall Effects.

If you have highly decorated wall and find it glossy in spots, give it a coat of starch or the water that is pressed out of the cottage cheese and this will make all colors dead flat.

If the texture of leather is desired, this can be obtained with cheese cloth rolled over the surface immediately after the glaze is brushed on. This can only be done on smooth plaster.

You can stipple a freshly painted surface with a sponge. A rolling pin covered with cord and rolled over the surface gives an interesting texture, but care must be taken that no cloth or string is used that will give up lint.

If deeper or double tones are desired, you may glaze a second time with a tone that will harmonize and in this manner produce the texture of coarse fabrics by combining the first glaze horizontal and the second perpendicular. A pattern may be stencilled on with the second glaze.

To Do Away With Envelopes.

With the paper shortage and the added necessity for economies of all kinds, an invention which has recently been reported may revolutionize some departments of business.

This invention comprises a method of perforating letterheads, billheads, telegram blanks and other documentary instruments in such a manner as to enable the sender to seal the document for mailing or other transmission by making only one fold in the paper. It eliminates the expense of envelopes and makes the writing of a second address unnecessary. The inventor also asserts that his invention, although extremely simple, renders it impossible for the document to be opened without detection. Another feature on which he lays particular stress is the fact that the postmark must be imprinted on the back of the document itself. Attorneys have informed him that this is vastly important from a legal standpoint.

În houses where large volumes of matter are prepared for mail daily this idea would decrease the labor and time consumed by more than 50 per cent, it is asserted.

Formula for Making Putty.

Possibly you would like to know how to make common putty, especially if you want to vary the strength. This formula is given by a builder, who says:

"Good common putty is made of chalk (whiting) and linseed oil. This can be strengthened by adding a small amount of white lead. Wagon makers use a putty composed of red lead and linseed oil, which in time becomes about as hard as granite."

An Unbreakable Window Glass.

A new glass, transparent, tough and strong, which a 22-caliber bullet cannot penetrate and a brick cannot shatter, is stated by Popular Science Monthly to have recently been invented. The secret of its strength is said to be a sheet of white, transparent celluloid, twenty onethousandths of an inch thick, placed between two pieces of glass. The glass and celluloid are welded together under high temperature and tremendous pressure, the result being a solid sheet possessing the transparency of the best plate glass and the strength of a sheet of metal.

Motor Oil.

The motor oil, which is obtained by redistilling the tar, is replacing gasoline as a fuel for motor cars in Sweden, as it is more efficient, it is said, as a fuel and can be produced at a cost of about nine cents per gallon.—Exchange.

One Dollar for a Practical Suggestion

H AVE you achieved some really new and practical solution of one of the old, or one of the new household or garden problems? If so, Keith's readers would like to hear about it, and we will pay one dollar for each suggestion accepted as satisfactory for publication. Let these suggestions cover items of general helpfulness, or of novel or attractive effects. They must not exceed 300 words in length, and must be written on one side of the paper only. In order to insure their being practical send a photograph which shows how the suggestion actually worked for yourself, if it is something which can be photographed. If you want the photograph returned in case it is not used, send with return postage to "DOLLAR SUGGESTIONS," KEITH'S MAGAZINE.





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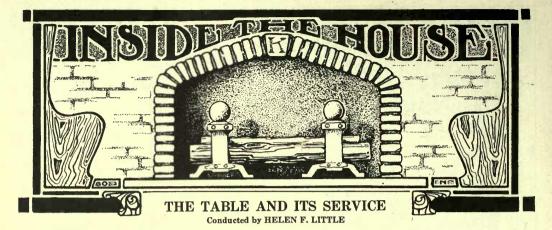
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A June Luncheon

HE hostess who has access to country fields has a wealth of inexpensive table decorations at her command. The beautiful red and white clover-blossoms can be used in a variety of ways, and there is something about the fresh fragrance of these



Clover blossoms for the June luncheon.

sturdy little blossoms that peculiarly fits them to garnish a table where food is to be served. The hot-house flowers never seem quite so much at home in an atmosphere of meat and vegetables; they seem to wish a more romantic environment, but the field clovers are quite happy in their fresh, wholesome way when in the midst of bread and butter. Birchbark holders contrast well with the red clovers, and the green Japanese Zedji-ware is also well adapted for a pink and green color scheme. The menu might include strawberries, served with powdered sugar, or strawberry and pineapple cocktails; broiled lamb chops, pocket-book rolls, asparagus, new beets; lettuce and tomato salad; sponge cake covered with raspberry whip.

How to Preserve Eggs.

Recent experiments have shown that a normal egg shell has a coating resembling mucilage, which, unless softened by washing, helps to keep out the bacteria which causes decay. There are many methods of preserving eggs, such as wrapping in paper, rubbing with salt, packing in bran, covering with paraffin, brine, vaseline, lime-water, and water-glass. The last three methods are much the best, as the flavor of eggs may be injured by musty straw or bran, and from 52 to 80 per cent of eggs preserved by the other methods have spoiled in experiments covering eight months.

Water-glass produces better results and fewer failures in flayor than any other method. To use this, buy commercial water-glass, being sure that it is not alkaline, as this gives the eggs a bitter flavor. It comes in powdered form, and as a syrup. For the latter use one volume, to two volumes of water. Pack the eggsin a clean vessel, but do not wash the



The wonderful variety of the silken grain of "Beautiful **birch**" fits it for every purpose that demands a high-class cabinet wood. Its iron hardness makes its beauty permanent and its surface mar-proof.

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Falling Ceilings— "We wouldn't have plaster on our walls and ceilings for love or money. It's too expensive-and positively

dangerous! "A big chunk fell from our livingroom ceiling. It only crushed Baby's doll, but it might have struck Baby. Luckily we only had a bad-

ly-scarred mahogany table to refinish and a handsome vase to replace.

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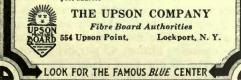
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eggs. Place a tight cover over the dishes, and keep in a cool place. One gallon of water glass solution will preserve 12 dozen eggs.

How the Housewife Can "Do Her Bit."

The avoidance of waste, the use of nutritious substitutes for expensive foods, and the careful study of the food problem in all its aspects are patriotic duties no loyal woman should neglect. Every housewife should send for the government very tough, so it requires a soaking and thorough cooking. This softening is produced in Japan and China by allowing the beans to ferment, which not only makes the beans more easily digested, but develops new flavors. Some of the forms in which the fermented beans are used are the "Shoyu" or Soy Sauce, familiar to us as an adjunct to chop-suey, "Topi," a kind of cheese, "Miso," soy bean milk, and "Matto," made from fermented boiled beans. Possibly some day

Table Showing Composition of Foods							
	Protein	Carbohydrates	Fats	Water	Ash		
Beans, Navy	22.5	59.6	1.8	12.6	3.5		
Beans, Soy	34.0	33.7	16.8	10.8	4.7		
Beans, Peas	24.6	62.0	1.0	9.5	2.9		
Beans, Lentils	25.7	59.2	1.0	8.4	5.7		
Skim Milk	3.4	5.1	.3	90.5	.7		
Whole Milk	1.0	5.0	4.0	87.0	.7		
Round Steak	22.6		2.8	73.6	1.3		
Halibut	18.6		5.2	75.4	1.0		
Eggs	13.4	.67	10.5	73.7	1.0		

bulletin, "Care of Food In the Home," which gives detailed directions for the care and storage of vegetables, fruits, and meat. A comparison of the composition of dried peas, beans, lentils and skimmed milk with that of the more costly meats and whole milk will show us why the former may be used in place of the latter.

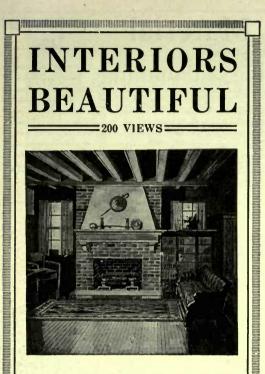
It will be noticed that the soy bean is an especially valuable food, as it is rich in protein, starch, fat, and ash. This has been a staple food in China for centuries, and is now sold in our markets for less than the navy bean, often under the name of "Chinese" beans.

The Soy Bean.

This bean, which has been for years used in place of meat in the dietaries of the people of Japan, China, and India, differs from ordinary beans and peas in that it contains more protein and fat and less starch. The meal made from these beans contains almost 45 per cent protein and nearly 20 per cent of oil, thus forming a good substitute for meat. The cellulose or woody fiber in the raw bean is we may acquire a taste for these, as we have for Roquefort, Brie, and Camembert.

The low percentage of starch in soy beans makes them a desirable food for diabetics, and a prepared soy bean flour is on the market for that purpose. The dried beans are used in Switzerland and other places as a substitute for coffee. We have consumed soy bean sauce unawares in Worcestershire and club sauces, of which it is the foundation. It makes an appetizing addition to creamed meat dishes and French salad dressing, and can be purchased in liquid form in jugs at a Chinese shop, or from a wholesale druggist. Another special use is as a food for babies in a gruel.

The most emphasis just now, however, should be laid on the use of the soy bean as a substitute for meat and for the navy bean in such dishes as pork and beans. As the cultivation of this plant has been successful in Germany, Austria, and Switzerland, it is now being urged by our government for cultivation in North Carolina and other southern states, and it is gradually finding its way into northern marts.



N planning the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

Fourth revised edition, just off the press, is beautifully printed on enameled paper and has embossed paper cover. 112 pages. Size $7\frac{1}{2} \times 10$.

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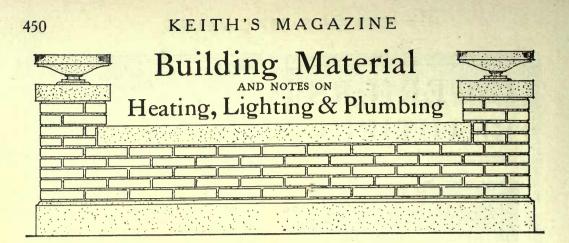
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You will find "Keith's" Advertisers perfectly responsible.



The Painted Wall

John Upton



HERE is much to be said in behalf of the painted wall, either in finishing the new house or in freshening or remodeling the old

one. With the present day demands for the sanitary house, the hospital ward, where absolute cleanliness is required, may be taken as a model for the treatment which may be given to the kitchen in the home, and the wall made sanitary with a coat of paint.

The painted wall has certain advantages over other forms of decoration, or of treatment. It is sanitary, it is washable and it may be made beautiful, and it is not an expensive treatment. If the outside of the house is painted, one set of workmen can take care of the whole job, which is sometimes an advantage.

Many walls will need some work on them before they are in suitable condition for painting. If rough and covered with loose flakes, they should be scraped and brushed until a smooth surface is obtained. Cracks and broken places may be filled with plaster of paris.

It is a good idea to stain the wall before it is painted, so that any small injury, which chips off the outer coat will not leave bare plaster exposed. To do this, mix some of the paint to be used with a little oil and thin it with turpentine, so it will penetrate the plaster deeply.

This will not show laps, will dry quickly and makes a good foundation for the work which follows.

Where walls are smooth, pleasing re-

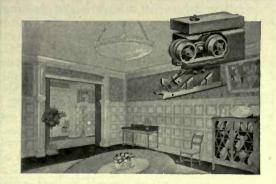
sults may be obtained by the use of stencils, but where too rough for this they may be treated by blending or stippling the shades of one color, ranging from dark at the lower part to light tints at the top. In this work, the wall is first laid off into three or four strips of equal width. The paint is mixed to correspond with the strips, and should have as much turpentine as oil.

The lightest paint at the top is applied first, then the next strip is painted, and as soon as it is finished the two strips are blended by strokes which work them together. The work is continued down in the same way and the strips may be so blended that one can scarcely tell them apart.

Color is a valuable element in decoration, and one should always consider the influence of various colors in making plans for inside work.

On the character and the amount of light which a room receives the colors that may be used depends. Rooms which receive much daylight may have darker colors than those which get only the light from north windows, or have too little window space, or are shaded by trees. Those rooms lacking in sunlight should have warm colors, yellow and the warm tans. The cool colors, as blue, green, gray, and brown may well be used where there is southern exposure and plenty of warmth and light.

You should notice the colors which give pleasing effects with the different lights



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and then choose those you like.

Large areas should be treated with subdued color. Too much strong color in a room is not pleasant.

Another rule usually observed is that floors should be darker than the walls and the ceiling lighter than the walls. If the ceiling is too high one never feels at home in a room. To correct this effect the color of the ceiling may extend down the side wall twelve inches or more. A stencil design may be run around below this as a further help. If the room is low the apparent height may be increased by placing the picture moulding next to the ceiling. Narrow stencil designs each side of the openings will help to make the wall seem higher. In large rooms with large wall spaces panel treatment may be used but this should not be employed in small rooms. Zinc ground in oil will give a hard lasting white finish which will bear repeated washings. Mix up the paste with benzine. After this settles pour off the liquid and mix with turpentine only. Do not add turpentine to paint until just before using, as it will evaporate. Oil paint can be mixed for several days before it is used.

Limestone as a Soil Preparation.

Tests made at the Ohio Experiment Station tend to show that pulverized limestone is a satisfactory corrective for soil acidity. The effectiveness is dependent on its fineness as well as upon its purity.

Much of the coarse limestone applied in these tests still remained in the soil unchanged after two years. Material coarser than one-twentieth inch has little immediate effect, chemists at the Experiment Station say, because it cannot be as thoroughly distributed throughout the soil and therefore cannot act as quickly in correcting acid conditions as more finely ground material. Limestone as marketed having 100 per cent to pass through a sieve with ten meshes to the linear inch, 50 per cent to pass 50 mesh and 35 per cent to pass 100 mesh is considered satisfactory for all practical purposes.

Lapis Lazuli Found In New Mexico.

It is stated that a discovery has been made of lapis lazuli, or lazurite, about 100 miles west of El Paso, in Southern New Mexico. If true, this is practically the

first discovery of this rare and precious stone in quantity ever made in the United States, as only small occurrences have been recorded in one other place, in California. In this newly discovered vein there is believed to be an inexhaustible quantity of it, which can be mined from the very surface. The vein occurs in a fissure in granite, having a northwestsoutheast strike, showing on the surface a width of one to five feet and a strong outcrop of over 1,000 feet in length. Along the surface of the claim are large boulders of the rock scattered around, all of which. are colored and banded or seamed with a beautiful blue color. Samples of the rock have been tested in the local assay offices and laboratories, and others have been polished, with the result that the rock is pronounced to be lapis lazuli.

Paint Changes Color With Heat.

Engineering publications are reporting a paint which shows when a bearing is becoming overheated by its change in color. It is recommended for coating the bearings or other parts of machinery and electrical apparatus likely to become overheated.

The new paint is normally bright red, but on reaching a temperature of 120 degrees Fahrenheit shows a change of color, and at 190 degrees to 210 degrees Fahrenheit is almost black. When the temperature of the part falls below 120 degrees Fahrenheit, the paint resumes its normal red color. It is asserted that the paint is virtually indestructible, that it is unaffected by lubricating oils, that it prevents the formation of rust, and that the warning it gives enables an engineer to stop a machine before overheating has done any damage.

Three Butts on a Door.

The reasons for hanging a door on three butts was made the subject of a recent contest which developed a considerable interest in the subject. Everyone knows the door that will not close properly or that has warped out of shape. Hanging the door on three butts, instead of two, will, it is claimed, relieve much of the tension and strain on the wood, by making three rather than two points of the door quite rigid.

Among the interesting data covered was an investigation of seventeen houses,



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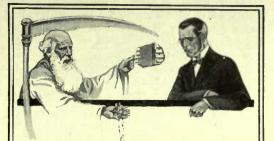


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Los Angeles, California

with a total of one hundred fifty-two doors hung on two butts. In eighty-nine cases the door had rubbed the stop at the center, while in forty-three cases they had rubbed at either the top or the bottom. Seventy-six doors were sprung so badly that they would not shut easily, and twenty-three would not latch as they should.

The prize winner says that the third or center butt will hold the butt edge of the door in alignment and to a great extent will prevent the door from warping.

It also prevents the door from striking or interfering with the door-stop, or the edge of the rabbet.

If a door is hung on two butts only, each butt carries one-half of the load or the weight of the door; but when a door is hung on three butts, each butt carries approximately one-third of the load or weight of the door, and the strain and wear of each butt is decreased. The butts, door jambs, and doors will have a longer life, and cause less trouble to the operators of the door.

When three butts are used, the top butt sets higher and the top edge of the door remains in line with the head jamb. The low butt sets lower and the bottom edge of the door is held parallel with edges of threshold. The top and bottom of door cannot be thrown out of line by the door warping or bowing on the butt edge of the door, as it is firmly held in place by the center butt. This affects the lock edge of door tending to keep it true and preventing trouble with the lock.

Another asserted that he was sure the pearly gates of heaven swung on three golden butts. We are not sure but that they do.

Wall Coverings.

"The ideal material for wall covering is a wide unbleached muslin. This can be obtained up to fifteen feet in width, and is put on with regular wallpaper paste, which is a preparation of dextrin. While the paste is still wet, a coat of glue and ochre is thoroughly scrubbed into the weave of the muslin. When this is dry two consecutive coats of lead and oil are applied, the last coat containing a flattener to give the mat finish. When this is completed, including what decorations are desired, the entire surface is given a coat of buttermilk and starch, which pre-

serves the surface from the attack of dirt and soot.

"When the wall or ceiling becomes grimy with dirt, a thin solution of paste, thoroughly brushed on the surface and then wiped off with a sponge with lukewarm water, leaves the surface as clean as when it was originally painted. Then a fresh coat of buttermilk and starch is put on to preserve it until the next washing.

"Another material is paint applied directly to the plaster. This is not so desirable as the muslin, for plaster as it dries through the years is likely to shrink and leave small pin cracks.

"Still a third material is water color, or so-called 'kalsomine.' This requires: first of all, the application of a coat of glue sizing, to make the plaster impervious to moisture. This makes necessary only one coat of color. The soft mat effect produced by this method is very delightful, but—any water which comes in contact with this surface makes an ugly spot.

"Several of the best designers, such as Sir William Morris, Walter Crane and Voysey, have given much attention to wallpaper designs, and where their designs are worked out by the hand-blocking process they are very beautiful.

"Wallpaper originated with the Chinese. Thomas Chippendale brought back from his trip to the Orient a number of examples of these paper wall hangings, and, having at that time an influence on interior decorating, he started a fad for these Chinese papers. It was the custom when building a house in those days to fit heavy cartridge paper to the plastered surface and then send it to China by some merchant calling at Hong Kong or Canton, to be decorated by these well-known Chinese artists and returned to England to be installed in its place.

"Many of the well known English manor houses today are decorated with these interesting documents, which may be said to have been the origin of paper used as wall hangings. From England the use of papers spread to France, and here the eighteenth century gave to the world some of the most interesting designs in hand-blocked papers that have ever been produced."—From "The Healthful House," by Lionel Robertson and T. C. O'Donnell. (Reviewed.)

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are most beautiful and appropriste for the shingles, siding or timbers. The colors are clear and transparent and bring out the beauty of the grain of the wood instead of covering it as paint does. They cost only half as much as paint, can be put on twice as fast, the colors are lasting, and the Creosote "is the best wood preservative known."

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With Nature's Laws, Not Against Them

(409)

utilizing to the utmost every known principle of combustion, humidity, ventilation and draft, and antagonizing none of them, the

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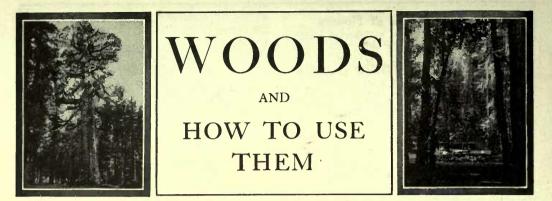
The FRONT PANE Steel Furnace is "fool-proof"-so simply and scientifically built that even an unskilled operator has no trouble with it.

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EDITOR'S NOTE. - When the building idea takes possession of you-and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEFH's staff of wood experts. This department is created for the benefit of KETH's readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

American Manufacture of Creosote.



WING to the decrease in shipments of creosote from England and Germany, whence came all but a small part of the imported

oil used by wood preserving plants in this country before the war, American manufacturers have taken steps which, says a report compiled by the forest service, it is estimated will largely increase production of the domestic article. The imported oil ordinarily forms about 65 per cent of the total used in the United States, where creosote is the most important wood preservative.

The statistics gathered show that wood preserving is one of the most rapidly advancing industries in the country.

There is abundant evidence of the long life of creosoted wood. Even in this country there are many examples of poles and other timbers creosoted 20, and even 30, years ago which today are apparently as sound as when first set in the ground. In Europe where wood preservation is an older industry the results are still more marked. The first successful wood preserving plants in the United States were built about 1870.

Wood Preservation.

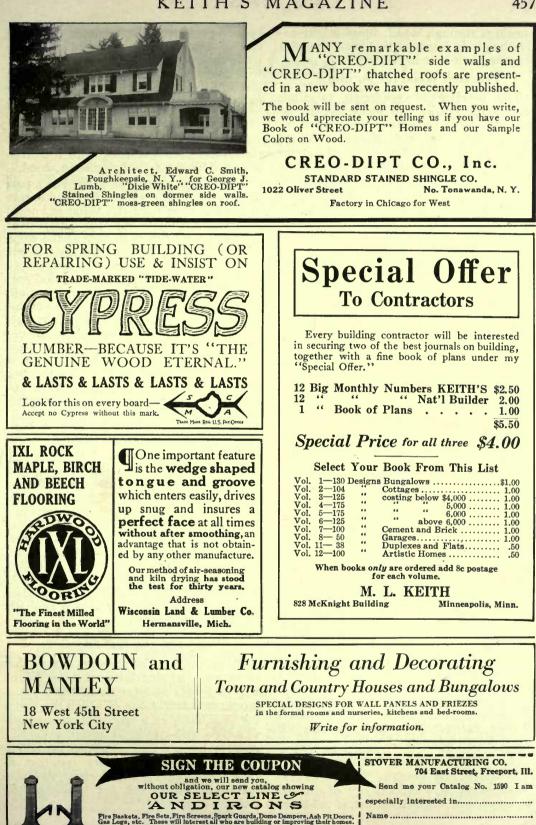
Whether any wood is durable or not depends not so essentially on the kind of wood as to conditions of its manufacture, seasoning and use. No hard and fast lines can be drawn. Heartwood is usually much more resistant to decay, according to R. S. Kellogg, the wood expert, while sap wood, since its cells are more open, usually absorbs wood preservatives better than heartwood.

Timber of naturally durable woods which is not seasoned before it is used or which contains a large amount of sapwood may rot quickly, while properly handled timber of less durable woods may last a long time.

The decay of timber is caused by minute organisms called bacteria and fungi. They feed upon wood and change it as completely as the digestive processes change the material upon which the higher forms of life feed. Sapwood is more liable to decay because it contains much more food for bacteria and fungi than does heartwood. This is true because the sapwood is the vital part of the tree. As the cells become older their functions are assumed by the newer ones close to the bark and the living matter of the older cells nearer the heart of the tree, is gradually changed by deposits of mineral or other matter, generally of darker color.

Decay of timber is prevented by treating with antiseptics which are poisonous to bacteria and fungi. Practical considerations make only a few such substances suitable for commercial use. A first essential of a good wood preservative is that it shall not dissolve out when the wood gets wet or is placed in water. For this purpose the best material thus far discovered is creosote.

Paint lengthens the life of wood because it keeps out moisture and closes



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State

457

openings through which fungi might enter; but it is essential that wood be well seasoned before it is painted.

Veneered Wood for Furniture.

The practice of veneering furniture may be regarded as the means of placing beautiful objects within the reach of those who could not otherwise afford them. If the wood serving as the foundation is good and sound, free from knots and cracks, and if the veneer is applied with careful workmanship, there can be no valid objection to work of this class. Of course, it should be sold for what it is.

Not all veneered furniture is less expensive than solid however. A fine veneer is more valuable than solid which is The rarest less beautifully figured. French and Italian walnut is sometimes veneered on mahogany, as it lasts better in this condition than if it were solid, and large surfaces and thicknesses of walnut are difficult to procure in perfect condition. Very precious woods such as ebony and satin wood can only be obtained in small quantities, and other woods of especially handsome grain are cut from roots and excrescences of the trees which produced unusual conditions of growth.

In addition to the cost of materials there is the labor to be taken into consideration, for good veneering requires careful work. A valuable veneer is usually laid on an expensive wood as a foundation, and this adds to the price of the finished product. The foundation wood is dry and free from all imperfections. Honduras mahogany is considered the best wood for the purpose, but yellow pine, whitewood and oak are often satisfactorily used.

Whenever possible both sides of the ground wood are veneered to prevent warping, and the veneer used on either side is of the same grain and strength, so that the tension of one side counteracts the tension of the other. When only one side of the foundation wood is veneered, it is laid on the heart side, or the side of the wood which lies nearest to the center of the tree before it is cut. — Furniture Woods, Interior Decoration, by Amy L. Rolf, M. A. (Reviewed.)

Trademarking Lumber.

It seems as though "Look for the Trademark" may become one of the slogans of the lumber industry. As the

boards pass over the trimmer table the end is automatically stamped with the trademark of the association or company, with numerals or other marks indicating the mill in which the lumber was manufactured.

The Definition of a Knot.

The American Society for Testing Materials has been wrestling with the problem of defining a knot, found in wood.

Briefly, a knot may be defined as a part of wood that differs in texture and nature of growth from normal. What is known as a sound knot is one which is just as solid or sound across its face as the wood surrounding it. An encased knot is one whose growth rings are not interwoven with the growth rings of the wood surrounding it; but if it is a sound or tight knot it will be held tightly by the encasing wood around it. A water-tight knot is one which is completely interwoven with the surrounding wood on at least one face of the lumber. A loose knot is one not held firmly in place by the surrounding wood. An unsound knot is one that is not as hard as the wood surrounding it, or one that has a hole in it.

Artificial Silk From Wood.

The Forest Products Laboratory at Madison, Wis., is experimenting in the making of artificial silk from sawdust and other lumber waste. Originally, the use of artificial silk manufactured from wood was principally in the manufacture of braids and trimmings, but of late the making of hose, woven goods of all kinds, linings, tapestries, neckties, ribbons, sweaters and coats has increased. At present, about five and a half million pounds of artificial silk are used annually in the United States.

Wood and the Building Code.

A prominent lumberman says that there are over one hundred cities in the United States of more than 50,000 population, in scarcely one of which the building code has been worked out on the basis of a right and intelligent use of wood. He also emphasized the importance of making wooden shingles more fire resistant so that there can be a wider use of these materials within the fire limits of the cities.

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SPLINTERS AND SHAVINGS

Some Mistakes.

HEN a plumber makes a mistake he charges twice for it.

When a lawyer makes a mistake, it's just what he wanted, because he has a chance to try the case all over again.

When a carpenter makes a mistake, it means an "extra."

When an electrician makes a mistake he blames it on "induction," because nobody knows what that is.

When a doctor makes a mistake he buries it.

When a judge makes a mistake, it becomes a law of the land.

When a preacher makes a mistake, nobody knows the difference.

But when a home-builder makes a mistake he usually has to live with it for the rest of his life.

Industrial Germany.

The manufacturers of Germany demonstrated their belief as to the value of research and, utilizing it in every available form, they went conquering the They were indeed far on their world. way in such conquest up to the time that the war lords fell out and so stopped their work and dragged them back to the old, old aboriginal manifestation of brute force and the lust for blood. Had they but kept to their work, utilizing scientific research in their manufacture as they had been doing, their conquest of the world would seem to have been assured, but the war lords decided otherwise and chose the way of blood.

The Supreme Court and the Billboard.

After years of litigation the Supreme Court of the United States has upheld the validity of billboard regulation. It is within the power of a municipality, according to the ordinance upheld, not only to prohibit billboards that affect the city's fire, wind or health hazard, but also to abolish billboards entirely in residence sections by consent of the property owners.

The Supreme Court has ruled that a city has jurisdiction over the placing of billboards and can prohibit their erection on residence streets where more than half of the property owners are objectors.

There has been a petition on file before the Chicago common council for some time for the tearing down of all billboards in residential sections of the city, and the promise was made that the request would be granted in case the decision in the court at Washington was favorable.

The "Teacherage."

Communities in the northwest have taken considerable interest in the subject of the Teacherage, as the buildings which are being built to include the homes for rural school teachers are being called. Several teacherages have already been built and seem to be a satisfactory solution of the problem. They are helpful in getting a better grade of teachers in the rural schools as the idea of boarding at a considerable distance from the school, with the necessity of traversing the intervening space during the most inclement weather, does not appeal to a competent teacher. Also it is increasingly difficult to find boarding places.

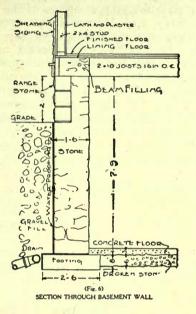
A teacherage recently built stands a short distance away from the school.

In the basement of the teacherage is located a complete home training department for girls, consisting of a cooking and sewing laboratory, storeroom, model dining room and laundry. On the first floor is the apartment for the principal and his family. This floor contains a parlor, dining room, kitchen, toilet and bath, vestibule, closets and bed rooms.

On the second floor the women teachers' living rooms are located. This floor consists of four bedrooms, dining room, kitchen, etc. The home economics teacher conducts a teachers' boarding club in this apartment, receiving for this the kitchen and dining room free.

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A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and 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.

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BEWARE of subscription solicitors purporting to be under the auspices of the society for the blind, child-welfare organizations and similar movements.

A fraud has just been unearthed which under different names has been operating in many of the larger cities, and possibly through other districts. No communications were allowed to go through the postoffice. Appeals were made by telephone, and little girls were sent out to make the collections which were usually in cash.

In Minneapolis all of the names in the telephone directory were systematically called and 1,200 subscriptions, at a dollar each were taken and nearly a thousand

Statement of the Ownership, Management, Circulation, Etc., Required by the Act of Congress of August 24, 1912,

Of Keith's Magazine on Home Building, published monthly at Minneapolis, Minn., for April 1, 1917. State of Minnesota, County of Hennepin—ss.

Before me, a Notary Public in and for the state and county aforesaid, personally ap-peared M. L. Keith, who, having been duly sworn according to law, deposes and says that he is the owner of the Keith's Magazine, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above cap-tion, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, to-wit:

1. That the names and address of the publisher, editor, managing editor, and business managers are

Publisher-M. L. Keith, Minneapolis, Minn. Editor—M. L. Keith, Minneapolis, Minn. Managing Editor—E. Bartholomew.

Business Manager-G. E. Nelson, Minneapolis, Minn. 2. That the owner is:

M. L. Keith, Minneapolis, Minn.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

M. L. KEITH. Sworn to and subscribed before me this 22d day of March, 1917.

(Seal)

My commission expires Jan. 25, 1922.

MARCUS P. STARK.



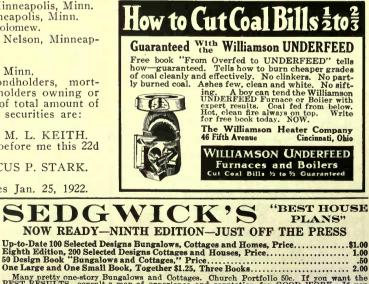
paid, largely in cash to the girl collectors. The subscriptions were asked for a magazine, ostensibly under the management, and for the benefit of the blind. In another city it was under the auspices of a child-welfare organization.

Military Service and the Slum Dweller.

According to the Journal of the National Housing Association, only one-third of the men who apply at offices of the Army and Navy and Marine Corps from the crowded sections of some of the larger cities are accepted, the greater number being rejected for physical unfitness due, in large measure, to the over-crowded, insanitary conditions in which they live.

England has found in her great war that the soldier from the slum is the first to succumb to disease and privation, and although thousands are turned away from her recruiting stations as physically unfit, many of the accepted do not withstand even the first hardship.

The majority of the men who apply at one of our recruiting offices come from the crowded sections of the city, and out of 176 who applied during April at the army recruiting office only 77 were ac-This number of rejected does cepted. not include the 150 or more who were so visibly unfit for service that they were turned down without being questioned or a record made.



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, MINNESOTA



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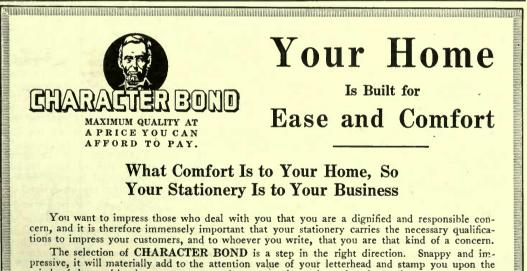
Special Offer

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The price of 12 issues (1 year) is \$2. We will mail you the next 6 important numbers (\$1.00) and 2 copies of current issues—8 late numbers in all for only \$1.00, if you will write mentioning this offer and enclosing \$1.00.

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New Booklets and Trade Notes

The Air We Breathe and the Heating Plant.



HE problem every home builder is called upon to solve is: How shall I heat my house so that the air will not only be comfortable, but healthful? The trade booklet by Haynes-

Langenberg Manufacturing Company, 4045-4057 Forest Park Boulevard, St. Louis, of their "Front Rank" furnace takes up the advantages to be derived from the combination warm air and hot water heaters with reference to the ventilation of the house. In connection with the furnace they have put on the market a humidifier which supplies moisture to the air sent into the rooms and maintains the humidity as may be desired. People are beginning to realize the necessity for a greater humidity for indoor air and the difficulty of obtaining it in an adequate degree. They quote Dr. Henry Mitchell Smith, who in a paper read before the Brooklyn Medical Society, entitled "Indoor Humidity," says:

"The point to be emphasized is that every time we step out of our house during the winter season, we pass from an atmosphere with a relative humidity of about 30 per cent into one with a relative humidity of, on an average, 70 per cent. Such a sharp and violent contrast must be productive of harm, particularly to the delicate mucous membranes of the upper air passages.

"If our rooms contained more moisture we could live more comfortably at a lower temperature. The overheating is required because of the low relative humidity.

"It was satisfactorily proven that one may live during the coldest weather with perfect comfort in a room at 65 degrees F. where the relative humidity is kept at about 60 per cent."

* * *

The Healthful House, by Lionel Robertson and T. C. O'Donnell, Good Health Publishing Company. Battle Creek, Michigan. Giving its own description: "What we have attempted in the present volume is to emphasize the health importance of beautiful colors and beautiful lines and masses, beautiful walls and floor coverings, equally with fresh air and light—to present to the reader, in short, a house that is healthful because it satisfies the demands of hygienic and esthetic sense alike. A house, be it ever so sanitarily built, is not a healthful house if it does not bring rest and repose to the tired mind.

"How many of us could spend an afternoon in our living rooms, and as for spending a month in our indoors, the thing would be quite out of the question. Witness our wives. Two times as many women as men suffer from headaches, while in neurasthenia and the minor forms of nervousness the proportion is even higher. We men folks are careful enough about our offices.

"The trouble is, most of us are house conscious. We plan and build a house much as an inexperienced youth buys his first suit of clothes. So long as we build after fashion plate ideals, just so long will our houses and our furnishings have the appearance of all having been run in the same molds.

"A house that gives the body all the fresh air that is needed, that provides for the right temperature and that reduces labor to a minimum; a house that will keep the mind tranquil and rested without jarring one's feeling for beauty—here is the healthful house."

Interior Decoration for the Small Home, by Amy L. Rolf, M. A. Instructor of Home Economics, University of Montana, published by The Macmillan Company, New York. One of the problems of the time is the satisfactory furnishing of the small home and the purpose of this book is to give a key to the solution of this problem. "It is the people who must make their own selections of furnishings and plan their arrangement who especially require some economic and artistic knowledge on the subject, so they may attain the greatest amount of beauty and convenience for the expenditure. If they understand color and form harmony in the essential relation to artistic unity, they should then have sufficient confidence to express some of their own individuality in their homes as they endeavor to combine the ideal with the practical."

Additional value lies in the list of references which is placed at the end of each chapter, where the subject of special interest may be studied further, and to any extent desired.

Estimating Building Costs, by William Arthur: David Williams Company, New York, publisher. This is a small book in which the author says he has endeavored to present the facts in plain language. It is compactly arranged and concisely stated. It gives time, labor and material required for the several operations. On account of the constant changes in price, up or down, the figures in this book are usually given in actual quantities required and in actual hours of labor necessary to put them in place. Costs can then be adjusted to suit local conditions and prices. These figures are "constant" under ordinary conditions, to which the "variable" cost can be applied, giving the book a constant value.

KEITH'S MAGAZINE ON HOME BUILDING

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A charming Dutch Colonial entrance.

VOL. XXXVIII

JULY, 1917

No. 1

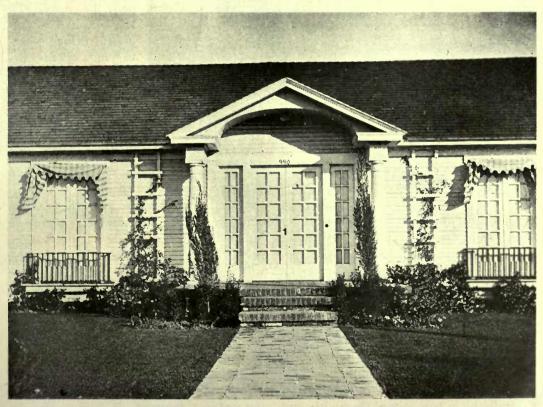
Doorways and Entrance Porches of Charm and Character

Charles Alma Byers



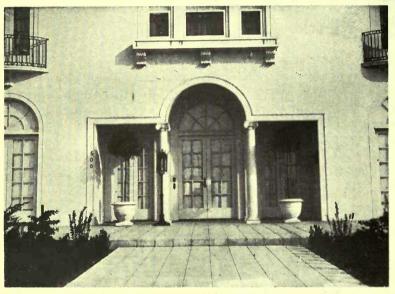
r is doubtful if any other structural detail is capable of wielding so potent an influence upon the exterior of a home as the front

entrance. Be it because of the prominence of the position it occupies or for some other reason, it is the feature of a home's exterior upon which is invariably first focussed the attention of the passer-by; and hence, since first impressions are said to be the most lasting, it should be readily evident that it is worthy, in all cases, of the architect's careful consideration. Through its handling, in fact, it can be made to either accentuate or detract from the general appearance of a house, even



A Colonial bungalow where French doors are used with good effect.

considering the matter in purely a structural way, to a very marked extent. Moreover, whether or not it be generally realized, every home is endowed with, or eventually assumes, a certain atmosphere, or personality, and it is here again, as a means of controlling the expression of this subtle something, that the entrance feature constitutes, because of its great pliability, a most important factor. It, for the same rule obviously applies with respect likewise to interpretations of the Italian, the Spanish, the English, and all other schools. While this is generally understood and rarely disregarded, it, nevertheless, is a matter worthy of emphasizing, for nowhere else will an architectural "missfit" be more conspicuous. However, this advocacy of consistency is not in any sense to be understood as a



A pleasing, recessed entrance.

instance, may be made to express hospitality, quiet reserve, dignified aloofness, even repulsiveness, or any number of other desirable or undesirable attributes. To fully govern its suggestiveness in this respect may comprise no easy task, but it is a matter that at least deserves study along with the other things that enter into the problem of good design, with special reference to the entrance.

The first and most important essential of front entrance designing is, of course, that the feature be structurally harmonized with the general architectural style of the house of which it is a part. If the house be of any one of the so-called Colonial styles, the entrance detail must naturally be in true accord therewith, and

recommendation of stereotyping. Although conforming to the particular architectural style employed for the house as a whole, the entrance, with proper handling, may be so varied as to detail that no two entrances, even of the same general style, need be exactly alike. And it is naturally through this varying of the details that, to a great extent, is expressed different the at-

tributes of the front entrance in respect to hospitality and so forth.

While the foregoing remarks may be considered as applying to doorways and entrance porches of all kinds, it is with the kind that may be described as an entrance feature only that this article is intended to deal especially. Observation, particularly with regard to city homes, will reveal the fact that the roomy front veranda is no longer by any means so common as it was only a few years ago. Instead of its now occupying such a prominent and conspicuous position, it is being given, in an increasing percentage of cases, a location somewhere on one side or in the rear of the house, where the outdoor lounging it invites may be

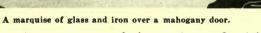
more private—and hence, because of this seclusion, the more fully enjoyed. And surely the relegation of the lounging retreat away from the front constitutes a very appreciable improvement in many ways, unless the style employed actually forbids.

With the removal from the front of the formerly common broad, deep veranda, the front entrance feature is made to

stand more or less alone, and consequently -necessitates specially studied attention. However. in some cases, an open terrace, paved either with brick or cement, will be used across the front, as a sort of substitute for the veranda. Sometimes this terraced area will be partially or wholly enclosed by a low wall or railing, but, without overhead covering, it is rarely permitted to detract from the

prominence justly due the doorway. As showing particularly charming doorways and entrance porches of the kind here referred to—and in some instances delightful terrace arrangements also—the accompanying illustrations are of more than passing interest. They portray a variety of styles and treatments, and in a manner far more impressive than may be given by any description.

As is true in respect to wearing apparel; tastes, hence styles in home architecture are constantly changing. Adaptations, variously interpreted, of the socalled Colonial styles have become especially popular in the last few years, with the result that we have representations of the Dutch Colonial, the French Colonial, the English Colonial, and so forth, as well as the "Colonial Bungalow." All of the Colonial styles naturally invite the type of entrance that is an entrance feature only, and the correspondingly varied kinds of Colonial entrances, invariably leaning toward the simple and dignified, are nearly always delightfully effective, both as helping to make the house's exterior attractive and as giving it an ap-



pearance of sincere but refined hospitality. In fact, it would seem that the Colonial influence which is making itself so manifest upon our home architecture of today is to be observed at its very best in this matter of front doorway and the charm of its designing.

The Colonial entrance, whatever its particular kind may be, is especially susceptible to widely modified treatment, to meet individual tastes. Usually it makes use of two or more white columns of dignified design, with either a simple Doric or with the delicate volutes of the Ionic order for the capitals and an architrave and cornice, and often a pediment or balcony above. This portal effect may be used in conjunction with a sweep-



The Ionic Order is used for the columns at the entrance.

ing terraced area or with merely a tiny stoop—the terrace or stoop, as well as the steps leading thereto, being paved with either brick or cement, of any one of the several possible colors.

The door itself may be variously designed also. It may be plain or paneled, while in some instances it is even of French design, and it may or may not possess glassed side panels and overhead And with the Colonial entransoms. trance has also been returned to us the old-fashioned knocker, as well as, in some cases, even the old-styled latch, although somewhat modernized. These knockers, made of brass or iron, are variously patterned, and always give to the Colonial doorway a finishing touch that is most appropriate. Then, too, as affording still another opportunity for varying the treatment of entrances of this kind, there is the matter of doorway seats to be taken into consideration. These seats, usually one at each side of the entrance, are ordinarily built with high backs, either solid or latticed, and, always seeming to be silently inviting one to tarry and rest awhile, do much toward giving increased charm and character to all arrangements in which they are used.

At the present time there is also a considerable vogue of adaptations from the modern Italian. Spanish and French styles of architecture. These styles are commonly interpreted in houses of stucco exterior, and, according to the particular style, range from the verv simple to the quite ornate. As will be observed by refer-

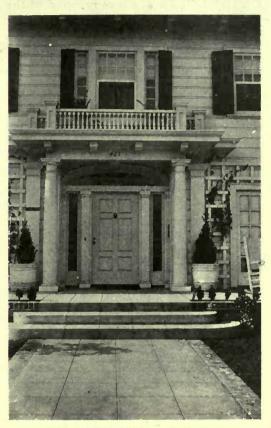
ring to some of the accompanying illustrations, many of the entrances make use of the classically dignified white columns, of the Ionic, Doric or Tuscan order, and in a other instances there will be used a sort of glass marquise supported on brackets. Into some of these arrangements attractive grille-work also enter; while deep, broad, terraces, enclosed with railings, or unenclosed, are not infrequent.

Something in the way of entrance lights is, of course, necessary, and here again is afforded wide latitude for treatment. This lighting may be done with a wall fixture at either side of the entrance or with a single one placed in the center of the overhead extension, and sometimes it is also supplemented by standard fixtures of some kind, intended mainly for illuminating the terrace. In fact, there are various attractive ways of handling this matter, and then, too, there are practically unlimited possibilities in the matter of fixture designs, even after their arrangement has been determined on.

Entrances of the kind here referred to lend themselves in a particularly appreciable manner to charming floral treatment. In fact, it will be found, this is a matter that affords almost unlimited possibilities, and that through its handling the general appearance of an entrance may be greatly modified as to its suggestion of cold formality or warm hospitality. In other words, an entrance that under one treatment may express severe dignity by a more free and easy use of shrubbery and vines can be made decidely informal and inviting. As showing something of the range of possibilities afforded in this respect, the accompanying pictures will be found quite interesting.

However, in the majority of cases, especially in the city where the general character of the street vista must be considered, the entrance of this type should be maintained, in respect to the planting, in a rather dignified style. Bay trees, pyramidal boxes or dwarfed arbor-vitae in tubs or urns very frequently enter into the scheme with effective results, and for the close-up floral decorations one or more pairs of such shrubs will, in many instances, prove quite sufficient. These potted shrubs are, nevertheless, often charmingly supplemented with a ground planting of two or more Italian cypresses. In Colonial effects, however, rose ladders or latticed borders are sometimes provided about the front doorway and windows, and these very naturally invite a delicate tracery of climbing rose bushes which may be relied upon to enhance the appearance of such arrangements. Sometimes, also, vines may be effectively used to even cover the pillars or to form a veritable screen for the entrance seats. if such there be. In fact, this matter of floral decoration must be left largely to individual taste, although in the exercising of one's taste in such matters proper regard should be always shown for the character of the neighborhood.

The possible front terrace is similarly susceptible to varied floral treatment. It is very frequently hedged or bordered with box, privit, "dusty miller," or some other low-growing shrub or plant. However, to attempt more than a brief sug-



Rose ladders besides a Colonial entrance.

gestion in this matter would be extremely difficult, for there must always be considered the problem of the most appropriate general effect.

Nothing is more important than the general character of the front entrance, as must be apparent. The designing and decorating of the front entrance may well be given the greatest consideration, alike from architect, owner and gardener.

or show block and addition of other

Peeled-Log Cabins

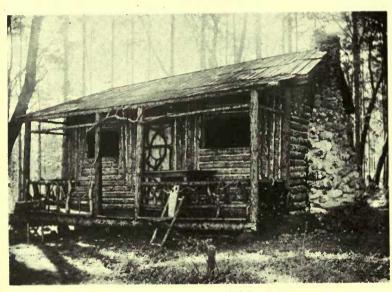
Monroe Woolley



ESTERN pioneers resorted to the log cabin largely because they had no other choice in construc-There were no lumber tion.

mills yet on the ground and freight shipments around the Horn made material make big practices of thrift not a fad but a duty to one's family as well as to society, the log cabin, in improved form, is coming back into its own.

If you have a small wood, or forest, on your land, and can do the work your-



A summer home which cost little in money.

prohibitive in price. But with the establishment of mills to work the west's wealth of wood up into lumber, with the building of railroads, and thorough industrial development came homes similar to those the settlers left in the east, and the log cabin eventually took a back seat, and in time was looked upon somewhat with disdain. But memory of it was preserved by those who kept summer homes in the woods, by hunters and trappers, and the loggers in the forests.

Now that the rising cost of everything necessary for human life and comfort is soaring to heighths that would make an aviator dizzy, and with conditions which self, or can get men at reasonable wages, who know how to handle logs, the cheapest sort of a home you can build, either for temporary or permanent use, is a log cabin-of an improved type.

Your home need not be as crude and unattractive as that the western pioneer had through force of circumstances to accept. There are as many ways of improving log cabin construction as there

are fashions for dressing milady's curls. Ingenuity and cleverness will do a lot, and with standing timber on your place there is no limit to the material bill. If you shun the rough-bark exterior appearance as savoring too much of medieval ages, it is an easy matter to peel the logs, and paint or stain them to your taste.

Use logs of small diameter for your house, say about eight inches. Big logs are unwieldly to handle, and using timber much larger than eight inches across is a waste of wood. Select logs of uniform size and have each log of about the same dimension at either end. Tapering logs must be discarded. Peel the bark from



A peeled-log house of modern type.

the logs, but do not throw it away. Remember, in these days of war, economy must be the watchword, as it should always be in more pleasant and profitable times. Bark makes a fine, hot fire; left on the logs to be put into a house it means an exterior finish such as nature used in the woods, but it certainly is not homelike. The bark will soon loosen on the logs of the house, and, anyway, it harbors all sorts of insects and other vermin.

For a foundation any form of construction may be used. If a log foundation is used an effort should be made to get large creosoted logs for laying on or in the ground. In the west and other logging localities big pilings of large size are marketed in which creosote is driven under high pressure at regular creosoting plants designed for the purpose. Four of these pieces of piling, laid to form a rectangle for a foundation, make ideal material for the purpose, in that they will effectively withstand rot and onslaughts of insects.

Or, a solid foundation of concrete may be used, as may concrete posts or pillars. Blocks of timber set upright are not desirable for reasons that should be obvious.

As to painting or staining the exterior of a peeled-log cabin, but two colors suggest themselves as appropriate. These are brown and dark green. Brown is preferred because it gives a rustic appearance to the house, and creosote stain gives this color and at the same time furnishes a coating which will protect the logs from the weather and from insects. A coat of creosote is also almost everlasting, and will therefore lessen painting bills.

Instead of a heavy shake, or clapboard, roof—more or less inclined to leak—such as the western settlers were compelled to adopt, you may have for a nominal sum a roof of 1x12 inch sheathing, rough, covered with some of the various forms of good patent roofing material. A shingle roof, creosoted brown, makes an attractive covering for a house which is creosoted outside. Rain troughs, or gutters, may also be added.

Of course corrugated walls, resulting from the semi-circular surfaces of the logs forming the walls, are objectionable on the inside of any kind of a house. To overcome this objection in a modern log house the inside walls and ceilings should be covered with wall board, or some similar material.

A log house of the kind herein considered, with modern doors and windows of good design, has an unusually attractive appearance, and, where the raw material is to be had for the taking, can be put up at very small cost, indeed. Every homebuilder now days is striving for originality in his home, and log cabin form of construction is so old that it is really new when modified and improved upon with the things present-day inventive genius and industry has given us.

A good floor of double thickness should be installed, whether your house is to have a basement or not. Floors are for feet, and the man or woman who neglects his or her pedal extremities never gets far—without limping. Since you are expending little for lumber you can afford to go in strong for good flooring material, as well as for dependable roofing. Doors and windows suitable for modern bungalows fit well with this building scheme.

The peeled-log house shown herewith was built by a small rancher who lives but a mile from town. He had an overabundance of small size timber on his place right at his back door. He determined when settling upon his land to make profitable use of this material rather than to burn it up for fuel. Excluding his own labor, the actual cost of completing the dwelling of four rooms was exactly ninety dollars-peace-time prices. This amount covered the buying of doors and windows, roofing material, sheathing, flooring, nails, chimney, and some other odds and ends which could not be gathered from nature's lumber yard near by.

In many cases it is a mistake for landowners to think that they must buy their homes "tailor-made," or from lumber vards and hardware stores. Natives of other lands depend largely upon their own genius, without the use of money, for getting a place of domicile, and although we are far removed from savagery or anything of the kind, the man with a home, whether it is acquired with a cash outlay or by his own sheer daring and industry, is to be looked upon as a factor for good in our economic development. Early Kansas settlers got along with sod houses, and no doubt some of them today might be living in an improved type of sod house minus the disconcerting influence of mortgages and unnecessary debts.

In the Philippines all a poor peasant needs to get a home is a bolo knife. With it he harvests the material for his casa from the woods, and with the same sole implement he builds his house. Due to this fact, perhaps, a larger proportion of the natives are home owners than is the case in many other countries.

Clay is a good material for chinking the crevices between the logs, but cement is better and more lasting. If cement is used it should be reinforced by running a wire parallel with each crevice to be chinked, just as concrete is reinforced with steel rods in large buildings. The wire, fastened at either corner with staples, will serve to hold the concrete in place in event it is inclined to work loose or crack.

You may depend upon one thing at least in a house constructed of logs. The mice won't disturb you scampering up open spaces in the walls. Then, too, it takes an extraordinary earthquake or storm to disturb a properly anchored log house.

Laundry Innovations Edith M. Jones

ET Old Sol put hot water in your pipes, says California. Its possibilities are understood by anyone who has washed dishes on a summer day with water which the sun has heat-

> ed accidentally in a small exposed section of the pipe, or in a summer home where the water pipe runs for some distance near the surface of the ground.

Why is not this principle equally applicable to the summer home which is used chiefly during the heat of the summer, supplemented by the more or less primitive methods often used for heating the hot water which is needed in the summer cottage.

With a hot water coil on the roof and insulated stotage tank in the attic of the fair sized house, why not complete the innovation and put the laundry on the upper floor? Most of the clothes are taken from the second floor bedrooms to the laundry, and the freshly ironed clothes must be carried up to the second floor again. Put a lift into the house instead of a clothes chute; it will be much more useful. When the clothes are hung in the attic the advantages are obvious.

Have you ever thought what an ideal thing it would be to have the laundry on the third floor instead of the basement? Of course I am speaking of the larger house and especially where a ballroom or an amusement room is desired, in which case I would suggest exchanging the third floor ballroom with the basement laundry. This is not an original idea and has been discussed by many people, but, so far as I have known, none have ever allowed themselves the luxury of a trial of the novel idea.

You ask just what the advantages would be in this decided innovation: First of all it leaves the basement for use as an amusement room or ballroom and cloakroom, which would be much more convenient to the drawing or living room, leaving the second floor undisturbed for other members of the family if need be, while the third floor laundry would save hundreds of steps as can easily be seen by following the clothes on a week's round of duty. For instance, the soiled clothes are first carried by hand or by chute to the basement. Here they are laundered, then carried to the back yard on sunny days for drying and on rainy days are very often taken to the attic or third floor. Then they must be carried back to the laundry for ironing, then to the sewing room (often on the third floor) for repairs, and lastly to the second floor bedrooms or closets where they rest for a brief period before beginning active service again.

Think what an advantage it would be to send them on a lift (which could be used also for other kitchen and sickroom service) to the third floor where a well

17



Unusual placing of sun coil for heating water.

equipped laundry with linoleum covered floor and screened Dormer windows allowing ample sunshine and fresh air could care for the washing, drying and ironing processes. The mending could be done in an adjoining room and the distribution to the first and second floors would be comparatively a simple matter

and would easily eliminate much unnecessary labor.

I called up the building inspector recently and talked at length with him and he said he could see no building restriction against the third floor laundry and thought when people once grasped the advantages of the idea it would meet with favor. He said he had thought about such an arrangement himself and that he would

like to see it tried out.

I talked with a master plumber of large experience and he said it would be a great improvement over the present arrangement. It especially appealed to him because the wash day odors would be entirely eliminated from the house. In this connection Lam reminded of a conversation I recently had with a middle-aged man who said he had never been able to

eat boiled dinners because when he was a small boy the regular Monday noon-day meal in his home was a boiled dinner and he said to this day he seemed unable to forget his early impression of the combination of dinner and washing. He said he remembered asking his mother "why they always boiled dinners and clothes



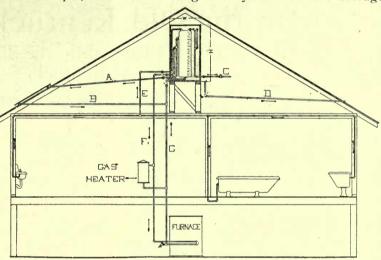
A sun coil on the roof—It must have a southern and complete exposure.

together." One can readily see the child's reasoning and of course in the days of the wood range it was usual to do as much cooking as possible while the range was going, so he naturally inferred they were boiled together.

I have talked with several architects who approve of the idea, and lastly, I have talked with housewives who feel it would be a most comfortable way of solving many problems. For example, the

laundress could come and go without disturbing the daily routine work and the fact of her being able to hang the clothes in an attic built to let in the air and sunshine, winter or summer. with immediate protection in case of storm, seems surely worthy of consideration.

Of course this arrangement would not interest the builder of the tiny four inches deep, in which water pipes are arranged. Under this coil of pipe there is a continuous sheet of copper or other metal to hold and reflect back the heat until it is absorbed by the water coil. The box is covered with glass and is practically air-tight. The heat from the sun's rays is absorbed by the water in the coil. The pipes of the coil have a certain upward pitch, causing the heated water to gradually flow to the storage



Hot water for summer, where there is also connections with gas heater and furnace.

house, but I am sure to the larger house such an arrangement would give greater efficiency and make it more enjoyable as well.

In this day of economic conservation, everybody knows that water, exposed to the sun's rays, will absorb some of the heat which ordinarily goes to waste. For years some parts of the country have taken advantage of a most interesting application of this principle for concentrating and utilizing this heat. It is a carefully worked out system for heating and storing water for use by day and night, and has been in successful operation for several years in many homes on the western coast.

The sun's heat is caught by a sun coil which consists of a shallow box about boiler. As the hot water leaves the sun coil it is replaced by the water which has the least heat from the bottom of the storage boiler. During warm, sunny weather the water that was first heated and sent to the storage boiler will return to the sun coil and be heated to a still higher temperature. In other words, it is a circulating system.

The sun coil must have a southern and complete exposure to secure the maximum heat from the sun's rays, but it can be placed on the roof of the house or a convenient shed, garage or pergola or even on the ground. The boiler in which the water is stored after it is heated is packed in a thick insulation and is generably placed in a vertical position in the attic. In many installations where little attic space is afforded the boiler can be placed on the rafters and extend through the roof, and the covered insulation may be finished in the form of a chimney.

Of course there is much more to be said about these solar heaters but the best that can be said is summed up in the statement that three-fourths of your hot water is delivered to you free. During the remainder of the time when the sun's heat is not sufficient and for the days when there is no heat at all, an auxiliary heater or a furnace connection with the coils is provided.

This is all very interesting and one more proof that the resources of God's. creation are by no means exhausted as yet.

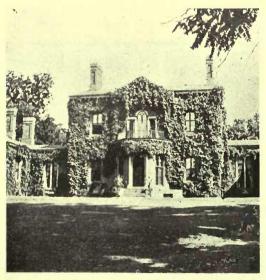
Vale to the Old Kentucky Home The Old Order Changeth in the Blue Grass Country of Kentucky

Felix J. Koch



IE sun shines bright as ever on the old Kentucky home—and in summer the darkies are gay—but you, who love the old, romantic pictur-

esque in American home-life—who have dreamed of some day tarrying at an old



Ashland, the home of Henry Clay.

Kentucky home, as you've seen them staged and pictured, must needs hurry, for the passing of the old Kentucky home is now well under way.

Of course you know well the type-the

real old Kentucky home; tall, with spreading wings of one, often two, or many rooms on either side of the house center rising with a pediment squarely at the middle. A little portico, rounded and edged 'round with pillars, or else, before the house, an array of larger pillars, flanking the guest on his arrival, as they towered from the outer side of the drive.

Come within the central hall; back in this is the winding stairs. Always white the woodwork of that hallway; every post and every spindle of the balustrade immaculate; the wallpaper is flowered, usually in large designery, hues all dainty, harmonizing with the white.

At the one side is the parlor, broken by the giant fireplace; at the other, the living room or else the dining room, always kept immaculate, in state.

Wonderful old Southern home—just the thought of it sets the heart to yearning; makes one want to venture forth in search of such. Whither, though, should one wander?

Somehow or other, at the very start of the pilgrimage, you recall the lines of Stephen Foster's touching song anent the old Kentucky home. Foster evidently knew his theme, living, as he did, at the gateway



Ashland, the conservatory at the rear.

to the Southland, from the mid-west—and when he apostrophized the old Kentucky home he must have apotheosized, thereby, the typical homes of the Southland.

Down in Kentucky, then.....

But just where and how to reach them? At Ashland, in the outskirts of Lexington, the home of Clay the Commoner remains, much as it was when he was in his prime—still typical of the old Kentucky homes.

On a road leading out of Richmond, there's another old home—one of the sort just to look at whose posts is to fancy mi-



Whitehali, the home of Cassius Clay.

lady and her "mammy" and the little piccanninies of the other time, gathered in the shadows, at the door.

Out at "Whitehall," where the warriorstatesman, Cassius Clay, long held forth, there are other such Southern—real Kentucky homes! But what of the visiting? Would it repay one, had the old order remained, except for the exteriors?



The Marshall Homestead.

In brief, where would a Kentuckian, who knew his state best, advise one to go to see the real Kentucky home?

We put the question to a leading barrister of northern Kentucky, whose father had long maintained one of the "show" estates of northern Kentucky, on the Lexington Pike, some twenty odd miles from Cincinnati.

"Probably the most typical of the surviving old Kentucky homes," he tells us, "is the old 'Traveler's Rest,' near Junction City in Lincoln County, Kentucky. 'Traveler's Rest' was Governor Shelby's place—it remains in the family still, and is kept up, largely as it was in the good old days before the war.

"Whitehall," the home of Cassius Clay,



Near Ross.

and "Ashland," home of the Commoner, rank next in importance and in staying true to the type.

Here, there, the other wheres—on the route of the Dixie Highway—leading from Cincinnati, through Kentucky, to the South, these old Kentucky homes survive—but after all, they are few and far between.

To one who loves the old South and the new, however, there is no excursion of greater charm than to such an ancient mansion.

To begin with you should go a-horse who ever heard of such things as automobiles in the old days in Kentucky.

Your way is down a broad, smooth pike, built by a folk who were ardent lovers of horse-flesh.

Either side of the road, as you approach the home, there will come meadows of the blue grass. Of course, you have seen blue grass before; but nowhere as in Kentucky. The old generation of growers and the new pride themselves on how pure, how clean is their blue grass. You'll come on blue grass meadows with absolutely not a single weed.

Beyond those meadows, nearer the house, that, in the good old days, Master and his guests might stroll out, to pet the favorite steeds, or else put them through their paces—were the paddocks, given over to the thoroughbreds. Even now, in Kentucky, the very finest of horse-flesh nibbles the succulent herbage in these meadows, and the daughters of the big house come out to pick the steed they would ride, on their errand to town.

Around these paddocks there were fences —white-washed fences—fences that bore not an advertiser's sign. To the fences there were gate-openers, of a sort that remains typical, well nigh, of Kentucky. Of course you've seen a toll-pole on this, that, the other high-road. Well, each side of the fence, where the drive approached, one found much such a pole, with rope or chain attached. You drew the rope, the pole came down, and, in its wake, there worked bar upon bar, and lo, the gate flew back. Then, safely through, from your seat a-horse, or in the equipage, you pulled the other cord, and lo, once more the gate went shut!

Possibly that it might be handy in the winter, when the black men cuts its ice and carried it to the store-house near—possibly because its very picturesqueness meant so much to the general beauty of the place in one corner of the paddock, nearest the big house and road, there would always be a little, limpid pool—just a pond, they call it in Kentucky.

And then one came to the garden proper



The old-type cabin.

-the precincts sacred to the house. Of course the drive made a semi-circle herein from the road and out, and ever under ancient trees that cut the winter winds and all the summer threw the place in shade. Piccaninnies were wont to toddle off this drive as you rode in; white children of the house might be seen strolling there together. At this side the drive or that one saw the shrubs dear to the old Kentucky home; an array that varied scarcely ever. Thus, according to the season when you came, you were greeted with no end of fragrance. Jasmine shrubs would drop their petals down on you. White lilac and lavender and a very purplish sort, too, bowed their plumes in unison. Spirea, or bridal-wreath, played their whiteness with the scarlet of japonica, the burning-bush; other months the sequence of the roses played.

Even now, on some of the great estates, you can gather yellow roses and cabbageroses and a double white rose that grows almost wild and whose perfume is bewilderingly delightful.

Through the wealth of trees and shrubs and flowers, chasing mayhap, the turkey gobbler out of your road en route, you came, on canter, then, to the door. You tied your horse to a pillar there—ten to one a dusky servitor was out already to assist you. If not you crossed the porch and beat the knocker on the door there, soundly. The wonderful story is still to be written of these door-knockers on the homes of Kentucky; types and styles and whence they'd come and of how one knew who was without by how he used them.

Usually there was the frizzly-haired old butler to open; sometimes the red bandanna on the head revealed his wife. That is, if you were an unexpected comer.

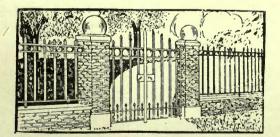
If you were looked for—an invited guest —Master and Mistress were out the door, forthwith, to bid you enter.

Up the hallway, up the stairs to the guest room—left a moment then alone to refresh yourself, possibly just a moment's catnap on the four-poster, then from spare bedroom down to parlor to be refreshed, after the fashion of old Kentucky hospitality.

Then, off a ways, the cabins for the negroes, with the one long structure housing the unmarried help.

And beyond that the kitchen garden, then the farm, and then more paddocks. By and by, once more, around to where you could admire the horse-flesh—the stock.

There was a charm, a lure to it, that one feels a pang at heart to know is passing the old-fashioned "old Kentucky Home."



Saving Flower Seeds

M. Roberts Conover.



AVE better seed each year and the flower garden will give finer results. Successful seed selection is: first, plant selection, then flower se-

lection. Previous to the actual seed gathering, the plants with the finest flowers of truest type should be marked and these must be so isolated that they cannot mix with other varieties, if the individuality of color and form of the parents' characteristics are to be maintained.

As a rule, selecting seed from mixed varieties cannot be relied upon for developing a distinct color or flower form.

Choose the seed from those plants that are in the height of their luxuriance rather than from spent plants that have been blooming all summer and part of the fall. This will limit the blossoming period of a few of the garden annuals and biennials and when taxed beyond recuperation, they can be pulled out. With annual phlox, the seed can be removed, the seed bearing plants clipped off, and the plant will prepare to bloom again.

Seed should not be gathered until perfectly mature when the seed capsule has become dry and is brown or yellow. At the close of a warm summer's day is a good time for gathering.

The largest seeds often give the most vigorous plants. Some of our flower seeds can be very conveniently screened by using small wire strainers of different sized mesh —such as 5 and 10-cent stores sell.

Some seeds have great vitality, as marigolds, zinnia, morning glory, etc. Others have low germinating power and many seed must be planted to get a small stand. Some highly developed flowers do not perfect seed; for instance, the seed of double petunias is much lower in vitality than that of the single varieties and in the case of the portulaca, the very double flowers do not produce seed, but the seed from the semi-double flowers will produce plants that bear very double flowers.

While, in general, the seed from the best specimens results in superior blooms, this rule is not infallible. Some plants defy our efforts at improvement by such care. Amarantus seed saved from the finest varieties often result in mediocre plants, and some highly developed plants will tend to revert to the original type if its seed are saved. In such case fresh crossing is necessary to procure a continuation of the variety.

Careful seed selection is essential to the improvement of balsam, zinnia, phlox, poppy, pansies and most of the garden annuals.

The seed of shrub azalea gives better plants for one's pains in selection.

Some of the fleshy seeds and those with meaty pods or outside covering require extra drying. A dry, sunny room is favorable for this. The seed should be spread out upon a cloth or board. The average attic is a safe store place for seed, but the chimney cupboard by the heated chimney is not.

Tin cans with one or two holes at the top and bottom are the best for seeds.

Small seeds will keep in perfectly tight cans, but fleshy seeds need the ventilation of holes.

A House Built in Ohio

Detailed Statement of Cost.



HE house, constructed in the past two to three

years and submitted in competition under the direction of the Complete _ Building Show, which is presented here, was awarded one of the prizes. It- was designed by Arthur Baer of Cleveland and was built in Lakewood, Ohio, the itemized cost being given.

A pen and ink drawing of the house was required in the competition, but a

Excavating	\$45
Masonry work	617
Carpentry 2	2,050
Roofing (tile)	120
Painting	80
Plumbing	275
Plastering	250
Tinning	40
Heating	100
Wiring	46
Fixtures	38
Hardware	50
Shades	21
Side walks	35
Total \$3	3,767

photograph was sent at our request, which is published herewith. Even though the photo was taken very soon after the completion of the house, as was necessary in the conditions, it gives a more actual idea of the house than many people get from a pen and ink drawing of the same house. The planting has not yet been set, and the house still looks very "new," as is likely to be the case in the first year of its existence.

From the plan you



A house built in Ohio, since January, 1914, at the cost given.

Arthur Baer, Architect.

will note that you can go to the second story from the front entrance, rear entrance, kitchen and living room, without entering any of the main rooms of the house.

Immediately upon entering you have a small coat closet, with a mirror door in it.

The kitchen is small but very economically arranged, that is, while work-

ing at sink or kitchen stove you have no extra steps to place dishes or take dishes out of the cupboard. There is also room enough for three persons to eat breakfast at the table.

The dining room is large enough to accommodate a good dinner party, with china cabinets and window seat at one side.

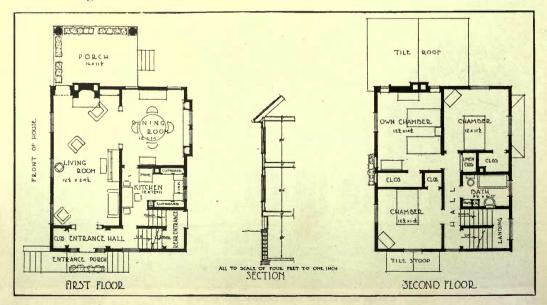
The living room is large, which is always a good asset in a small house. There is a fireplace and a bookcase at one end and a door leading to the veranda.



A book case beside the fireplace.

As you will note there are three good sized bed rooms on the second floor with spacious closet room, linen closet, and bath.

The question was asked as to space for the refrigerator, and what arrangements for it were made in this case. The architect replied that in this case the owner wished the ice box in the basement, and suggested that it might be so placed under the kitchen cupboard that it could be iced from the landing. This can be worked out very nicely by eliminating the cupboard space below the counter shelf.



Dignity in the Small House



OUSES, like people, have their own individuality in their outlook upon the community, but it is not necessary that a house be large in or-

der to give a sense of repose and of dignity. If one could sum up the essential sentially modern and well planned. The plan gives rather a surprising amount of room as there are several good rooms on the second floor, under the roof.

- The entrance from the nicely designed Colonial porch is into the roomy living



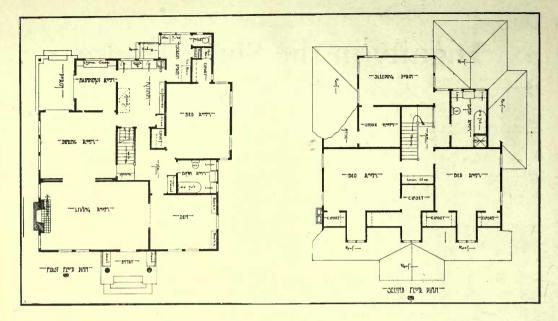
With a sense of homelike restfulness.

H. H. Whiteley, Architect.

difference between the fine old Colonial house of the beginning of the nineteenth century and many of the so-called Colonial houses of later times it might be found in that sense of leisurely repose which belonged to the colonial period. Even when the later houses spoke the same language it was often with the sense of breathless haste.

The house here shown gives a sense of homelike restfulness. The exterior is pleasing and dignified. The interior is esroom, 23 by 14 feet, and beside it with a wide opening is the den. The opening to the dining room, which is also wide, may be closed by sliding doors, which are not in the way when not in use. This arrangement is particularly satisfactory from the housewife's point of view, because of the privacy which it makes possible to the dining room. The living room has a wide fireplace and well arranged wall spaces. The book shelves are in the den.

A group of three windows nearly fills



one side of the dining room and glass doors open onto the porch. These rooms all have cornice mouldings at the ceiling.

The breakfast room connects with both the kitchen and dining room, and has French doors to the porch. Across one end of the room is a built-in china cupboard and buffet.

Special attention is called to the kitchen, which is very carefully planned. There is a plastered hood over the range. The sink is placed between and under the windows and has roomy sink tables. The cooler is beside the door. There is a kitchen closet in addition to the cupboards. On the rear porch are placed the laundry tubs and refrigerator. A toilet opens from this porch and also a closet for the laundry apparatus, etc.

Beyond the living room and den and

opening from the latter is a central hall which communicates with all of the rooms and from which the stairs lead up to the second floor. Both bed room and bath room communicate with this hall and a linen cabinet is placed in it. The bath room is particularly well fitted with linen drawers and has a medicine cabinet between the windows. The bed room is a most livable room. It has two large closets, in one of which special provision has been made for hats.

On the second floor are two bed rooms and a sleeping porch which serves as another sleeping room, another bath room, a wide linen closet, and a large supply of closet space.

The floors throughout the main rooms of the house are of oak, with linoleum in the kitchen and tile in the bath rooms.

An Attractive and Practical Home



HE problem which is set for the home builder is to make such an arrangement of living conditions and requirements as to get all that

is essential and desirable in the most compact space, and to eliminate all that is not 11×16 feet (176 square feet) gives the feeling of a large room, while a room 13×14 feet will only accommodate one group of people in conversation, and seems quite an ordinary sized room, yet the floor area is 182 square feet. On the other hand, when



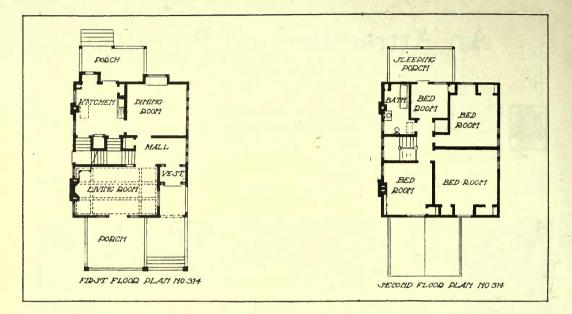
An attractive home in its setting of trees.

J. W. Lindstrom, Architect.

needed. The plan here shown has been carefully studied in respect to convenient arrangement and economical construction.

The size of a room, for one thing, depends more on the shape and proportions of the room, as far as pleasant living is concerned, than on the actual floor area. Here is one place where expert planning can gain a great advantage, because the cost of a house may be figured in proportion to its floor area in square feet, or of its cubic contents. Every square foot added means additional cost. For instance, a room it is customary for people to use circular dining tables as they do at the present time, a square dining room is best proportioned to it. The art in home planning in the arrangement of the rooms lies in so proportioning and arranging the rooms as to make the best possible use of every part of the enclosed space, and to make the enclosure economical.

The home illustrated is really small in size and therefore economical to build, while at the same time it gives the accommodations for a fair sized family. The



entrance at the side of the living room is through a vestibule into a hall which connects with both living and dining rooms and also with the stairs. A coat closet is placed in the corner between the two runs of stairs which connect both the kitchen and the hall with the first landing, giving access to the second floor from either part of the house.

The living room is well proportioned, with windows on three sides, and with a good fireplace. The dining room is square with a recessed buffet. The kitchen is light and well arranged, with a good closet between the runs of stairs, and a recess for the refrigerator where it can be iced from the outside. The basement stairs open from the kitchen with an entrance at the grade level, and go down under the main stairs.

On the second floor are three good bed rooms and a sleeping porch, with a small room through which the porch is reached which may be used as a dressing room, or can be used for sleeping.

The exterior walls are shingled, with cement stucco between the half timbers in the gables, and the roof is shingled.

A Seven-Room Bungalow



HIS low spreading bungalow is well built and attractive. It is 45 feet deep and 29 feet wide, not including the glazed sun room.

The plan gives pleasant communication between the living room, sun room and dining room. They are so arranged as to make sunny pleasant rooms with either an east or a south front.

The entrance to the living room is

through a vestibule, giving protection from the storm in cold weather. In fact the whole house is suited to a northern climate.

The two main bed rooms are connected with each other and with the bath room by a short passage way, opening from the living room. The sleeping rooms are completely secluded from the rest of the house.

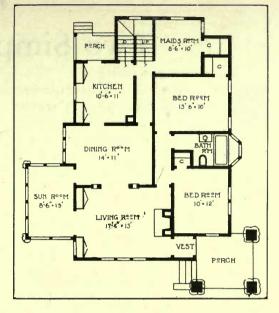
The space is very compactly used in

order to give closet space for each room. The bath room is small but has the advantage of a recessed bay of windows with a deep shelf at the sill height, very convenient for laying out toilet articles. Table space of any kind is convenient in a bath room.

From the dining room a passage way connects the maid's room and the stairs and also opens to the kitchen. The stairs in the rear connect with the basement and with the attic space. All of the bed rooms have good-closets. A door from the second bed room to the rear hall would give closer communication if such were desired.

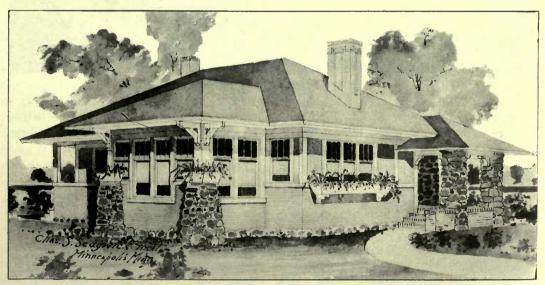
The construction is of frame with brick veneer up to the window sills, with boulder work in the porch and sun room treatment. The boulders are laid up in cement mortar with red joints. The upper part of the walls are finished in cement stucco on metal lath. The main cornice has a wide projection and is cemented up on the under side. The roof is of the best cedar shingles stained with a brown creosote. All of the outside trimmings, casings, cornices, etcetera, are painted white.

The finish throughout is in hardwood, the casings and base of oak in the main part



of the house, with oak floors and with linoleum for the kitchen. The bed rooms are all in white enamel with mahoganized doors.

There are porches at both the front and the rear entrances, with space so arranged that it may be used at the front for sitting room and at the rear for working space, and a place for a refrigerator as well.



Low spreading bungalow with many windows.

Chas. S. Sedgwick, Architect.

Two Simple Homes



S a matter of fact most compact house plans may be easily reduced to one of several elementary arrangements, though a difference in

the details of the arrangement may make these same plans seem to have little likeand stairs are between them. In the other house the living room has the light and air across the full front of the house, while the dining room, the kitchen, etcetera, are back of them, filling the square of the plan with a maid's room, entry and screened

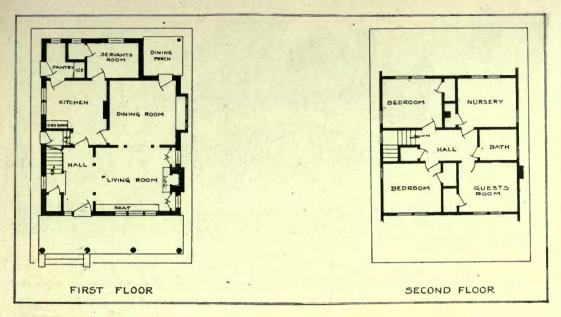


Field Stones and Stucco make an attractive combination.

ness at the first glance. This fact is worth a little study by the home builder as its recognition will often allow him to get into one plan the especial features which he seeks for his home, giving the living rooms the desired exposure with reference to the sunshine or the view, which are often the determining features.

The homes here shown give two of these types. In one the long living room fills one end of the house, and the dining room and the kitchen the other. The central hall porch which are only one story in height and come under the roof at the rear as the porch does across the front.

This home is very satisfactory both in plan and in exterior appearance. The first story walls are built of masonry, field stones or cobble stones that are found in the vicinity, or that may be taken from ledges of stone nearby. The porch wall and the chimney are of the same construction. With the cement porch posts and stucco in the gables this makes an unusually attractive



home. The wide dormer effect gives the second story practically the full width of the house.

This arrangement of the first floor plan makes the entrance at one end, setting off a hall from the living room by a colonnade, and allowing direct communication between the front door and the kitchen, and making the stairs accessible from the rear of the house, though the hall is not closed from the living orom. An entrance vestibule could be arranged here if desirable, by setting a panel either of glass or of wood, between the seat and the column. Opening from the landing, which is up one step, is a good coat closet, convenient to the entrance. The window on this landing gives direct circulation of air across the living room and in this way gives it the benefit of windows on three sides. The fireplace is opposite the entrance and has book cases on each side with high windows above the cases.

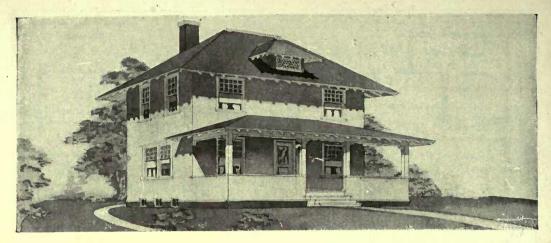
Beyond the living room is the dining room with an attractive bay of small paned windows. A small dining porch opens from the dining room, which with its setting of trees, makes a charming spot for eating during the warm weather, making the meals doubly appetizing. The service door between the dining room and the kitchen is placed at the side of the dining room farthest from the porch. In case this is to be used during a large part of the year it might be well to put the door at other side, giving most direct communication from the kitchen both to the dining room and to the dining porch.

The basement stairs open from the kitchen with a grade entrance. Beyond the kitchen is a rear entry with place for the refrigerator and with a storage closet.

On the second floor are four good rooms and a bath. While the hall is roomy it merely accommodates the necessary doors.

The second design shows a modern twostory house of frame construction, the entire exterior of which is covered with stucco. The design is well adapted, however, to clapboards or shingles. The wide porch and overhanging cornice give considerable character to the design.

The floor plan is well arranged. The living room is a little unusual in the arrangement which gives it a corner fireplace with a bookcase on one side and a settle on the other. The central hall gives easy

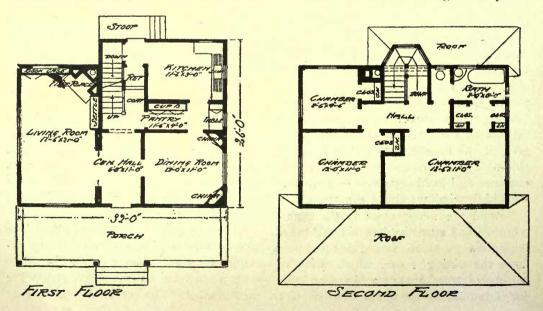


The wide overhang of the eaves give character.

communication between all parts of the house. The stairs are set well back so that they are as easily reached from the kitchen as from the front of the house.

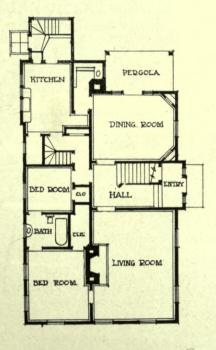
In the dining room are two corner cupboards for china, with a wide window between them. A roomy pantry is placed between the dining room and the kitchen, with a work table and ample accommodations under the window.

On the second floor are two chambers over the living room and a larger chamber on the other side, well fitted with closet space and communicating directly with the bath room. Only the tub and lavatory are in the bath room, the toilet being in a separate room. This makes a very satisfactory arrangement, and is well located in this plan, with an outside window for the toilet and yet direct connections with bath room plumbing. The second room is found a great convenience, especially when the several members of the family depend on one bath room and want to use it as a dressing room. The stairs are attractive in their octagonal bay.





J. S. Cote, Architect.



(Courtesy of West Coast Lumbermen's Association)

Taking Advantage of a Gambrel Roof





Simple dining room, well arranged for summer.



Decoration and Furnishing

VIRGINIA ROBIE, Editor

Summer Dining Rooms

DINING room in a small suburban house lived in all the year has remained in my memory a long time. In winter it was warm and

cozy, in summer cool and spacious, and at all times full of charm.

In November I made my first visit, when the dining room attracted me more than the other rooms, although all were interesting. The walls were sand finished plaster, tinted light brown in a transparent wash. The trim, flat and with few moldings, seemed only one tone darker. A slightly deeper shade gave to the floor a good foundation color holding the scheme well in place. The furniture, repeating the color of the woodwork in the simplest lines, consisted of a long narrow dining table of the old monastery type, a serving table of similar design, six straight back chairs with rush seats, and a reed screen of three panels. New England provided the chairs, Japan the screen, England the dining table and the carpenter of a mid-western town the serving table. Narrow shelves between two windows held effective pieces of American potterv. Green "Grueby," yellow "Van Briggle," old red "Crown Point," blue and gray "Dedham," yellow and green "Paul Revere," made pleasant notes of color against the neutral wall. When not in use on the dining table six copper candle-

sticks filled with bayberry dips formed a military line on the serving table. Nothing else appeared on this table except a low wicker basket of fruit. On the narrow mantel shelf a big copper jar held tall branches of russet oak leaves, yellow beach, and crimson maple. On the dining table a larger and lower jar repeated this gay color with the addition of long vines of wild blackberry and clematis. At the windows were the thinnest and most transparent of curtains the color of the wall, with valances of cretonne in wood browns, leaf green, pale yellow and dull orange. Such was this very simple room in autumn.

In mid winter a large rug of warm reddish brown covered the floor, the cretonne curtains gave place to hangings of the same brown, the mantel held a big winter bouquet of red bitter sweet and of clematis turned to silver plumes. On the dining table a round highly polished brass tray held red apples. Red candles filled the copper candlesticks. Everything glowed with warmth and a pleasant shutin quality difficult to describe.

Spring saw all the red things removed, and the early wild flowers and shrubs distributed in a most effective manner. By summer over-curtains and heavy rugs were banished, white candles in glass sticks came forth from some carefully



concealed corner, while ferns in bowls of plain crystal, and pine boughs in green pottery jars seemed to lower the temperature ten degrees. The room, stripped of everything not absolutely needed for convenient housekeeping, seemed to gain in space and airiness. Since my visits to In several New York houses, open during the hot months, rugs and curtains are carefully packed away, gray linen covers conceal the furniture, and everything is made as cool and barren as possible. But these rooms are not beautiful. The bare floors are never forgotten on account of



Breakfast room in the home of Albert Herter, Easthampton, Long Island.

that little house I have often wondered why most housekeepers cling so persistently to crowded rooms in summer, to walls lined with pictures, and to mantels and tables loaded with "things." Doubtless the passing of the attic has robbed many households of a storage place. Yet a plea might be made for less display of mere things, and for convenient tuckaway cupboards where really valuable objects could be housed between seasons, or when not actually needed to contribute beauty, or distinction or utility to the home.

Particularly in summer is it important to keep rooms as uncluttered as possible. echoing footsteps, the windows are not sufficiently protected by shades alone, while the furniture has a ghostly appearance as if a general exodus to Europe planned had been and hastily abandoned. Such backgrounds are restless and irritating. Nothing seems home-like or normal.

The real gain in arranging a room for summer lies in putting away the purely ornamental which

has grown tiresome from over familiarity, and in substituting cool, quiet colors for the warmer and more permanent schemes of the fall and winter. So much may be done in merely changing the accessories of a room that the experiment is well worth trying. Inasmuch as the living room is used far less in summer than in winter, while the dining room-except in rare instances-must fill its every day mission it is well to begin reformation with the latter. If there is a mantel remove everything from it. Probably the clock does not "go." Dining room clocks have that failing. Perhaps there are vases and other pieces of bric-a-brac.

Keep a convenient receptacle for matches and keep it full unless you live in a matchless house. There are such-no smokers. no open fires and a complete electric treatment for lighting and cooking. But such dwellings are rare. While expensive flowers have little place in a summer dining room, it is very important to have fresh greenery of some kind. Pine needles are a good standby when more delicate green is not obtainable. With a little forethought it will be found possible to have constantly on hand at least one well arranged flower or leaf scheme. Next to green growing things comes the color green in linen or cotton, and next to green comes blue, and blue and white. A cool, delightful dining room recently described to me by a decorator is in green and ivory, another, planned by the same person, is in blue and white. For the first a green

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cotton crépe in a fine stripe forms the basis of the scheme, for the second Japanese toweling. The green is a misty shade, very cool and attractive, while the blue is the tone so beloved by the Orientals, and found in both expensive and inexpensive materials. One of my illustrations shows the blue room with its carefully built up scheme of rugs, furniture and curtains. The Japanese idea has been carried out in pictures and accessories, although the main pieces of furniture conform to well defined Occidental designs. Japanese toweling has the advantage of being durable, attractive and reasonable.

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Another dining room, on quite different lines, is seen in the first illustration. This is a city room used all the year. The summer phase is shown here when walls are quite bare and the china on view is



Courtesy A. A. Vantine & Co.

Summer dining room in which blue and white toweling has been used.

that used every day. Worthy of note are the chairs with painted frames and rush seats, and the table which may be folded or extended according to the needs of the occasion.

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Hardly under the head of dining rooms may the second picture be classed, inasmuch as it is used merely for the morning cup and its accompaniments. But as it holds several good suggestions for summer living it is included. In the first place the walls show a simple and attractive lattice which may be used in any outdoor room with charming effect. The rugs and chairs are of an interesting type well suited to many dining rooms, while the china and glass have that direct, simple quality in keeping with summer ideals and traditions. This breakfast room is in the summer home of Albert Herter, the artist, at Easthampton, Long Island, and has that individual touch found in all Mr. Herter's work.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.

I N spite of delays regarding importations, many beautiful foreign articles are found on sale. A recent visit through the china and glass shops revealed many new and interesting things.

While the English potteries are running at reduced rates the output shows no decline in excellence. In china many convenient sets for summer usage are noted. One tea service is of pale yellow with narrow lines of black.



Glass plate and goblet—Sterling silver monogram and crest.

another of apple green decorated in pink hawthorn blossoms, a third of gold lustre shading into mauve. Black and white china decorated with small brilliant flowers may be purchased in a variety of shapes. One pleasing design is long, low and narrow like some of the Colonial models, and the flowers are in the form of small garlands in harmonious tones. Some of the recent Wedgwood sets are attractive.



One shows the familiar strawberry vine on pale ivory, another the Greek fret on lightest cream, while a third displays the cane bamboo coloring, almost buff, and of thinest paste. There is no decoration beyond a raised border of self color. This pleasing ware comes in a breakfast set of twenty-

six pieces, including half a dozen egg cups. Duplicates are promised -conditionallv. Every effort will be made to fill orders. but potters and importers have little control of the seas. One of the new Minton sets shows the well known "Indian Tree" pattern on a black ground. Gold decorated china is found in every variety, from narrow border lines to intricate bands overlaid with color. Monoest of linen forms the foundation, tall crystal vases hold the flowers, and glass candlesticks the candles. For summer dinner parties there is something cool and alluring about such a table arrangement. For those who prefer to serve the main courses

presents a charming appearance. The fin-



English table china.

Courtesy of Higgins & Seiter.

grams and crests are added when especially ordered, and thus a pleasing individuality marks each piece.

But it is in the beautiful new glassware that one notes the widest range of color and decoration. Whole dimer services are now made in glass. An elaborate menu from oysters to black coffee, including soup, fish, roast, game, salad, dessert, etc., may be served on glass, and the various plates and dishes are beautiful in texture and design. These sets may be purchased in clear glass without decoration or in this same crystal foundation embellished with borders, monograms, crests, etc.

A table laid with one of these services

on china, glass salad and dessert plates make a pleasing variation. Berries seem to have a special flavor when eaten from glass, while sherbets and ices and all frozen and semi-frozen foods appear far more interesting when served from their respective dishes of clearest crystal.

As for drinking glasses, whether for lemonade or something stronger, the array is bewildering, and here is where color is brought into play in a most effective way. A group chosen at random from the shelves of a big importing house showed the following colors: Green bowl, white stem, green base, the green being etched with gold; amethyst bowl, white stem and amethyst

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base; the same substituting cobalt blue for amethyst; white bowl decorated with gold is bands painted in bunches of purple grapes and green leaves, base with same decoration, white stem; ruby bowl, ruby base and white stem, the bowl etched in white strawberry vine; a similar one substituting mint

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American glassware in its many phases is also a product of this big shop. The new ornamental bowls and jars in plain tones and of a semi-opaque appearance are made, we are told, in a famous glass making district of western New York. From this locality also comes the "Pyrex," or fire

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English china in oriental pattern and Crystal goblet. Courtesy of Higgins & Seiter

green for ruby; crystal lotus-shaped bowl, hollow stem and flat base, made by the way, in a corner of Belgium; and finally, an American glass of beautiful clear tone and graceful shape, outlined around the bowl and base with narrow lines of red, white and blue, and displaying the flags of England, France and America. And this bit of transparency, it may be added, is quite the latest thing in glass. resisting glassware for cooking purposes. A new delight is given to familiar "dishes" when they arrive on the table piping hot from the fire, without any change of service.

Japan has provided much interesting porch china in blue and white, in green Sedji, and in heavier pottery. The Oriental shops, large and small, are full of attractive things moderately priced.

With every tea set appropriate linen may

be secured and the combinations are very attractive. Also trays of all kinds may be purchased to accompany china and linen. Round wicker trays suit the Oriental sets, while the many combinations of wicker and cretonne harmonize with the English and French china. For tea services of sturdy American pottery, the simple painted trays are fitting, and it is pleasing to note that "made in America" has attained a new and forceful meaning.



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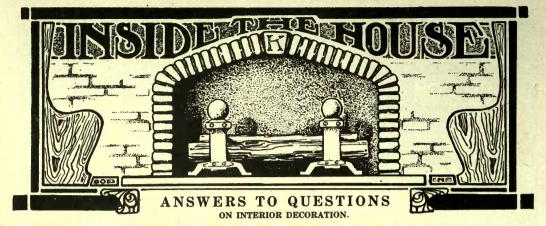
On inside walls of office or home, Dutch Boy white-lead, mixed with flatting oil and colored any tint, provides artistic decoration which will neither fade nor become shiny, and is as washable as china plates.

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Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

Ivory and Oak.

W. H. H. In building our new home we have decided to finish living room in oak with harmonizing furniture. The dining room is to be separated from the living room by French doors and because it will be shadowed somewhat by a neighboring house, our idea was to finish it in white enamel with yellow painted walls. Our dining room furniture is the oldfashioned walnut. Now will you kindly criticize this color scheme for the dining room? Should the floor be of oak as in the living room? If so, suggest the kind of oak. We are uncertain as to the appearance of white enamel from the living room. If it is used, should the French doors be all oak, or face enamel on the dining room side?

Ans. We have no criticism to offer on your ideas for the dining room and living room, which seem to us excellent. We only suggest that you make the woodwork old ivory instead of white as it will then be in entire harmony with the oak of the living room and even better with the dull yellow walls. The ceiling will then be tinted deep ivory, while the curtains will be yellow Sunfast.

The old fashioned Walnut furniture will be charming in this environment and a deep rich blue rug with Chinese design in yellow, would make it quite perfect. We have seen such a rug in the domestic Orientals.

White Oak, of course; always makes an excellent floor, but with the Walnut fur-

niture we should want to put some brown stain in the finish.

We should make the sash of the French doors Ivory in both rooms, with Oak frame in living room.

A Remodeled Interior.

J. C. C. We are planning to remodel our home and think we would like to use white enamel woodwork throughout for reception hall, living room and dining room, as they will all be thrown together by extremely wide openings. As it is now I have living room in fumed oak, reception room in mahogany with rose silk draperies and rose colored rugs. The dining room is in fumed oak. In our new plans the hall and living room will virtually be as one room and will be compelled to use my same furnishings for this room. What walls would you suggest in the three different rooms and shall I have the colonnade painted white or stained mahogany?

Would you use different woodwork in these rooms? They are all very light, on corner lot. Will deeply appreciate any suggestions you may give to me.

Ans. According to your sketch, the arrangement of your day rooms will be charming. In place of building a seat across the front of the dining room windows, we would suggest that these windows be built out in the form of a bay with a low seat built into the window. The bay should be square and 2 feet deep inside measurement, and if the house is heated with hot water, a coil of pipes may

INSIDERENHOUSE

be placed under the seat. Have a two inch cushion made for this seat, both sides covered with same material so as to be reversible and use plenty of cushions. This will give more space in the dining room and also offer a charming vista from the front door.

Your idea of having all the woodwork in enamel is splendid but would suggest an ivory tint instead of the white. The pilasters may be in mahogany, likewise the banister rail and treads.

With the wood trim in old ivory and your rugs in rose, would suggest for the walls of living room and hall, a paper (either plain or figured) in a putty or warm gray shade. If your rose silk draperies are faded, would advise having them dyed to a rose mulberry shade and use a fancy net at the windows in an ivory tone. With this treatment an ecru lace or net would be too dark. We would advise carrying this wall treatment up the stairs and through the upper hall.

In the dining room we would suggest plate rail of pine or birch in the ivory enamel, about 5 feet from the floor. Hang the lower wall with a paper in a textile or fabric effect in gray, with a suggestion of blue and gray foliage pattern. The ceiling should be in ivory or a gray white. The windows in the bay may be hung with a fancy net in an ivory tone in a dainty "all-over" design, hanging straight to the sill. As these nets are very sheer, they will not interfere with the view or shut out the light.

The overdrapes should be simple, straight curtains of 50 inch sunfast, split and hanging straight to the sill. Would suggest a dull old blue in a faded tone so as not to offer too sharp a contrast to the living room.

Across the bay window would suggest a flower box with the top on a level with the outside sill.

To Harmonize Woodwork.

A. M. H. I have been much interested in reading your magazine, as I am soon to be married to a gentleman who has been married and has a home he is going to remodel. There are now ten rooms in the house and he is going to add three rooms and make two apartments. We



Living Room in Home of James F. Oahes, Eya., Evanston, Ill., Birch Enamel Trim. Messrs, Schmidt, Garden and Martin, Architects, Chicago

You live *inside* your home—

The inside of the house is where you spend most of your time—you *live* inside—and so its interior woodwork must be attractive, harmonious,—and *in good taste*—as well as *substantial* and *lasting*.

"Beautiful **birch**" is one of America's popular hardwoods (to put it modestly), close grained, with a lovely sheen which when properly prepared lends itself to a great variety of finishes —a different color scheme for each room if so desired—from silver gray to dark brown or Colonial dark red.

In veneered doors and panels it offers the same wide latitude in beauty of finish. It makes a hard, handsome floor, too. "Beautiful **birch**" is an all-'round wood.

The illustration above shows how admirably "beautiful **Dirch**" serves as a base for white enamel—a finish which calls for a hard, close grained "mar-proof" wood, and "beautiful **birch**" responds nobly to this call.

"Beautiful **birch**" has another commendable characteristic,—its use is "easy on the pocketbook"—and in these "high-cost-of-everything-times," this is one of the factors that is bringing it more than ever into general favor with home builders who demand "the most of the best for their money."

Let us send you a little set of **birch** panels -showing different finishes, including White Enamels, and an instructive book about **birch**

THE NORTHERN HEMLOCK AND HARD-WOOD MFR'S ASS'N 203 F. R. A. BUILDING OSHKOSH, WISCONSIN

are to have the lower half with sleeping room on the second floor.

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I enclose herewith two blue prints showing the layout, and would like to ask your advice about color scheme, rugs, etc. Part of the furniture I shall use and part will have to be discarded.

The house faces the south, so the rooms for the new part will be south, east and north, as you will see. The light lines show the old part of the house.

The front or living room in the old part has a green velvet carpet and paper, hangings and furniture which go with that will not be disturbed at present.

The room off from the living room is the dining room and I do not think that will be changed for paper and finish. The dining room is finished throughout with quartered oak and a rug with the dull shades, I would say on the old rose or Dresden shades. I have a very fine Mahogany inlaid sideboard which is very old and the reddish Mahogany, lighter than what is being used now, and we hope to match that for a table and chairs. The daughter is to have the dining room furniture which is now there.

Off from the dining room is the kitchen, and that will remain undisturbed.

The hall and stairway going to the sleeping room will be oak finish, but the den where the fireplace is, will be gumwood, with natural finish. The builders seemed to feel you would want a different finish in this room from the oak. The fireplace will be the red pressed brick to the mantel. Over the mantel will be an old mirror with gilt frame, about three feet by two feet high. All the furniture in this room will be oak. We shall have to buy a table and all the rugs. Would you advise an art square or two rugs? What color scheme would you advise? There will be a plate rail and chair rail in this room. There is no plate rail in the dining room and I have quite a few very old plates, etc.

The room back of the den will be the spare room and there will be an old black walnut bureau, which is a family heirloom and an iron and brass bed. No special chairs and no rugs for this room. What color scheme, paper, etc., do you suggest?

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The room upstairs is to be our room. We have a heavy oak set, but my plan is now to have the headboard of the bed lowered, use the bed and bureau, and have different chairs. The finish of this room will be hard pine to paint and oak floor. We have no rugs or chairs for this room.

The bathroom will have white tiled floor, narrow green tiled border, and white tile baseboard, and hard finish to chair rail and then rough plaster. It will be white to the rail. Very nice white enamel for all the bath room equipment, except the closet seat of natural oak. What color tint would you use above the rail. I think I told you the hall and stairs were all oak finish.

The daughter is to take all the furniture that is now in the house that she cares for and we are to replace what we want to when the house is finished, but I think you will be able to help me with the description I am able to give you. I am not familiar with the house and furnishings as it is now.

Ans. We have examined your blueprints and think the sideboard should face the dining room. Also we should not want a plate rail and chair rail in den, but would put it in dining room where the old plates, etc., belong. Moreover, we would certainly not try to match the light red mahogany of the sideboard in the new table and chairs, as the furniture will then be entirely out of harmony with the oak woodwork. Have the sideboard refinished in the dark, English Brown Mahogany, and it will be still handsomer; then get table and chairs to match and it will not be impossible with the oak trim.

In regard to the gum wood trim in den, we should advise a brown stain to bring it into harmony with the oak furniture and trim of other rooms. We should use on the wall a grass cloth paper introducing grays, greens, and blues, and have a Scotch or Bundhar Wilton rug but never an Art Square.

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INSIDE THE HOUSE

The spare room back of den with old walnut bureau will be good with a fawntan wall, paneled with an old rose narrow border, and the iron part of the bed painted deep tan. Then use chintz hangings in deep dull pink and green on tan ground and rug to harmonize. Get two old fashioned chairs with rush seats, walnut frames; one a rocker and have a dressing table made of pine covered and draped with the chintz and hang mirror over it.

As your own room upstairs is to have rather heavy furniture, you cannot use a dainty wall. We should paint the woodwork very deep Old Ivory and use a chintz design in rather gay colors on ecru ground for the wall paper. This is about the only way you can make it a pretty room. Have the chairs natural wicker upholstered in chintz to go with the wall.

We should make bathroom wall above rail, very pale apple green.

A Florida Bungalow.

C. T. H. Would you kindly suggest a pretty and inexpensive treatment for windows and doors in the living room and dining room with only a colonnade between them? The arrangement is shown in sketch. The ordinary opaque roller shades seem not very well suited to casement windows, especially in a very windy climate. The two difficulties are the combination of regular windows and casement windows, and the fact that both casement windows and French doors open outward, making it necessary to The have the screens on the inside. casement windows, French doors and the upper sash of the other windows are of The mantel is small panes of glass. dark red brick and the furniture is fumed oak with brown leather unholstering and a few rattan rockers. The house is of cypress siding stained green, with deep cream trimming.

We have not finished the inside woodwork but are considering the mission finish.

We have thought of using net curtains hanging to the sill, with over curtains of brown or tan burlap. What do you think of this plan, or can you suggest something better?

Ans. Your letter regarding the case-



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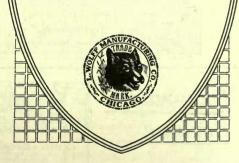
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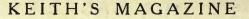
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ment window treatment of your dining room and living room has been read with interest.

Burlap, while attractive in color and texture, is too heavy of weave to use as casement curtains. A material of lighter weight and softer finish is recommended.

Our curtain advice is as follows: At the regular windows of the double hung sash type, use roller shades, but do not "shade" the casements. At each casement use a transparent net curtain, ecru in tone, run on a small metal rod next the



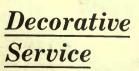
glass. This curtain may be run on a rod at the bottom if desired, but in this case the curtain remains fixed and cannot be drawn back and forth. Repeat the net at the regular windows hanging the curtains from the top of the window next the glass with a three-inch hem at the lower edge. Do not curtain the high window of small panes. Over curtains of cretonne are suggested for the other windows, the ground to be ecru, and the colors harmonious with the walls. A uniform window treatment will give unity to the room which it might otherwise lack by reason of the novel window arrangement.

On the north wall, since the four windows are on a line, they could be treated as a group with side curtains of cretonne at each end connected by a valance of cretonne. The opening and shutting of all the windows would not be difficult.

We note what you say about screens. When casements open out sometimes the screens open inward, designed like doors, locking in the same way as the casements. In time of rain and high winds, rapid movement is necessary. Undoubtedly the picturesque casement adds to the care of a house, but its beauty is its own justification.

The French doors we would leave unadorned unless you need the protection of curtains; in that case a rod at the top and bottom with a repetition of the net is recommended.

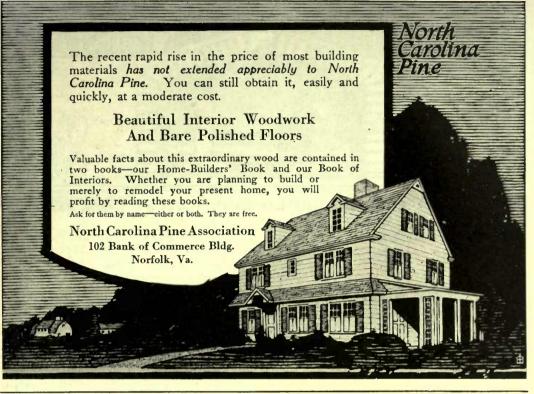
As a wall scheme we suggest a plain tone, alike in both rooms. Tan with a paler ceiling tone would be interesting. With such a foundation use cretonne with bright colors—green and orange in ecru or green, yellow and old blue, or green, deep rose and ivory on ecru.



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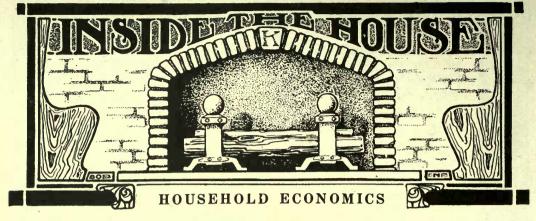
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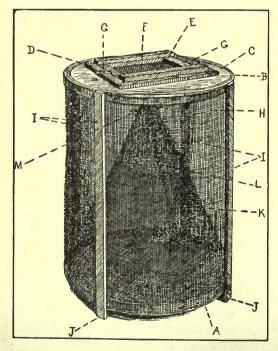
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Flytraps.

ARTICULAR attention should be called to Bulletin 734, "Flytraps Their Operation." After and everything possible has been done to prevent breeding by destroying or treating with chemicals the breeding places of flies, then comes the usefulness of the flytrap.



Conical hoop flytrap; side view. A, Hoop forming frame at bottom. B, Hoops forming frame at top. C, Top of trap made of barrel head. D. Strips around door. E, Door frame. F, Screen on door. G. Buttons holding door. H, Screen on outside of trap. I, Strips on side of trap between hoops. J, Tips of these strips projecting to form legs. K, Cone. L. United edges of screen forming cone. M, Aperture at apex of cone. of cone.

The same general principle is involved in nearly all flytraps in use, though superficially they may seem quite different. The flies are attracted into a cage going through a passage, the entrance to which is large and the exit small. The material necessary for the construction of this trap consists of four wooden barrel hoops, a barrel-head, four lath, some strips, some 12 or 14-mesh galvanized wire screening, and an ounce of carpet tacks. A screening cone with an aperture at the apex is fitted inside a longer cylinder. The flies get in through the opening in the cone and are unable to find the way out. A door at the top allows the trap to be emptied. The bulletin gives complete instructions for building the trap, and may be obtained by writing to the Department of Agriculture at Washington, D. C.

The cut shows the trap in a general ay. Its efficiency was largely comway. mented upon last summer.

Government' Bulletins.

Farmers' Bulletin 734, "Flytraps and Their Operation."

Farmers' Bulletin 679, "House Flies; What they Are and What They Do." Farmers' Bulletin 740, "House Arts,

Kinds and Methods of Control."

Farmers' Bulletin 444, "Mosquitoes; Remedies and Preventives."

Farmers' Bulletin 450, "Malaria." Farmers' Bulletin 659, "True Clothes Moth."

Farmers' Bulletin 658, "Cockroaches."

The foregoing list gives a few of the bulletins which the United States Department of Agriculture has prepared relating to household insects, and which are available for free distribution, on ap-

INSIDE HOUSE

plication to the department at Washington, D. C. The various series of government bulletins cover practically any subject on which information is desired, and are either sent free or on the payment of a few cents. The list here given is of free bulletins.

Iceless Refrigerator Devised by the Department of Agriculture.

The principle of evaporation is an exceedingly active force and one which has not been fully appreciated in its practical application. Realizing this fact and facing the needs of this summer, a government bulletin has been issued which gives directions for making a cold box where foods may be kept in a healthful condition in the heat of the summer. The best refrigerators maintain a temperature of from 40 to 50 degrees. It is asserted that on hot dry days a temperature of 50 degrees has been obtained in this cooler, which is a "safe" temperature for food. Did you ever keep damp paper wrapped around your pound of butter, or a wet cloth around the bottle of cream? Try this when you are without ice, being care-. ful that the damp covering completely protects the object.

The iceless refrigerator is the newest device being exploited by the government department of agriculture to keep down the cost of living and to prevent waste of food through spoiling of fresh foods.

This refrigerator consists of a wooden frame covered with canton flannel, burlap or heavy duck. Wicks, made of the same material as the covering, resting in a pan of water on top of the cooler, conduct the water over the sides and ends of the pan and allow it to scep down the sides of the box.

Evaporation from this moistened covering causes a lower temperature inside.

The bulletin, giving complete instructions, may be obtained from the department of agriculture. Anyone can make one and here are directions for building the box:

Make a screened case three and onehalf feet high with the other dimensions 12x15 inches. If a solid top is used, simply place the water pan on this. Otherwise fit the pan closely into the opening



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of the top frame and support it by oneinch cleats fastened to the inside of the frame.

Place two movable shelves in the frame, 12 to 15 inches apart.

Use a biscuit pan 12x14 inches on the top to hold the water, and where the refrigerator is to be used indoors have the whole thing standing in a large pan to catch any drip. The pans and case may be painted white, allowed to dry and then enameled.

A covering of white canton flannel should be made to fit the frame. Have the smooth side out and button the covering on the frame with buggy or automobile curtain hook and eyes. Arrange so that the door may be opened without unfastening these hooks.

This can easily be done by putting one row of hooks on the edge of the door near the latch and the other just opposite the opening with the hem on each side extended far enough to cover the crack at the edge of the door, so as to keep out the warm, outside air and retain the cooled air. This dress or covering will have to be hooked around the top edge also.

Two double strips one-half the width of each side should be sewed on the top of each side covering, and allowed to extend over about $2\frac{1}{2}$ or 3 inches in the pan of water. The bottom of the covering should extend into the lower pan. Place the refrigerator in a shady place where air will circulate around it freely.

If buttons and buttonholes are used on the canton flannel instead of buggy hooks, the cost will be reduced.

The provision for removing the cover allows it to be kept in a thoroughly sanitary condition.

The device will prove a godsend to those who for any reason are unable to have ice; especially as it is applicable to the hot and crowded parts of the city. Its construction is so simple that it can be made out of an ordinary cracker box, which will give it the solid top and bottom. Heavy wire grating or a piece of glass would make good shelves. A similar device widely used in California, is fitted with a faucet in a water pipe which constantly drips into the upper pan, keeping it filled without being watched, and a drain to carry off the running water. This water-cooled cupboard was described in March.

The government originally designed the iceless refrigerator to aid farmers in southern states, who must do without ice.

Ordinarily a refrigerator's usefulness is dependent upon the owner's ability to obtain ice. Not so in the case of the iceless refrigerator, for the evaporation of water is the active principle.

Newspaper as an Insulator.

If you want to keep a piece of ice from melting wrap it closely in dry newspapers. They make an excellent insulation, but do not make the mistake of wrapping the ice in the refrigerator, for if the ice is kept from melting it will not cool the refrigerator. Newspapers may be put between the ice and the outside surface of the ice box to prevent loss to the outer air, but air must be kept in circulation between the ice and the cool chambers.

If an extra piece of ice is to be saved for use later, as for freezing cream, that piece may be carefully wrapped in newspapers to advantage, so that it shall not waste in the meantime.

To Bleach Green Salads.

Green salads may be kept fresh and crisp for days if they are wrapped in wet papers, and the papers are kept wet from time to time. Not only that, but vegetables which come from the market rather wilted after the long trip from the garden or farm will freshen and become crisp if put under the cold water faucet for a few minutes before being wrapped, and they will bleach and often be sweeter and better flavored after remaining a day or two in such a cool damp place wrapped in wet papers. This treatment is especially good for lettuce and green salads, celery, radishes, etcetera.



One Dollar for a Practical Suggestion

HAVE you achieved some really new and practical solution of one of the old. or one of the new household or garden problems? If so, Keith's readers would like to hear about it, and we will pay one dollar for each suggestion accepted as satisfactory for publication. Let these suggestions cover items of general helpfulness, or of novel or attractive effects. They must not exceed 300 words in length, and must be written on one side of the paper only. In order to insure their being practical send a photograph which shows how the suggestion actually worked for yourself, if it is something which can be photographed. If you want the photograph returned in case it is not used, send with return postage to "DOLLAR SUGGESTIONS," KEITH'S MAGAZINE.







July Meals



HE heat and energy requirement for food is not so important in warm weather as that the food be cooling, refreshing and easily di-

gested. Less meat and starchy food and more succulent vegetables and fruits should be the slogan. Menus which can be easily prepared and served on the porch should be selected. Dishes which can be prepared in the morning so as to minimize fuel and labor at noon and night are planned by the efficient housewife. These may include molded fish, meat and vegetable salads, meat and nut loaves, gelatine desserts and frozen dishes, especially the water ices. Soups if served at all should be made from the green vegetables, as cream-of-lettuce, pea or asparagus soup. Fresh fruits should take the place of rich made desserts, such as pies, puddings and cakes. The fireless cooker may be used to great advantage when hot foods are wished, as they may be prepared in the cool morning hours. The wise housewife rises with the birds in summer and accomplishes her work before the heat of the day.

Women Must Learn the Fundamentals of Dietetics.

It is only by getting down to the voluntary effort of every household that food waste can be eliminated, says Herbert Hoover, new food administrator.

Things like proteins, fats, carbohydrates and calories should be made as much household words as peas and beans, and any intelligent woman can grasp them in an hour.

Women control 90 per cent of the food consumption and should introduce a spirit of sacrifice for the good of the country.

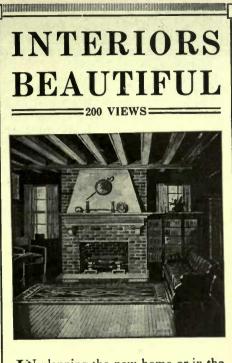
Once the women get the theory of di etetics fully grasped buying would revolutionize itself. If we could teach the women what they might substitute for wheat, pork products and then some subsidiary articles we would increase our export balance for these are what the Allies need most in the war of foodstuffs.

Home Ground Wheat Flour.

Food experts have been advising the housewife to grind her own wheat, both to reduce the high cost of living and what is still more important, to secure a more nutritious product. In the process of milling wheat and corn the valuable bran coats and germ are removed to be sold as by-products, and the patent flour and refined corn meal of today are far less nutritious than the more simply prepared foods of our grandmother's day.

But how to go about it was the question which puzzled one woman, and this is how she solved it. Spring wheat was purchased from a seed store, and put through the coffee grinder. This gave a rather coarse product, which however worked up into a most appetizing loaf. This method was used for a month, the wheat being ground whenever needed.





55

IN planning the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

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M. L. KEITH

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But it was rather a slow process, especially as the neighbors all wanted to buy the flour, so our housewife was delighted to learn of a firm in Philadelphia from whom she purchased a larger mill suitable for household use. The flour is finer and makes the best bread I have ever tasted. It is tender, nutty, and of a brown color. It can be used in the same recipes as other flour. Corn is ground the same way and the "Johnny-cake" made therefrom reveals why it was so universally used in pioneer days. The home-ground flour and meal have become so popular in the neighborhood that within two months the little mill had paid for itself and is now proving a source of revenue. There is no attempt made to keep the flour on hand, as the neighbors like to see it freshly ground, and besides the keeping qualities of the whole wheat are less than the white flour, inasmuch as the germ is not removed. The delicious flavor of the bread is a revelation, and it is a most appetizing and body-building food for children. The success of this plan should encourage other women to give it a trial, for it seems a most interesting and justifiable return to the ways of our ancestors.

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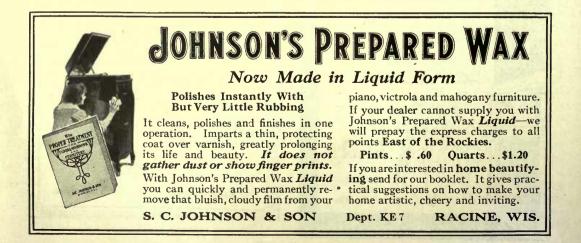
Rice Suggestions.

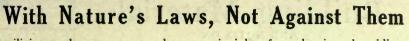
As rice is one of the few foods which have not soared in prices it is deservedly



Rice mold filled with salad.

popular just now, and a rather unusual way to use it is in salads, which are more appetizing for summer meals than the hot rice dishes. Take one cup of rice which has first been boiled rapidly or steamed without stirring. While still hot add one grated onion and a quarter of a cup of French dressing. Pack into a mold until it is cold and set. Turn out on a dish garnished with crisp lettuce leaves. Fill the center with curled celery. A variation of this recipe is called a Japanese salad, and is made by adding minced sardines or herring to the rice and garnishing with chopped olives or shredded beets.





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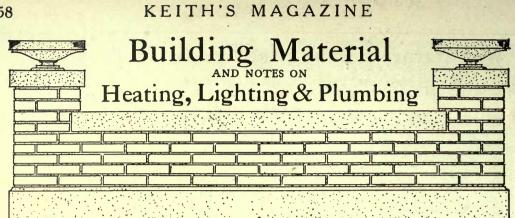
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Sanitation of the Home-The Dangers in Dust.

By Ira S. Wile, M. D., Associate Editor American Medical Society.

UST is a little of everything." All dust is not alike. Its seriousness depends on its origin. A chronic cough may result

from working in a dusty atmosphere.

If the dust abounds in bacteria it may cause various diseases as diphtheria, tonsilitis, consumption.

Fight dust as the enemy of health.

Never use a feather duster.

Remove dust, do not brush it about.

Use a moist cloth or dustless duster, or an oiled rag to get rid of the dust.

Do not shake out your dustclothswash them.

Before sweeping, sprinkle moistened paper, sawdust, tea leaves, or bits of rags about the floor. The dust will adhere to the moist surfaces instead of rising freely to the level of your nose. Dry sweeping puts dust into circulation.

Don't brush your rugs in the house.

When possible use a vacuum cleaner.

Collect the dust and burn it.

Dust removal is not merely for the sake of appearance.

Destroying dust eliminates an agent of ill health.

Cover your food. Wash fruits, vegetables and salads that are eaten uncooked.

Do not buy cakes, candies and other articles of diet that are unprotected against street dust.

Bathe frequently so that dust will not clog the pores of your skin.

Don't eat dust. Don't breathe dust. Don't live in dust.

Plaster Trouble.

A frequent trouble encountered in plastering is the failure of the plaster to adhere permanently to the lath. In some cases this is due to an excess amount of sand in the plaster. It may be caused by a little carelessness in mixing. Sometimes the plaster is too old when applied and will not adhere properly.

Probably the most fruitful cause of unsatisfactory plastering, according to a builder, is insufficient slaking of the lime. Before all the little particles have been reached by the water, the hair and sand are thrown in and the mixture slapped on the laths. For weeks and months afterward little lumps of lime continue to absorb water and explode, causing small cracks or blisters and throwing off little chips from the surface. When the Boston Public library was built, the lime for plastering was slaked one whole year before mixing. Allow at least a week for this chemical action, keeping the same in a tight box outside.

Hair is mixed with plaster to give it tenacity. Watch the next mixer you come across. He probably will turn the hose on some dry lime, hoe it back and forth for a few minutes, then throw in the hair and mix the two. The result is that the hair is so burned that it retains no more of its tenacity than does a toothless bulldog. It is far harder to distribute the hair evenly throughout the mass of lime putty than when there is free water to help break up the lumps; nevertheless; for the sake of a good job, see that the hair does not go in for twenty-four hours at least after slaking, and a week would be better. Long ox hair is best; goat's hair is not strong; short cattle hair and horse hair are of

the least value. Chopped manila fiber is largely used in New York.

River sand is best for plaster. Pit sand is liable to contain clay, and sea sand is not so angular so that the lime does not bind it so closely together. If sea sand must be used, see that it is washed in fresh water to take out the salt.

A New York architect of experience says that on straight work, where there are no elaborate moldings, he specifies two-coat work with patent plaster. If he asked for three-coat work he would get a higher estimate and the same sort of a job. If the walls of the house have been built particularly straight and true, two coats of plaster are just as good as three. If the walls are not true then the plastering may be so uneven that baseboard and casings will not fit closely against it.

The truth of the matter is that on fine work, where cornices, moldings or coves are to be run, good workmen can do a far better job with three coats than with two. As a matter of fact, however, unless you have an experienced and conscientious superintendent, you will really get a two-coat job when three coats are specified. The reason is that plasterers are getting into the habit of flushing the finished surface while the second coat is still wet, thus practically making a twocoat job.

Tin Shingles for Repair. Wm. E. Curley.

A leak in a shingle roof may be due to any one of a variety of causes—a nail hole, a rotten shingle, or careless laying so as not to lap properly may be the trouble. But nine times out of ten the leak is caused by one or more split shingles. If you can get to the under side of the roof, as in a barn or unplastered attic, the leak is usually easy to locate. The discoloration of the sheathing will lead to it.

Drive a nail through the roof from underneath to locate the place more easily from the outside. If there is nothing to cause a leak at that point, investigate further up on the roof, as the leak may be higher than you imagine, the water following the sheathing or rafter until it finds a place to drip off.

Then take good tin, well painted on both sides, and cut into pieces 4x7 inches. If a shingle splits, that brings three joints



Stained with Cabot's Shingle Stains. Hollingsworth & Bragdon, Arch'ts, Cranford, N. J.

Cost Much Less Than Paint Wear Longer-More Artistic

"Your stains have proved most satisfactory. I have five lakeside cottages finished with them. My one painted cottage costs me almost as much as all the rest to keep fresh looking. My cottages are considered quite artistic." Joseph H. Scranton, Washington, N. J.

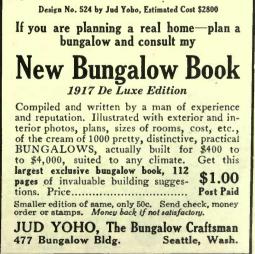
Cabot's Creosote Stains

have proved their artistic effects and wearing and wood preserving qualities in every climate for thirty years. You are sure of them. Don't take substitutes made of kerosene and crude colors.

You can get Cabot's Stains everywhere. Send for samples and name of nearest agent.

SAMUEL CABOT, Inc., Mfg. Chemists, Boston, Mass. Cabot's Stucco Stains-for Cement Houses.





in a line and water is carried directly into the sheathing. Pry up the butt of the split shingle and slip one of the pieces of tin under the split place the full seven inches. This gives a lap of one inch under the next course above. Then slip another piece of tin over the split shingle and under the next course above. This completes the repair.

Even if there are numerous split shingles close together, this method of repairing is much more satisfactory than tearing off or replacing a number of bad shingles.

Psychology of the Smoke Problem.

The smoke clouds of industrial centers exert a direct and an indirect influence upon the human body. The direct influence is due to the immediate contact of the smoke-laden and poisoned air with the skin, mucous membranes and sense organs of the body.

Dark days exert a particularly sinister influence upon working people. One factory head has ventured the opinion that a disagreeable day yields about ten per cent less in labor returns than an agreeable day. During human labor, the chemical products of activity are greatly augmented. The amount of carbon dioxide given off during a day of work is nearly twice as much as during a day of rest. The bodily waste products from muscular activity are more injurious on dark than on bright days.

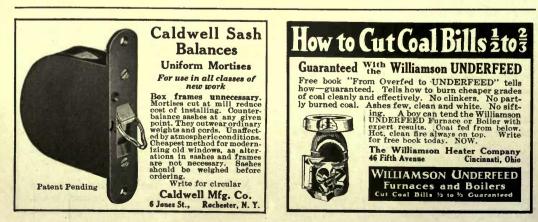
Now, since smoke diminishes the sunlight, and since it also increases fogs, and since fogs and humidity tend to increase the poisonous, bacterial and solid contents of the air and to decrease the heat light rays—since these things are true, it is evident that smoke must exert an important influence on human health, happiness and efficiency and that the smoke nuisance must be regarded as a problem of very vital concern to any community that would conserve the vital efficiency of its citizenship.—Dr. A. W. Nelson, in Good Health Magazine.

Concrete Walks at the Curb.

The luxuries of today are the necessities of tomorrow. Not long ago we were so well contented to ride in automobiles that such a little thing as stepping out and walking on the damp grass of the parking was merely vexing, but today it is not to be borne. To satisfy the dwellers of large, modern apartment buildings in Chicago, narrow concrete walks are built along the curb, with a cross-walk opposite the entrance. With this convenient arrangement the car can arrive at any place along the curb and my lady's slippers are neither soiled nor is American chivalry assailed for lack of a Sir Walter. These walks are built similar to a sidewalk.

Foreign Demand for Building Materials.

The members of the American Commission to France appointed to study reconstruction conditions abroad have just returned and report that there is an unquestioned demand developing for portable temporary buildings, materials for construction of permanent factories and residences, metal ceilings, window and door sash, Portland cement, lumber, rolled steel, and possibly basic clay products; in fact any kind of material that will facilitate quick construction.



BUILDERS

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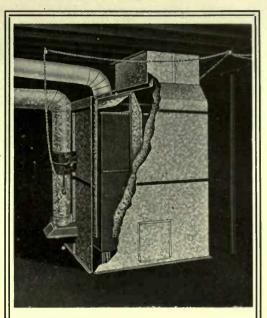
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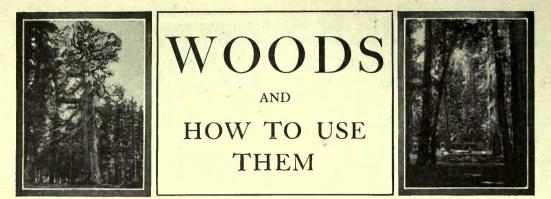
The Hess Welded Steel Pipeless Furnace

is efficient, economical, and in every way satisfactory for heating cottages, bungalows and single large rooms, such as churches, schools, stores, etc. We do not consider it the best type for heating houses where there are a number of detached rooms to be heated separately. For such houses we recommend our regular pipe furnace. We have improved the pipeless method, however, so that it is perfectly adapted to heat the "pipeless" way, and also to heat one or two detached rooms by means of an extension of the heat chamber and separate pipes for such detachable rooms. This improvement is indicated in the cut, and a patent has been allowed upon it. It is entirely satisfactory and places the Hess Pipeless Furnace in a class by itself.

Write us for a solution of your heating problems, and our estimate for your work. We make special terms to contractors, and enjoy the patronage of very many in all sections of the United States, whose repeated orders indicate the satisfaction they receive from Hess furnaces.

Hess Warming & Ventilating Company 1217 Tacoma Building, Chicago, Ill.

P. S.—The furnace supply this year will be below normal. Material is scarce, railroad service is slow, mechanics are joining the army and this combination of circumstance leads us to urge our friends to anticipate their furnace wants and orders early.



EDITOR'S NOTE. - When the building idea takes possession of you-and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH'S staff of wood experts. This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

"Plant a Tree" Movement.

CONCERTED project to set shade trees along the highways which shall add to the pleasure of travel is following in the wake of the

Good Roads movement and is being felt in many parts of the country. A certain township in Ohio, it is reported, has a plan for lining the roads of the township with trees in order to make them more pleasant to travel in summer. In addition, it is thought that the trees will help to keep the surrounding ground moist by preventing rapid evaporation, thus keeping down the dust. They will, in a measure, shelter travelers during storms. They will check the erosion of ditches on hills, beautify adjacent property, add to the land values and to the general attractiveness of the community.

In Minnesota, a "Loring Memorial," in remembrance of a public spirited citizen who is sometimes called the father of the park system of his city is taking the form of a "Plant a Tree" movement, as the most acceptable form in which to commemorate the work and spirit of this tree loving pioneer. The planting of a "Loring Tree" by a pioneer lumberman more than ninety years of age, who in the course of his business had cut hundreds of trees, was made a pretty ceremony, the officials of the city accepting formally the tree set by the nonagenarian. What better memorial can any community make to an honored citizen for his public spirit than such a further act of public service.

Fireproof Shingle Paint.

A process which shall render a wooden shingle roof protection fire resistive and at the same time that can be produced at practical commercial prices, has been the objective both of the government laboratories and of the various lumber and paint associations. Results have been obtained from these organizations which are of the greatest importance to all of the building interests.

Under date of May, Secretary R. S. Kellogg, of the National Lumber Manufacturers' Association, sent a letter concerning the work done in Dr. von-Schrenk's laboratory and the results of his tests of the new fire-resistant shingle paint, devised by Dr. Gardner, of the Institute of Industrial Research.

"Although we are not yet ready to publish the details, the progress so far made has been extremely gratifying. Dr. vonSchrenk has devised a fire test which burns through a new, first-class untreated cedar shingle roof every time it is applied. Roof sections, composed of the same kind of shingles, covered with the new paint, do not burn through in about 90 per cent of the tests. The fire built upon such a roof chars the wood to a certain depth over a small area, but goes out almost every time before the shingles are burned through.

"The formula for this paint is held by the Paint Manufacturers' Association, and reputable paint manufacturers throughout the country are being licensed to manufacture it and use the association





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63

trade mark in connection with their own labels. So far some twenty-five paint manufacturers have been licensed, and it is expected that many more will soon avail themselves of the opportunity to produce a fire-resistant shingle paint of high merit. In order that the product may be kept uniformly up to standard, proper means will be devised for the purchase of samples of the paint in the open market at regular intervals throughout the country, and their subjection to uniform tests as to both physical and chemical characteristics.

"It is very important that the shingles be completely covered with the fire-resistant paint. The best results are obtained when the shingles are dipped and allowed to dry for several days before placing upon the roof, and then given an additional coat with a brush, after the roof is finished. The paint promises to be very satisfactory so far as durability and exposure to the weather are concerned. The cost will be no more than that of other first-class brands of linseed oil paints, suitable for exterior use."

Work of U. S. Forest Products Laboratory.

A small roof section covered with shingles painted with a zinc borate paint has just been tested as to its fire-resistant properties, after having been exposed to the weather on the roof of the Forest Products Laboratory for nearly three years. Other shingles freshly painted with the same paint were tested in comparison. The results show that the paint had resisted the action of the weather without losing its fire-retarding properties to any marked extent. A close examination of the exposed portion of the shingles showed that the paint was in firstclass condition. It was concluded, therefore, that a zinc borate paint has excellent lasting qualities and that it retains its fire-retarding properties for at least three years.

Mobilizing the Lumber Industry.

The lumber industry is rapidly mobilizing for war, in furtherance of the pledge of loyalty made by the National Association.

The National Lumber Manufacturers' Inter-Insurance Exchange has decided to

invest 20 per cent of its funds in the government war bonds.

Douglas fir producers are taking steps, as are all lumber organizations, to utilize their cutover lands for the production of crops to provide food for America and its allies.

Fear in the East that the proposed wooden ship campaign, for the relief of the submarine blockade by building 2,000 wooden ships might fail because of a lack of lumber is entirely overthrown by this statement by Secretary R. S. Kellogg of the National Lumber Manufacturers' Association:

"All information I have indicates lumber in all necessary sizes and quantities much more available and reasonable in price than steel. Many saw mills in South and West can supply necessary stock quickly, also many shipbuilding plants are located in those sections. Two thousand wooden ships would require only 3 to 5 per cent of one year's production of lumber."

The Northern Hemlock and Hardwood Manufacturers' Association has been among the first to join in the preparedness movement. The association has sent word to Washington of its decision to furnish its lumber to the government without profit and named a committee to prepare a schedule of production cost, before proceeding to Washington to offer its lumber to Uncle Sam.

Not some, but all American lumbermen are anxious to help the government win the war. They don't want excessive profits, and they will furnish the government the materials it requires for warpurposes, particularly for building wooden ships.

A Regiment of Foresters.

A regiment of foresters and woodsmen are being recruited in Minnesota for special war service in France. State Forester W. T. Cox has received his appointment as preliminary recruiting officer in Minnesota from Henry S. Graves, chief of the United States forestry bureau. The regiment will be sent to France to cut timber in the French forests to supply the allied armies, according to the report. A number of trained foresters are wanted, also logging foremen, small sawmill operators, and a large number of sawyers, choppers and tiemakers.



Making Plans to Build?

Include in those plans the

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the monthly publication which contains—every month—a full page colored perspective drawing with plans, constructive details, and condensed specifications, also photographs of recently completed unique and unusual houses accompanied by full working drawings.

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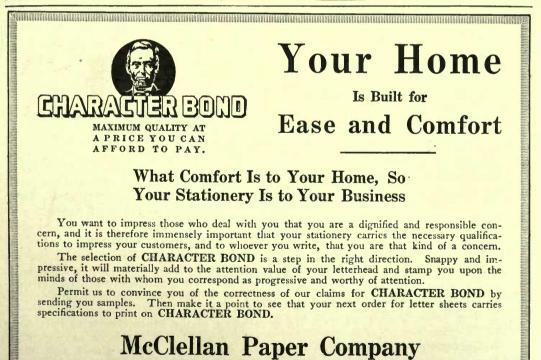
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To enable you to judge for yourself the value of the contents of BUILDING AGE, we are glad to make readers of Keith's this special offer:

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SPLINTERS AND SHAVINGS

The Deadly House Fly.



ARLY in the season is the time to swat every fly that appears. Keep everything immaculate around the back door so that there is breading class for the fly por

neither breeding place for the fly, nor anything which will attract them from less careful neighbors.

The ordinary life of a fly does not seem to exceed 30 or 40 days.

Eight or 10 days seems to be sufficient time for development from the egg to the adult.

Thus a new generation starts every 11 to 14 days.

Swat the first fly and prevent the laying of the first batch of eggs.

Kill each fly within a week of its first appearance.

The number of eggs laid by an individual fly is undoubtedly large, perhaps 120, and a single female will lay at least two and possibly four such batches. Killing one fly when it first appears accomplishes more than swatting hundreds later in the summer.

The body and especially the legs of the fly are thickly covered with hairs and bristles of varying lengths. When it crawls over infected material it thus becomes loaded with germs. Subsequent visits to human foods results in contamination. It is not uncommon to see flies crawl over Baby's finger tips.

A "fly-speck" is even greater contamination.

Flies cannot always be exterminated, but every particle of food can be closely screened.

Government Bulletin 734 gives instructions for building and using a fly trap which has been made and used all over the country with surprising results in the numbers of flies which are killed. A cut of it is shown elsewhere.

Begin early.

Gardening for Old Glory.

This war is going to do a great favor for you if you are wise. While you work that borrowed garden lot for Old Glory this summer you are going to say to yourself and wife something like this:

"This beats sitting around folded up in a two-room apartment. The air is fresh, the sun is fine, the work of growing a garden is fun. I hate to go back to that third-story coop. Let's not go in until it's too dark to see to dig in this good clean dirt."

Then your wife, being wise, will say: "We've spent so much work getting this lot into good gardening shape this summer, let's buy it. We can raise twice as much on it next year with half the work."

This done, the house on the lot and the home of your own follow as a natural and happy consequence. Thus the war will have put you squarely on the road home, which you might never have reached otherwise.

Waste.

For many years Americans have refused to recognize the word WASTE when they met it. It was a poor relation, which was passed by as though it did not exist. When met under the dark clouds of the war conditions it has suddenly thrown off its mask of careless goodfellowship and disclosed its teeth and claws in a most alarming fashion. In a day the whole country is armed against the monster disclosed, but it is not an easy matter to throw off the habits of years, and the thrift-thought, through long inactivity is only a puny weakling to begin the fight, and must have guards and guides on every side.

Daylight Saving.

The government has taken up the big matters of saving in a very forceful way, but after all it is largely a personal matter, and must have the individual initiative.

Most of the other countries have long ago adopted the "daylight saving plan" by setting all clocks ahead one hour, through the summer months at least, which only means the simplest way of moving the business day ahead into one

hour more of sunlight, and cutting off one hour of electric lights, etc. When one considers the wonderful lighting of Broadway, and in addition the brilliantly lighted thoroughfares of all the other great cities of the country it gives some conception of one point only in the saving. In the latitude of Chicago, even in December there are almost five hours of sunlight before noon, and three and a half hours after one o'clock in the afternoon. In June there are approximately eight hours of sunlight before noon. Imagine being through with the labor of the day before the "heat of the afternoon" and its lassitude which comes on about two or three o'clock. Everyone recognizes the greater efficiency of the earlier part of the. day,

The Vacuum Cleaner and the Potato Bug.

New uses for the vacuum cleaner have been developing. Last year some one tried it on the flies which had gathered on the screen at the door or window, with eminent success. The big openings of the cleaner gathered them all in, according to the report. It was much quicker and easier than swatting.

The latest stories come from Westmoreland county, Pa., where some ingenious farmer tried the vacuum cleaner on his potato patch when the potato bugs were particularly trying and numerous. He rigged up a small gasoline engine and a vacuum cleaner on a little wagon.

Up and down the rows the machine is taken, and the bugs are sucked into the hose pipe. The farmer says more bugs can be destroyed thus in a few hours than could be picked by hand in a week.

Ode to the Vacuum Cleaner.

"The scope of the cleaner is broadening fast;

Poisoning bugs is a thing of the past.

Farmers all over the country, I ween,

Will shortly be buying a cleaning machine.

With a vacuum cleaner in every patch,

Potato bugs have at last met their match.

- The pests start to run when they hear the thing humming.
- They know that disaster or death is acoming.
- They all are agreed that there's nothing so mean

- Or so bad for the health as a cleaning machine.
- No bug is so swift and no bug is so gay But what the machine will get him some day.
- He may try to escape, he may hide 'neath a leaf,
- But the vacuum cleaner will bring him to grief.
- Great possibilities thus can be seen
- In the use of an up-to-date cleaning machine.
- If it's good for potato bugs, why not for gnats,

Flies and mosquitoes and nocturnal cats?

- If it's good for potato bugs, why not for mice,
- Bedbugs and roaches and midges and lice?

All of these pests would surrender, I ween

If brought face to face with a cleaning machine."

-T. F. Vickers.

The Paean of the Road.

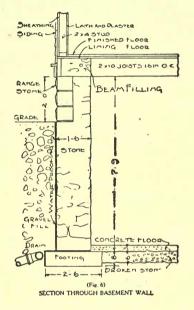
"Roads rule the world-not kings nor congresses, not courts nor constables, not ship nor soldiers. The road is the only royal line in a democracy, the only legislature that never changes, the only court that never sleeps, the only army that never quits, the first aid to the redemption of any nation, the exodus from stagnation in any society, the call from savagery in any tribe, the high priest of prosperity, after the order of Melchisedech, without beginnings of days or end of life. The road is umpire in every war, and when the new map is made, it simply pushes on its great campaign of help, hope, brotherhood, efficiency and peace.'

Furniture Polish.

A home made furniture polish that will compare with any known polish, as given by a practical builder, is composed of the following chemicals and oils: Mix 3 oz. of turpentine very gradually with 6 oz. of linseed oil, then add 3 oz. of grain alcohol, 3 oz. of 5-per-cent acetic acid, and $\frac{1}{2}$ oz. of butter of antimony. Apply with a cloth and use a good friction. As the substance might prove harmful to children if taken internally, see that is it kept out of their reach.

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A Handbook Every Home-Builder Should Have



A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and 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. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

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New Booklets and Trade Notes

RACTICAL Homes," published by the Complete Building Show Company, New York; price \$1 is a most interesting publication to the home builder. It contains thirty designs, selected from those submitted in a competition, not of houses which may or may not be built at some time, but of houses which have already been built; completed since January, 1914. These are no "proposed" designs at an "estimated" cost, but completed homes with actual cost details published. The locality in which the house is built may be taken into consideration in connection with the actual cost so that a cost ratio may be estimated for that section of the country. All types of houses are shown, masonry and frame, and the designs are excellent, both as to plan arrangement and to the use of building materials.

"How to Run an Automobile," which has just been published by the Norman W. Henley Publishing Company of New York, was prepared by Victor W. Page, a mechanical engineer. It is well illustrated and sells for \$1. It gives concise instructions for starting and running all makes of gasoline cars, how to care for them, and gives distinctive features of control. It shows the control groups of all popular makes of automobiles, and describes every step for shifting gears, controlling engine, etc.

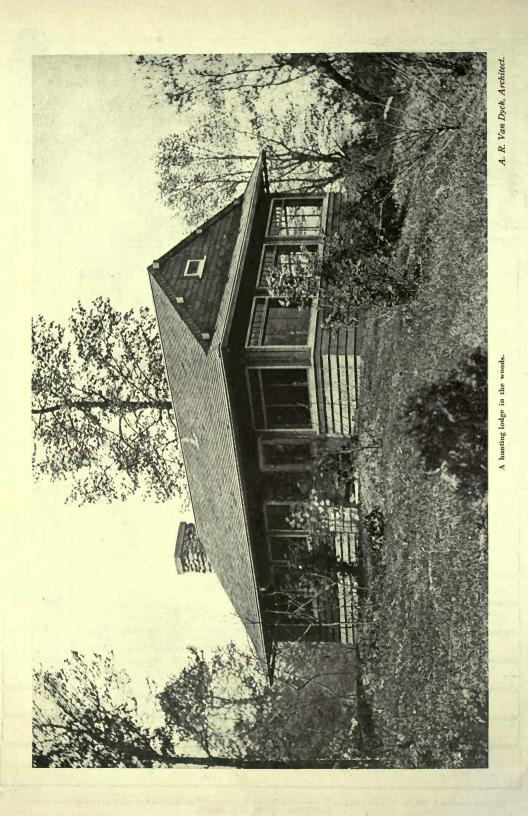
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"The Livable House, Its Plan and Design," by Aymar Embury II, Architect; published by Moffat Yard and Company, New York; 100 full page photographs; price, \$2.50. "Good taste is not confined to the wealthy. Our American colleges graduate annually something like a hundred thousand men and women of high ideals and artistic perceptions, who are constantly seeking good things. Since good taste is not synonomous with expense these are as available to the poor as to the rich." It is in response to this demand that The Livable House has been published. Necessary preliminaries, Style, Plan, Materials, are the main subjects discussed.

With reference to the proportioning of rooms Mr. Embury says: "The living room, in general should be proportioned in the ratio of three to five, which would mean that a living room fifteen feet wide would be twentyfive feet long, or twenty-one feet long if thirteen feet wide." "It may be noticed that in speaking of interior dimensions the odd numbers of feet have been used, and this is not because there is luck in odd numbers, but because lumber comes sawn in even length of feet."

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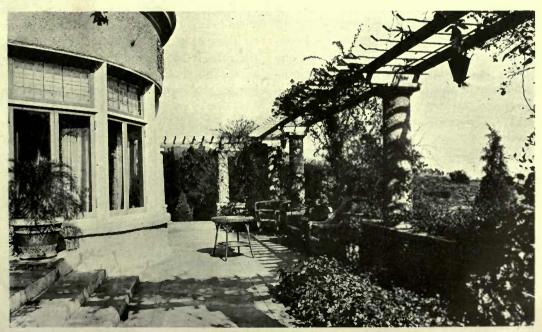
No. 2

Lounging Retreats of Sunshine and Shadow Charles Alma Byers



T is a matter of gratification that porches, verandas and other outdoor lounging retreats are con-

stantly receiving from the modern home-builder more and more attention. To spend as much time in the open as we should, for our health's sake, the most of us require a very pressing invitation, and it is, of course, by way of these features that such invitation is best extended. And realizing this, we are gradually learning to endow them with the alluring qualities demanded. However, there is perhaps one phase of the outdoor-lounging question that is still being quite generally neglected. Reference is made to sunshine. While our porches and verandas bring us out into the pure, invigorating air of the open, it is rarely they lead us to properly appreciate and utilize the equally beneficial sun. In a way, we have learned the value of a "sun bath," but we have done very little toward providing places for its enjoyment. The inference is obvious. The solution, of course, lies in something in



A charming terrace.



The walls are of cream stucco with an interesting lattice treatment.

the nature of a porch open to the sunshine, and also shaded.

Actually there are several different ways in which this sunning retreat may be designed. It may be created either as an uncovered terrace or court or as some sort of pergola-covered porch. Preferably provided, for convenience, as a direct adjunct of the house, it may be located on the front, in the rear, or on one side. It also offers many charming possibilities in the matter of its furnishing, especially desirable arrangement, in this respect, is that by which the house is planned with a side or rear court, perhaps enclosed on three sides. In such cases the remaining side may be screened in charming fashion to such extent as may be desired with plantings of trees and shrubbery, or with vines trained over trellises or pergola-columns. Then, too, the retreat so located is frequently made accessible from nearly all parts of the house, and hence is the more apt to be

its floral treatment, and its flooring or paving.

The ideally located porch or other outdoor retreat is, no doubt, the one that affords privacy and seclusion, which means that it has been placed somewhere on the side or in the rear of the house, rather than on the front. An



A pergola covered porch.

utilized.

We are here showing illustrations of a number of especially inviting retreats designed expressly to make the sunshine available and enjoyable. Not only do they show the features differently located and variously designed architecturally, but they also deserve to be carefully studied for the suggestions they offer in respect to furnishing and decorating.

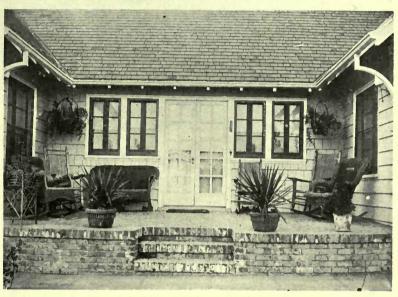
The first of the photographs given here shows a most delightful terrace. Of especially roomy depth, it extends entirely across the front of a large house of imposingly elegant architecture, and from it is commanded a most charming view of the surrounding hills and valleys. It is floored with cement, and is enclosed

by a low concrete wall, from the top of which rise several round columns that support a pergolalike coping. Both the wall and the columns are of deep cream color, to match the stucco walls of the house. and the wooden framework thus supported is painted white. From the latter, at intervals, are suspended oddlydesigned lighting fixtures, and over both pillars and frame-

work is trained a most enhancing tracery of climbing rose-bushes and other vines. The terrace is ideally situated to utilize the morning sunshine, and yet from either the screening vines or the house is invariably extended sufficient shade to enable one to escape from the sun's glare, if it becomes too intense. The furniture consists of tables and comfortable chairs of wicker, which may be easily easily moved from one spot to another. Although not all of us can afford a home of this size and elegance, we at least may be able to borrow the general idea of its terrace and work it over into something almost as near our heart's desire.

The second illustration charmingly

shows a most desirable arrangement for enjoying a "sun bath." It consists of a roomy open court, located in the rear and surrounded on three sides by the walls of the house, which is of bungalow style. The walls of the house are of light cream stucco over frame construction, and over their surface is constructed a most interesting lattice-like covering, effectively painted a soft brown color. The court is floored, or paved, with blue-red brick, at-

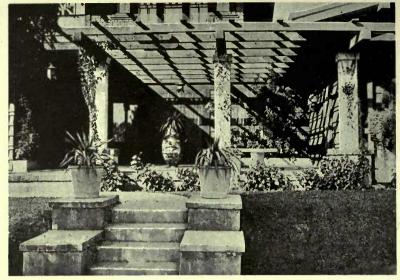


An open court at the side of the house.

tractively laid, but is unprotected overhead, save by the roof extension and a slightly protruding second-story addition. Sufficient shade, however, is thereby usually provided to permit one to enjoy some portion of the court, if the sunshine be not desired, at any hour of the day. Here again wicker furniture is used, and grass rugs are used to cover the center portion of the brick flooring. As will be noticed in the photograph, several doors lead to the court from the house's interior, and so convenient, private and otherwise inviting is the retreat that it is made quite irresistible.

The arrangement which is pictured above shows a court quite similar in char-

acter, except that it is smaller and less pretentious in general appearance. Enclosed by three walls of the house, the same as the preceding one, it, however, is located on one side, instead of in the rear. It is floored with red brick, and along its open side passes the automobile driveway. Here again the extending eaves comprise the only overhead protection, and it like-



An inviting retreat in which one may have either sunshine or shade.

wise is furnished with wicker. Although a very simple little court, it is well secluded and otherwise genuinely enjoyable.

Another photograph shows a small court with a pergola overhead. It is located immediately in the rear of the dining room, and leading into it therefrom are three pairs of French doors, which lend to the interior an effect that is most attractive. Opening onto it also are other doors that furnish direct connections with other parts of the house's interior. The court is floored with concrete, and a few vines have been trained to form a partial screen for its one open side. It is designed to enable enjoyment of the early morning sunshine, but it may be here suggested, for possible employment in other cases, that a few widths of canvas stretched over its overhead beams is all that would be necessary to convert it into what for all practical purposes would comprise a real porch.

The view in the last of the illustrations shows another very charming sun porch. Located on the side of the house, its steps lead to the automobile driveway, and several doors open onto it from the house's interior. It is floored with cement, and a couple of small beds of earth sunk into the flooring afford some interesting floralwork possibilities. The overhead covering consists only of pergola beams, and through these the sunshine enters freely, although wide roof projections create a certain amount of shade at nearly all hours of the day. Electric lanterns of Japanese type also help to make it an enjoyable retreat at night.

Naturally, as is the case with any other kind of porch in eastern and northern climates, outdoor lounging retreats of the type here referred to must remain unused during the winter months, but nevertheless it will be found that the sun porch can be used on many days that the ordinary kind would be found quite chilly and disagreeable. With the furniture removed, its floor being manteled with snow should in no way comprise a menace or detriment. Of course, the furniture chosen should be of a kind that will not suffer to any great extent from the rains, and hence may be left outdoors throughout the summer.

The sun porch has so many good points that it deserves to receive consideration from every prospective home-builder.

A Little Apartment in Old New York

Margaret Craig



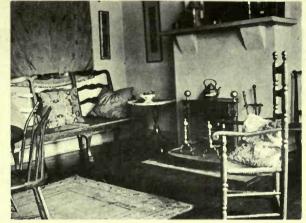
N turning from Fifth Avenue into Twelfth Street, New York City, one realizes a subtle difference and sees

that he has entered a quaint old section of the city. West Twelfth Street is picturesque with its irregular line of neat "brown stone fronts," its iron grated fences, its balconies, and window flower boxes containing trailing vines and bright colored blossoms.

On the fourth floor of one of these interesting looking houses is an apartment that is in keeping with



A prie Dieu from an old monastery in France.



The fireplace and the walnut settle.

this elm bordered street. It is reached by climbing four narrow flights of stairs with beautifully carved mahogany banisters that were built years and years ago, such as architects so often copy now for their good lines.

When admitted to the really spacious living room of this little house, the home of a prominent sculptress, there is a feeling of rest and of completeness in its atmosphere.

It is furnished so that it echoes the distinguished taste of the builders of long ago, for it breathes quality and refinement of choice in color and texture.

Like a master's painting, the room has tone, a regard for light and dark, and a feeling for values and colors.

The walls are plastered, unbroken by moulding or wainscoting and painted a warm yellow gray or putty color. The few Japanese prints that adorn the wall spaces give a color key to the decorations.

On the west wall is the fireplace that

is noteworthy because of its plain painted surface, broken only by a broad shelf above the unornamented fire opening. The people of several generations ago could tell us of the history of the Franklin stove and how it was the first step between a fireplace and the later development of the stove.

On the north wall, between the two

Between the fireplace and the north wall is an Elizabethan chest. Its carving shows the sixteenth century treatment.

Next to the entrance door is a "prie Dieu," which was found in an old monastery of France. Its rich carvings and unusual spacings show the qualities of a fine piece of sculpture. In its structure it has no lines plumb with the floor, and



An Elizabethan chest of the sixteenth century.

French windows, hung with dull flowered linen, is a high window which allows the passage of a soft glow of light and forms a lovely background for twining ivy and a row of potted flowering plants arranged on the broad window shelf.

People scarcely realize how a note like this is a happy substitute for a painting, especially when aided by the views of the outside balconies and roofs seen through the French doors.

The eastern wall is almost entirely devoted to a long line of grayish shelves. The pewter pots and plates that are used give a gentle glitter that becomes a rich undertone to the whole wall.

The furniture in the apartment was chosen with regard to its setting, and in almost every instance the pieces are antique. connoisseurs say that this was not unusual as the uneven floors of the old buildings were the cause of a similar unevenness in the furniture.

Against this same wall and near the fireplace is a Siennese settee made of walnut. It was found in an old cobbler's shop in Sienna, Italy. Its carved arms and back show a Dutch influence, but whether its orig-

inal owners brought it from Holland or from Spain, no one lives to tell.

A few cushions in it are in Chinese design and blend with the handsome hanging of Chinese brocade above, which has a tone of faded peach color, brightened with spots of blue and gold, while the oriental rugs are of the Ming period, harmonious in their soft yellows and blues.

The kitchen, of which one catches a glimpse through one of the south doors, is just as consistently furnished. Here are brown yellow walls, and apple green trim used in the china closets as well as in the panels and wainscoting. A black and white linoleum on the floor gives character to the color scheme.

So, in many of these old New York apartments, there is a singular elegance and style that may be an inspiration.

Ethics of the Flag in Decoration



OLD GLORY floats in the breeze. It should never be tied or draped in a way which takes away its freedom. The flag was not designed to drape and should always be hung as if riding the breeze. The National flag may properly be made to hang in convolutions such as would naturally be produced were it floating on the breeze.

When displayed in connection with other flags, whether state or foreign, the National flag should always be at the right. It is properly carried on the right in parade and if flown together with state or other flags the National flag should be on the right. When seen from one side only the

blue field should be at the right as one faces it.

When placed in a window with the stripes running horizontally, the stars should appear in the upper right-hand corner when viewed from within the room, and in the upper left-hand corner when viewed from without.

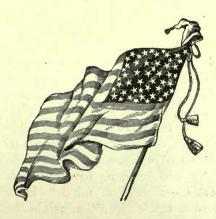
One may walk down any thoroughfare in these stirring days and find one flag after another draped or hung contrary to patriotic ethics. If, in exigency, the flag is draped, the stars should always be positioned as above stated. The stripes should never be hung vertically. The flag should always be placed in its proper position.

The flag should not be hoisted before sunrise nor allowed to be up after sunset. The flag should never be allowed to touch the ground.

At forts and at military posts, civilians and spectators are expected to stand at attention and to uncover upon the hoisting or the lowering of the flag, and during the playing of the "Star Spangled Banner."

It is a well known fact that the statutes of the United States forbid the use of the flag as a registered trade-mark, and for any purpose of advertising. Lettering, decoration and pictorial matter of any kind cannot lawfully be imposed upon the flag or any representation of the flag.

There are no federal or other laws of observance concerning the use of the flag, but the patriotic societies unanimously support the theory that the flag should not be used for draping or for covering scaffolding, desks and boxes; that the redwhite-and-blue bunting is proper for this purpose; and that the flag should be always "flown."



The Kitchen is the Laboratory about which the Home Centers The Home is the Carbureter of the Industrial World

Efficiency in the Home

Edith M. Jones, Kitchen Specialist

While "Kitchen Planning" is a comparatively new business in the industrial world, it has passed the stage of merely remodeling the old kitchen. In the series of articles, of which this is the first, the subject of household efficiency is discussed and illustrated by a home recently built which has been planned for efficiency and beauty throughout. The house was designed by C. LeRoy Kinports, Architect. The kitchen and service part of the house was turned over to Mrs. Jones for her specialized planning. First she laid out the most efficient scheme for the work and located the various parts in their relation to it. Then places were arranged for utensils where they would be convenient for use. All surfaces were finished so as to be both sanitary and beautiful.—Editor's Note.

Part I.



HE kind of houses we live in have, without question, a peculiar influence upon our lives. Not alone is our comfort affected, but our

housing has much to do with our efficiency. For instance, a cold, dark, badly planned house is not only less comfortable than a warm, sunshiny convenient one, but the wasted time and energy in caring for such a house necessarily lessens one's interest and usefulness.

In the business world today inefficient housing is considered a very serious matter—as the watchword of the successful business man is efficiency. In fact, we hear so much about this desirable state of things that we can well stop a moment and clearly define just what efficiency really is. Someone has said it is "like Boston,—a state of mind." Possibly a more tangible definition might be, "the standardized effort to secure the greatest amount of work with the least possible waste of time, energy and material." It is true offices, factories, workshops of all kinds are being arranged and re-arranged under the advice of efficiency experts with most satisfactory results.

Have you ever stopped to realize that the most vital workshop in the world is, and always has been, the kitchen? Have you ever thought that every individual in the world depends more or less upon some kind of a kitchen every day of his or her life? Yet in spite of this, I think I can safely say the last industrial center to reflect efficient organization and equipment is the kitchen in the majority of the houses of the present day.

I say the majority of the houses, which is true,—but nevertheless there is a decided undercurrent of interest for better things among alert, progressive housekeepers, and much talk on every hand about "model kitchens." To most of us this idea of a model kitchen is very mis-



A beautiful kitchen, simple, and without unusual expense.

leading and is as impossible as a model living room or a model bedroom. Upon reflection one can readily see why there can never be one model for all kitchens.

For instance, to illustrate with an example quite apart from the subject in hand—let us think for a moment how it would be if one were ordering a gown. The modiste might show several models, any one of which might require some change to meet the individual need or requirement. A change of measurement, —a change of coloring,—some part of the trimming left off to lessen the expense or possibly a touch of something added to make it more beautiful.

What is true in this example is true in the planning of almost anything. This surely is true in planning a house and especially is it true in regard to the kitchen. Why? Because a model kitchen becomes such only as it meets the every day working individual family needs and, as two families can never be exactly alike, each kitchen demands separate and distinct attention.

The kitchen is often spoken of as the industrial center of the house, and when one stops to realize that someone, either the mistress herself or one or more of her assistants, must spend two-thirds of the day in this room—it is obvious this part of the house should be not only convenient but attractive.

It is a great mistake, however, to think that a convenient kitchen means an unnecessary outlay of money. Not so at all, for some of the most expensively equipped



A house planned for beauty and efficiency.

C. LeRoy Kinports, Archi.ect.

kitchens I have even seen have been the most inefficient. On the other hand, some simple kitchens have been models of convenience.

In fact the secret of a successful kitchen does not depend so much on expensive equipment as on the intelligent, careful planning for the individual needs. A mistake in the planning of the kitchen is especially serious because changes either mean much additional cost, or else many needless steps, useless effort, wasted time and constant annoyance.

Mr. Frederick A. Osbourne, of the University of Washington, says:

"The kitchen must be under as efficient a system as has been indispensable in the modern factory, and the housewife, by paying attention to her movements can easily save 25 per cent of her energy, and miles of unnecessary steps can be eliminated by careful attention to the arrangement of the furniture, and utensils, and the organization of her movements." In fact everyone is realizing that only through system and organization can efficiency and conservation be gained and every successful business, whether it be the home or some activity in the business world,—is absolutely dependent upon these wonder workers.

Efficiency; Conservation. These are wonder workers, truly, but they are results, and we must go back to the causes. First, we must devise a system by which the work will be done most satisfactorily and with least effort; then this system must be so laid out in the planning and arrangement of the kitchen equipment that the "line of least resistance" in doing the work shall naturally follow the system: In other words the kitchen must be so organized that the relation between the sink and the cupboards, that between the work table, bins and pan cupboards, and the relation of the range to both shall be such that the easiest way of doing the work shall be the right way.

Color and Harmony James S. McMillan, F. I. B. D.

Part. I.

- I. Primary colors should be used on small surfaces, and in small quantities, balanced and supported by the secondary and tertiary ones in large masses.
- 11. The primary colors should be used in the upper portions of objects; and the secondary and tertiary ones in the lower.
- III. When ornament is on a ground of a contrasting color, it should have an edging of a lighter tone of its own color.
- IV. Ornament on a gold ground should be separated by an edging of a darker tone.
- V. Ornament on white or black may be left without outline or edging.

VI. No composition can be perfect, if any of the primaries are wanting, either in their natural state or in composition.

-Owen Jones in his "Grammar of Ornament"



HE question of color and its relation to our home surroundings is of primary importance to all who are interested in the decoration of

their homes.

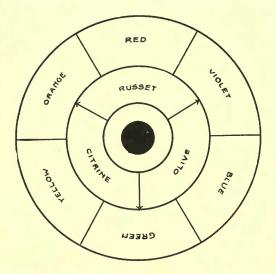
Most authorities agree that all the colors we are surrounded with, whether in natural forms, as flowers, birds, insects, animals, rocks, etc., are all derived by the principle called "absorption" of white light. This white light, of course, is derived from the sun's rays, and they possess the property of giving to external objects different hues, or colors, as seen by the human eye. White light is a combination of different rays of light of varying lengths, any one of which acting on the retina of the eye would produce the color of that particular ray; while the sensation of white is the blending of all the rays, and that of black, the absorption of all the rays. From a scientific point of view then, color is simply the analysis of white light. Any reader can analyze white light by making this simple experiment:

When the sun is shining brightly, pull down the blinds and allow a beam of light to fall on a piece of glass of a prismatic shape and you will find certain colors refracted from the glass, these colors are called spectrum colors, and are six in number—red, orange, yellow, green, blue and violet. Authorities disagree as to the actual number of colors, some telling us of three, five and seven respectively; however, for ordinary purposes we consider the above quite satisfactory.

So far the scientist has enabled us to understand the source of our color theories, but the artist, particularly those who follow the decorative trades, finds he cannot work with "colored rays of light" and has to confine his abilities to colored materials called "pigments." These pigments are not so pure in color as the spectrum colors, hence he is somewhat at a disadvantage. Experiments are now being conducted to produce pigments of spectrum purity; although up to the present only three have been put on the market, spectrum red, yellow and violet.

Colors which are produced by the admixture of pigements are divided into three classes, namely—primary colors, secondary colors and tertiary colors.

By primary color is meant one that is simple or uncompounded and cannot be produced by the admixture of any other pigments. The primary colors are three in number, blue, red and yellow. For red some advise using vermilion; for blue, Prussian blue, and for yellow, Gamboge. When these pigments are mixed in the proportion of eight of blue, five of red, and three of yellow, they are supposed to harmonize with each other. Some writers as-



sert the contrary, however, and state that harmony depends rather on aesthetic grounds, and, being a question of "feeling" cannot be reduced to rules. Still for all practical purposes rules are required, and required badly at the present moment, although we do not follow them slavishly.

The secondary colors result from a mixture of two primary pigments. Thus eight parts of blue and five of red will produce violet, eight of blue and three of yellow will produce green, and five of red and three of yellow will produce orange. The secondary colors are complementary to their respective primaries, and vice versa. Thus violet is complementary to yellow, and yellow to violet; green is complementary to red, and red to green; blue is complementary to orange and orange to blue.

By the mixture of two secondary pigments we get other three colors called tertiary colors. These are also three in number thus, citrine is composed of green and orange; russet of orange and violet, and olive of green and violet. Citrine being composed of green and orange, both of which contain yellow as their primary basis, is yellowish in tone, while olive inclines to blue, having more blue in its composition, and russet inclines to red, having red as the dominant color in its composition.

Another and more simple method to get the tertiary pigements is to mix two parts red, one of blue and one of yellow and you have russet; citrine by using two of yellow, one of red and one of blue; olive by mixing two parts blue, one of red and one of yellow. There are certain terms used in describing color such as shade, hue, tone and tint, which are often misapplied. The proper application of the term "tone" is to designate brightness in color; and colors are said to be lighter or darker in tone according to the quality of light they reflect.

By "shade" is meant the change that occurs in a color by the addition of black. "hue" is the change produced in a color by the addition to it of another color. The original color must always be in the ascendancy, otherwise it becomes a hue of the color added to it.

"Tint" is a tone of a color produced by the addition of white to the normal color. A tint of blue therefore would mean that the color produced had a less intensity than the original blue. In a scientific sense, black is not a color at all, but the absence of color. However, you can have a colored black, such as blue black, etc.

Gray again is considered a "neutral" pigment, and in a normal state consists of pure black and white mixed in various proportions; however, we can have colored grays. A colored gray consists of normal gray with a quantity of any primary or secondary added. We can therefore, by mixture, have at least nine different grays. Citrine is considered a yellow gray, olive a blue gray, russet a red gray.

China in the Summer Home

Katherine Keene



OWHERE else perhaps can the decorative value of china be utilized to a greater extent than in the summer home with its infor-

mal ways of living, and so far removed from the dust of the city. This is equally

true whether that home be a ceiled wooden "shack" or an old farm house. The informality of the simple summer home gives, a place for all the treasured old bits, with lovely color or quaint design, or the odd pieces from "greatgrandmother's tea set" which have escaped the mishaps of time and moving.

In the green country, at the seashore or the lake, the china may be left exposed in the room as one would never dream of doing in

the more formal surroundings of the allyear home. The simpler living loosens the conventional lines, and a greater play of individuality is allowed.

The farm house dining room of the photograph shows the marks of the older time in the quaint latches, antique hinges and curious recesses and ledges where the equally quaint pieces of china are placed. The cupboard itself is certainly not placed in the usual way, with its overhang cornering over the projection, perhaps of an old fireplace in an adjoining room, or over the head room of a stairway to the basement. In any case it shows original thought in the utilizing of odd spaces.

The low ceiling, only a few inches above the door indicates the age of the house and makes one wonder about its



Curious cupboards and recesses for china.

builders and the stories which have been lived under its sheltering protection. It speaks of the days of secret hiding places in Indian warfare, and of "underground railways" of slavery times; all of which are only stories to us, but with a deeper meaning in the light of the present deepstirring times.

Quite a different interest attaches to the other photograph, with its low window under the dropping roof line, as the ceiling follows the line of the rafters. Though one feels that it is summer and blooming

things outside yet the little potted plants on the window ledge give a pleasant note. With the china on either side the whole end of the room makes a pleasant picture. More than that, the dishes are convenient under the hand, and even the passing guest who wishes to be helpful finds it

easy to "set the table" or do simple services.

W e are long past the place where people are willing to be uncomfortable in the summer time, even for the sake of the great out-doors, for they have found that it is not necessarv. A business man must have his shower in the morning, if his vacation is to be a happy one, and now where does the housewife need so much of convenience in her kitchen and dining room,

selves and often do much of their entertaining during the summer. Then the housewife must exercise the qualities of a great general, marshalling all of the forces under her control so that she may supply her family and her guests with a noticeably larger amount of food, pre-



China on either side of the window makes a pleasant picture.

and of labor-saving devices in every part of the house.

Those people who have pleasant summer homes at the seashore or by a lake or in beautiful surroundings realize that here they are able to give their friends greater pleasure, perhaps with less expense, possibly with less effort to thempared in the quickest and least extravagant way, which will at the same time appeal to the eye and satisfy the inner man. She must keep herself free to join in all the expeditions, and above all, she must never be over tired or worried. In other words, efficiency must be her constant watchword.



A House Built in New Jersey

Detailed Statement of Cost.



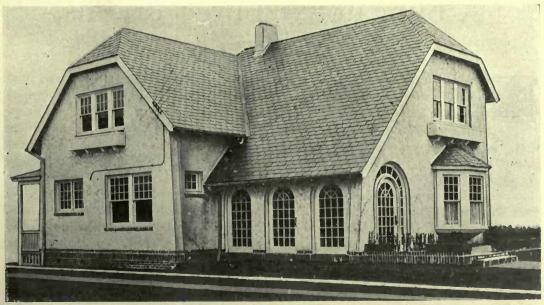
HE series of h o u s e s, which it was stipulated

must have been actually built and completed since January, 1914. and which, with the detailed statement of actual in building. cost were submitted, under the direction of the Complete Building Show in New York, have brought out many points of interest. The house shown in this issue was designed by Frank A. Berry. Architect, and built in Ventnor, N. J.

Excavating	\$25.00
Masonry Work	745.00
Carpentry	2,050.00
Roofing	400.00
Interior Tile Work	105.00
Painting	190.00
Plastering	395.00
Plumbing	575.00
Tinning	135.00
Heating	347.00
Electric Wiring	80.00
Fixtures	75.00
Hardware	125.00
Shades	45.00
Sidewalks	95.00
Total	\$5,387.00

The exterior of the house is stuccoed. and it is logical in construction, though it is quite unusual in some of its features. The section shows the footings only a feet below few grade, and the laundry and heater room is only shown five steps below the first floor. In this way the wall is only carried below the frost line. Building so little of the house underground gives an unusual amount of space above grade.

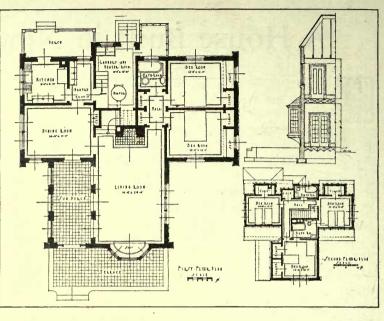
The plan is particularly well ar-



The glass filled arches of the sun porch are particularly attractive.

Frank A. Berry, Architect.

The long ranged. living room is well proportioned and light with a sun porch to the southwest. The dining room, kitchen and pantry makes a compact and complete unit, on one side and the two bed rooms and bath are complete in themselves on the other side. There are closets opening from the hall as well as from the rooms. The stairs lead up from



one end of the living room, passing around the fireplace.

On the upper floor are three bed rooms and two baths, all particularly well supplied with closet space. The pitch of the roof gives excellent arrangement of space on the second floor. The house is pleasing in appearance. The round arched openings have been given a very effective treatment, and one which lends itself particularly well to a stucco house. The glass filled arches of the sun porch are particularly attractive, especially in their relation to the roof.

A Bungalow---Three Rooms, or Larger



ILL you have your home large or small; the smallest possible space, or quite roomy and almost spacious? Here is a tiny home,

yet one which gives the necessary accomodations for a small family. There is a good living room, 19 feet long by 10 feet wide with an alcove to the front, beside the porch. Back of the living room and opening from it is the kitchen on one side, and the sleeping quarters on the other side of the house. One end of the living room is used for dining, connecting closely with the kitchen which is conveniently and fully equipped with cupboards and sink. Beyond is the rear entry porch from which open the stairs to the basement.

The bath room and the sleeping room are so placed that either can be reached from the living room and from the kitchen, yet no space is wasted in passage ways. This plan, being so tiny is arranged especially for the mistress who is her own cook, and no steps are wasted between her own room and the kitchen. At the same time the kitchen is equally accessible from the living room.

It is always desirable to have more than one bed, even in a small house, and

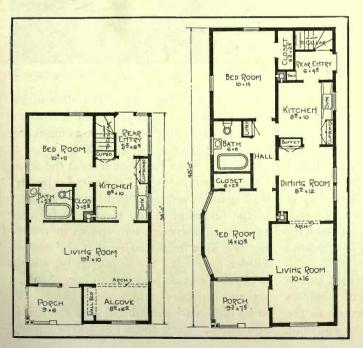
the matter has been very cleverly handled in this plan. The alcove in the front of the living room adds to the size and livableness of the room. In one end of this a wall-bed has been built, which allows the alcove to be turned into a tiny sleeping apartment at night.

The chimney is practically in the center of the house, and connects directly with both the kitchen and the living room, and is well located for a furnace in the

basement, if one should be installed.

Here are all the essentials of living, for a small family, compassed in the space of 20 by 34 feet, including both porches and the basement stairway.

Not satisfied with this tiny house the architect has made an alternate plan, giving more ample accommodation to possibly the same family. The larger plan includes both living and dining rooms, and has two bed rooms, by the addition





The exterior is simply built. E. W. Stillwell, Architect.

of 14-feet to the length of the house, but it does not have the alcove from the living room.

The five room house is kept to the same width as the tiny house, with the bay to give better light to the bedroom thus adding some two feet to the greatest width. The closets are unusually large, and a linen cupboard opens from the small hallway.

The exterior is very simply built, with

either shingles or siding used for the walls. Circulation of air under the roof is provided to keep the rooms cool in warm weather.

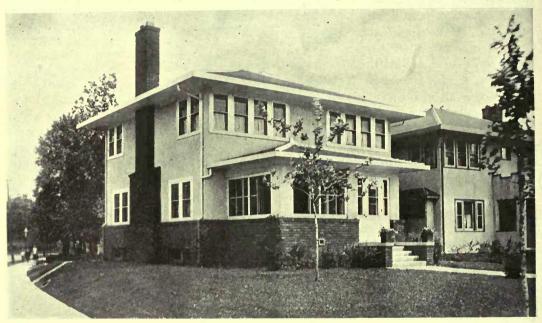
The two plans, side by side, have in interest in showing how an architect may go about it when he finds it necessary to reduce the size of a house materially and yet give accommodation to the same size of family. While 14 feet is added to the length of the house, for a dining room and another bedroom, it is also necessary to get a passage way and more closet space.

Stucco and Brick

HE first requirement of the modern house is plenty of light and air, with as much sunshine as possible. In the home illustrated the

windows of the second story form an almost continuous frieze across the front

Beyond the dining room is the well equipped but compact kitchen. Three steps lead from the kitchen to the landing of the main stairs, giving convenient access to the second floor. The kitchen entrance is at the grade, under the main



With many windows under the eaves.

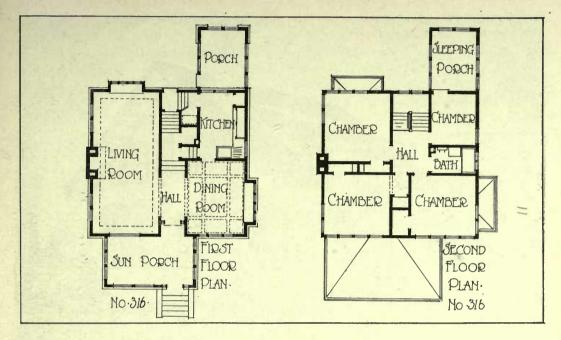
J. W. Lindstrom, Architect.

and corners of the house, leaving wall space necessary for the placing of furniture. These with the additional porches make a very airy house.

The economical, square type of house is used in plan, giving the living room the full width of the house, with a bay at one end and an opening on the sun porch at the other. The fireplace is on the long side of the room with a group of windows on either side.

On the other side of the central hall is the dining room, with groups of windows on two sides, and a wide opening to the hall, as has also the living room opposite. stairs, connecting with the basement stairs. The ice box is placed in the entry.

On the second floor are four chambers and a bath room. Each room, being on a corner has cross ventilation from the windows on two sides. At the same time the wall space is well arranged for the placing of the furniture in the room. In fact, in each room there are two spaces in which the bed may be placed so that the housekeeper may have the opportunity, which is usually a great pleasure to her, of moving the furniture, when she is tired of it in its old location, and feel that she has a new room. Each room has a good closet



and one of the front chambers has two, —a very wise provision.

Connecting with one of the rear chambers is a good sleeping porch, and under it is another porch which may be entered from the terrace at the rear of the house.

On the exterior, the house is veneered with brick up to the sill course of the windows, and the chimney is carried up of the same material. The main body of the house is of a light toned stucco, with the outside trim and cornices painted white. The roof is low, the house being roofed with the simplest construction, but with a wide rather flat projection of the eaves, which comes close down over the heads of the windows. This cornice treatment is effective in the play of light and shadow, broken by the windows and the reflections from the glass, in and out of the shadow thrown by the cornice.

There is a full basement under the house, with place for the heating plant, a fully equipped laundry, vegetable and fruit rooms, and additional space for storage.

A Distinctive Cottage

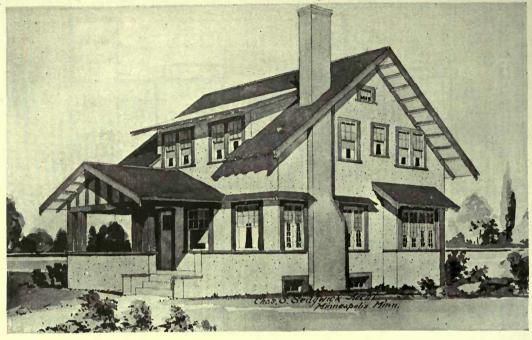


HIS design shows a home which is very compactly planned, and very well arranged, giving the necessary living conveniences in small space.

The house itself is 28 by 27 feet. The communication between the rooms is excellent, and the vistas are well arranged.

The main entrance is into a vestibule with a coat closet beside it, and immediately beyond is the main stairs. Opposite the vestibule is the door leading to the kitchen, to the basement, and if desired, to a grade entrance under the main stairs. A short flight of stairs from the kitchen reaches the main landing, giving access from the rear of the house to the second floor. The large living room across the front is 27 feet in length and 13 feet in width.

A fireplace between windows fills one end of the living room. The dining room is



Cream stucco with brown stained wood trimmings.

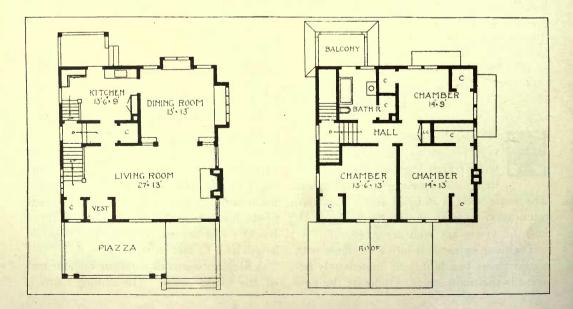
Chas. S. Sedgwick, Architect.

separated from the living room by a wide opening with columns and bookshelves on either side. In the dining room are two recessed bays filled with windows.

The kitchen is well fitted with cupboard and shelves, and the sink is lighted by the window over it. There is a good closet in the passage between the living room and kitchen.

The second story has three good sized bedrooms, large closets and a bath room. The finish of the second story is in natural birch, with birch floors.

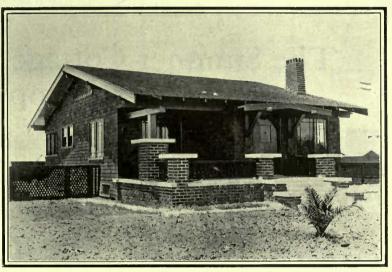
The finish for the first floor is oak with



oak floors. The cottage is designed for a west front.

There is a full basement under the house, with a laundry, room for the heating plant, etcetera.

The exterior is finished in cement stucco on metal lath, using a light cream stucco, and the wood trimmings, casings, cornices, etcetera, are stained a dark brown. The roof shingles are given a creosote stain either dark red or brown to suite the owner's taste. It is an economical cottage to build and an unusually good plan for a small family.



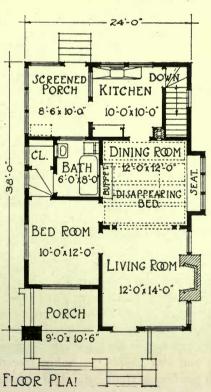
A Small Home



EOPLE are not satisfied in these days that certain rooms

shall be used as day rooms and others as night rooms. This plan accepts the new ways and accommodates the dining room to a "disappearing bed" which is cleverly arranged, and does not obtrude itself upon the day room.

On entering, the rooms have the appearance of those usually seen. The entrance is into the living room from a porch only partially sheltered by the overhang of the roof.



Combination of shingles and brick.

Jud Yoho, Architect.

At one side of the living room is a bed room and a connecting bath room which is four steps above the floor of the bed room, and is lighted by a window from the porch. The closet is on the bath room level, or one step below.

The bath room floor is raised and so arranged that the socalled disappearing bed may "disappear" under it;—in other words it is built above the height of the usual bed, and a niche is left in the dining room under the buffet, where the bed, made up ready for use,

may be pushed in the morning, transforming what has been a bed room for the night into the dining room for the day time. On one side of the dining room is a bay window with a seat under the windows. If this is a box seat many things may be stored here. The kitchen is of good size and the screened porch may be used as a dining porch. Many pleasant meals could be served here in hot weather.

Paving brick and shingles are used in the construction of this bungalow, and make it quite attractive.

The Summer Cottage or the Summer Camp



IS a curious fact that the more civilized we are the more we seem to crave something rustic for the summer vacation. Wheth-

er we go to a summer camp or to a cottage in the pine woods or in the lake two sides for the sleeping rooms on the second floor.

The exterior walls are of boards and battens, with shingles or shakes in the gables, and all stained a brown or gray like the weathered wood of the trees among which it

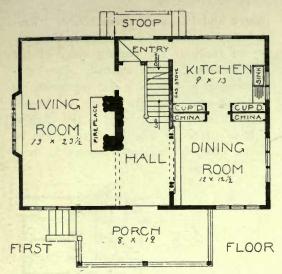


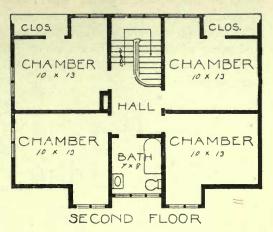
The exterior wall gives a paneled effect.

 region we like to get as near to nature as possible, and as far away from the formality and restraint of city living.

The summer cottage here shown is excellent of its kind. It has big open spaces for the downstairs day rooms and airy chambers with windows to catch the breeze from stands. The broad sweep of the roof is very satisfying and the projecting bay in the center of the living room is very picturesque with its square panes of glass in the out-swinging casement sash.

A big free-standing boulder fireplace is the chief separation between the living room





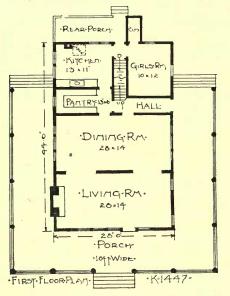
and the hall. It gives a pleasant circulation and sense of freedom especially fitted to summer living. The dining room has a wide opening to the hall and is shown down one step, with picturesque effect. China cupboards fill one side of the dining room, with cupboards on the kitchen side also, which would allow for a sliding panel connecting the two so that dishes could be set through, with a considerable saving of steps.

The kitchen entry is under the stair landing and connects with the basement stairs.

The next design shows a real summer



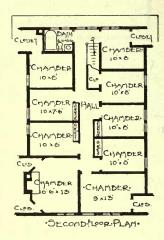
camp in the woods, built of logs; wide spreading and roomy on the ground floor, with sleeping quarters on the second floor and many small sleeping rooms which can very comfortably accommodate quite a company of people.



The width of the main part of the building is 28 feet, with wide porches around three sides. The living room and dining room take the full width of the house, with a big fireplace in one end of the living room and wide openings between the two rooms. Back of the dining room a rear hall opens to the porch and connects with the pantry and kitchen. Here are placed the stairs to the second story.

The service portion of the house, while compactly arranged is ample for the requirements. The sink is placed next the pantry and has wide drain boards. Presumably it connects directly with the pantry to facilitate the putting away of the dishes after they are washed. The basement stairs are opposite and convenient to the rear entrance. The maid's or housekeeper's room is convenient to the kitchen.

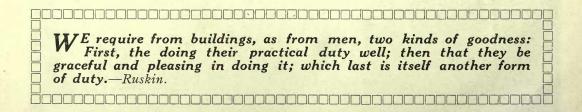
It is surprising how much room can be found under a roof, as is shown in these



sleeping rooms on the second floor. Closets or wardrobes are built in each room. the bathroom is at the end of the hall, with closets under the roof.

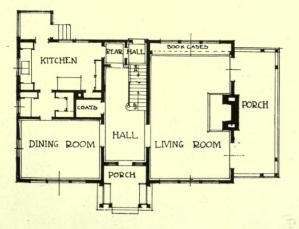
The principal rooms downstairs are not plastered, the logs showing in the natural on the inside. The chambers are plastered and the simple pine finish is stained.

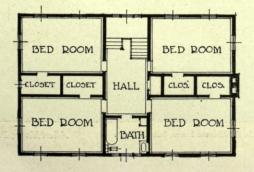
The main part of the exterior walls and the porches are all built of logs, the gables of boards and battens or slabs, making a very attractive lodge, quite in keeping with the vacation mood.





A Comely and Practical Colonial Type





(Courtesy of West Coast Lumbermen's Association)



The Peacock Doorway, in the Ehrman house, San Francisco.

Albert Herter, Deccrater.



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

An East Indian Setting

FITTING Swan Song for Madison Square Garden was the Ten Allies Pageant for the benefit of

the children of wounded soldiers, which has passed into dramatic and artistic history. In all the varied career of what many critics consider White's masterpiece a more brilliant assembly never packed the huge Auditorium. The old building will go to the auctioneer's block merrily some time next December—with added laurels.

It was a clever scheme to give India first place on the program thereby making possible an eastern setting. In these days when the ends of the earth are ransacked in order to provide the novel and bizarre, anything west of Suez would have seemed tame. And the fact that to a Chicagoan belongs the honor of designing the background merely shows that the event was national as well as international.

The beauties of exclusive Gotham and of that larger New York—the theatrical world —were superbly represented. Who can say that Miss Barrymore's "Belgium" was greater than Lady Colebrook's "Britannia," or that the "Italy" of Julia Opp surpassed the "Russia" of Madame Nazimova? And what of the haunting quality of Yvette Guilbert's "France?"

Wonderful France and pathetic Belgium! Gallant England and loyal Ireland! Each had its brief fifteen minutes and passed, as it came, into that vast No Man's Land which is the border country of pageantry. There were discrepancies, of course. Art would hardly be true to nature without them. The Far East is far away—and if Persia, Turkey and Arabia mixed a little at the borders of the Madison Square India few knew and none cared. The general effect was dazzling, and in one instant colored the mood of the entire audience.

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Mrs. John Carpenter's setting cleverly simulated the courtyard of a Rajah's palace, with mosiac walls and floor and arched entrance gates. The arch in minature was repeated around the amphitheater, lowering the walls and keeping the vast arena in scale with the performers. This important matter of scale, so often neglected in big auditoriums, deserves special mention here. It was a decided factor in the success of the Ten Allies Fete.

On the stroke of twelve the blackness of an Egyptian night settled over the audience. The arches faded out of sight and the blue and black canvas tiling lost itself in space. Then came wierd Oriental music and a blast of tom-toms which seemed to blend the Midway with the Pike, followed by a wonderful electrical scheme. Were there five hundred people in India, or a thousand? Who can say? It was a kaleid-



oscopic vision of beauty led by dancers and incense bearers and dominated by Ben Ali Haggin as the Rajah-resplendent in white and silver-and mounted on a coal black charger. There were twelve other mounts -equally in the picture, princesses in palanquins, princes walking under baldichinos, slaves, jugglers, fakirs. If not the Durbar it was perhaps as good an imitation as American will ever see, and its beauty no one will question. How could it be otherwise with such gifted people as Albert Herter, Robert Henri, Ben Ali Haggin, Everet Shinn, Mrs. Benjamin Guinness and Mrs. William Astor Chanlor back of it.

The dancing of Madame Roshanara was a delightful feature. This picuresque person is an English girl, married, it seems, to a native prince. She has studied the subject first hand and is the personification of grace.

After the brilliancy of India, the entrance of the solitary figure of Lady Colebrook as "Britannia" was intensely dramatic. Clad in silver chain mail, bearing a shield and pointing upward with her sword she seemed a heroic figure-half St. George, half Joan of Arc. Cheer after cheer rang through the building which deepened with the appearance of John Drew and sixty members of the Lambs and Players Clubs dressed as English soldiers.

Quickly following the Tommies came Elsie Janis leading the Irish section and then entered Scotland headed by William Faversham. The flutter of green pennants and the glint of Tartans made gay the scene while bagpipes drowned out "Tipperary." An impressive pause ! and a single figure walked slowly in to the strains of a solemn dirge. In all her stage career Ethel Barrymore has done nothing finer than her "Belgium." Clad in black robes

from head to feet-she was the embodiment of Tragedy, her hands outstretched in supplication, her face the epitome of pathos. After her trailed a little band of refugees -so pathetic, so hopeless-so real that one forgot that it was acting. Here indeed was the finest art of the pageant. The glitter and pomp seemed but tinsel and sawdust in comparison. The hush seemed almost vocal.

That the spell should not be too rudely broken, the Red Cross group followedan impressive band in the garb of nurses of the battlefield. Many well-known society girls chose this costume by preference and charming they were, in white habits marked with the scarlet cross.

A gayer note was struck by Alla Nazimova and her Russian peasants who trooped in to the stirring music of the national anthem of Russia.

And after Russia-Italy, next Portugal, then Japan, next France, and finally America. Theatrical stars and social luminaries of the first magnitude added beauty and brilliance. When will such a galaxy appear again?

Historic and romantic France passed in a clear cut frieze beginning with Guilbert in the costume of the Middle Ages and ending with a soldier of the Trenches. All the great ones of our French history days lived again-Kings and Queens, an Emperor and an Empress, saints and peasants, poets and painters. Miss Olive Oliver as St. Genevieve, won the prize for the most consistent costume-a difficult decision when saints and sinners were so beguiling.

High on a pedestal Mrs. Charles Dana Gibson as "Liberty" enlightening the world formed a fitting climax. The vast audience, ten thousand strong, joined in singing "The Star Spangled Banner," the rafters rang and the pageant came to a dramatic finish.



Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.



Javanese cotton hanging.

in which the brightest of modern colors are seen. A Swedish fibre is said to be the basis for some of the most successful of the painted rugs. Other charming specimens designed for outdoor rooms have a glazed surface which may be wiped with a damp cloth.

One porch recently furnished has such a rug in which the main color is King's blue with narrow border lines of black.

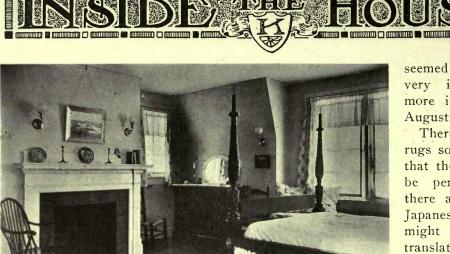
THE growing popularity of the outdoor living room has given impetus to the summer rug industry. The output seems bewildering when the old-time piazza is remembered with its occasional Navajo blanket and its ever present door mat with upstanding bristles. Rush, Reed. Raffias. Crex. grass, etc.-all related. yet sufficiently unlike in make and design to afford a wide choice-are found in many of the shops. While soft browns, tans and gray-greens prevail, many show a surface painted in oil and guaranteed to be washable-



Japanese fibre rug in chinese style.

Reed furniture of this same lustrous blue is padded with flat cretonne cushions in which black, blue, jade, green, primrose yellow and old rose are deftly blended. There are bird cages of blue willow with black tassels, and the afternoon tea china is yellow striped with black. It seems gay until another porch is reviewed in which the rug is of wool in black and gray blocks. For the willow furniture a paint

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Dining room in a modern colonial house-craft rug on the floor.

between orange and flame was chosen. The printed linen of gray background carries a pattern in long black leaves, small birds of brilliant flame color tipped with vivid green, and lilies in purple shading into blue. From a Japanese shop came a tea service of flame porcelain placed on trays of polished gray wicker bound in black. Two wall cages of black willow hold green parrots. By contrast another porch, where the color scheme consisted of silver gray and pale green. very inviting and more in tune with August days.

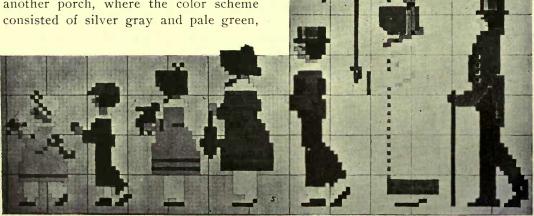
cool

and

There are new rugs so like the old that the novice will be perplexed, and there are delightful Japanese rugs which might be called translations from the Chinese. These are not reproductions and they are too clever to be called imitations. The range of color is extensive, including

tans, wood brown, leaf green, apricot, several yellows and a beautiful blue. Labor must still be cheap in the Land of the Rising Sun for most of the prices are very reasonable.

Craft rugs there are in many styles, the best following the old types as "rag," "braided" and "hooked-in," but in better



Cross stitchs designed by Laura Hills.

color combinations than the once favored "hit or miss" effects. For old-fashioned rooms, such as are shown in one of the illustrations, these quaint floor coverings are very desirable.

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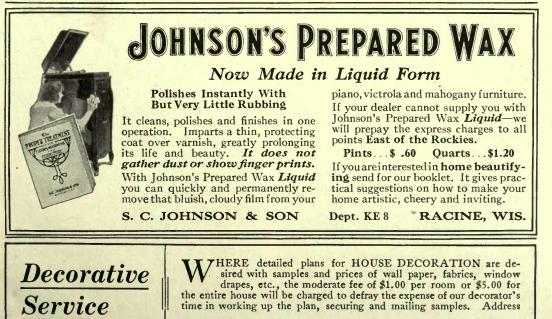
The rugs in one old house are all of the summer variety but have proved their wearing capacity. Aside from a braided specimen in front of the living room hearth there are two Russian peasant rugs, long and narrow, in a delightful grayish tan in which the "castle by the sea" motif is woven. As this pattern is in blocks, and not at all realistic it usually takes a good deal of study to separate the blue of the water, from the old red of castle, and from the blue-gray of the sky. This pattern, so those familiar with peasant craft say, is more than seven hundred years old. Nine years of constant wear have had little effect on these sturdy examples of Russian work.

In the dining room of this old dwelling, built on a lower level and reached by three steps, is a large Japanese reed rug in shades of bluish-green-the body being of a light tone deepening in a graduated border to a fairly dark color at the edge. The floor is painted brilliant yellow and on the walls is a paper in tones like the rug, known as the "Longfellow lattice"-copied from an old pattern in the Longfellow-Wadsworth house. The furniture, with the exception of the table which is long and narrow and of the darkest of walnut, is painted black with cane seats and backs. The color scheme of this room, nearly square with windows facing east and west, is quite different from the rest of the house, which is rather neutral in tone and depending on books, flowers, and chintz for the necessary dash of color.

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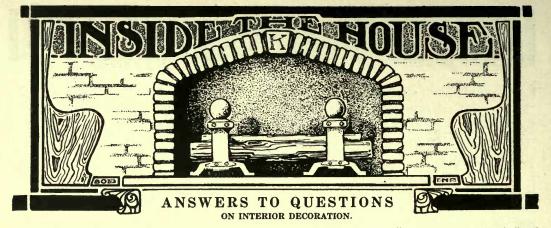
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Keith's Decorative Service,

Minneapolis, Minn.



Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

To Use With Mahogany.

W. S.—We are about doing over a room which will be furnished in antique mahogany. What would you suggest to use for ceiling beams, flooring and other woodwork?

Ans.—Woodwork in a room which will be furnished with antique mahogany, would preferably be of a mahogany finish to match with furniture, which with old mahogany will tend to a rich red brown.

The trim of the room should be mahogany if possible, though birch stained a Colonial dark red will match the mahogany and is often used. Much depends on the care with which the finish is done. For ceiling beams and floor, we should advise birch in any case—unless the work is very elaborate. False beams set on the ceiling are not so popular now as a few years ago, though they are still used. Mouldings or wood bands at the angles or on the ceiling are often used.

Two Bedrooms.

S. A. A.—I am going to repaper two bedrooms. I would appreciate any suggestions from your department. One bedroom is on the southeast, the other on the southwest. In one of the rooms I must use Birdseye maple dresser. Would like something to make rooms look as pretty and dainty as possible. Thought I should like one paper to be cream background, combined with pale pink sprays, or combined with pale green. Can you send me samples of wall paper on that order, with drapery samples that will be suitable?

Ans.—You letter has been read with interest and I take pleasure in sending you suggestions for two bedrooms together with samples.

For the room with birdseye maple my choice would be the narrow stripe in deep cream, with the cretonne in broad stripe of similar coloring with the "allover" small roses in deep rose. This cretonne is 35c a yard, thirty inches wide. Another suggestion for this same room is to use the rose cretonne with the narrow black and white stripe and for a wall tone either paper or paint of the enclosed shade of grayish green or greenish gray. For a couch cover the soft green sample fifty inches wide would go with either scheme. The narrow black stripe with dwarf roses is only twenty-three cents a yard, thirtyfour inches wide. With such inexpensive materials great care would have to be taken in laundering same. We also send a more expensive cretonne in Tudor rose pattern on a wide ground with a sample attached. This material would be interesting with pale green walls.

As a blue scheme we offer the two toned blue paper and the blue and white cretonne also the more expensive printed linen in blue, green, orange, black and white. This may be cut apart in stripes and used to border curtains of plain blue, green or white. Thus used it is not expensive. A couch cover of plain linen bordered with this would be effective.

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So smooth and sleek is a surface painted with Dutch Boy white-lead that it is hard to believe there are millions of tiny roots on the underside of the paint film, binding it to your buildings. Yet that is so. The corroded metal lead is ground so fine that, when mixed with pure linseed oil, it works as paint into the wood pores and dries there. Thus firmly anchored, by millions of tiny 'roots,'' the paint film is virtually a part of the wood itself. Such paint is weatherproof, waterproof, elastic, toughly resistant to wear and will not crack nor scale.



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We add a few other papers. If you wish additional samples the department will be glad to send them.

At any time I shall be happy to shop for you in any department of house furnishing.

In a Rented House.

L. A. B.—Will you kidly help me with suggestions for my living room colors and where to place the furniture I have.

It is a rented house, and therefore I can't repaper, but intend to paint the woodwork over, which is white-with mahogany door. This room is on the west of the hall. Fire place on west which I will use for open fires. There are four tall windows—two on the north, two on the south, one door that opens in hall.

The paper is a tan with gold floral design forming stripes, with white ceiling. I do not like the paper, though with the proper treatment I might make a comfortable room. I will have to buy a new rug. I also need book case for this room or book shelves.

I have a mahogany piano, library table, two rockers, one with brown leather seat, the other green, mahogany Morris chair of brown leather. One combination book case and desk also chair to match. This is a very handsome piece of wood, also good design, as they are not used much I do not know if I should use it. I have also one book case, about five feet wide and four feet high, and two comfortable foot stools to be re-covered.

I shall want two more chairs for this room. What would be best? Could I use an over-drape for windows and net curtains. Also what kind of a lamp shade. I have beautiful brass dog iron and tongs, etc. Any help on this would be appreciated. I am enclosing floor plan.

Would ivory painted furniture look well in dining room? I have six good low back chairs, also table and large serving table. The wood of this does not match but the designs are good. I must use this as I can't buy more now. Dining room is wainscoted 3 feet high and has four doors and two windows. What shall I do to make this room pretty. Walls are tinted green with cream ceiling. This opens in the den which has green walls.

Ans.—We appreciate the conditions which a rented home impose, particularly when the taste of the owner and the present occupant differ widely.

Inasmuch as the woodwork seems to be good in the living rom we would advise retaining the color scheme, particularly as it makes a good setting for your furniture.

We would suggest that you repeat the tan of the paper in a large rug and that at the windows you hang ecru net curtains with over draperies of cretonne having a tan background combined with old rose, green and perhaps a little soft blue.

Cover the foot stools with a tapestry in the same tones or in tan repp. If the latter, use cushions of the cretonne in the room to knit the color scheme together.

In buying new chairs purchase willow which can be secured in very attractive shapes. Either a light brown stain or a soft green stain or paint would be attractive with the other furnishings.

You are to be congratulated on your fireplace and fine old brass andirons. Nothing so contributes to the cheer of a room as an open fire.

By all means use the combination bookcase and desk. It is a little old fashioned, but all the better for that.

Your dining room may be made interesting by painting the furniture in a good harmonious tone. We do not advise white for this room, either a deep cream the color of the ceiling or black. The latter with the green walls would be effective. With black painted furniture use a black cretonne at the windows with a gay pattern in birds and flowers. Use a green rug, the color of the wall with a border in cream, tan and black. Paint is a great aid in harmonizing misfit furniture.

A New Home in Oklahoma.

E. M. S. For the last year I subscribed for two copies of your magazine under my maiden name, planning to build my

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home during that time, but was delayed until now. I ask your suggestions as to decoration and furnishings.

The house has a south frontage, very necessary in this climate and you will note there are many windows as we practically live out of doors for six months of the year.

The den, living room, dining room and reception hall will be finished in the natural oak finish and the fireplace will be constructed of brick of almost the same color.

I want all the other rooms enameled but have not decided on the color, though rather prefer ivory.

What are your suggestions regarding ivory finished doors in hall and bedrooms?

I would like one of the bedrooms to have touches of old blue and the other to have some yellow. With the exception of the fact that I do not like red or pink except in very dainty touches, I am open to any suggestion.

We have no furniture at all so are free to choose.

Your magazines have helped me greatly and I have recommended them to others.

Ans.—To combine two entirely different trims on one floor requires a well thought out color scheme. Inasmuch as the main rooms are to be finished in oak the effect will be of a house finished in that wood. Therefore the scheme should be planned accordingly. We give you a color guide and the scheme could be carried out in either paper, paint or other wall preparation: the hall and living room in putty, the dining room which opens from the living room by an arch the same color and the den in light golden Thus far the background is brown. rather quiet. At windows of the living room and dining room use net curtains next the glass, two shades lighter than the paper with over curtains in a figured material. Chintz, printed linen and cretonne are all good and may be purchased in inexpensive grades. The windows in the dining room should have curtains of

a gayer pattern than that of the living room. Yellow and green in combination with soft blue; or green, old rose and ivory. Almost any harmonious color effect would be interesting with the putty wall. The ground work in either case should be like the walls.

As the hall and living room are practically one, let the rugs here be plain, a tone darker than the walls. At the windows of the living room let the pattern be golden brown, putty and green with a green rug in the den and plain green curtains of "Sunfast" or similar material.

In the bedrooms use the colors you like —the soft blue in one and the yellow in the other. Figured walls would be interesting here if the walls of the other rooms are plain. If the trim in the bedrooms is ivory enamel, the doors must be enameled too. There are many attractive bedroom papers with which plain window curtains are effective and plain rugs.

Possibly you will not care to use plain rugs throughout. Good oriental rugs are always in good taste. The plain rugs are usually cheaper. Do not buy poor orientals, as the colors are harsh and discordant.

You are fortunate to be able to buy furniture throughout. For the main rooms we would suggest oak and cane of Jacobean style reproduced by large furniture makers. The cane is toned to match the frames, or if you prefer something more usual, mission furniture of modified design, not so heavy as the earlier types. Wicker pieces will suit your house admirably and give a chance for decorative cushions matching the curtains. Possibly you would like the Jacobean cane in your dining room. The dining chairs are very comfortable. A gate leg table of oak would suit the chairs.

Keep the bedrooms fresh and dainty using white or gray enameled furniture. Have the bedspreads match the curtains in color.

If we can help you by additional advice or by samples we shall be glad to do so.

We send good wishes for your success and pleasure in your new home.



Music Room Up Two Steps.

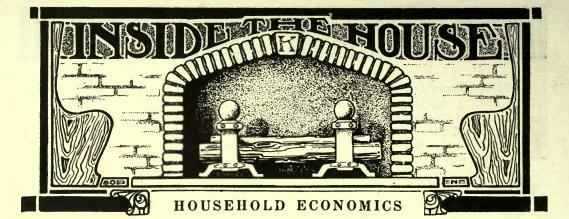
F. J. M.—I have taken your home building magazine since last October. I am about to build a seven-room bungalow all on one floor. Size 30x45, or about those dimensions. I would like some advice on living room, music room and dining room. Living room to be clear across front, with about 10 feet off south end for music room. Fireplace in north end of living room. Dining room on north, with east front. I've decided on my bedrooms, bath and kitchen, but want advice on the three front rooms. First, my woodwork is to be pine, stained and waxed like fumed oak. Floors oak and finished in natural light color. Furniture for three rooms of fumed oak. Have Wilton velvet rugs for living room and music room, which are olive green ground with brown, tan and cream and little black designs. I intend to paper. Please tell me what color paper for living and music rooms. I had thought of gray, or can you suggest something better? Then what color brick for my fireplace? I want a plain but pretty fireplace. Will have built-in bookcases on each side with leaded glass casement windows above. Would gray brick do for the fireplace? I have thought of old blue for dining room, with old blue and green rug. Large openings between living and music rooms; also between living room and dining room. Please suggest curtains and draperies for these rooms also.

Ans.—With the plan you have in mind, I think you will have an ideal arrangement of living room and music room if, instead of two rooms, the part of the large room intended for the music room be raised one or two steps and divided from the living room proper by a simple col-This music room could onnade effect. take up about one-fourth of the front of the house. If you do not care for the colonnade effect, a very simple low balustrade with spindles may extend out from each wall for two or three feet. I have seen this idea worked out many times with splendid results, the room having a spacious effect and offering better wall spaces. I fear that the gray paper would spoil the effect of the pine trim in the fumed oak stain, so would advise using a golden tan or a soft light brown paper throughout this entire room with the hangings in a soft rich brown. Also this would harmonize better with your rug. The dining room would be charming if done in dull soft blues, but, as this room faces north, I would suggest that you have plenty of golden tan and yellow in the wall paper, preferably a tapestry effect, with the hangings in mixed blue and gold. The blue dining room will offer a harmonious contrast to the tan or brown living room. For the fireplace I would use the regulation "rug faced" brick in soft brown, showing touches of red and green.



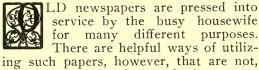


Advertisers in Keith's Magazine are reliable.



A Dozen Practical Ways of Using Old Newspapers

By Adeline Thayer Thomson



perhaps as commonly practiced. Hardwood Floors. Old newspapers

hardwood Floors. Old newspapers will prove a treasure, indeed, to the woman who does not boast ownership of a weighted-brush to polish her hardwood floors, or who does not have the strength, perhaps, to manipulate its weight if she does possess one. A rich, glossy sheen may be easily and quickly given waxed floors by rubbing them briskly with old newspapers. The bright polish obtained will not only prove surprisingly satisfactory but it will be found that the paper will remove an amazing amount of dirt, and stains, from the waxed surface.

Cut-flowers are readily arranged in any desired way by crowding pieces of paper closely in and about the stems of the plants to keep them in the exact position wished—such papers, of course, being concealed from sight within the vase or receptacle used. Often one finds the stems of flowers too stiff, or too short, for graceful arrangement, or, a bouquet, perhaps, too small to present a pleasing effect in the vase available. Papers used as advised will not only greatly aid in solving the problem of desired arrangement but with the aid of papers one may speedily and with little trouble accomplish charmingly graceful flower effects.

Moth. No safer, more economical way can be found to keep clothing, furs, etc., from the ravages of moths than to wrap such articles securely in newspapers overlapping the edges generously and pinning them snugly in place. The scent of printers' ink is unusually distasteful to these destructive insects, and goods however tempting, protected by newspapers, will be given a wide berth. Mothballs, camphor and other preservatives often used for the purpose, are not always on hand at the time of need, while newspapers are generally at one's command and will answer the purpose just as well.

Cleaning the inside of bottles, vinegar cruets, Mason jars, etc., at best, is usually a tedious job. This work may be greatly facilitated and the results accomplished will be very satisfactory, by filling the article to be cleaned three quarters full of hot, soapy water, to which are added torn bits of newspaper, the whole to be shaken vigorously until cleansed. The paper softened by the water not only cleans, but polishes the glass, and the pieces used are easily removed with rinsing.

Excellent skirt-hangers may be made from newspapers. Fold the inner waistband of the skirt (hooked together).



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G Owners always emphasize OAK FLOOR-ING in newspaper ads when they offer their homes for sale or for rent. They know OAK FLOORING increases the selling and renting values besides attracting a better class of buyers or renters.

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I There is a solid satisfaction and lasting pleasure in the substantial and dignified appearance of OAK FLOORING.

¶ 3-8 in. OAK FLOORING is very adaptable for covering old pine floors in old houses, as well as in new houses over cheap sub-floors.

¶ Nature has given OAK FLOORING that peculiar favor that appeals to the artistic as well as the demand for the distinctive and substantial.

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All reputable lumber dealers sell OAK FLOORING

Write for Booklet-"America's Best Flooring"

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No advertising is accepted for "Keith's" that you can not trust.



Roll the paper over and over tightly, tying it firmly together with string in the center and at both ends. The cord in the center should be looped, thus making a convenient catch for hanging up the skirt. A coat, or waist-hanger may be made in the same manner, the ends slightly bent to fit perfectly the arm size of the garment. Hangers made of old newspapers not only cost nothing, but they may be pressed into very acceptable service when traveling or visiting, as many closets are not provided with clothes-hangers.

The garbage pail, that inelegant but highly necessary commodity, may be kept sanitary and free from noxious odors by spreading out a newspaper of several thicknesses and placing it in the bottom of the pail, bringing it well up about the sides. With this plan adopted, garbage will not come in direct contact with the pail, and the paper emptied out with the garbage, leaves the pail clean.

"Dry" Cleaning. One may save a great amount of energy, and time, and bring about surprising results by giving linoleum covered floors in kitchen or bathroom, a "dry clean" at times with newspapers, instead of scrubbing it always with soap and water. The labor involved is not nearly as hard, and dust and dirt adhere easily to the paper.

The padded surface of the ironing board —a padding so necessary for good work —is effected well with papers. Open the papers wide, spreading them on the entire surface of the board, drawing them over evenly and smoothly and tacking them firmly underneath into place; the entire surface then to be covered with the usual outer muslin cloth. As many layers of papers should be used, of course, as will furnish the thickness desired.

Kitchen Range. Nothing excels newspapers for keeping the kitchen range clean, and bright. They are far better than cloths; the paper being not only soft enough to gather and hold the unavoidable accumulation of grease and dirt, but the paper polishes the metal nicely.

Drying Prints. The amateur photographer will find nothing better for the quick drying of prints than newspapers. The water is as quickly absorbed by newspapers as by the usual blotter method, photographs being "dried out" and ready for mounting in short order at no expense.

A Non-Conductor. It is a well known law that paper is a poor conductor of heat. On this account newspapers are invaluable used as undercoverings for mattresses for outdoor sleeping, since they aid in preventing the heat of the body from escaping. The paper should cover the springs entirely, the edges widely overlapping, and be used in several thicknesses—the more the better.

The same principle applies to keeping food hot. It is often desired to carry some cooked dainty to a neighbor, or invalid friend living at some distance, or perhaps food, cooked at home is desired hot for a church supper, etc. The problem of keeping such food at steaming heat is solved again by the ever useful newspaper if such food is encased in several thicknesses of paper.

"BUILDING THE HOUSE" tells you how to build and insures good results. PRICE ONE DOLLAR, POSTAGE FOUR CENTS M. L. KEITH, 742 Metropolitan Bank Building, MINNEAPOLIS, MINN.

One Dollar for a Practical Suggestion

H AVE you achieved some really new and practical solution of one of the old. or one of the new household or garden problems? If so, Keith's readers would like to hear about it, and we will pay one dollar for each suggestion accepted as satisfactory for publication. Let these suggestions cover items of general helpfulness, or of novel or attractive effects. They must not exceed 300 words in length, and must be written on one side of the paper only. In order to insure their being practical send a photograph which shows how the suggestion actually worked for yourself, if it is something which can be photographed. If you want the photograph returned in case it is not used, send with return postage to "DOLLAR SUGGESTIONS," KEITH'S MAGAZINE.



IN planning the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

Fourth revised edition, just off the press, is beautifully printed on enameled paper and has embossed paper cover. 112 pages. Size $7\frac{1}{2} \times 10$.

Contents:

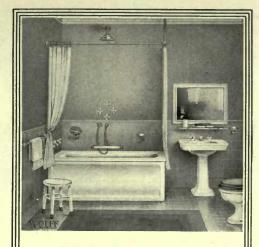
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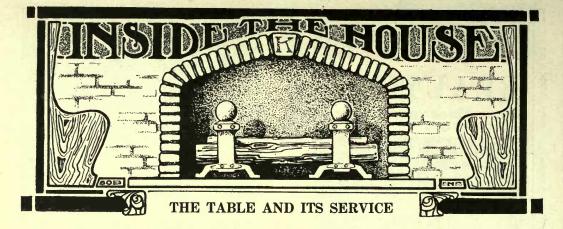
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CHICAGO

Send for Booklet



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Foods-In War Time



O important is the situation with regard to food stuffs, in this third year of the war, that the Food Administration of this country

deems it wise to pledge the individual cooperation of the women who do the buying of foods for the households of the nation, and has formulated what might be called the proposed

Seven Conservation Measures:

1. The use of local foodstuffs, to the maximum, to save transportation.

2. The use of perishable foods, to save staple foods.

3. The elimination of waste, in all possible ways.

4. The conservation of wheat.

5. The conservation of meats, fats, sugars.

6. The greater use of milk, and greater milk production.

7. Adequate feeding for health,—a better understanding of its principles.

Particular stress is laid by the Food Administration, on our saving of wheat for the greater needs of the Allies. It is hard for us to realize a situation where there is not enough white bread possible to the world to keep it from starvation. We are asked to use a little of some other grain,—rye, corn meal, oat meal, rice, in every loaf of bread, perhaps twenty or twenty-five per cent, and thus save millions of bushels of wheat to send to the Allies. With the Argentine corp largely a failure, United States and Canada are the main dependence for the supply of wheat. From Mr. Hoover's figures it is plain that Americans must consume less in wheat stuffs than is their usual habit.

A greatly increased acreage of garden vegetables has been planted this year. Under usual conditions, about 14 per cent of our foodstuffs are supplied in the form of vegetables, while 40 per cent are provided by bread and other cereal products. We should double our use of vegetables, and save our wheat.

The facts of our low meat production are well known. Nevertheless it will be necessary for us to share some even of what we have with the armies of Europe. To do this we must substitute other foods, chiefly fish, milk, cheese, peas, beans, nuts. It is hoped to stimulate an increase in egg production large enough to materially assist in the saving of meat.

The case for fats is not so much one of world shortage as difficulties in transportation. The vegetable oils usually shipped from Africa and the Orient are only slightly available. It is also necessary for us to share with the Allies the fats which are available. For this purpose the board of nutrition experts are asking us to cut down our habitual use about one-third. They ask that we maintain our table use of butter,—in recognition of the value of butter in growth,—but that we use no butter in cooking, using other forms of fat instead; to save and clarify

INSIDE THE HOUSE

all left-over fats from foods, and use these in cooking.

In sugar we are asked to omit candies, icings from cakes, and the sugar from soft drinks, hoping thus to save 25 per cent in the use of sugar without materially affecting our general food habits. Fruits may be canned without sugar, which can be added and jelly made later in the season, with some advantages.

Milk is not sufficiently recognized as a relatively cheap food. At ten cents a quart it is a cheap source of protein and a reasonably cheap source of energy.

The recommendations for a reduced use of various foods are made by a committee of our best nutrition experts, who have made them upon an understanding of what is actually an adequate diet; an acceptance of the actual "energy requirement" of the body; an understanding that about one-tenth the total food requirement needs to come from protein; that a varied diet is the safe way in which to provide for the mineral salts required; that milk, vegetables, and fruit are necessary to provide certain substances which are essential to growth.

(The notes on the Conservation Measures and the rules for War Breads are given by courtesy of Miss Josephine T. Berry of the Minnesota college of agriculture and member of Herbert C. Hoover's advisory food conservation committee of five.—Editor's note.)

War Breads.

Save the Wheat; Use Corn and Oats.

Make it a principle to increase the use of cornmeal to the maximum. Pound for pound, the energy value of cornmeal is equivalent to that of wheat flour. The cost is less. Every time cornmeal is used where before we used wheat products, we are helping to win the war. Have cornmeal mush for breakfast; add figs, dates, or other fruit, for variety; serve fried mush; use cornmeal in quick breads, yeast breads, desserts. The breads are light, palatable, and capable of frequent use in the weekly dietary. Likewise, make the maximum use of oatmeal or rolled oats. Omit all wheat breakfast cereals.

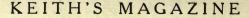
HORNET MANTELS

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Cornmeal yeast bread, satisfactory in texture and mild in flavor, can be made using 20 per cent by measure or 25 per cent by weight of total cereal of cornmeal. The flavor of white cornmeal is less distinctive and affects the color of the usual wheat loaf less than the yellow meal. While these breads may be made combining dry cornmeal with the flour, the product is more satisfactory if the meal is first cooked as for cornmeal mush. The manipulation is the same as for wheat bread, except that it is a little more difficult to knead.

Cornmeal Yeast Bread.

1 Loaf of Bread.

 $1\frac{1}{4}$ cup of milk and water, or water, (10 oz.)

2 tablespoons sugar, (1 oz.)

1 tablespoon fat, $(\frac{1}{2} \text{ oz.})$

2 teaspoons salt, $(\frac{1}{2} \text{ oz.})$

 $\frac{2}{3}$ cup cornmeal, ($\frac{3}{3}$ oz.)

 $2\frac{1}{3}$ cups flour, $(9\frac{1}{3}$ oz.)

 $\frac{1}{4}$ cake compressed yeast, ($\frac{1}{3}$ oz.)

 $\frac{1}{4}$ cup warm water, (2 oz.)

(More yeast may be used if desired.)

Add sugar, fat, and salt to liquid, and bring to boiling point. Add cornmeal slowly, stirring constantly until all is added. Remove from fire, cool mixture, and add compressed yeast softened in $\frac{1}{4}$ cup warm water. Add $2\frac{1}{3}$ cups flour and knead. Let rise until about double its bulk, knead again, and put in the pan. When light, bake in a moderate oven for at least an hour.

In mixing the dough, the flour and commeal are to be used as separate ingredients, because the commeal must be scalded or a grainy bread results. When the commeal mixture is removed from the stove, the housewife will doubt her ability to add the amount of flour called for. The flour will work in, as required, but a stiffer, stickier dough than that to which she is accustomed will result.

Oatmeal Yeast Bread.

Oatmeal yeast bread is coarser than wheat bread, and is not unlike Graham bread in appearance. It has a sweet nutty flavor, much liked by persons who care for whole wheat or dark breads. "Some care is necessary in combining the rolled oats with the mixture. The most satisfactory method has been found to be that of pouring the hot liquid over the rolled oats, allowing the mixture to cool rather slowly (about half an hour). Longer soaking of the oats produces a somewhat more moist bread. The manipulation is the same as for wheat bread. The dough is a bit softer. Baking requires about 45 minutes.

Oatmeal Yeast Bread.

1 cup milk and water, or water, (8 oz.)

l teaspoon salt, $(\frac{1}{4} \text{ oz.})$

1 tablespoon fat, $(\frac{1}{2} \text{ oz.})$

2 tablespoons sugar, (1 oz.)

1 cup rolled oats, $(2\frac{3}{4} \text{ oz.})$ $2\frac{1}{2}$ cups wheat flour, (10 oz.)

 $\frac{1}{2}$ cake compressed yeast, ($\frac{1}{4}$ oz.)

V cure compressed yeast, (74 (

¹/₄ cup warm water, (2 oz.)

Scald liquid and pour it over the rolled oats, sugar, salt, and fat. Let stand until lukewarm, (about half an hour). Add yeast softened in warm water. Add flour and knead. Let rise until double its bulk. Knead again and place in pan. When light bake in a moderate oven from 45 to 90 minutes.

Rice.

There is much to be learned about the cooking of rice, especially by the northern housewife. The manner of its use is legion, and it is delicious in each. It will serve as breakfast cereal, vegetable, and dessert, and in each form will conserve the wheat. Rice, combined with wheat flour makes especially delicious muffins and yeast bread. But, first, "in the north," generally speaking, we must learn to boil rice, for properly boiled rice is absolutely essential for the making of good rice bread. The orientals and our own southern cooks sprinkle washed rice into boiling water, letting the grains pass in slowly enough not to check the boiling. Use plenty of water-this is most important-taking a gallon to a cup of rice. The water is kept boiling briskly for about twenty minutes, or until the kernels are tender. Then it is drained in a colander or strainer. Set on the back of the stove,

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or put in a slightly warm oven or in a pan over hot water, to dry off a bit. There results a fluffy mass of large, plump, grains, each perfectly distinct in itself, instead of the gummy mush so often served as boiled rice.

The rice yeast bread is very white in color, is more moist than wheat bread, and keeps moist longer. It is handled in much the same manner as wheat bread. The first dough, however, is much stiffer, and after once rising the light dough is so soft that it cannot be kneaded with the hands. It should be well stirred, with a strong spoon, and placed in the pans, looking much like a stiff drop batter. After baking, the upper crust is less smooth than that of our familiar wheat flour loaf.

Rice Yeast Bread.

Note: These amounts make two large or three small loaves of bread.

 $\frac{1}{2}$ cup milk and water, or water, (4 oz.) 4 tablespoons sugar, (2 oz.)

4 tablespoons fat, (2 oz.)

 $1\frac{1}{2}$ teaspoons salt, ($\frac{3}{8}$ oz.)

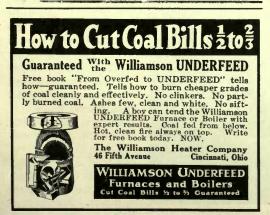
7 cups of boiled rice.

8 cups flour, (32 oz.)

 $\frac{1}{2}$ cake compressed yeast, ($\frac{1}{4}$ oz.)

 $\frac{1}{4}$ cup warm water, (2 oz.)

Scald liquid, if milk is used. Pour over fat, sugar, and salt. Cool and add yeast, moistened in ¼ cup warm water. Add rice and flour, and knead. After second rising bake 45 minutes.



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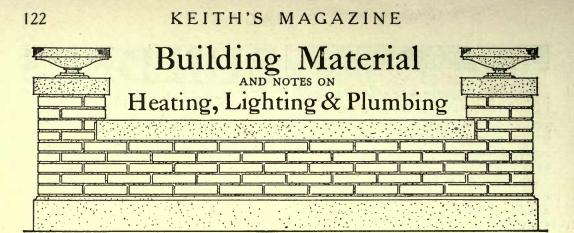
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A New Room in the House

J. M. Dunworth

HERE'S an old Spanish health maxim which reads: "Don't stop the way of a current of air." The application of that maxim is need-

ed today if possible more than ever before. In the days gone by there seemed to be more foot space out-of-doors. Folks spent a great deal more time in the open then than now.

Business did not keep our grandfathers confined in an office all day long. Much of their time was spent out in the fresh air. It wasn't that they deliberately planned to be in the open. It was instinct. The houses then, were built on a different scale. The rooms were large. Great high ceilings, long, wide halls and doors that were open almost continually, except in the severest weather, allowed fresh air to circulate freely. They tell us people were healthier; annoying colds, grippe and things of that sort were almost unknown. But today the ever increasing population makes more compact



Sleep and live in the open as much as you can and you will laugh at colds.

living necessary. Massive buildings shelter a number of families. Narrow halls, small rooms, some opening on courts, shut out the sunlight and fresh air. Houses are built tight against one another. One can walk miles through some of the large cities without seeing a foot of space between residences.

Men go from their homes in the morning in a closed street car to a closed office and back to their closed homes again at night. For recreation, a closed thea-

tre or restaurant is usually chosen. Only on Sunday does a man seek the open. A human being needs air more than he needs water. One can go several days without water but try to go five minutes without air and see what happens. Even though he realizes that air is absolutely necessary to life, the average man goes along day after day taking stale, thin air into his system, expecting it to serve as well as fresh, pure air direct from the great outdoors.

Fresh air is a preventive. It helps the body to throw off bacteria and strengthens the tissues and livens the brain. Those whose business keeps them indoors during the day have only one way to fill their lungs with fresh, pure ozone. And that way is to sleep as near out doors as possible.

The thing to do is to sleep on a porch or in a sun room.

Fit your porch or sun-space with screens. Cover the entire opening. If you do not have a porch or sun-parlor you have screens. Open wide every window and door leading outside them when you retire and you have a new room in your house. Screens not only keep out mosquitos, flies and other insects, but they take a great deal of dirt out of the air just the same as the hair in your nostrils stops particles of dust. A screen of bright, smooth finish gives a surface to which dirt does not readily adhere. Keep vour screens clean and in good condition from year to year.

Start during the summer, when it's warm, to sleep out-of-doors and continue it through the winter. It means health. Open up everything as wide as possible and add covers as the nights grow colder. Never be uncomfortably cool and you won't take cold. Sleep as near in the open as you can and you'll laugh at draughts and you'll be able to stand the cold better when it comes. Lots of pure water and sound sleep in the fresh air would make many strong men out of weaklings, and add years to the span of life.

Why Wall Surfaces Turn Black.

Why do wall surfaces and ceiling surfaces near radiators, chimneys, steampipes, and other heat-radiating objects turn black? is a question that is frequently asked.



Edwards 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.

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.

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Patent Pending

Caldwell Mfg. Co. 6 Jones St., Rochester, N. Y. These dark spots appear on walls and ceilings and darken so gradually that they are not noticed until attention is called to them, and then what appears to be a black surface dust is discovered to have been deposited over a certain area. These spots are difficult to clean, rubbing only serving to produce a stain. The cause of such spots is difficult to discover, because the peculiar dust of which the spots are formed is not elsewhere present.

A very clear scientific explanation of the cause of these deposits is given by the Wall Paper News. They are found only where gas is burned for heating, cooking, or illuminating purposes. In the manufacture of gas from coal, the sulphur of the coal is retained in the gas, and when this gas is burned, sulphuric acid is liberated in the atmosphere in greater or lesser quantities, according to the character of the gas and the amount burned.

This free sulphuric acid adheres to surrounding walls, fabrics, ceilings, etc., and it has the propensity of turning black wherever exposed to heat. Therefore, that which is deposited near a radiator, chimney, or other warm surface, turns black, and successive deposits deepen the discoloration until it becomes conspicuous.

So long as coal gas is used in the home there will be a certain amount of this free sulphuric acid liberated, and these dark spots will continue to mar our rooms. The explanation as to how these spots are caused, however, may assist in some measure in preventing their recurrence in newly decorated rooms.

Should Not Affect Price?

"We like the plan of cottage though we changed it once or twice—just some minor alterations that should not affect the price. Where it shows a single window, wife suggests a double door, and she'd like the kitchen better if it had a maple floor. The parlor should be longer, with a fireplace to the east, and one more double window on the other wall, at least. The woodwork in the dining room should be of better grade, and on the south my daughters want a dormer window made. They also think the sleeping porch a little bit too small, and wish a full-length mirror built in every bedroom wall. The porches must be widened out, with larger pillars there; and then, in place of yellow pine, we want an oaken stair. The side walls should be raised a bit—at least a foot or so; and substitute for narrow eaves the modern bungalow. With these few changes, we all think the plan is very nice—just some minor alerations that should not affect the price!"

A Startling Suggestion.

A novel idea in wall paper was proposed recently by Prof. Montreville M. Wood in a talk before the Union League Club, Chicago. Prof. Wood declared that a radioactive coating may be applied to wall coverings which will furnish sufficient light in a room to enable one to read without aid from other light sources.

A New Non-Corrosive Alloy.

A new alloy that is claimed to be entirely non-corrosive has been recently patented by an American inventor, according to the Canadian Engineer. It consists of 82 parts of aluminum, by weight, 12 parts copper, 5 parts cadmium and one part silver mixed in a special manner. This alloy is said to be much lighter than copper or bronze, of good strength and to run well in casting.

Such a metal that will not corrode on exposure to moisture is very desirable for many purposes; for making faucets and other water fixtures, and fittings for yachts. Many alloys have been devised for this purpose, as no simple metal appears to meet the requirements satisfactorily.

The Kind of Floors He Wanted.

"Would you like the floors in mosaic?" asked the architect.

The Springfield man looked dubious.

"Would you like the floor in mosaic patterns?"

"I don't know so much about that," he finally said. "I ain't got any prejudice against Moses as a man, and maybe he knew a lot about the law. As regards laying floors, though, I kinder think I'd rather have them unsectarian."—Harper's Weekly.



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In a home so equipped, father and mother may entertain callers in the living room without disturbing or being disturbed by children studying in the library, nor the maid at work in the dining-room and kitchen.

On occasion the entire house may be thrown open as one unit by sliding the doors out of the way and out of sight into the wall pockets.

Write for folder, "Richards-Wilcox House Door Hangers" Sold by the Best Hardware Trade Everywhere

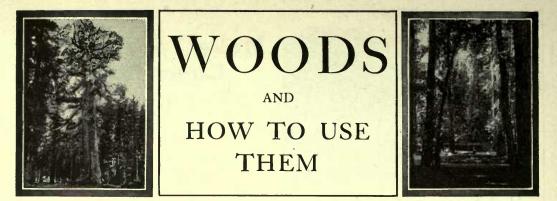


AURORA, ILLINOIS, U.S.A. Richards-Wilcox Canadian Co., Ltd., London, Ont. "A hanger for any door that slides"

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EDITOR'S NOTE. — When the building idea takes possession of you—and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH's staff of wood experts. This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords. The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

Birch and Its Rights.



ERHAPS few woods have a wider range of usefulness than birch. Given any desired tone in the finish it makes a beautiful wood-

work for any part of the house, whether for a simple inexpensive home or a large country house, whether it is stained and finished or whether it is enameled. It may be given a tone which will make it pleasing with any type of furniture generally used. So largely has it been used with mahogany, however, and so successfully has it been stained to match the mahogany that the terms "mahoganized birch" and "birch-mahogany" have sprung up. It certainly is not fair to so excellent a wood as birch to thus seem to put the odium of imitation upon it, simply because it makes a good substitute and carries itself so well in its co-operation with the more expensive wood. It is suggested that we dignify this use of birch with mahogany, since it is so closely associated in our minds with Colonial types, by calling this treatment "Colonial dark red birch," or specify that it be stained to match the mahogany used with it, rather than calling it an imitation mahogany. We will find greater pleasure in our woods when we are honest with them, even in thought. As we give more thought to the specific woods used in the special conditions, they will repay us with better service, and a greater satisfaction in their use.

National Forests to Supply Wood for Fuel.

To meet any possible coal shortage in the West next winter, more extensive use of fuel wood from the National Forests is urged by the Government's foresters, who are advising both ranchers and town dwellers to be forehanded in making arrangements for the supply of their fuel needs.

The supervisors of the 153 national forests will be instructed to afford all possible facilities to local residents wishing to obtain cordwood, which settlers may obtain free for their home use and which is sold at low rates to persons cutting and hauling in order to sell to others. Since the material thus utilized is mainly dead timber, its removal, it is explained, helps clear up the forest and thus lessens the fire menace. Timber which is insect-infested, or old and deteriorating, or otherwise damaged or undesirable from the forester's standpoint, is also disposed of for fuel purposes. The demand in the next twelve months is expected to break all records.

When dead and down timber or other timber which is deteriorating is not available for cordwood, the cutting of mature living trees will be permitted to the extent necessary to meet demands.

While wood as a fuel is less economical to handle and use than coal, it is in many parts of the west cheaper, even at normal price levels. Stoves and furnaces,

however, equipped to burn coal usually require different grates to permit of the substitution to advantage, and this is pointed out as one reason why the householder will do well to look ahead and decide beforehand how he will keep warm and what he will feed the kitchen stove next winter.

Where saw mills are operating in the woods at points within hauling distance of towns, there is a chance to obtain slabs and other material that ordinarily goes to waste. Since green or wet wood is both poorer fuel and heavier to transport and handle than dry, mill waste as it comes from the saw is relatively undesirable for immediate use. For this reason, as well as in order to be sure of a supply, the Government foresters suggest that a good-sized woodpile in the backyard or under cover before winter sets in may be found a thrifty provision. -U, S. Department of Agriculture.

The Forests of France.

The German forest system has not only immensely enriched the state economically, it has also strengthened it in national defense. None know the forests' value in both these respects better than do the Germans, and, when war came, what they preciously conserved and used at home they immediately began to destroy in the occupied lands of their enemies. They did not stop with forest trees; in the recently evacuated territory they have even been destroying the cherry and apple trees, in violation of the injunction observed even by warriors of primitive times and recorded (as Dr. Richard Harlan reminds us in a letter to the New York Tribune) in Deuteronomy xx, 19, 20 for the ancient warriors of Israel.

The destruction of fruit trees has no military purpose. Its one object can only be to make France weaker, not for war, but after war. The destruction of timber, on the other hand, has a military purpose, and can be justified under the law of warfare.

As early as December, 1914, the French government created a Miltary Forest Commission to act in connection with the General Staff "to prepare by all available means the woods supplies for the army," for the construction of trenches, shelters, barracks, etc. It also estab-



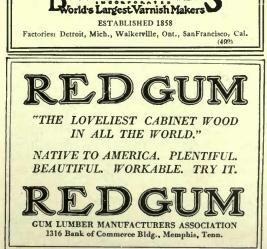
THE most interesting discussion that can come up in the family circle is about "our house," as it will look when ready for occupancy. An important part of the plan is the interior trim—that part of the house you live with. In solid woodwork, and veneered doors and wall panels "Beautiful **birch**" is the solution of the interior trim problem—Beautiful "satiny" sheen, due to close grain admits of Breat variety of finishes including white enamel. Hard, marproof-economical-**birch** is a universal favorite with home builders-You'll say so, too—

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of our new book on interior finishing treatments with colored illustrations will be mailed you for the asking. It is of special value to home builders and house owners.



lished temporary saw mills just in the rear of the fighting zones.

The British Commission, when in Washington, called attention to the increasing need of saw mill units behind the lines, and appealed for American aid in utilizing the standing timber.

The American Forestry Association took up this matter and made arrangements looking toward sending ten saw mill units abroad. Each saw mill unit is to have thirty-six men. These men are ready to sail, we are told, as soon as transportation can be provided, as is also the machinery, with the extra equipment and apparatus which may be needed. This is cited as a case of prompt response to a war call.

Shingle Tests For Nailing.

The College of Forestry of the University of Washington has established, in co-operation with the Shingle Branch of the West Coast Lumbermen's Association, a long-time test on western red cedar shingles to determine the effect upon the durability of roofs of different kinds of shingle nails. The test area consists of the roof of the storage shed of the new experimental North Coast dry kiln, recently erected on the campus. The test has been arranged in the following manner: Two thousand shingles were fastened with lath nails, which represents ordinary poor practice in many localities; three thousand shingles were fastened with cut copper nails, three thousand were fastened with zinc clad shingle nails, three thousand with zinc clad felt nails and four thousand with ordinary wire shingle nails. The roof was shingled with the various kinds of nails in sections running from the eaves to the ridge pole so that the final results would be readily distinguishable. Clear vertical grain shingles were used.

No result from this experiment can be expected for about ten or twelve years, as even the most improperly constructed shingle roof will remain in good condition for that length of time. The effect of the copper and zinc-clad fastening should, however, become very apparent after this time.

Work In Wood.

The supply of wood enters into many phases of our living necessities. In New York state alone 200,000 people are employed in turning out an annual product of nearly \$400,000,000 in wood manufactures. Striking at the basis of this great industry, hundreds of human lives, and millions of dollars worth of property are destroyed each year by forest fires, which might be prevented with proper care. The burning of saw mills, lumber yards, furniture and woodenware factories and stores is too frequent to call for special comment. Similar surveys might be made in other fields of staples included in the cost of living.

Portable Telephones.

Forest rangers are carrying portable telephones of a type which have been invented by a forest officer of Missoula, Montana. These instruments are made of aluminum and weigh about two and a half pounds. They have been added to the equipment of the patrolmen of some of the national forests.

It is said that a field man equipped with this telephone, a few yards of light emergency wire, and a short piece of heavy wire to make the ground connection, can cut in anywhere along the more than 20,000 miles of forest service lines and get in touch with the headquarters of a supervisor or district ranger.

Forest officers say that these portable phones are especially valuable in reporting fires and other emergencies with the least possible delay, and also in sending instructions to field men and keeping district rangers informed as to the progress of work going on in the field. They will supplement the regular telephone sets installed at lookout points, ranger stations and at convenient intervals along forest service roads and trails.

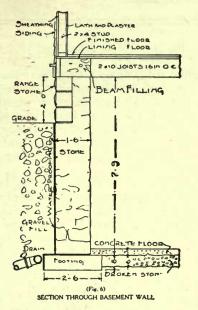
M Feet of Lumber.

The "Funny Man" does occasionally tell true stories. Here is a letter received by a western lumber company.

Dear Gentlemen: In your letter to me quoting prices on lumber, let me know what you mean by M feet of lumber. Does that mean one mile of lumber? And do you lay it out and measure how much is a mile of lumber? You know the place I want to build should not reach a mile, but should be only a little house for chickens. Be sure to let me know right away how much is in a mile of lumber.

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A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and 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. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

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CONSIDER NOW

the heating of your house next winter. Present prices are lower than they will be in the fall, and orders entered now are pretty certain to be filled. But, later on, there will be a shortage in the supply of heaters, for there is already a shortage of steel and other materials, and mechanics are being drawn away for war purposes so that the shortage of labor will be increased.

We have at present a good supply of Hess Steel Furnaces, both of the PIPELESS and the SEPARATE-PIPE-AND-REGISTER kind. The supply, however, is not equal to the demand of a normal year, and, thus far this year, the sales exceed those of any previous year.

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What Is YOUR Building Problem?

Put Your Home-Building Problems Up to Us, and We Will Give Them Careful Study and Reply Either Through These Columns Or by Mail When Stamp Is Enclosed.

Repairing Damage by Floods.

L. O.—I built a house three years ago and finished it with wall board and pine casings stained a dark brown. In August we had a flood with water five feet high in this house and again in January we had another with four feet of water in the house. This lot where the house stands had only been under water once before in the memory of our oldest citizens and

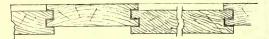


Wainscot the walls with 3 and 8 inch boards set as shown in cut.

these floods were a great surprise to us so we believe that we will not have any more like them again. Of course the wall board is ruined as it is badly stained and warped and loosened in many places.

Now what I want to know is how you would advise me fixing this house. In this country there are very few plastered houses as they are not necessary for warmth in winter.

Of course I want to fix it in the cheapest and best way. Have thought of making paneled walls up to the height of about five feet. Should we have another flood, which would stand water better, plaster or the paneling? Would it be necessary to have all the casings removed in order to panel the walls? Do they ever panel a wall making it flush with the window and door casings?



Grooved boards set to form panels.

The floors were stained and varnished and of course are badly spotted and stained. What would you advise for them? I have a living room, dining room and two bedrooms on the first floor besides the kitchen which was not hurt much as the walls of that were heavier board and were painted and the water did not warp them badly.

Ans.—Where there is any possibility of recurring floods, a wood construction and finish would seem the best to use. While standing in water is not good for wood, it ruins plaster and most other materials.

We would suggest paneling the walls to the heads of the windows and doors with a wood strip carried in line with the head casings. You could use your wall board above that for a frieze and prob-



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Chicago

ably be safe. It is quite customary to use tongued and grooved boards, 8 inches and 3 inches in width to make paneling as shown on the accompanying sketch. This brings the casings in line with the 3 inch boards and makes it part of the paneling as shown in the photograph.

We are afraid you will need to have the floors entirely refinished, first taking off the old varnish.

The Rear Porch.

W. W.—I am enclosing a picture of our new house, and wish to ask about a porch for the side door—the door opens into an enclosed porch, but it is very inconvenient to have the screen door open on the steps, as it has to and I'd like to have a small porch built there-without tearing up the roof of the house. Can you suggest a roof for the porch that would look all right and yet not interfere with the roof on the house? Would a pergola be suitable?—it is the door to the kitchen. If so, can you tell how it should be fixed overhead, and good vines to use? The door is on the south. You see the eaves come down so low that they interfere with the porch roof.

Ans.—Your chief difficulty seems to lie in the narrow step at the door. So why not simply move out the steps and build a fair sized platform—or uncovered porch large enough for the screen door to open easily but not large enough to interfere with basement windows. You might build a seat at either end, as you must have something on account of its height from the grade. A pergola over this will make it very attractive. Set square posts of suitable size at the outer edge of the platform to carry the supporting beam for pergola cross beams. Let these rest above the head casing of the windows, giving support against the house. Paint the pergola white like the trim of the house.

As to the vines you may use the choice is very wide. An article "Concerning Vines—their use and varieties" was published in September, 1916, giving classified list of vines and where and how they grow. Nothing, however, is more beautiful and satisfactory than Wistaria. Climbing and rambler roses would grow over your south porch—or the common wild clematis, with its feathery white seed clusters in the fall, would make a pleasant shade.

Enamel Tints in Decoration.

"Radical" best describes the recent upheaval in the popular idea of color propriety. Blues, Greens, Yellows, Reds, Black and White, riot together in combinations hitherto undreamed of. Were it not for the greater range and finer tonal quality that have been attained in colors themselves, and the really clever way in which the most startling schemes are handled, one might almost believe that there had been a return to the unrestraint of early barbarism.

There's a bit of truth in every excess, however, and color has a more legitimate place in interior decoration and architecture than convention has allowed it in decades past. There is more of charm than of shock, for example, in a breakfast room whose trim is finished with a light ivory enamel—walls paneled over with leaf green finished lattice, or table and chairs enameled in chinese blue, appropriately striped with hair-line tracing of black—cool and restful and very "different." Some of the new tints offer unlimited possibilities in the way of furniture decoration.

To Bore Holes in Plate Glass.

It is often desirable to bore a hole through plate glass to be used as a shelf or for some other purpose in the shop, says an exchange. This has often seemed impossible to the trimmer or merchant in the smaller towns where there is no one specially prepared to do the work. Here is a simple and easy way to do it: Get a small three-cornered file and grind the points from one corner and bias from the other and set the file in a common brace for boring wood. Lay the glass you wish holes bored in on a smooth surface covered with a blanket and start the hole. You will soon make a slight impression on the glass. Around this place a disk of putty; fill this with water. This will prevent too great heating from the friction. Resume the boring, and in a few seconds you will have as clean a hole as though you were boring in wood. Use a little care, and don't apply too much pressure while you are boring, as you are liable to crack the glass.—Building Guide.



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You will also find many valuable suggestions for residences of moderate-cost type and ideas which will add to the convenience and comfort of your new home.

Consult the advertising pages before buying—you will find them a veritable market place for material.

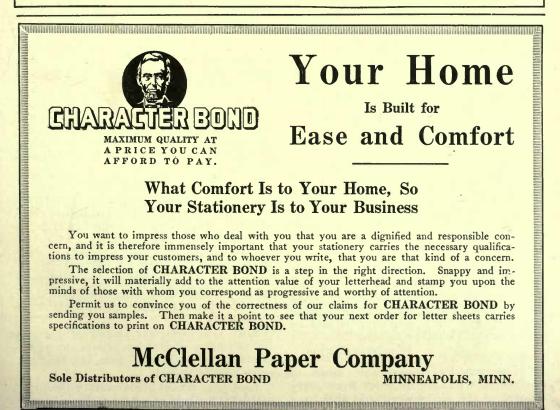
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SPLINTERS AND SHAVINGS

Shall We Let Some Men Starve to Make Others Drunk?



HE liquor traffic is recklessly absorbing food and toil and life at a time when these are sorely needed to preserve the nation.

"We are credibly informed by trained economists that last year the manufacture of liquor consumed 7,000,000,000 pounds of foodstuffs for the production of malt and distilled liquors—enough food to supply the energy requirements of 7,000,000 men for a year.

"It is inconceivable that liquor should be permited to starve some men by making others drunk.

"The Brewer's Year Book boldly declares that it requires the toil of 75,000 farmers for six months to furnish these foodstuffs. If the labor of these men could be diverted so that the grain and other food products raised for the liquor industry were to be used for food instead of liquor it would relieve the situation produced by the present scarcity of food.

"There are employed in the manufacture of liquor 62,920 wage earners. Only onefourth of these are engaged in occupations peculiar to the liquor business, such as brewers, maltsters, distillers and rectifiers. The remaining three-fourths are employed in the liquor business as mechanics of various kinds, such as carpenters, electricians, machinists, teamsters, etc. These men are needed in legitimate industry, and they should be transferred to such occupations as will make their labor a blessing to the people instead of a curse."—Statement regarding War Prohibition.

"We must supply abundant food for ourselves and for our armies and our seamen not only; but also, for a large part of the nations with whom we have now made common cause, in whose support and by whose sides we shall be fighting."

Woodrow Wilson.

"However, by taking the totals of everything we could hope for from every quarter of the globe we would still have a shortage of what is needed to maintain the present ration, and that ration is a pretty drastic ration. In other words, what I am trying to make clear to you is that we are not going to be able to prevent some privation. It is a physical impossibility."

Herbert C. Hoover.

Save the Calves, Lambs and Pigs.

"The woman who is handling the food supply in the home is equal in importance to the man who handles a gun on the battlefield. The triumph of the soldier depends on the efficiency with which the housewives of America conserve the food supplies."

"The calves, lambs and pigs of today will be vastly more important in solving the food problem of tomorrow, than is the case today. Lambs in particular should be spared because the army needs wool and the supply is short."

Beware.

Beware of stove polish which contains benzine, or any other inflammable liquid. Numerous serious accidents have resulted from their use.

Do not throw burnt matches on the floor or into waste-baskets, and never throw away a burnt match until you are **absolutely** sure it holds no spark. Break it in two pieces between the thumb and fingers.

Are Prices High?

Values are usually quoted in the terms of gold, as being the most valuable commodity. At the present time food products have the greatest value and prices quoted in comparison with gold are very misleading.

At prices of a year ago, it would have taken 50 bushels of wheat to buy a Liberty Bond; today, one can be bought for 25 bushels.

Last year a farmer could build a silo for the price of 800 bushels of corn; today he can build the same one for the price of 400 bushels.

Last year it cost a community the price of 16,000 bushels of wheat to build a mile of permanent highway; today a mile can be built for 8,000 bushels.

Last year a farmer had to raise a thousand bushels of wheat to buy the tractor with which to till his field; this year he can buy two tractors for the same amount.

Was there ever a more favorable time to build a silo, to buy a tractor, to build permanent highways?

Now is the time to exchange your farm produce for these necessities.

By doing this, capital will be created and placed in circulation. Prosperity will be stimulated, labor kept employed at good wages, and the dollar kept rolling so that more of our citizens will be enabled to live and perform their patriotic duty.

The Accuracy of Clocks.

The most perfect clocks are used in astronomical observatories. One of these in Berlin has run for months, with an average error of only .015 of a second a day. In order to run so perfectly, a clock must not only be constructed and adjusted with the greatest care, but must be installed in a special room, such as an underground vault, where the temperature is practically uniform. It must also be free from jar or vibration, and must, therefore, be mounted on a heavy masonry pier. Lastly, it should always be kept under the same barometric pressure, and this may be effected by inclosing it in a glass or metal case, from which the air is partially exhausted. In order that the case may not be opened or disturbed, the winding is done automatically by electricity, the frequency of the winding in some cases being as often as every minute. Only pendulum clocks can at-

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tain the highest degree of accuracy.— [Wall Street Journal.]

The Garden of Illusions.

Whatever you do, cling to your illusions. Believe that the work you can do is the one vital, important thing in the universe as far as you are concerned—and it is, too. Nothing else on the face of the earth matters.

The happiest family I know lives in a



bit of a white cottage on the edge of a small New England town, and the most miserable man of my acquaintance paid \$11,000 for a rug to put down on his living-room floor.

Happiness and money are not the same. Nor are they interchangeable. One can be very poor with millions of dollars, and one can be very rich without anything more substantial than the lasting beauty of one's dreams.

We are all living in Gardens of Illusions. Our illusions are glorious if but our thinking, too, is glorious.

By our thoughts we create the world we live in and make it what we will.

—Thomas Dreier.

Make Time.

Make time—it isn't hard. To do this just realize the truth that practically so many "little odd jobs" are not bigger than fifteen minutes at the most and that the reason they "cost" so much time now is because for every fifteen minutes actually spent in doing the work we give an hour thinking about or fussing over it.

"Brasstacks" methods work in the household even more than in the office. Get at these jobs, stick to and finish them. Take an hour and crowd it full of four of the jobs; if possible cram five of them into it, and lo, a half morning is saved.

Don't give yourself a day to do a task; you will either spend that whole day actually in the throes of the work, dawdling and agonizing along, or you will give a share of the day to thinking and worrying over the work and possibly spoil the entire time without doing the assigned task. The more distasteful the work, the more quickly should it be dispatched.

A small room can be dusted in five minutes—the actual sweeping of a room, too, isn't much more than this—a patch or darn can be completed in much less than half an hour, that is, an average "mend" —a hook can be put on in very little time and so it goes; the most trifling tasks can be put on a "time basis" and crowded into as little space as possible the bigger tasks likewise. And when it comes to those things we don't like to do—things that, though actually trifling, seem big, this method seems to take away the sting.

By following this plan we can say "Here, I hate to have to clean that cel-

larway, but if I can get it done in twenty minutes or half an hour, look at the time it leaves and it will be done!" Presto it is done! Time and nerves saved and everyone more cheerful for it.

Make time every hour of the day—it means a saving of strength and nerves and better results. It's the efficient way. The real beauty of this plan is that when we work fast, hard, seriously, and sincerely and try to get the work done and over, it goes so speedily we do it well and we find more time in which to do it well, too. However, quality as well as time saving must be considered.

What Shall the Garbage Can Contain?

Not bread—for every crumb can be used: the small bits for meat loaf, stuffings; the slices for toasted "sticks" and "sippets"; the crumbs for dredging; the crusts for steamed puddings and the like.

Not cake—every piece is good; "sour sauce" or custard over the squares of cake, the crumbs made into other cakes, and into puddings.

Not food taken from the table, except a few very, very trifling bits of scrap, for the untouched pieces can be put with the leftovers, cooked again and served.

Not meat—bits of meat are always good in gravies and with white sauce to serve on toast.

Not vegetables—even a tablespoon of vegetables can be used in omelets, in soups, in meat loaves and the like.

Not fruit—think of the pudding flavoring, the addition to mince meat or to "parti fruit" pie, made with many leftover fruits in the filling.

Not egg shells—the neighbors' hens need these, or ground up, they go back into the ground where your vegetables grow.

Not soup—for a soup can be used as the foundation of a stew or a vegetable or meat soup of different kind.

Not tea or coffee grounds—for they too may go into your garden around the rhubarb plant.

There is nothing much that should or could go into the garbage pail these days. This pail may soon be an extinct institution, representing waste, and as we are eliminating waste and all its symbols, the garbage pail is relieved of many of its functions, if not already doomed!

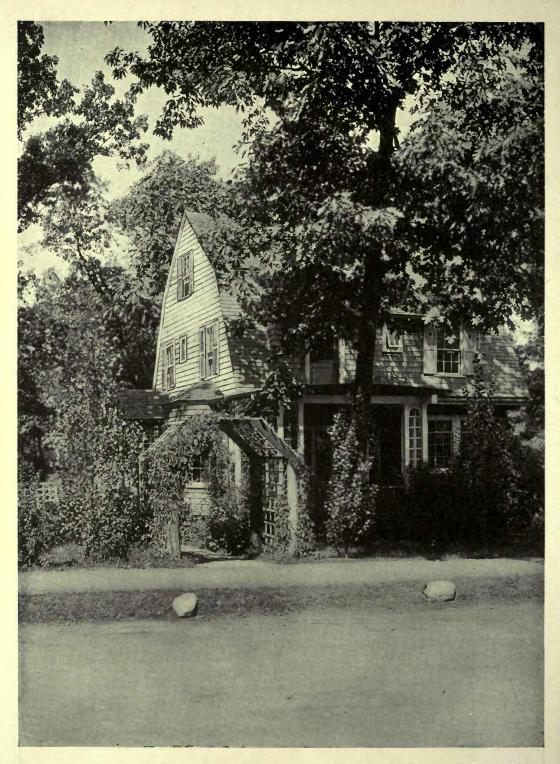
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The charm of a vine covered trellis.

VOL. XXXVIII

SEPTEMBER, 1917

No. 3

Value of the White Trellis Kate Randall

OMETIMES just a touch will change what would otherwise have been a very commonplace home, into something unique and

charming. It may be just a beautifully designed doorway or a bit of detail. When we analyze it we think, how simple. Yes, but not so easy to get. Just the difference between the artist and the everyday builder. It is impossible to illustrate all the little touches that charm us, but the houses we show are good examples of simple, inexpensive homes which have character.

Just now white pergolas, seats and trel-

lises seem to play an important part, they are certainly great transformers, and when one is remodeling are invaluable. Those made of cypress are very nice although any good wood can be used. Take, for example, a cottage like No. 1. There is really no porch, only a concrete terrace. Without the trellis, the arch of roses at the side, and the well placed hedge, and prim little evergreens, it would be very plain. As it stands it is charming. When you once get interested in the white trellis you will wonder how you ever lived without it. If you are remodeling and the front seems flat and bare and uninterest-



1. There is really no porch, only a terrace.

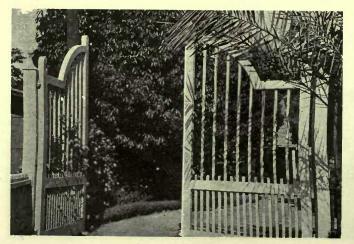
Cyril Bennet, Archt.



II. The big chimney besides the entrance.

Cyril Bennet, Archt.

ing, put an arched or square trellis over the front door just wide enough to set outside the casing and just deep enough for a little bench on each side, somewhat like No. IV, though this has no seats. Then at each corner of the house set a white trellis about 3 feet wide flat against the front. Let it run up nearly to the eaves, as in No. III, or you may carry it entirely across the front just over the windows. Cover it with roses—not with heavy vines—the whole bare front is



A pretty garden gate.

changed, and made a charming picture.

If your rear garden is too much in evidence and chickens and laundry not very decorative, a pretty white gate, like the illustration shown, or even a plain high white trellis of 4-inch stuff, reaching from the side of the house to the side fence, will shut off everything objectionable. No matter how small your back garden you will need more of the white trellis to make it perfect. We have found that a very satisfactory way to lay out a 50-foot

lot, and secure privacy and an effect of space, is to have a central walk from the back porch to the rear of the lot. Here, across the whole width, set some tall, slender evergreen trees. Cypress or cedars are good and give an air of repose to the whole garden. If possible let themgrow tall enough to be seen over the house from the front. Notice the houses with such a background and those without, and you will realize how beautiful they are. In

front of these trees set flowering shrubs, and more low trees and flowering shrubs to entirely hide the side fences. About half way from the house to the tall trees have a rosecovered pergola (no other vine). Arch the walk and under it, on either side, set a formal little white seat like the one illustrated, and, at the far end of the walk, against the back-



III. The trellis is carried nearly to the eaves.

ground of tall trees, build a white trellised arbor with tea table and seats to match. You will find it a most restful place and the vista from the back porch very charming. The seat illustrated is made of hard pine. It is 5 feet long. We drew our own design and took it to the mill, where they cut and sandpapered it for us. We put it together and painted it ourselves and it cost \$1.50, not the \$20 we might easily have spent for such a seat.

The chimney as a decorative feature has been given full vantage in the second illustration, and is charming with the group of casement windows beside it. The use of boulders in the cement base of the chimney is quite unusual, and is attractive. The trellises at the end of the house show how advantage has been



IV. An interesting touch at the entrance.



V. A trellised summer house.

taken of the sunny side of the house. The bay trees in tubs give a pretty little air of formality.

The summer shelter attached to the last house is full of suggestion to those who wish to live more out of doors. It is very attractive, yet simply built. Set back on the lawn, it is more or less secluded from the street even before the vines have begun to cover it. It is large enough for hammock and chairs, and for a tea table besides, in fact for an outdoor living room.

Being photographed before the vines

have started to grow over it, the construction is clearly shown, both the trellised corners and the pergola rafter ends.

In front, from the street to the house almost everything is now treated very formally. Slender little evergreens are planted on either side of a brick walk and at the corners of the house and clipped bay trees and slender evergreens in tubs are set about at intervals. Sometimes four or five tubs are on each side of the walk from the street to the house and formal little hedges of box or barberry as in the first views.



A wooden seat designed at home.

Visiting A Cottage Gertrude Appleton Luckey

HE picturesque cottage shown in this article is characteristic of a style which has become very

popular among those who admire simplicity of design and quiet, subdued harmony of coloring.

It is in these attributes that much of the charm lies, particularly in its picturesque roof lines and the sense of seclusion of the entrance porch. The lat-

ter, shaded from the afternoon sun by a large orange tree; with roses climbing over the lattice blending their delicate perfume with the delicious scent of the orange blossoms; with green, refreshing ferns; with its red brick floor and comfortable

wicker chairs, makes an ideal entrance and gives, as an entrance should, a sense of welcome and an impression that beyond this delightful porch must lie an equally delightful interior. But before entering to verify this impression let us consider the exterior for a moment.

This home is one of four cottages, which, built on a single lot, forms a small bungalow court. Its setting among the trees, as the view shows, is very picturesque; but, unfortunately for the photographer, these trees make it almost

> impossible to obtain a satisfactory view of the house. The picture reproduced here, though very pleasing from an artistic point of view, does not show the bungalow to advantage, and it is only by studying the plan in connection with this photograph or bearing in mind that the

> > porch is in the

center, that one

A sense of seclusion is given to the entrance porch.



Gray and Ivory for the decorative scheme.

can gain a correct impression of the house.

The exterior coloring is very simple. The shingled walls are stained a light gray, the doors, windows, and finished woodwork painted white, and the roof is stained green. There is a pleasing touch of color in the red brick band round the chimney top, also in the red brick steps

modation consists of combined living and dining room, two bedrooms, bath room, kitchen and pantry. The outside dimensions of the house, omitting the entrance porch, are forty-one feet six inches wide and thirty-five feet for the extreme depth.

The first impression we receive as we



The buffet is built under a group of casement windows.

enter the living room from the porch is, just as we expected, a sense of repose and comfort. There is a charm about the cool grav of the walls and the bright, clean ivory enamel of the woodwork that is soothing and makes us feel that this decorative scheme - gray and ivory-simple as it is, embodies the qualities most conducive to the comfort of home-cheerfulness without gaudiness, restful-

and porch floor; this touch of color blending with the green of the lawn, the trees and shrubs, and with the brightness of the flowers, creates harmony of color that is delightful. The details of the lattice work and porch columns, also the cutoff gables of the roof, are interesting features of the design.

The accompanying plan shows how the rooms are arranged, and that the accomof combined living

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ness without somberness. The living room and dining room, as the plan shows, are in reality one room, there is nothing to divide them, nor is there any change or break in the general color effect. This arrangement is satisfactory in a smalt house for it gives a feeling of spaciousness to both rooms, which would be missing if they were divided by a partition or even by bookcases, columns



Yellow tones blend with enamel and mahogany.

or some device to indicate a separation.

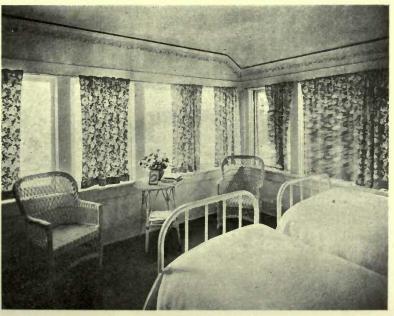
The view of the living room shows the simple detail of the woodwork and the absence of mouldings, ceiling beams, panelling or other decorative features. There is nothing elaborate about the fireplace mantel, just a simple moulding support-

ing a plain shelf, yet the effect is charming and the soft brown hand-made tiles harmonizing with the general color scheme, add to this effect.

The buffet, with its group of casement windows, is interesting. Here the treatment, same characterized by exsimplicity, treme prevails. The sides above the broad shelf are papered, not paneled in the usual manner, and there is no mirror, for which we are inclined to feel thankful.

Passing from the dining room through the pantry, we reach the kitchen, but on passing through let us glance at this room.

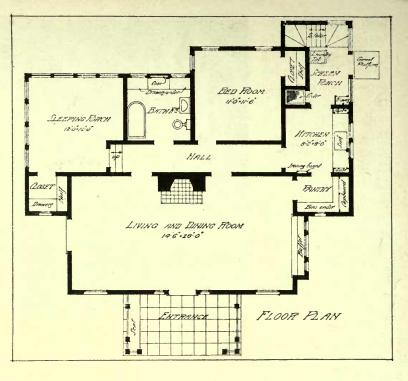
Although it is small, it is roomy enough for cupboards on one side and a work



A delightful place to sleep.

table beneath the window on the other. Under this table are tin lined flour bins and drawers for the numerous utensils connected with the science of baking.

The kitchen is eight feet square. As there is sufficient room for all ordinary culinary duties, it follows that it must be very compact and well planned. Under the sink board which takes up one side of the room are drawers and cupboards and above it are two spice small cupboards. There is a



very convenient built-in ironing board (with plug for attaching electrical iron) which folds up into the wall when not in use. Over the stove is a ventilated, plastered hood to carry away the fumes and odor of cooking.

The screen porch is also well arranged. There is a broom closet, laundry tray, ventilated cool closet and refrigerator space.

In passing through this house we are impressed by its brightness and cheerfulness, points that it is hardly possible to overrate, for we all know well how such attributes affect our health and consequently our happiness.

It is in the bedroms that these two essential qualities are most noticeable.

Nothing could be more dainty or delightful than the sleeping porch bedroom, and it is to be regretted that the view gives an inadequate idea of this pleasant room. On two sides are windows which slide down into the walls and so during mild weather can be entirely hidden from sight and the room becomes a sleeping porch in the true meaning of the words. The walls are papered with gray striped paper and the woodwork is ivory enamel. Old rose tones predominate in the chintz draperies and this ever delightful color is echoed in the flowered frieze. A bowl of freshly gathered roses, and a few favorite books add to the comfortable appearance of the room.

The color of the other bedroom, a view of which is shown, is in the yellow tones which blend in with the ivory enamel and mahogany furniture.

In concluding our brief description of this delightful little home, which must be a pleasant place to dwell, let us again emphasize the qualities that pervade it: brightness and cheerfulness; subdued and soft coloring without monotony; and effective and harmonious color schemes.

The Kitchen is the Laboratory about which the Home Centers The Home is the Carbureter of the Industrial World

> Efficiency in the Home Edith M. Jones, Kitchen Specialist

PART II.

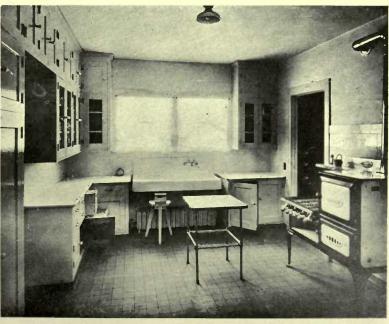
HERE are many kinds of business that men and women are engaged in, but, as someone has truly said, "Every profession or business is

tributary to home-making." If this is true, housekeeping is the greatest business there is in the world and the home is the greatest organization today, as it has always been. A careful survey reveals the fact that practically all business (with the possible exception of the making of munitions of war, and that primarily is for the protection of the home) contrib-

utes to and is itself dependent upon the home. The success of the individual home, however, depends entirely upon the organization and systematic methods of the housewife and the successful housing of this organization determines the efficiency and conservation obtained in the household.

In studying business methods one quickly discovers that confusion and congestion are two things which must be avoided in any kind of business, whether domestic or commercial. To overcome these difficulties a business is divided into departments and the work of each department is carefully classified, indexed, etc.

I have so often thought what a splendid thing it would be if every girl could have an opportunity to study the carefully classified, systematic, closely related order of a successful business. It would be a wonderful training for her in her future home as a housewife. There is little

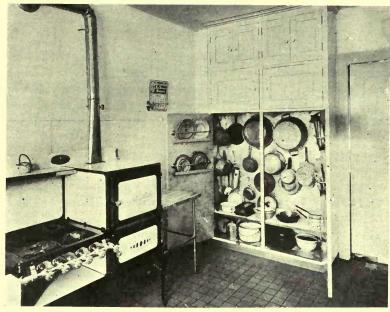


The bins and cake box are metal lined.

reason to doubt if she fitted up her kitchen and ran her home on the same business principles she learned in the business world that she would develop into the best kind of a housekeeper and would find the work in her home quite as interesting and absorbing, and the results as satisfactory as any managerial position in the business or commercial world. the minimum loss of time and material.

Entering the kitchen here shown one is immediately struck with its simplicity and beauty. The wood-work is white enamel. The upper side walls are white Sanitas—which, by the way, was painted just as soon as it was hung, to preserve it and make easier to clean. The Vitrolite of the lower side walls extends up about five feet. The Vitrolite is used

Of the many departments in the home-



The pan closet is metal lined, with staggered hooks.

making business none can compare in importance to the culinary department, and we find here four distinctly separate types of work to consider.

1. Preparation and cooking of the meal.

2. Serving the meal.

3. Clearing away of food and cleaning process.

4. Storage of food materials and utensils.

The test of the efficiency of the kitchen depends upon the best grouping of the necessary utensils—in the best relationship to each other that the greatest amount of work can be accomplished with very satisfactorily for the working tops, and also for the ends of the spice cabinets and cupboards.

The pan closet is shown quite fully in the photograph, and its convenient location in relation to the range. It also shows the racks for covers and pans. See how easy it is to get the cover that is wanted. The pan closet is lined with galvanized iron. The shelves in each instance are also covered with the iron and are removable. As time goes

on metal and hard, enduring surfaces will be more and more in demand for kitchen equipment. To be sure the installation is more expensive, but the returns balance, as it requires fewer pairs of hands for the cleaning and the equipment is practically everlasting and always impervious to dust and vermin.

This pan closet is proving itself a great comfort to all concerned. It is 5 feet long, 20 inches in depth and 5 feet 2 inches high. The staggered hooks make it possible to hang every kettle and reach one without disturbing the others. The racks for the pan covers are also made of metal and the cook insists it is "sure a

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comfort to have a convenient place for thim kivers."

The first set of cupboards above the pan closet stores the waffle iron, etc., and the second set stores the preserving kettle and other utensils not often in use.

The range is one of the new, all over enamel, up-to-date models. The stovepipe or vent is nickeled to correspond with the other furnishings, fixtures, etc.

The kitchen is the laboratory about which the home centers and on which it depends. Efficiency in the kitchen "makes time" for the housewife, which she may use in the manifold demands which are made upon her.

Navajo—The American Rug A. R. Spivey



HE aroused interest in American made products brings to attention the Navajo rug, which is essentially an American product in

the strictest sense of the term. The designs are entirely of Indian origin, and in a great many cases have a meaning and carry a story, as is usually the case with the designs of primitive people.

The Navajo rug industry dates back, in point of time, to the 15th century. The early Spaniards introduced sheep into the country and from that time on wool

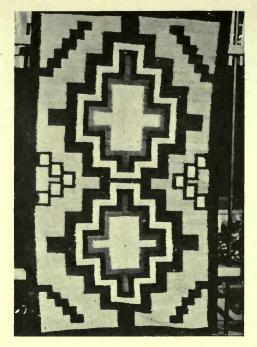
has been used by the Indians in their weaving instead of fibres and grasses.

The Navajo Indian country is located in northwestern the part of New Mexico and the northeastern portion of Arizona. There is close to thirty thousand Navajo Indians, and they still live their life and carry on their industries in much the same way that their ancestors did before them. Their chief industry is sheep raising, from which the wool is obtained and used for rug weaving. The natural colors, black, white, gray and brown, are used. Red is the only dye they use in recent years, and their process of dyeing the wool has been worked out through years of experience.

Navajo rugs are especially adapted to the bungalow type of a house, and they are charming with wicker furniture. Nothing could be better for a sun porch, especially if the floors are of tile or cement.



Navajo rugs are especially suited to the bungalow.



Gray body---with rain crosses,---red, black, white and brown.

The average size of rug is 5 by 7 feet, though they can be obtained in sizes from small foot rugs to a size 8 by 12 feet. Twenty-five dollars will buy a medium size rug.

The rugs are not made by any set patterns or designs. You will never find any two rugs exactly alike. The same motifs are reproduced over and over again, but never in just the same way. Each motif and figure has a name and meaning. Each tells its own story to those who understand.

Many of the designs grow very familiar to those who see much of Navajo design, and can be readily explained, as the vertical zigzag which signifies lightning; smoke is not so angular; a horizontal zigzag signifies mountains; a small square, eyes, etc. It is hardly possible to give the meanings of their designs. No white man really knows them, even those familiar with the Indians through many years, and with their handiwork—blankets, baskets and pottery. They worship the sun, moon, stars, streams, and they express themselves through the designs in their rugs, many of which we do not understand, though we may guess at their meaning. One familiar design used by the Navajos is the "Swastika."

Colonel Wilson of the Smithsonian Institute says of this interesting symbol: "No conclusion is attempted as to the time or place of its origin or the primitive meaning of the Swastika because these are lost in antiquity."

It has been found in our western prehistoric ruins, in the temples of Central America and Mexico, in the Indian ruins of the United States, and in the burial ruins of the East in Persia, in Navajo Indian rugs and in the baskets of the Pima and Apache Indians of Arizona.

The Buddhists attach religious significance to it, and it is found over the heart and on the soles of the feet of every authentic statue of Buddha.

The ancients were great astronomers, and it doubtless served as a calendar to them, as well as to our own Aborigines.



Gray, white and black with a touch of red.

With the Navajo it signifies, primarily, the regular changes of the seasons.

Four times during the year can be seen, at midnight, this sign which has been for ages the symbol of so many races.

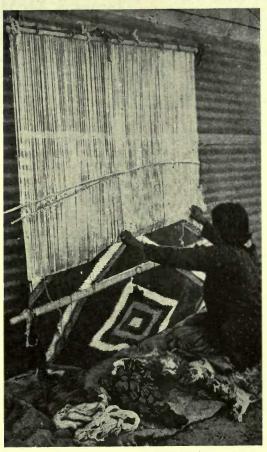
The Polar star is the center which, with the constellation of Ursa Major, form a complete Swastika. It is used throughout Asia as a charm signifying good luck, good fortune, long life, much pleasure or great success. It is not found in this country in connection with any religious ceremonies, only upon objects of daily use."

The Navajos are a symbol loving people, and express this through the designs or symbols in their weaving. The study of the different symbols would require a life time, as there are so many symbols having so many different meanings.

The looms are very primitive and 90 per cent of the rugs are made out of doors, stretching the looms to trees and then fastening to the ground. They live in a country where there is no danger of rain during the greater part of the season.

In the last twenty years the Navajo rugs have been made much heavier than formerly and they are used very generally on the floor. The Indians have adopted the American custom of wearing shoes with heavy soles in the place of their own moccasins and so have made their rugs heavier. In thus adapting them to their own changed conditions they have brought them into wider usefulness to other people.

The designs are woven through, being the same on one side as on the other. The rugs themselves are reversible so that either side may be used as the right side. Like oriental rugs, they are woven with a long woof knap which covers the warp threads and protects the body of the rug through long years of wear. This



A Navajo blanklet weaver aud primative loom.

is the secret of the long life of these rugs. Until this long shaggy knap has been worn completely off the wear does not reach the body, and there can be no break in the rug until this is worn through. So we are told that a Navajo rug will not, with ordinary usage, wear out in a man's life time.

NOTE-It might be of interest to compare this primative loom with that on which the Oriental rug is woven shown in December, 1916-and the modern hand loom, in May, 1917.

Color and Harmony

James S. McMillan, F. I. B. D.

HARMONY-PART II.



HEN colors are so arranged as to produce a pleasing effect they are said to harmonize.

There are no definite laws for the harmony of colors, but the principle may be accepted that if two colors which are chromatically related be placed so that there is an abrupt transition from one to the other a discordant effect will be produced. It is the elimination of "discord" therefore, that produces harmony.

In nature colors seldom come in contact, but are generally harmonized by the gradual blending of one color into the other.

A very comprehensive analysis of color harmony has been prepared by Henry T. Bailey, and it includes all colors under the following five heads: Contrasted, Dominant, Complementary, Analogous and Perfected. In contrasted harmony, color is opposed to non-color, such as spectrum color opposed to black, gray, silver or gold.

Dominant harmony is found where different tones of one color form the color scheme. Combinations of this nature are often termed self-color schemes.

Complementary harmony is found where complementary colors are contrasted, that is to say, where orange is contrasted with blue, red with green, etc.

Analogous harmony is formed by combining tones of analogous colors; that is, colors that stand near one another in a spectrum scale, such as blue, green blue and violet blue.

Perfected harmony is where analogous colors are combined with the complementary of the "key color"—by key color we mean the color they possess in common. For example, orange-yellow and yellow-green may be combined in contrast with blue blue being the complementary of the color they have in common—yellow.

When certain colors are placed adjoining one another we find their behavior very peculiar; for instance, all the primary colors gain in purity and brilliancy by their juxtaposition with gray; but very different are the effects which result from their proximity with white.

Chevreul found, for instance, that red, by being in contact with blue, appeared yellower. By contact with yellow it appears bluer; by green brighter, and in contact with black it becomes duller. Rood, in his book, "Modern Chromatics," has a similar story to tell and gives many examples of the modifications colors undergo by juxtaposition. Church, too, in speaking of the behavior of yellow with black, says: "It (yellow) is rendered paler, brighter and more advancing. The combination affords the most intense contrast of tone next to that of white with black. The blackness of the black is modified by acquiring a slight bluish hue which enriches it."

If two colors don't harmonize it is a good plan to separate them by a white outline. Black associated with the primary colors is never disagreeable, but it does not associate so well if one of the colors are luminous, and the other sombre; such as orange with blue, yellow and blue. If white, when associated with a luminous and a sombre color, produces too strong a contrast, gray should be used; it is also more desirable than black, as it will have the effect of increasing the proportion of the sombre color.

We have seen then that the changes

colors undergo through association with other objects of color are of primary importance to the home decorator, and all pleasant and artistic decoration must, to a certain extent, depend on the proper arrangement of colors, and on the knowledge of their various effects when placed in contiguity to one another. Surface reflection also greatly affects the color results, a polished or varnished surface differing greatly from a reticulated one.

All colors show a different effect when on different planes, and tones of color obtain their value from their situation as well as from their contrast with each other. Various lights also affect the color of objects; for instance, under some lights all colors are tinged with yellow.

It is a good principle therefore, in any decorative scheme to try the colors in the position they are to occupy.

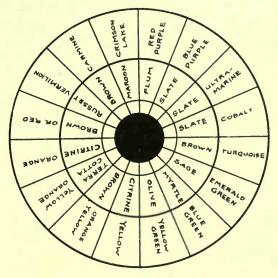
There are various contrasts in color which should also have our consideration. There is contrast of tone—the graduations of a particular color from light to dark. There is also contrast of hue—the graduations of one color towards another color. Contrast of texture where various shades or colors are shown according to the light that falls on them.

In a combination of colors the aim should be to get "color," not a number of colors set out side by side. The colors must be in harmony with each other, and there must be a relationship between them or a touch of the same nature in them all. It is true that to devise a scheme of color requires not only inventive skill, but artistic appreciation, and ready adaptation.

Theory, the chromatic circle, and acquired knowledge are all helpful, but actual experience in the manipulation of colors will be the best teacher of all. Beautiful color schemes can be found by using very few colors; in fact, the best schemes are those where few colors are used.

Many artists confine their attention to

one color alone, and produce what we have already termed a self-color arrangement. Take blue, for instance, on a white ground it looks beautiful. The famous "Wedgwood" ware was originally worked on a blue ground with white ornament. Some pleasing harmonies can be had by using two distinct colors in varying proportions; as blue and orange, blue and scarlet, blue and white, gold and green, gold and blue, gold and crimson and gold and purple.



If more than two colors are taken, the following will give some rich effects: Blue, scarlet, purple, yellow and black; blue, scarlet, gold and white, a very favorite combination in the work of the Moors. Nature will suggest many suitable ideas for color combinations, we should remember, however, that nature is not always harmonious, and should be looked upon more as the "starting point" than the finished product.

There is also the legacy left us by other peoples to take into consideration. The color combinations of the Moors, Greeks, Pompeians and Egyptians are well worthy of our closest scrutiny. Inasmuch as the coloring applied to a room will often depend on the colors of the carpet, curtains and furniture, etc., not much latitude is given to the painter or decorator. The ceiling should contrast with the floor covering, the curtains and furniture should be met with a contrast on the walls and woodwork.

As already said the aim should be to get "color," not "colors," so that even the contrasts should be in harmony. Attention is again called to the rules quoted at the opening of Part I, which were formulated by Owen Jones in his "Grammar of Ornament."

- I. Primary colors should be used on small surfaces, and in small quantities, balanced and supported by the secondary and tertiary ones in large masses.
- II. The primary colors should be used in the upper portions of objects; and the secondary and tertiary ones in the lower.
- III. When ornament is on a ground of a contrasting color, it should have an edging of a lighter tone of its own color.
- IV. Ornament on a gold ground should be separated by an edging of a darker tone.
- V. Ornament on white or black may be left without outline or edging.
- VI. No composition can be perfect, if any of the primaries are wanting, either in their natural state or in composition.

-Owen Jones in his "Grammar of Ornament"

A Picturesque Bungalow with Low-Dropping Eaves



HIS unusual little home, which is not so small as one might imagine, will not appeal to those who want a "showy" home, but rather

to those who want something with a genuine home aspect, and something different from the mediocre house so generally seen.

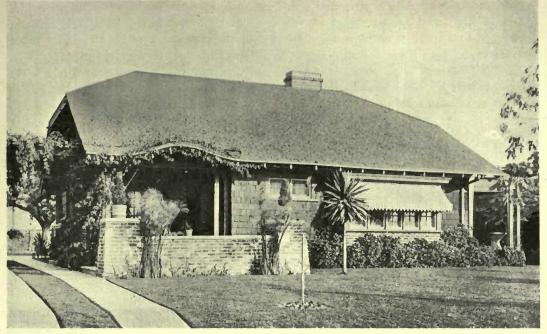
Exterior walls are shingled with broad courses exposed to the weather, and the roof is also shingled. Shingles are stained with the smoothed trimmings painted to match. Rough, colored brick with wide white mortar joints showing in the porch wall, chimney and bay windows lend just enough color to the whole. The window jutting out with the awning for sun protection is a necessary element of the design, although not conspicuous in itself.

Some might criticise the roof shape as being too plain, preferring a gable or dormer with front light to the second story rooms, but the simplicity of the roof as shown is in perfect harmony with the whole.

The floor plans are an adaptation of the California bungalow idea, making the house suitable for reproduction in a colder climate. The room plan is worthy of special note. Minor changes might be made to meet special requirements or personal tastes. For instance, the open porch off the living room could just as well be made into a sun room. Or the stairway might be entered from the hall of dining room, or from both.

The service portion of the plan has been given a good deal of thought. The pantry has a serving counter and a roomy china cupboard built from the floor to the ceiling. The plan of the kitchen is intended to provide for every labor-saving device.

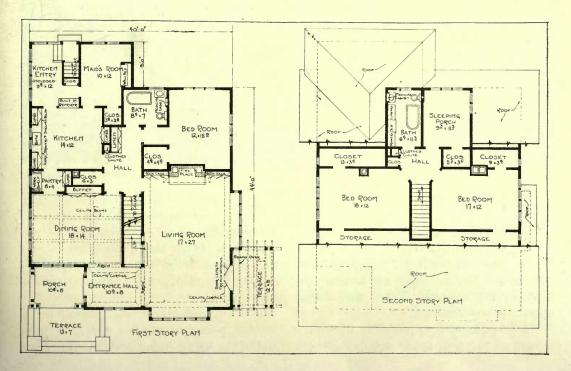
Consideration for the maid's requirements is evident. She has a pleasant living room of her own which is convertible into a bed room by using a disappearing



The simplicity of the roof is in harmony with the house.

E. W. Stillwell, Archt.

wall bed. The kitchen porch is enclosed to high openings and it is plastered inside like any room. Although there is an inside basement stairs off the hall, another is provided from the porch by having a combination entrance. There is a door one step above grade to a landing and a door to the cellar stairs.



First story ceilings are nine and onehalf feet high and second story rooms have eight-foot ceilings without any slope for rafters, leaving them full and square. The large remaining space under the rafters is utilized by lighted and ventilated storage rooms and closets which would seem to meet the most exacting demands.

The roomy and convenient built-in equipment make a most attractive place of the bath room. The sleeping porch is fully protected by drop sash hung with weights, which disappear in the walls under hinged window stools.

Wide Spaces In the Home



NY ONE who has once lived in the cramped quarters of modern apartments is apt to feel that it is not possible to have a room

seem too large,—if it is well arranged, of course. The limit of cost fixes the out-

rooms gives its cheer impartially to either or to both, and unites the rooms which are separated by location rather than by division between them. A full sweep of the house is given in two directions, giving circulation of air, and light in plenty.



The Exterior is brick and stucco.

J. W. Lindstrom, Archt.

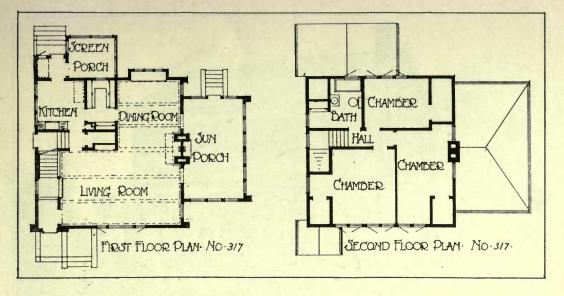
side dimensions of the house quite definitely, but much may be accomplished by the planning to give a sense of spaciousness to the interior.

The home here illustrated has utilized this possibility to quite an unusual degree in the way the living and dining rooms are coordinated.

The fireplace, located as it is, in the center of the wall space devoted to both

Doors on either side of the fireplace, that is from both living room and dining room, if one wishes to be so exact, open to the sun-porch, which also has a glass exposure on three sides, and an open fireplace similar to and opposite that in the main day rooms.

The entrance is at one side under a hooded porch and gives access to one end of the living room, with the stairs be-



side it, which lead up from the end of the living room.

The basement stairs are under the main stairs with a grade entrance. There is closet room both from the passageway and from the living room.

Between the dining room and the kitchen is a butler's pantry well fitted with cupboards and working space under the window.

There is place for the refrigerator in the entry where it can be iced from the cutside. The screened porch is really an enclosed room and adds very materially to the working space, and to the comfort in working.

On the second floor are three chambers and a bath room, with closet space under the roof, utilizing every bit of space.

On the exterior the house is surfaced with brick up to the line of the watertable. The main body of the house is stuccoed not only including the gables, but the dormer wall surfaces as well. The wood-work of the trim and finish is all painted white, including the verge boards and the exposed rafter ends under the eaves.

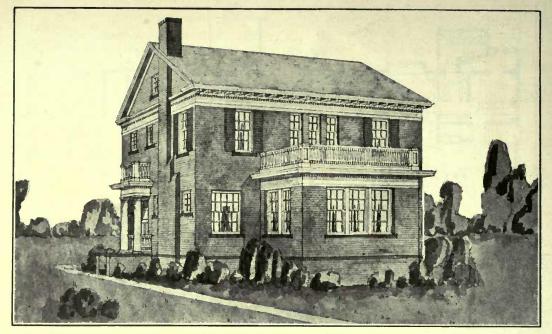
A Colonial Design



ITH the wide range available in brick, both as to color and texture, it is not surprising that the brick house holds so firm a place

in the popular favor. The design illustrated has a simple Colonial exterior, but with rather an unusual floor plan. The entrance is designed on Colonial lines but is placed at the side. It has, in fact, a "Colonial porch," and opens into a small entrance hall. The main stairs, which are also convenient to the kitchen, open off this hall, thus eliminating the necessity for even the combination stairs. A small toilet is located in the rear of the house off this hall.

The living room, while not large, has plenty of wall space. A wide opening connects it with the entrance hall. A brick fireplace with bookcases on either side are across the end of the room, with windows over the bookcases, while at the opposite end of the room French doors open to the dining room. A pair of



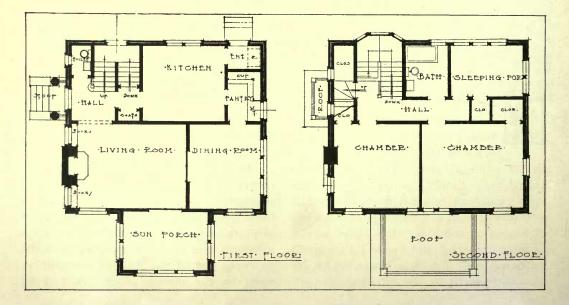
A home built of brick, on Colonial lines.

W. W. Purdy, Archt.

French doors also lead into the sun-porch.

The kitchen is large and well lighted. The basement stairs are on one side, with an entrance at the grade level. At the other side is a small entry with space for the refrigerator. There is also a pass pantry between the kitchen and dining room. On the second floor are two large chambers with a sleeping porch and a bath room. The bay of windows on the stair landing makes a pleasing view. A small stairway leads to the attic.

The exterior is of a Colonial brick veneer, with a stained shingle roof, dark green shutters, with white trimmings.



A Bungalow in Half Stucco



Great porch pillars for a stucco bungalow.

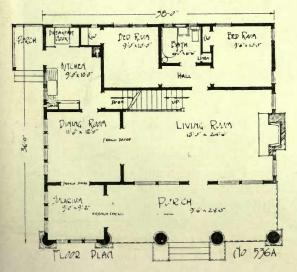


EMENT stucco on galvanized expanded metal lath has been very successfully employed as the wall covering for the lower portion of

this attractive bungalow design and it is also used on porch pillars and the chimney with very good effect.

The gables are shingled and stained a color to blend with the stucco walls.

The arrangement of the interior is very clearly shown on the accompanying floor plan and does not require any elaborate



explanation, but we wish to call the reader's attention to a few points that are of especial value. Note the possibilities of the great living room for entertaining, with the wide fireplace extending a warm greeting to all its friends. This might have been planned especially for the young people who like to have their friends in of an evening for dancing, but it is equally adapted to the needs of those of more mature years, who, having reached the age when their children have established homes of their own, desire to live as quietly as possible. At the same time it allows them to gather the children and grandchildren around them at the home-coming times.

Note the open appearance conveyed by the French doors between the living room, dining room and solarium. This last named room with three of its walls practically of glass might just as well been called a conservatory as this is no doubt what it will be used for in many cases. The bedroom, bath, and closet arrangement is very good and the breakfast nook is tucked in very neatly.

Two Homes



N ORDER to give a wider range as to size a larger and a smaller home are given in this group, both of which make attractive

homes. The first has large rooms, wide

an unusual location. The projecting bay in the living room is very attractive.

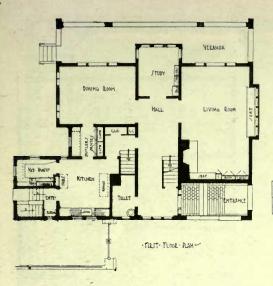
The entrance is at the corner of the house with a paved terrace. The main hall runs through the center of the house.

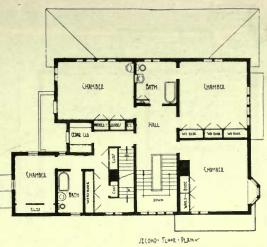


A charming suburban Home.

halls and wide spreading verandas, with the service part of the house entirely separated from the living rooms. Not only are the living and dining rooms large, but there is a study or den of good proportions, opening from the hall between them. The living room is entered from the hall by a wide opening near the center of the room. The fireplace and seat have The entire south side is devoted to the living room.

The service wing is so completely separated from the main part of the house that there are separate rear stairs. The butler's pantry opens from the kitchen, and a pass pantry connects kitchen and dining room. The sink with long drain boards fill one end of the kitchen. The





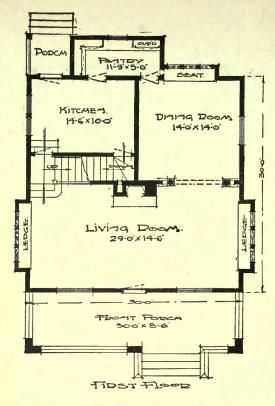
details of the house have all been worked out very carefully.

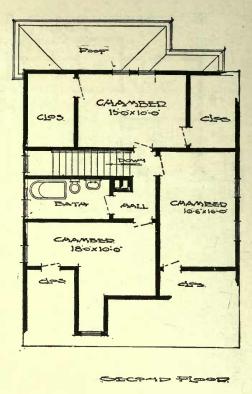
On the second floor are three large chambers, and a smaller room, and many well planned closets. The owner's room connects directly with a bath and has built-in wardrobes and cabinets, as have each of the larger chambers. The cedar closet is very roomy. There is additional room on the attic floor.

The whole home has been very carefully planned for the people whose home it is. It is simply designed but is beautiful and homelike, and will appeal to those desirous of having a charming suburban residence.



The compact home will grow in charm with the growth of vines.





It is finished throughout in hardwood on the interior. The exterior is of stucco. The veranda extends the full length of the house.

The second home is not large and is compactly planned, with outside dimensions of 30 by 30 feet, exclusive of porches. The house is built entirely of stucco with timber work in the gables. The front porch is shown under the main roof, a substantial part of the house.

The entrance to the porch is not centered, thus one end of the porch may be left undisturbed by those entering the house. The living room fills the entire front of the house, with a projecting bay of windows at either end of the room and an attractive fireplace opposite the door. Beyond the living room is the dining room, separated by a columned opening, and with bay and window seat opposite. The kitchen and dining room are connected through the pantry, which is very well equipped with cupboard and working space.

The main stairs go up from the living room back of the fireplace. Three steps from the kitchen meet the landing, giving access to the second floor from both sides of the house. The pantry helps to enclose the small rear porch.

On the second floor are three chambers and a bath room. The finish is of Georgia pine with Georgia pine floors throughout.

The basement extends under the entire house and contains a small furnace.

Many Woods In One!

THE modern home of beauty and refinement has included in its interior finish a variety of effects in tone and color. These effects can, of course, be produced by the use of a variety of woods—but that involves expense beyond the means of a great majority of us.

It is possible, however, to attain the same result-easily, economically and permanently-by the use of ONE wood. That wood is

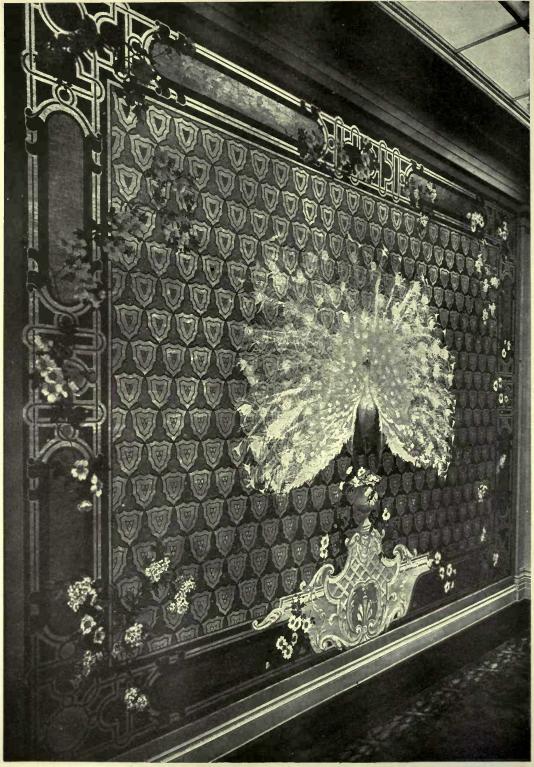
Southern Pine

"The Wood of Many Uses"

Southern Pine not only ranks among the strongest, most durable and most workable of home building material, but because of the readiness with which it takes and holds stains, paints and enamels, it is possible to obtain any desired effect in tone or color. For interior use in the home it is literally "many woods in one." Furthermore, its wonderfully varied and beautiful grain lends infinite variety to its satiny surface when stained or varnished.

If you have home building or home refinishing in prospect, it will pay you to write us for information that will be valuable to you. Address Department D-51.





The White Peacock-designed by Albert Herter for the Ehrman house.

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Decoration and Finishing

VIRGINIA ROBIE, EDITOR

The House in September



EPTEMBER belongs to summer if we believe the

thermometer, to fall if we follow the calendar and to the vacation season if we consult our feelings. No time of the year finds us less ready to settle down to serious things. The garden is more attractive than the house, and the fields than the garden. In spite of school bells and advanced fashions it is pleasant to be idle, postponing weighty



A French scenic paper which has proved an inspiration to American manufacturers.

matters until after the first frost is here. The shopkeepers, decorators, and importers, however, have been busily preparing for this transition period since early in July. While we have been napping they have been entirely awake. Doubtless many of them have spent sleepless nights meeting a situation which is without a parallel in the history of interior decoration. Many importations planned for a September showing have been delayed indefinitely, others are expected in time for the October trade which is always more stable than that of the early fall.

In wall papers there is an interesting output in all phases of domestic designing, particularly in landscape and scenic patterns. Hitherto our designers have been less successful with large pictorial effects than with the more conventional small motifs. In certain lines American papers have always ranked high, and in others they have been surpassed by English and French patterns.

The situation in France does not tend at





A linen copied from a Belgian tapestry which is strongly Persian in feeling.

present toward any of the peaceful arts. The big Zuber factory outside of Paris is now used as a Red Cross station, another factory almost as famous, as a munitions plant, a third as a barracks, and so on. For a time many French wall paper patterns were printed in England from blocks shipped across the Channel. The same method was followed with cretonne and chintz. Whether these wartime measures are still in successful operation is not fully known, but the fact that many firms who have specialized in imported furnishings are now giving prominence to papers and textiles made in America, leads us to think that the plan has been abandoned for the present.

One large wall paper house shows the now rare French designs side by side with its own patterns made in the French spirit. These are far from being copies or imitations. Landscapes and bold tree and bird

motifs in a great variety of color afford the shopper an extensive choice. Several American makers have given much space and time in the past to the showing of imported papers in their retail salesrooms when the profit would have been far greater on their own lines. Many people demanded English and French papers even when the difference in point of excellence was slight. The beauty of certain French, English and Scotch papers is conceded. The work of such designers as Defosse and Karth, Zuber, Shan Kydd, Sanderson, and others. strikes a very high mark which some of our own designers have never approached. On the other hand prospective buyers of wall paper this fall will find it interesting to give particular attention to domestic designs.

In color, drawing and compositions, the new "made in America" papers reach a high average. Colors seem a little more subdued.



Printed linen in autumnal coloring.



There is less black as a whole, although several of the bird and flower patterns have broad black and white stripes. Another black theme is the checked gray and white, cream and white and tan and white outlined in black. cannot compete with the old world here. Many of the best wall papers are in tones of gray or sepia and several are in compositions so large that four sections are necessary in order to present the entire pattern. They are fitted for large halls and spacious

One shop shows novel, yet very livable cut out schemes, also many paneled effects. A variety of beautiful borders to be used with neutral walls are shown at a nother place. Birds seem to hold their own whether in the old Persian style or in the more modern English rendering.

Draperies are many and of attractive texture and weave, among them being mercerized damask, tapestries, velvets, voiles, etamines, marquisettes, the "Canterbury" and "Colon-



Glass dish which may be used for fruit, flowers or for conserves.

ial" fabrics—trade names for materials respectively suited to English and Colonial interiors—sunfast draperies, silks in Spanish Renaissance, Chinese and early Italian patterns, Japanese cottons of every variety, repps of many descriptions, cretonnes, chintzes and printed linens. For rooms of every style may the appropriate material be found, and of a color and pattern to harmonize with walls and furniture.

Brilliant tones are still used, but American designers do not attempt to follow modernistic schemes very closely. Doubtless they have found by experiment that they rooms and require rather formal furnishing. Of the smaller pat-

Of the smaller patterns, well suited to simple rooms, are the foliage papers in two toned gray, russet, taupe, tan, light golden brown, gray green and a new gray blue called "London mist." As London fog is quite yellow—called by those who live in it "pea soup"—the new t o n e is somewhat idealized.

"Grasscloth," says a writer in the *Decorative Furnisher*, "is the back or skin of the Japanese Honeysuckle

which grows on the mountains of Japan. When the poor people can find no better work they wander over the hills gathering this vine. With their fingers they peel off the skin in long strips, and again tear into thinner strips of an even size. Then the skin is boiled—to bleach it to a uniform color—and the strips tied together in a long string and rolled into a ball ready for weaving. The cottagers have hand looms of the old style, and the balls of grass are given them to weave into eight yard lengths. When woven the material is of very delicate texture and easily ruined by rough handling.

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Once pulled out of shape it cannot be made right again, and that is why it is not woven into longer lengths. It is then backed with

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paper sheets ready for the dyer, who does his staining by brushing the required color into the face of the goods."

Buying by Proxy

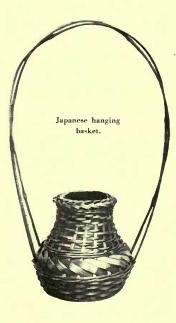
Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.

S MANY gardens are at their best in September, the "cutting baskets," shown in the illustrations will be found very convenient. Asters, dahlias and other fall flowers, so attractive for indoor use, may be easily and quickly gathered for both hands are free. These durable vet lightin-weight baskets come from Japan where gardening has long been a fine art.

From the time the Japanese flower is cut until it rests in its particular

vase, there is a touch of the beautiful about the whole process. The choice of color, the arrangement of line, the selection of the background, all make of the ceremony something quite removed from our haphazard way of quickly picking and hastily massing into the first convenient article that will hold water. Often charming effects are gained by the latter method. There are happy accidents, of course,



occasionally more interesting than carefully planned schemes. The Japanese, however, have the faculty of giving their flower arrangements the quality of unstudied grace, when the study of years is back of every stem. We compete with cannot them, nor is it wise to try. "Japanese schemes" as attempted by the Occidental are apt to be rather meager, lacking both grace and colors. But the spirit,---if we can ensnare it,-is well worth securing. A Japanese respect

for the stems and leaves of flowers, and a greater regard for simplicity will be found helpful in the most casual arrangement.

Some flowers are most effective in glass, others in metal and pottery and a third class in baskets of various styles. Wall baskets for long-stemmed flowers or for branches will be found very acceptable. They become a part of the wall



decorations in a charming way and are secure from accident. Against a plain wall of agreeable tone, the most brilliant flowers may be used, and when selected to harmonize with the color scheme of the room, will be extremely effective.

Wall baskets are of several kinds; the flat "wall pocket" which is fastened in an invisible way, the basket flat on one side with high handle and various adaptations of the hanging basket. Pottery wall holders may be found in some of the shops. These being rather heavy must be well secured to the wall lest disaster overtake the plan. Soft green, dull brown, and warm gray are some of the colors. These are

water-tight. Tin and glass linings may be purchased with the baskets. Lacking these, bottles and preserve jars may be mustered into service. Colored glass in every tone and in every shape is popular and with the right flower in the right place is highly decorative. Many aids to arranging flowers are on the market, among other things the devices for holding a few blossoms upright in a low dish.

Flower jars combined with fish globes are on sale in some of the novelty shops, but are rather incongruous. Bowls of clear crystal filled with water plants and made gay with a few gold fish are quite



different. They are extremely effective, but it is well to get posted on the care of the fish before buying. A good deal of thoughtless cruelty is indulged in by owners of gold fish who seem to think that plenty of water and "fish food" are sufficient. Fish demand far more care than birds as the many "untimely" deaths testify.

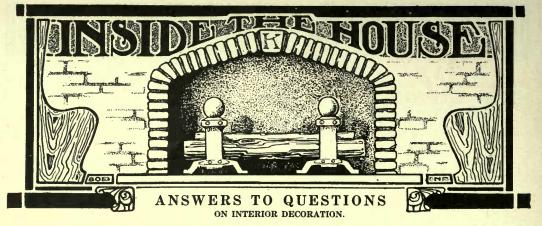
Several decorators use the long square window aquariums in place of indoor flower boxes. When in thriving conditions such window treatment is very pleasing, adding an interesting note of color, and a live interest to the room.

Decorative Service

WHERE detailed plans for HOUSE DECORATION are desired with samples and prices of wall paper, fabrics, window drapes, etc., the moderate fee of \$1.00 per room or \$5.00 for the entire house will be charged to defray the expense of our decorator's time in working up the plan, securing and mailing samples. Address

Keith's Decorative Service,

Minneapolis, Minn.



Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

Oak and Mulberry.

F. W. C.—We have at present a large house but as our family now is reduced to two people we prefer a smaller home, but would like to make use of the draperies, rugs, and mahogany furniture for our living room. The draperies and rugs are mulberry for the living room and hall side is gray. The present finish of our old home is white but we desire to use an oak and would like to retain the grain if possible. What wall colors and wood finish would you use? There is to be a four-member picture moulding or cove in the living room. We have cased openings between living room and hall, also between dining room. Would it be the proper thing to use our mulberry draperies between these openings? Should there be folding doors between either? Could the valance be used on the French doors or would it be too bunglesome?

Ans.—A small house may be just as attractive as a large one, and sometimes more livable. At the outset you have an interesting problem in combining with an oak trim rugs and draperies selected for rooms finished in white paint.

Mulberry is a delightful color, but must be carefully used. When placed with oak it has an entirely different effect than when combined with either white or gray. There are, however, many natural woods with which it may be used, provided the yellow tones are avoided. Mulberry shades differ. If very ruddy, a grayish finish for the oak is recommended. Taking as a basis the portieres which you are now using, gray on the hall side, mulberry on the living room side, we suggest the following:

On the living room walls use a twotoned paper in shades of gray, repeating same in the hall. Let the tone of the oak trim in hall, living room and dining room be the same, fumed oak or any finish which is rather gray. "Putty" is a good comparison. If this work is well executed, and we would advise your architect's co-operation here, the life of the wood will be preserved, the grain retained, and a tone secured which will make the mulberry rugs, etc., entirely harmonious.

In the hall,—continue the mulberry hangings, rugs, etc. In the dining room, where the maghogany furniture is to be placed, we advocate one of three schemes: first, the same gray two-toned paper on the walls and curtains of chintz with some mulberry in the pattern; second, a figured paper in which mulberry is slightly visible; third, a reproduction of an old paper, mulberry or gray. The gray paper and chintz will work out easily. In that case there should be some use of chintz in the living room in the way of chair cushions, pillows, etc. With either of the figured papers, the curtains should be plain mulberry. As you have an abundance of mulberry draperies you may be glad to use them.

At the opening into the dining room from the living room, instead of folding

INSIDE CHOUSE

doors, screen doors of glass divided into paues are recommended—the woodwork being like the trim. When closed these give privacy, yet never interfere with light, and at all times are attractive. The screen door is closely related to the French door, but with less woodwork.

Ceilings should not be clear white in any of the rooms but toned to go with walls and trim. Good subordinate colors to use with gray and mulberry are soft green and old blue. Gold is effective in moderation.

White Enamel or Stain.

F. A. P.--We wish the whole of our new semi-bungalow finished in old ivory and mahogany, unless we except the kitchen. Should yellow pine floors be finished natural or in mahogany stain? If we conclude to use dining room furniture as it is, which is very dark golden oak, is there any other finish we could use in dining room that would not conflict with finish in living room, or would it be necessary to change finish throughout? If so suggest what you consider best. Living room fronts north; dining room east.

Ans.—Your plan to use old ivory paint, dull finish, throughout the house with mahogany doors is admirable, particularly as the larger part of your furniture is mahogany. The panels in living room and dining room should be old ivory. Rugs rather than carpets are advised, and of tones to harmonize with the furnishings.

We note that the dining room furniture is golden oak. Unless you are especially attached to this furniture in its present finish, we strongly recommend painting it, for golden oak and white enamel are not well mated. Now that painted furniture is so much used and so well liked an excellent opportunity is presented. Apple green is an agreeable color with ivory, so are chrome yellow, old blue and lacquer red. Use either yellow or green and a wall tint a little deeper than the ivory trim, and at the windows chintz curtains, and one large plain rug. With apple green furniture a chintz of ivory with gay flowers and birds in old rose, green and mauve would be effective.





With chrome yellow furniture black chintz, with green, yellow and old blue would be interesting.

In the living room: Have the walls of warm gray, rugs of gray and old rose, and at the windows plain old rose hangings over ivory net. Silver fixtures, rather than brass, and for the doors glass knobs. The mantel in this room should be of wood, not brick, although a brick facing would be quite in line, gray in tone.

As you do not mention the hall or send us a plan we are a little in the dark here. We take for granted an ivory trim. A landscape paper in shades of gray would be attractive here, furniture mahogany, and rugs of darker gray. If any upholstered furniture is used here, introduce olive green, and continue the green notes in the living room in order to bind the two rooms together. Suggestions for the bedrooms are: One south bedroom, old blue and white, the other pale yellow and gray and the third lavender and ivory.

F. A. P. (Continued).—In a previous letter I gave the impression that we would like old ivory finish with mahogany doors and we received very good suggestions, but after thinking more about it, we think the old ivory would spoil the grain of wood, which is yellow pine, and we are wondering if wood stain would be better. Living room and dining room are to be wood paneled, about 5 feet high; panels about 12 inches wide. Furniture in living room is solid mahogany, French legs. Dining room furniture we like as it is, dark golden oak.

Ans.—I think that your last letter presents the best solution of the problem, namely to stain the pine woodwork instead of painting it. With this latter plan you will follow bungalow traditions, preserving the grain of the wood at the same time making a good background for your furniture.

The first advice was based on your preference for white paint and mahogany doors and furniture. With the stained woodwork your dining room furniture may be used in its present condition; thus doing away with the necessity of painting.

The tone for the woodwork better be the same in the main rooms. The tone of fumed oak is excellent, floors a little darker. With the woodwork treated in this way we would advise the same wall tint in both rooms. Your choice of buff is admirable and one that will harmonize with the furniture. Use the olive green portieres which you now have at the opening between dining room and living room and repeat the green in some of the furnishings either at the windows or in the way of curtains, etc., preferably the window as your furniture is already tastefully upholstered. A figured material would add a needed touch of pattern to the wall. The rug could be either plain or figured as you desire.

In the bedrooms we note your preference still for white paint and mahogany doors. Our former suggestions hold good here. With so many plain walls, the use of a figured paper would be attractive in the hall, the colors to repeat those of the other rooms, with the addition of green and golden brown.

Renovating a Colonial House.

D. P. P.—I am enclosing floor plan of my colonial house which I am having renovated and would much appreciate any assistance you may give me in selecting colors for woodwork and paper.

Would say that this house is to be divided into two apartments so the plan shows only one-half which is soon ready for the finish.

I am in doubt as to what kind of doors to get for the ground floor. The woodwork in the living room is the old-fashioned kind—paneling about three feet high, with hand carved ridge around the top, and narrow carved piece around doors and windows as well as carved moulding around ceiling. Now what I wish to know is this: If the woodwork was painted white should I retain the old pine doors and have them painted to match

INSIDE HOUSE

woodwork or would new hardwood doors be suitable? The floors are to be hardwood throughout.

Should the dining room living room and hall all be painted the same?

In what other color could these rooms be done to look well and what paper and hangings would you advise?

Do you advise white paint or something darker? Green window shades or white?

The side of this house to be finished first faces⁻west.

There are two chambers, den and bath upstairs. What kind of paint would be suitable to use there? The southwest room will be papered in blue and I thought of having other chamber old rose.

Ans.—Our advice would be to use the old doors painting them to match the trim, which could be either white or ivory cream as you prefer. Light gray paint is also very effective in old fashioned rooms.

The main rooms of the house should have the same tone of paint. The other rooms separated from the body of the house could take a widely different treatment.

With your plan before us we would say, use one color in vestibule, hall and living room, as ivory white, a gray in the dining room, ivory in the bed rooms and possibly a light apple green in the den and buff in the kitchen. Use paint on the side walls of the vestibule—a gray green, buff or putty color; a paper in old fashioned design in the hall, a plain painted wall in the living room, gray, green or buff, and an old fashioned paper in the dining room; paint again in the kitchen, the bath room and the two bed rooms, and in the den a wall paper.

If blinds are green use green shades.

With the plain walls use figured curtains and with the figured walls, plain curtains.

If you prefer paper in the bed rooms, rose in one and blue in the other will be in excellent taste. Simple brass fixtures in colonial design will be appropriate.

"Indian Tree" Color Scheme.

A. W. B.—Will you kindly suggest color of rugs, overdrapes, and wall paper





for living room 25 ft. by 13 ft., with northwest exposure? Furniture for the most part antique mahogany and wicker. I thought of having tan rug, with deeper border of same, tan wall paper and old rose side curtains. Some of the chairs are to be re-upholstered. Would you advise tan or mulberry colored repp for this? Will have cretonne or chintz slip covers for the modern pieces. Woodwork to be in white enamel, egg shell finish.

In the dining room the woodwork is the same as living room. It has a baywindow and two Dutch windows, east exposure. Furniture is Cathedral oak. Have lovely antique "Indian Tree" punch bowl and cups. I would like to build up a color scheme from this. It has a cream white ground with flowers and leaves of old rose and pink greens, old blues and blacks and gilt. Would a woven rug of old blue blended with cream and tan, and old blue window drapes be correct?

How shall I treat woodwork and walls in small breakfast room, having plate rail, with gray Windsor chairs and table? Would the gray woodwork be good? What colors would you suggest for rugs? Would Japanese toweling be good for draperies and table runners? West exposure.

Ans.—Your preference for tan and old rose for the living room is excellent providing the tan is not too yellow. We enclose a good foundation tone for your walls which may be expressed in paper, paint or other wall preparation. There are many good plain papers in two tones on the market. Tan repp is advised for the upholstery of the chairs rather than mulberry. In the slip-covers old rose, mulberry green, tan and black could be combined. If the black is very prominent in the chintz it should be repeated elsewhere—a touch in the rugs or in a table cover, and the room will gain in balance and harmony if the same chintz is used at the windows. The curtains should have a straight valance and full side hangings. Inasmuch as this room has a northern exposure, keep it as light as possible. Instead of one long rug use several of varying sizes. They will break up the lines and take away from the extreme width of the room which is nearly twice the length, an unusual feature.

We congratulate you on the possession of the old Indian Tree punch bowl. We are familiar with the color scheme of the bowl, the soft clear green, old rose, green and cream. On the walls we would use a deep cream or ivory, deepening from the tan of the living room. For side curtains at the window use old rose silk of a very transparent quality with a straight valance of the chintz of the living room, and a narrow panel of the same at side. This straight valance or lambrequin is fitted over buckram and the narrow side panel hanging the length of the silk curtain is lined. It is understood that the chintz has green, old rose, and ivory, and possibly mulberry on a black ground.

If your preference is for a strong old blue note here rather than old rose, substitute old blue silk at the windows with chintz overdraperies, as suggested. In this case blue should predominate in the rug. With the first scheme suggested, green should predominate.

Coming to the breakfast room with its gray Windsor chairs, we would advise a continuation of the ivory woodwork. If you use blue in the dining room, keep the breakfast room in gray and pale orange with a little blue. The Japanese toweling is a good suggestion. If you use rose in the dining room, the dominant note could be blue in the breakfast room with gray and a little green.

If the walls are plain in the other rooms, use a paper here in a Chinese Chippendale or Colonial pattern. Thus you will gain variety, holding at the same time to your color scheme.

BEAVER BOARD FOR BETTER WALLS & CEILINGS

Put this Room in Your Attic

If yours is the average home, there's room in your attic going to waste.

Stop the waste!

Here's the chance to get that extra room you've always wanted. Possibly it's a sewing room, a den, or a playroom for the children.

That snug little corner in the attic will furnish the space. Beaver Board will provide the walls and ceiling.

And when it's finished you'll wonder how you ever got along without it.

No Muss-No Litter

One big use for Beaver Board-the modern, sanitary, wall and ceiling material-is that of remodeling. No plastering, muss or litter, no worry and the splendid transformation which Beaver Board accomplishes is a source of constant delight.

Beaver Board Cleanliness

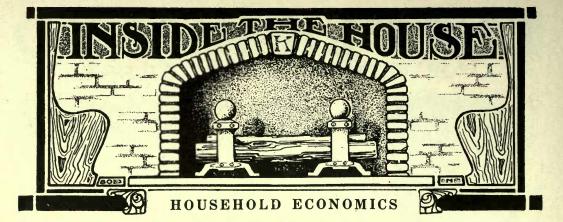
Beaver Board is cleanly through and through -- only pure, clean wood fibre, fresh from the forest. Beaver Board is painted, not papered, so it's completely sanitary.

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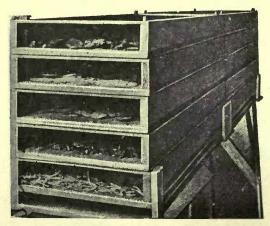
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You can't ex-pect Beaver Board results un-less this trade-mark is on the back of the board you buy.



A Lost Art Revived

ANY of the present generation can remember childhood days when "grandmother came to dry corn, and apples, cherries and peaches," while "Mother" put her strawberries and blackberry jam into tin cans and sent for the tinner to solder the cans. The drying of fruit and vegetables is almost a lost art to this generation of housewives. For several years the drying of corn has been gaining in favor as giving a finer flavor than the canned product, but few have really taken the trouble to dry it, even though the process is comparatively simple. The whole object is to preserve them by removing from the



Drying trays may be made at home.

vegetables and fruit all the water they contain.

Now the whole situation is changed and the need for drying all kinds of fruit and vegetables is imperative. Drying vegetables in the sun is a simple and easy process. It is merely necessary to wash and prepare the vegetables, slice or shred them and spread the fresh-cut pieces on sheets of paper or on old muslin, which may be held down with stones. Bright, hot, sunny days should be chosen for drying days, and a close watch kept to see that no rain or dew wets the product. Once or twice a day the slices should be stirred or turned over with the hand and the thin ones, which dry quickest, removed. The greatest care should be taken that the material be kept absolutely free from possibility of contamination by flies or insects, by the use of screens and mosquito netting or some light covering.

Sun Drying.

Sun drying requires no expenditure of fuel, and is believed to give a finer flavor, possibly because there is no danger of scorching. Some housekeepers say that dried pumpkin and squash have a superior excellence for pie-making. Snapped beans are often strung on threads and dried above the stove.

Vegetables for drying may be spread on large trays of uniform size, so made that they can be stacked on top of one

REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc., is a serious business,—it may win or lose the war.



another, with the bottoms made of lath spaced an eighth of an inch apart, or with wire mesh bottoms. Such trays may be home made, using wood strips two inches wide and three-quarters of an inch thick, for the sides. Wire mesh may be used for the ends.

Use of Electric Fan.

An electric fan will greatly "speed up" the drying process. The trays may be stacked as in the cut and a fan set at the open ends. As the forced draft of air passes over them, it sucks out the air so rapidly that sometimes in twenty-four hours they are in the required condition.

Cook-Stove Dryers.

There are cook-stove vegetable dryers on the market. One type consists of a series of shallow trays, placed in a skeleton framework one above another, and suspended over the cook-stove, preferably beside the chimney, but raised high enough to be out of the way when the range is in use. This also can be made by a boy who is handy with tools.

Oven Drying.

Indeed vegetables may be satisfactorily dried on plates or suitable trays in the cook-stove oven, though the temperature must be very carefully watched, and the door left open if the oven is warm. When dried by artificial heat they should be exposed at the beginning to a moderate warmth, and later to a higher temperature. At highest the temperature ought not to go above 140 degrees. A thermometer is indispensable. In some types of apparatus several hours are sufficient for drying some kinds of vegetables. This is the kind of work in which experience is the best teacher.

Care should be taken that the material is sliced thin enough, but not too thin. From one-eighth of an inch to one-quarter inch is usually about the right thickness. If dried products of a fine quality are to be obtained, the vegetables must be fresh, young, tender and perfectly clean.

A Good Suggestion for a Dark Room.

I want to tell you how I treated the walls and ceiling of a dark hall. The



Illustrating one of the many designs in Morgan French Doors

Nothing adds so much to the charm of the home as beautiful doors—inside and outside. They are the barometer of the quality of the house. A new front door and a few new inside doors have made many an old house attractive.



is your guide to the utmost in doors in beauty, in individuality, in variety of designs and in lasting satisfaction and service.

Insist on MORGAN DOORS because of their beautiful, selected woods, their extrathick veneers, their All White Pine Cores and their Patented Wedge Dowel Construction.

And because they are guaranteed.

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"Adding Distinction to the Home" gives you many suggestions for improving the present home.

"'The Door Beautiful" is full of ideas on doors, interior trim and interior decoration for prospective builders.

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Morgan Millwork Co., Baltimore Morgan Co., Oshkosh, Wisconsin Exhibits of finished Morgan Model Doors in all principal cities. Ask for list.



decorator in the store where I bought my paints suggested that I use yellow, as I was tired of tan. So I got a gallon of yellow, flat wall paint. After I had the first coat on it did not please me. For one thing it gave my complexion a bilious cast which I did not approve of.

So, taking out a can of old rose paint which I had gotten for stencil work, I mixed enough with the remainder of the yellow paint to give it a decided pink tinge. Then I put the second coat on over the yellow coat and the result was a beautiful sunset glow, beautiful in day time but even more so under the electric light. The pink in the second coat gives it a life and takes the hard look away. I used a delft blue for stencil design, with french gray woodwork. I am going to use the same combination in my kitchen, and would think the manner in which I put the paint on the walls would do for any room in which one would like a change from tan and needs to stick to a light color on account of the position of the room. Any one who uses the combination as I did I am sure will not go back to tan, pleasing as it is.—Mrs. Jane Heckman Taylor.

Illuminated Keyhole.

By means of a small electric lamp concealed in a door knob, and operated by a push button, also concealed in the back of the knob, an Ohio inventor has made it possible for the late comer to find the keyhole, even in the darkest night. The lamp is so located that the light is thrown directly on the keyhole.

Protection Against Lightning.

The damage to property from lightning is so small that it is almost negligible, in comparison to the damage by fire of other origin. That modern building construction makes the danger from lightning much less in the cities than it is in the country is the contention of The Electrical Review, which says that the metallic roofs and the steel that enters largely into the construction of buildings in the cities seem to rob the lightning of most of its destructive power, even if buildings are struck. Lightning rods as usually erected are of practically no use. Continuing, The Electrical Review says:

"The problem of protecting a building from lightning is one of no small importance. A tin roof seems to be a fairly good protection, especially if gutterspouts connected with it are carried to the ground and there joined with buried pipes. Barns containing animals and green hay particularly seem prone to invite the stroke. Trees differ very much in their attractive power for lightning; thus maples and cottonwoods are struck much more often than oaks, and oaks much more often than beech-trees. The old rules for personal safety, which are the result of experience and superstition in about equal parts, may well be observed, particularly that which cautions the avoidance of trees as places of shelter."

To Transfer Photos to Wood.

A method of transferring pictures to wood is given in the Electrical Experimenter by V. C. Mcllvane, as follows:

Dissolve salt in soft water, float your photo print on the surface, picture side up; let it remain about an hour. The wood should be of bird's-eye maple or other light colored hardwood. Varnish with the best copal or transfer varnish.

Take the picture from the water, dry a little between linen rags; then put the photograph, picture side down, on the varnished wood, and smooth it nicely. Let the picture entirely cover the wood after the margin is cut off, so that no varnish is exposed, lay over it a thin board and heavy weight; leave it thus over night. If you wish but a small picture in the center of the wood apply the varnish only to a space the size of the picture.

In the morning dip your forefinger in salt and water, and commence rubbing off the paper; the nearer you come to the picture the more careful you must be, as a hole would spoil your work.

REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc., is a serious business,—it may win or lose the war.

should be the roof for the home you are planning.

AMBLER Asbestos Shingles

Nothing to Burn

Nothing to Repair

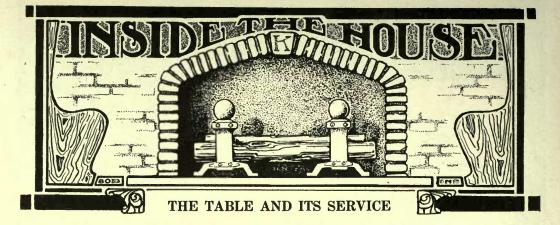
will give you roof insurance for you and your heirs for generations. Insurance against falling sparks, against leaks, against repairs, against painting. Neither storms, winds, hot sun, sharp frosts nor fires will effect a roof covered with Ambler Asbestos Shingles. The several beautiful colors, red, gray, and blue-black, will not fade.

We would like to send you pictures of some beautiful homes covered with Ambler Asbestos Shingles, and the full story of what they are samples too.

KEASBEY & MATTISON COMPANY DEPT. K-1. AMBLER, PA., U. S. A. Manufacturers of Asbestos Shingles, Asbestos Corrugated Roofing

and Siding, 85% Magnesia Pipe and Boiler Covering and Asbestos Building Lumber.

Residence of Dr. P. Chas. Lapp, Malvern, Pa. Cantr. Walter Paschall & Son, Paoli, Pa. Roof applied with Ambler Asbestos Shingles. 185



Protein Foods-Tissue Builders



ROTEIN is both necessary and expensive. Therefore, it should receive first consideration when planning economy.

The dried legumes—peas, beans, etc. are the cheapest sources of protein. Use them more generally. There are many ways of preparing them. Don't overlook cow peas and soy beans. They are the cheapest in price, are highest in protein value and have a pleasing flavor. All dried legumes are greatly improved by soaking in lukewarm, soft water for 12 hours and cooking in soft water until well done.

Cheese has high protein value, requires no cooking and is no waste. Consequently, it is a cheap source of protein, rather than an extravagant one, as is sometimes supposed.

Classification of Common Foods According to Chief Food Constituents

For the convenience of the homemaker who is trying to plan an economical diet that will supply food requirements, a list of common foods tabulated according to the chief food coustituent is given. If one food from each group is found in every meal there need be little fear of lack of nourishment.

Protein Foods Tissue Builders	Starch Foods	Sugary Foods	Fatty Foods	Fruits and Wa	tery Vegetables
Lean Meat Poultry Fish Oysters Milk, skimmed Cheese Eggs Legumes Dried Peas, Beans, Soy Beans, Cow Peas, Peanuts Nuts and Siniilar Foods	Bread Crackers Macaroni Tapioca Potatoes Rice Cereal Break- fast Foods Hominy Bananas Starchy Vege- tables and Similar Foods	Sugar Syrup Honey Jelly Candy Preserves Marmalade and Similar Foods	Butter Cream Lard Drippings Olive Oil Cotton Seed and Salad Oils Fat Meat Oleomargarine Bacon Chocolate and Similar Foods	Apples Oranges Berries Peas Melons Rhubarb Datcs Figs Raisins Prunes Apricots Carrots and Similar Foods	Greens String Beans Green Peas Cabbage Tomatoes Turnips Asparagus Salsify Squash Lettuce

REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc., is a serious business,—it may win or lose the war.



Milk, Eggs and Fish.

Milk is a valuable source of protein and mineral. At 10 cents a quart milk protein is comparatively inexpensive and every child should have at least a quart of milk a day. Eggs are a valuable source of protein and even at high prices can well be substituted occasionally for meat. Canned and preserved fish, because of low cost and small percentage of waste should be used more frequently. They add variety.

Meat protein is expensive and is more apt to decompose in the intestines. Meat protein need not be served more than once a day and may well be served even less frequently. When meat is desired the same food value, at much less expense, can be had in the cheaper cuts. By careful cooking they may be made quite as palatable as the more expensive cuts.

"Regulating" Foods.

The acids and mineral matter found in fruits and fresh vegetables regulate the body. Outer layers of grain serve the same purpose. This is largely why graham flour is so valuable. Water acts as a regulator and a flush, which carries away poisonous toxins. Drink at least three pints daily, either "raw" or in the form of beverages.

Economy Will Pay Big Dividends.

Sane, intelligent economy will do you no harm. It will do you much good. Someone has said America is a nation of gourmands. We eat too much-more than we need-more than is good for us. Millions of Americans are suffering from maladies directly traceable to over-eating. Most of us would be healthier, happier and wealthier if we reduced the quantities of food consumed from 10 to 50 per cent.

So, here's patriotism, which will not only do a great good toward conserving our food supply, toward feeding the brave boys in the trenches and in the training camps, our own poor, but actually pay big dividends in health, happiness and prosperity.

Eliminate the thick, expensive steaks and roasts. Substitute the cheaper, thinner cuts and then eliminate some of



WINDOW HARDWARE **Ushers In A New Era In**

Casement Window Construction

By overcoming all the faults of the ordinary hinged casement window-Whitney Casement Window Hardware not only increases the desirability of casement windows for sun rooms and sleeping porches-but also makes them practical for any and all parts of the home and for all other types of buildings.

In fact, casement windows installed with Whitney Hardware have many advantages over the ordinary double hung, sliding sash windows. Whitney windows are absolutely tight and storm-proof when closed - also burglar-proof.

They open outward-out of the way of shades, curtains and furniture. They afford perfect control of ventilation and drafts. Yor can easily move the sash to either side of the opening and have a wide unobstructed view of the outdoors and a clear sweep of the breezes when desired. They never rattle or slam shut—always work smoothly and quietly. We manufacture only the patented Whitney Window Hardware and screen fittings—use any style sash you wish.

If you cannot get the sash locally, we will quote you on your requirements complete, f. o. h. Minneapolis. Our service department will help you, without charge, to

adapt Whitney Windows to any unusual requirements, fur-nishing you with drawings and specifications that will enable your contractor or carpenter to make successful installation. FREE—Write for interesting portfolio of artistic and practi-

cal casement window designs for different types of homes. If West of Mississippi River If East of Mississippi River, or in Wisconsin, addressaddress-

Whitney Window Corporation, 311 Fifth Street South,



Whitney hinge that is fastened to top of sash. The roller runs in a groove. This -> shows the Whitney hinge that is fastened to bottom of sash. It has a shoe that slides in a water-proof metal track.



H. E. Holbrook

Company,

445 John Hancock Building,

BOSTON, MASS.

187



these. Stop serving the expensive salads and "fussy" desserts. Your body does not require them. In most cases it is better off without them.

What Your Food Must Do.

For you to be well nourished your food must do only three things:

1. Furnish building material for the body tissues—so that they may be nor-

"Heat and Energy" Foods.

Heat and energy are supplied by the carbohydrates-sugars, starches and fats. Sugars are largely obtained from sugar cane, beets and fruits; starches from cereal grains and such vegetables as potatoes, sweet potatoes, etc., fats from fat meats, milk, vegetable oils-olive, cotton seed, corn, etc.

SUGGESTIVE MENUS

A few suggestive menus show the variety it is possible to have at comparatively small expenditure. For dinner, two vegetables, a protein dish, bread and butter and a simple dessert are recommended. For lunch or supper, one hot dish, bread and butter, milk and a dessert. These menus have proved satisfactory even for people doing heavy manual labor. With minor changes they should meet the needs of the average household.

Menu 1

- Stewed Prunes, Oatmeal, Toas Creamed Codfish, Milk and Coffee. Breakfast..Stewed Toast,
- .Flank Steak Roast, Dressing with Gravy, Rice, Bread, Lettuce, Cherry Dinner.... Pudding.
- Supper.....Corn Chowder, Gingerbread, Rhu-barb, Milk and Tea.

Menu 2

Breakfast. Stewed Apricots, Cream of Wheat with Bran, French Toast with Syrup.

- Dinner.....Pot Roast of Beef with Gravy, Brown Potatoes, Graham Bread, Lettuce Salad, Prune Pie.
- Supper.....Escalloped Lima Beans, Bread, Pine-apple Tapioca, Milk and Tea.

Menu 3

Breakfast . . Bananas, Oatmeal, Bran Muffins, Milk and Coffee.

Dinner.....Cottage Pie, Creamed Lima Beans, Graham Bread, Apricot Rice.

Supper.....Tomato Soup with Rice, Saltines, Banana and Pineapple Salad.

mally developed and kept in good condition.

2. Supply heat and energy.

3. Supply regulating material so that the processes of digestion, circulation and elimination may take place normally.

To provide proper food and in the proper quantities it is not necessary to gourmandize. Neither is it necessary to go hungry. It is necessary only to know the relative values of foodstuffs and the actual requirements of the family.

Menu 4

- Breakfast .. One-half Orange, Farina, Corn Griddle Cakes, Milk and Coffee.
- Dinner.....Meat Meat Loaf with Brown Sauce, Creamed Macaroni, Escalloped To-
- matoes, Bread, Brown Betty. Supper.....Macaroni and Cheese, Graham Bread, Stewed Prunes, Milk.

Menu 5

- Breakfast . . Apple Sauce, Cracked Wheat, Creamed Beef on Toast, Milk and Coffee.
- Dinner....Escalloped Eggs with Ham, Baked Potatoes, Bread, Orange Snow. Supper....Tomato and Kidney Bean Stew, Gra-
- ham Bread, Apple Tapioca, Milk.

Menu 6

- Breakfast .. Stewed Peaches, Oatmeal, Graliam Muffins, Milk and Coffee.
- Dinner.....Creamed Codfish, Baked Potatoes,
- Bread, Buttered Beets, Cherry Pie. Supper.....Cheese Souffle, Graham Bread, Peach Cobbler, Milk.

Menu 7

Breakfast. Stewed Figs, Cream of Wheat with Bran, Frizzled Ham, Milk and Coffee. Dinner.....Boston Baked Beans, Brown Bread, Creamed Onions, Lemon Jelly. Supper.....Potato Soup, Saltines, Fruit Salad, Peanut Cookies.

Building material is supplied by protein foods-meats (the cheaper, thinner cuts are just as good), fish, eggs, milk, cheese, nuts and the dried legumes, beans, peas, soy beans, cow peas, etc. Mineral matter in small amounts is needed, but let fresh vegetables and fruits supply this. Water obtained from fresh fruits, vegetables and beverages also plays an important part in that it is the basis of all fluids of the body and all food must go into solution before it is utilized by the system.

Published in the Interest or Food Conservation by the





N planning the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

Fourth revised edition, just off the press, is beautifully printed on enameled paper and has embossed paper cover. 112 pages. Size $7\frac{1}{2} \times 10$.

Contents:

Halls and Stairways, Living Rooms, Dining Rooms, Sleeping Rooms, Dens and Fireplaces. Billiard Rooms, Kitchens, Outdoor Living Rooms and Garden Rooms.

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M. L. KEITH

742 Metropolitan Bank Bldg., Minneapolis, Minn.



"The Natural Trim for the American Home"

In great houses as well as modest little bungalows, "Beautiful **birch**" has come to be regarded as "The Natural Trim for the American Home." Nor is its use confined to the trim alone. "Beautiful birch" veneered doors, furniture and hardwood floors, are among the "added attractions" of this all-purpose hardwood.

Its extreme hardness and close grain permit of its forming a fine base for a great variety of finishes, from natural and silver gray to dark brown and Colonial dark red, while for white enamel it seems almost made to order.

These are by no means all of the reasons for the universal use of "Beautiful birch," by home builders. There are many more. Low cost, for example. The economy of "Beautiful **birch**" has had much to do with the widening cf its circle of users.

"Beautiful birch" gives more for less

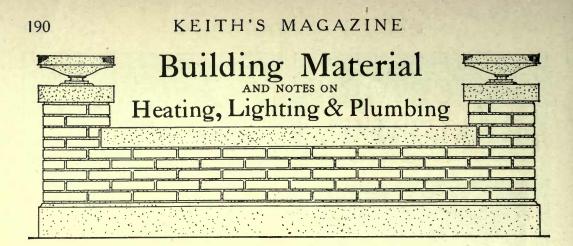
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You are entitled to this information and it will give us pleasure to put it before you-in detail and with authority.

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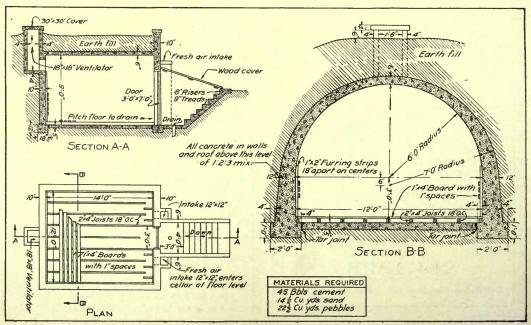


To Build A Storage Cave

MERICAN ingenuity will be put to the test in addition to the regular conservation plans, if no garden produce goes to waste in the new made gardens all over the land. Pro-

vision for canning was made early in the season in the villages, in many school houses and other centers, in addition to the usual methods of home canning. Drying of all kinds of vegetables and fruits is recommended. But for many vegetables and some fruits some kind of cold storage seems the practical thing for those who have or can build storage cellars or caves. Built partly if not entirely underground, on a hillside location, a cellar temperature can be maintained with a little care and apples and potatoes, in particular, can be kept in good condition from one season's end to the beginning of the next.

The apples or vegetables must be carefully handled and in good condition in



Plan of Cave 12x14 feet, with details of section each way.





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He will tell you this is one of the very few paints that are "fit for the finest homes." And he will tell you that it has a wonderful reputation for spreading farther-clinging tighter-wearing longerand holding its color unchanged. Sold by leading dealers everywhere.

Our beautiful book, "The House Outside and Inside" -enlarged color-plate edition-mailed promptly on request. State whether in-terested in outside or inside decoration.

The Lowe Brothers Company 465 East Third St., Dayton, Ohio Boston New York Jersey City ago Kansas City Minneapolis Chicago Lowe Brothers, Ltd., Toronto, Canada

the first place. The market is often glutted by the entire crop of a neighborhood being thrown upon it at once, and much waste ensues, as well as prices lower than is fair to the gardener, which might have been avoided by holding the crop in good condition until a later time.

Working drawings are shown for a cave built in a natural or improvised hillside. The excavation, which goes some feet below the surface of the ground, furnishes enough loose earth to cover the entire structure.

This plan permits adding to or taking from the length of the structure so that it may be built to any required capacity. The cellar is 12 feet wide and 14 feet long as designed and 9 feet deep on the inside. The entire structure—floor, walls and roof—is of concrete. Such a cellar is not only moisture-proof, but will entirely prevent waste which rats and mice cause to some stored crops.

The average normal temperature of the earth is about 50 degrees Fahrenheit, which is too high for ideal storage conditions. During the early fall months there are nights when the temperature drops near or below the freezing point. This condition should be taken advantage of by building the storage cellar or cave so that it has a good ventilating system, which will provide rapid and ample circulation and change of the contained air. After the interior of the storage cellar has been brought to proper temperature, the cellar should not be opened until the next change of weather which will permit doing so without again warming up the interior.

Details of Construction.

Concrete mixed in the proportions of 1 part cement to $2\frac{1}{2}$ parts sand, to 4 parts pebbles or stone, may be used throughout except for the floor and the arch of the roof, for which a 1:2:3 mixture should be used as indicated on the plan.

Side walls are 16 inches thick at the base and taper to 6 inches thick at the crown. End walls are 10 inches thick.

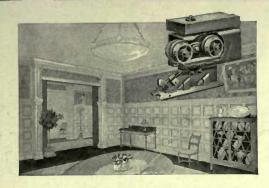
This design has been prepared with special reference to ventilation. During cool evenings manhole and cold air intake covers are removed and the cold air permitted to pass down the intakes, circulating through the passage between the concrete floor and the false floor of the bins. The false floor is made of 2 by 4 joists, covered with 1 by 4 boards nailed 1 inch apart. Openings in the floor allow the air to pass up through the stored contents, thus cooling them.

The outside walls are built so that cool air can circulate up along them. The warm air passes out through the manholes. In the course of one night the entire air in the storage cellar is in this way changed many times, thus thoroughly cooling the cellar before morning.

Booklet No. 140 contains information on proportioning concrete mixtures, and mixing and placing concrete; booklet No. 141 contains information on the construction of foundations and low walls, and No. 137 on floors. All of these may be obtained from the Portland Cement Association without charge, on request.



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or sister entertain friends in the living room and the maid busy herself in the dining room or kitchen, with convenience to all concerned.

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as well as more even heating, better ventilation and proper humidity in the rooms, and the very minimum of trouble, invariably result from installing a

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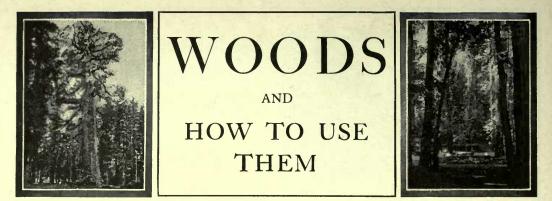
called "the fool proof Furnace," because it is so simply yet scientifically huilt that it works right along even in the hands of an unskilled operator.

The FRONT PANE Steel Furnace is the greatest economizer of fuel, because it has the longest fire travel; and therefore, it gets the most heat value from the fuel before passing the gases and smoke to the flue. The FRONT PANK Steel Furnace is easily cleaned, stays in order, burns any kind of fuel, is gas-tight and smoke-proof and has no direct draft to warp and buckle.

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EDITOR'S NOTE. --When the building idea takes possession of you--and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH's staff of wood experts. This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords. The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

Wood to Play an Important Part in the War

"When the fight for democracy is won, no little credit for the victory will be due to forest resources America. The timber of the New World is contributing directly and powerfully to the final defeat and vanquishment of the last remaining despotism of the Old World."—R. S. Kellogg.

HERE is no other material used for construction purposes that combines in such a high degree the qualities of universal availability and workability-as wood. It can be had everywhere on short notice; it is transported almost on any kind of railroad equipment, subject to little damage en route, and can be used by all-chisel, saw and plane quickly fitting it for a multitude of purposes. Weight for weight, wood is stronger than steel or any other material that may be substituted for it," said R. S. Kellogg in an address to World's Salesmanship Congress.

"Its durability is sufficient for all common uses, while by the selection of certain species or the chemical treatment of other species it can be made to last indefinitely in locations favorable to decay. One of the most useful properties of wood is its non-conductivity of heat and electricity. Wood is one of the best insulating materials we have."

"The world has built with wood since the beginning of time, and the return to the use of wood in the present national crisis is striking evidence of the serviceability of this universal material."

• An example of the speedy construction possible with wood is that of the building of the quarters for the Reserve Officers' Training Camp at Fort Sheridan during the first ten days in May. 400,000 feet of the shipment was run through the planing mills of the lumber company, and also loaded on cars in the same day.

The trainload of lumber was delivered at Fort Sheridan on Tuesday morning, May 1. The construction company had its force on the ground equipped with gasoline saws and all other devices for quick work. Ohio National Guard engineers staked out the streets and buildings. The job was finished May 10, in just ten working days, using only one shift per day. The largest number of men employed on the job at one time was 785. They built complete, ready for occupancy: 42 barracks, 20x126 feet each; 21 mess buildings, and 21 lavatory buildings, both fully equipped; 1 post exchange building, and 1 telephone exchange building.

Quick work of the same character has been done at Fort Benjamin Harrison, Indiana, at Fort Oglethorpe, Georgia, and other points. At Fort Oglethorpe, 136 buildings were erected in 12 days.

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If the proper wood be selected, modern homes, even those of moderate cost, can have interior features formerly associated only with homes representing considerable outlay. Of the available woods none will serve you better in this respect than North Carolina Pine. Beautiful effects are made possible by its handsome grain figure in combination with stains. Also it is an ideal base for enamels. And bare floors of this wood are easily polished and very satisfactory. Write for our two free books—Home-Builders' Book and Book of Interiors.

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Write for information.



North Carolina In connection with the much-talkedabout fleet of wooden ships, a great many contradictory statements have been issued, but it is reasonably certain that at least 250 vessels of standard type will be constructed of wood. In addition to these vessels, of course, every wooden shipbuilding yard in the country is working and will continue to work to the limit in the construction of all sizes and types of vessels for private owners. High prices for charters make this profitable even if a boat survives only a few voyages.

One concern, whose office is in New York, assembled in Canada 550 eight feet submarine chasers within 535 days for England. This was one of the most remarkable examples of speedy construction we have had. A "master boat" was first built, every part of which was carefully fitted and measured as permanent models or templates. From each of these templates 550 exact duplicates were made in the parts of the country best suited to the production of different materials. They were shipped to the assembling plant in Canada, and at the finish, the rate of the assemblage had reached the speed of three complete boats per day. The lumber was worked up at a mill in New Jersey, and a total of over eight and a half million feet went into the operation. Should our navy undertake the construction of similar boats the facilities are available, and the necessary experience already gained.

The War Work Council of the Y. M. C. A. has made definite plans for the erection of some 200 buildings at the Army and Navy Training Camps throughout the country. There is expected to be a complete unit of building equipment, and Secretaries for every 8,000 men in camps.

Army transportation requires innumerable wagons; recent orders are in excess of 30,000 such vehicles.

Soldiers must have guns to fight with, and cots to sleep on.

It is said that a gunstock requires about 10 feet of lumber, so if we should make a million new rifles in this country, it will take 10 million feet of lumber. If a new army of one million men is fully equipped it may require four or five million rifles. Walnut has always been the preferred material for gunstocks, but birch has also been used for contracts for the Allies, and it is possible that the birch and gum may be used in this country. An army cot also takes about 10 feet of lumber. Recent orders by the War Department, placed in Wisconsin, are said to have exceeded 400,000 cots, which would require more than four million feet of rock elm, beech or hard maple, chiefly $1\frac{1}{2}$ inch thick.

One of the large items of lumber consumption will be for packing boxes and crates for both the army and navy.

If the United States should decide to carry the war into the air, it must build thousands and tens of thousands of airplanes. It is said that the Allies have 20,000 airplanes on the Western front, and the wastage is very great. Light, strong material is especially necessary for Ash has been airplane construction. chiefly used in the bent portions, spruce for the wings, and for the propellers a variety of different woods, built up in laminated fashion so as to have the necessary strength and to prevent checking and warping under the severe conditions of service. To build 10,000 airplanes may require the equivalent of 20 million feet of rough lumber.

Other war uses of lumber include the material for automobiles, artillery, cooperage, furniture, ways, docks, trench lining, saddles, mine timbers, tools, railroad construction, etc., etc. There will also be a large amount of lumber used in construction of new factories to fill war orders.

Value of Farm Woodlots Emphasized.

Contrary to general opinion the farm woodlots of the country not only furnish immense amounts of material for local use, but are important sources of supply for timber for the general market, says an expert of the Forest Service in a new publication of the Department of Agriculture, on "The Status and Value of Farm Woodlots in The Eastern United States." Much of the choice hickory, ash, and white oak now in use comes from farm woodlots. Many woodlots contain țimber every bit as good as that in the larger tracts and fully as capable of yielding high-grade lumber, if properly sawed and seasoned. Others have large quantities of pulpwood suitable for paper making, low-grade lumber for boxes, bolts for slack and tight cooperage, and excellent material for veneer.

In 1909, it is stated, the farmers of the

KEITH'S

for OCTOBER will be a SPECIAL STUCCO HOUSE NUMBER

While stucco has become very popular with the builders of homes, its possibilities have hardly been touched, while the use of cement and concrete, and the development to which these may attain is almost unknown to the building public. A few of these possibilities will be taken up in the special October number including

> Garden Accessories A Stucco House in Plan and Photograph Stucco as Used in Colonial Times Some Modern Stucco Houses Several types of concrete construction including Pre-Cast Walls and re-inforced concrete houses built in this country and elsewhere, Special designs for stucco houses and the other usual features including Kitchen Efficiency.

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BUILDERS

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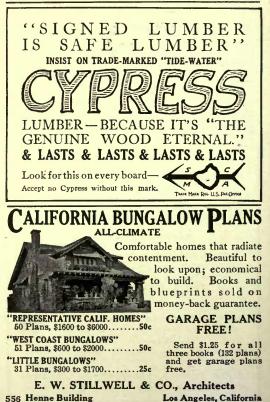
PORTER-HODGSON CO., Publishers 1315 Ellsworth Bldg., Chicago, Illinais				
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City				

Eastern States alone received from the sale of their woodlot products an average of \$81 for each reporting farm, or nearly \$170,000,000. This was more than the value of the entire potato crop, nearly double that of the tobacco crop, and more than twice that of the combined barley and rye crops.

Uses of Waste Tan Bark.

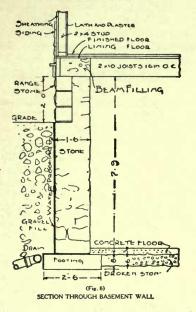
Investigations by the Forest Products Laboratory, at Madison, Wisconsin, have resulted in the use of spent tanbark in the manufacture of asphalt shingles to the extent of 160 tons per week. The value of the bark has been thereby increased from 60 cents to \$2.50 per ton.

A method for using waste hemlock tanbark to partially replace expensive rag stock in the manufacture of felt roofing has been developed at the Forest Products Laboratory and is now being used commercially by co-operating mills, according to an announcement made by the Forest Service. It is stated that, in these mills, from 20 to 30 per cent of the rags is being replaced by waste bark and that the quality of the finished product is equal to that manufactured solely from rags.



BUILDING the HOUSE

A Handbook Every Home-Builder Should Have



A great many homes are built without an architect's supervision. When this is the case, go out on the job with a copy of this book in your pocket, and 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. Look after the construction yourself, and with this book to guide you, faulty work will be detected and you can accomplish more and better results.

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Keep the American Dollar at Home.

SPLINTERS AND SHAVINGS

Home Making.



HERE is a story, which we hope is a true story, of a Civil War Veteran and his good wife, who, though people of wide interests,

had lived in a contented, economical way. When a legacy fell into the Colonel's lap, they decided to build a home in the newer part of town to which most of their oldtime friends had already gone.

A handsome brick house of the Georgian type was decided upon and Mr. Decorator was called in. Madam showed him some pictures of some elegant interiors which she had treasured, fine and somewhat elaborate.

Mr. Decorator looked around at the comfortable, worn old furnishings that were to be abandoned, and shook his head in a decisive manner.

"I wouldn't do it," he said, "It's too different. You haven't been used to that sort of thing and it wouldn't seem like home. You wouldn't be happy. Why, the good old Colonel would have to go down to the kitchen to enjoy his pipe."

"But you wouldn't take these old, wornout things up to that new house?" she protested. "They would seem so out of place."

"Of course," he replied, "we must have something worthy of the new house and of you. We'll have new things, good things, beautiful things, but they mustn't be just like the things Mrs. Hightone has, nor like those in the pictures. They must be just suited to you and the Colonel."

"Well, then," she answered, "What?" "I don't know yet," said Mr. Decorator. "I'm going to ask you to let me visit you for two weeks after the Colonel returns. That will be too short a time, but it will help."

The upshot of it was that Mr. Decorator, being something of a practicalpsychologist and student of human nature, made it his business to learn all he could about the tastes and habits and home life of the Colonel and his wife when they did not know he was observing them. Then, when at last he did furnish their home, he was able to introduce such styles and colors and objects as to produce an atmosphere in keeping with the character and lives of the owners.

The furnishings were new and of good quality, but comfort was the key-note rather than the elegance that Madam had thought they wanted. Somehow the home breathed the very spirit of the Colonel and his wife, and all their friends were charmed. As for the Colonel, he threw away his corncob pipe and bought a briar-root, but aside from that he found himself settling quite naturally and contentedly in the new quarters, and their new home proved a lasting satisfaction to them till the end of their days.

My Wage.

Jessie B. Rittenhouse.

I bargained with Life for a penny And Life would pay no more,

However I begged at evening When I counted my scanty store.

For Life is a just employer,

He gives you what you ask,

But once you have set the wages Why, you must bear the task.

I worked for a menial's hire Only to learn, dismayed,

That any wage I had asked of Life Life would have paid.

"This is the time for America to correct her unpardonable fault of wastefulness and extravagance. Let every man and every woman assume the duty of careful, provident use and expenditure as a public duty, as a dictate of patriotism, which no one can now expect ever to be excused or forgiven for ignoring."

From President's Proclamation.

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The community garage is rapidly gaining in favor. There is sound reason why this should be so. A garage with any-

The Fuel Supply for Next Winter,

is most uncertain. The mining of coal is not up to that of normal times, while the consumption is increased.

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where from four to sixteen stalls can be built much cheaper than an equal number of individual garages, and has greater possibilities architecturally. It conserves space, which is a very desirable feature. Masonry work, or reinforced concrete, is preferable to wood in a garage of this type, because of protection against fire, lower insurance rates, and durability.

American Dependence.

As the war progresses we are con-stantly finding out how dependent we have been on foreign nations for many of the things essential to keep our industries going. It seems always to have been cheaper, or easier, to buy these things than to build up the industries that could make them. So we have gone on importing things that might just as well have been made in the United States. We have felt that we were a self-sufficient nation, but are finding out that we are far from There is money enough in this that. country, and there are resources enough, to produce here practically everything we need. It will come out if given the proper kind and amount of encouragement.





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You will also find many valuable suggestions for residences of moderate-cost type and ideas which will add to the convenience and comfort of your new home.

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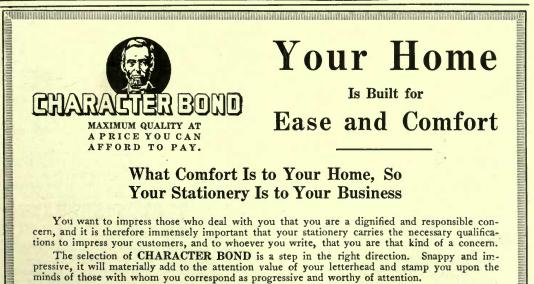
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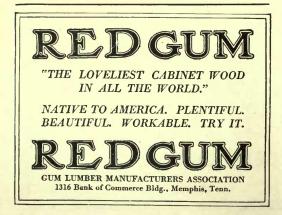
Book Reviews.

HE Livable House, Its Plan and Design. by Amar Embury II, Published by Moffat Yard and Company, is a real contribution to the literature of home building. It is generously illu-

home building. It is generously illustrated with full page cuts of beautiful homes, many of them small homes, built by some of the foremost architects of the country, Harrie T. Lindeberg; Delano and Aldrich; Peabody, Wilson and Brown, as well as the author; to mention only a few. The study of the plan is considered of paramount importance.

of paramount importance. "Good taste is not confined to the wealthy: Our American colleges graduate annually something like a hundred thousand men and women of high ideals, of culture and, and of artistic perceptions." Since good taste is not synonomous with expense, good things are as available to the poor as to the rich, if one but chooses wisely. People are coming to realize that the architectural profession is by no means useful only from the artistic side; a competent architect can get a little more room out of the same space than the untrained builder. He can plan so that housekeeping is a little easier, and he can see that the materials employed are durable and sound, and lend themselves to the beauty of the whole."

"It is an artistic axiom that the absolutely perfect thing is not as beautiful as that which has some slight irregularity—it would be unfair to call it a defect—and a wall made up of small similar units of absolutely equal size is never so happy as one in which the units are substantially similar but not uniform. Thus the shingled walls of Colonial times were made of shingles of various widths, and laid at slightly different intervals, so that the whole surface is of constant variety, unnoticed until looked for. Today our machine made shingles are uniform in size, and our careful workmen lay them so regularly that much of the interest is gone. While it may not be possible to reproduce in new shingles exactly the



same delightful quality which old shingles attain, still it is possible to produce shingle surfaces which have real artistic quality."

Experimental Building Science, by J. Leask Manson, head of the Building Trades Department, Leicester Technical School, Published by the Cambridge Press; G. P. Putnam's Sons, American Representatives, is a volume prepared for the student who wishes to get knowledge of the elementary sciences which will help him in his work in the Building Departments of the technical schools. The study of building science should run concurrently with the study of building construction. This volume is preliminary to a companion volume, Architectural Building Construc-"It should be possible, by means of the tion. knowledge and experience gained in working through these two little books to understand, discuss and possibly investigate some of the larger problems which arise in connection with the production and use of building materials and the This first design and occupation of buildings." volume takes up the physical problems of weights; density, structure of matter, as in its bearing on mortar and concrete; expansion and contraction, and the chemistry of problems. It gives the student an intelligent basis for more technical work which he will take up later.

The White Pine Bureau has recently published a book of Classified Recommended Uses for White Pine in House Construction, compiled for the use of architects in specifying White Pine Lumber. While various localities have their own local grading rules there are three fundamental or basic sets of white pine standard grading rules one or more of which are familiar to all dealers, all of which are published and fully illustrated in this volume. These are the rules in use by the associations of the Northern Pine Manufacturers, the Western Pine Manufacturers and the White Pine Association of the Tonawandas.

The purpose of the publication is to furnish architects with such authoritative information as will enable them to easily and correctly determine and as a result to properly specify the various grades of white pine lumber desired for use in house construction.

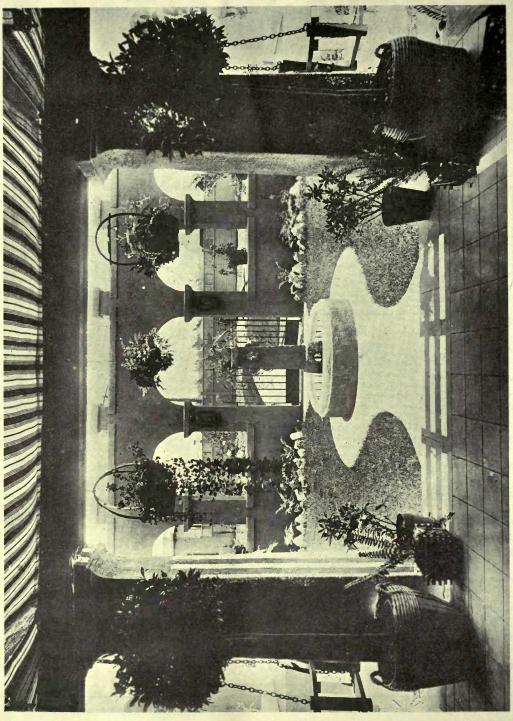
The recommended uses of white pine are those for which from a practical standpoint each grade is best adapted in house construction. In this book white pine has been recommended for use only in connection with house construction, the detailed information given being confined to those uses for which it is best suited in that particular class of building, no attempt having been made to cover the broader or in any sense the entire field of its usefulness. The information, however, while it pertains only to house construction, may be used as a basis and interpreted in terms which will apply to any class of building operation where white pine is to be specified.

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VOL. XXXVIII

OCTOBER, 1917

No. 4

Garden Accessories Franklin Boyd



OMES are necessities, but gardens are play spots. Never-theless into the garden do many

men and women put the most real part of their living. As the artist paints his picture, so does the gardenlover build up his little spot of the great out-doors.

With the development of the country house the scope of the garden has outgrown the bit taken from the lawn and In the small homey garden a rustic treatment is often adopted, using the material most easily at hand. As the science of landscape gardening has grown, the facility with which cement can be worked and its ready adaptability, as to form, texture and also the possible use of color have made it very acceptable to the gardener. For fountains and for garden urns, for sundials and for seats, the most beautiful forms, ancient

devoted to flowers and shrubs and has become the heart of a beautiful estate with its pergolas, summer house, and pool, with seats prepared for a certain amount of living out of doors, with beautiful vistas leading both to and from the house. The design of the garden is often quite as carefully worked out as that of the house.



Terminating the garden wall.

• or modern can be duplicated, while for the ever popular pergola, cement or stucco in some form are ever ready.

America has hardly learned to think and to design in the terms of a plastic substance so that the beauty of concrete design is hampered by the thought of imitation stone, and much of the possibilities for beau-

ty which is intrinsic in the plastic material is missed. Nevertheless results are being obtained which indicate something of the marvelous development which is before it. The possible use of color in connection with either stucco and cement is almost without limit, and herein lies one of its happiest forms of development. Garden urns with inset colored tile and mosaic as part of the

design are shown in the illustrations.

For the garden wall and to close the vista of the garden, looking through the pergola and past the fountain and pool, what would satisfy the eye as being adequate in a happier way than the terminal shown in the illustration. The relief work is modeled and cast in pieces which are set into the stucco wall. Only a glimpse is obtained of the stucco garden wall which this terminates, but it is a charming bit with its brick coping and the relief of the lattice.

A happy solution for the garden walk is also shown in one of the illustrations. The hard, plain line of a cement walk never



looks quite in keeping with the rest of the garden. The softer gravel or cinder walks are not satisfactorily under foot. Flat stones set a little apart in the English way, are very effective but difficult to get in Stepping place. stones of concrete set a little apart seem to solve the difficulty. They are good to look at;

they may be set to form any curve, by utilizing the space between. Set low in the grass they are good-looking and effective while at the same time they are thoroughly substantial under foot. They are very easy to obtain and to lay.

For garden seats and ornaments the use of cement is limited only by cost and ability. A beautiful piece of work in



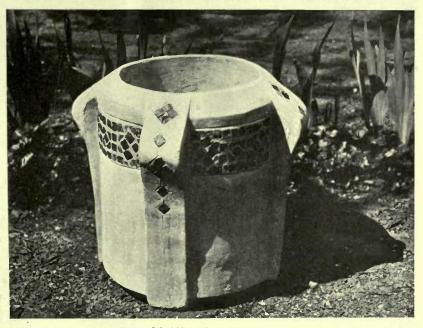
Irving J. Gill, Architect. Stepping stones for the garden walk.

white concrete has the endurance of a piece of marble and much the same type of beauty. It is worthy of the most skilled effort, or the simplest, and it repays either in the beauty of the result.

The sundial which "marks only sunny hours" does not lose its popularity, though the bird bath, in its thoughtfulness for the little feathered friends, has

become a favorite addition to the garden, and may be found in many types of graceful shape and pleasing color. The garden urn is always among the first additions when the garden begins to grow in scope, and it has been the subject of some very interesting developments in the use of concrete with reference to color as well as form.

Color may be introduced into garden pottery and accessories very effectively by the use of tile, set in the concrete, or by Mosaic so inset as to enrich the surface as a part of the design. The materials used for Mosaic are small squares of marble or of glass of different colors, sometimes including gold. This process goes back to the farthest antiquity and



Inlaid Mosaic for garden urn.

The use of color with concrete is hardly past its formative stage, perhaps. The authorities tell us that color is given to concrete by the use of dry mineral colors mixed with the sand before it is mixed with the cement. Permanency of the color is one of the most important questions. Blacks are safe as a rule we are told. Ultra-marine blue, if of good quality, will hold its color for a number of years, and generally possesses the virtue of fading out evenly, when it does finally lose its color. It cannot be classed as a permanent color, as is black, brown or ochre. has always given beautiful results. To make their color brighter the bits of stone used for the Mosaic may be soaked in linseed oil for several hours, we are told, and then set in the soft mortar. While most people are more or less familiar with the term Mosaic, few realize how simply it can be done and how much is added to a concrete surface to give it such an enrichment.

The tesserae, as the bits are called of which the Mosaic is made, may be oiled from time to time to keep them bright. Two garden urns are shown with inlaid Mosaic in the design.

Some Beautiful Portland Homes

Louise N. Johnson



I seems but fitting that residents of this scenic city of the Northwest, silhouetted against a back-

ground of snow-capped mountains, should build homes blending with the city's natural beauty. The plans and dreams of home lovers, made into a reallike an English cottage, was designed by Ellis F. Lawrence, Dean of Architecture. The home fairly breathes hospitality. It is situated on a sightly knoll overlooking Laurelhurst, a scenic park at the foot of a cluster of hills, dotted with lakes. The wide porch and the principal rooms face



The wide porches face the park.

Ellis F. Lawrence, Architect.

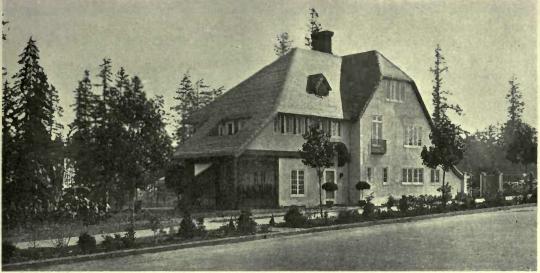
ity, lend a distinctive and homey atmosphere to its dwellings.

The two "shingle-thatch" homes illustrated represent neither the most costly nor the least expensive, but they are homes that have been completed this year, whose individuality has a particular appeal. With the improvement of the grounds and the wealth of luxuriant shrubbery and vines which make Portland dear to flower lovers, these homes will leave little to be desired, not only as models of the craftsman's art, but as cozy, homey and substantial structures.

The farmhouse of Paul J. Murphy, built

the park. The view of the house as seen from the park shows its architecture to better advantage, but I have also chosen a photograph of the house facing the street, as it brings out more effectively the beauty of the tapering lines and the unusually striking appearance of the shingle-thatch roof. The garage is built in as part of the house, the same roof extending over both.

The color scheme is of natural stucco, with crushed marble used in the last coat, relieved by old ivory trim on the windows and an edge of brown trim on the cornices. The roof is of green, a color



Built like an English cottage.

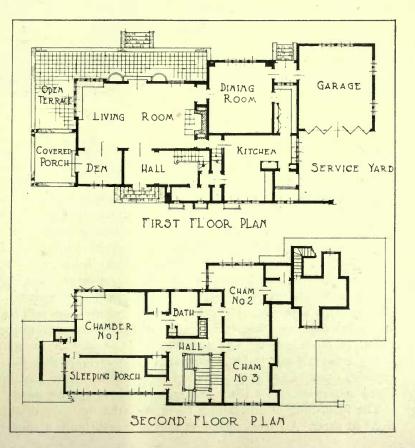
Ellis F. Lawrence, Architect.

named by the architect as a faded out olive green. The color arrangement suits the surroundings so admirably that it

seems to be built into the scenery. The shrubbery planted in the park strip only this year is a wide variety of evergreen shrubs. This placement was for the purpose of increasing in effect the distance between the house and the street.

The roomy porch, extending entirely around the east and south sides of the house is a typical English farmhouse porch, and directly overlooks the park. French doors open from it into the living room. Chinese furniture, brightened here and there with bright cushions, enhances its attractiveness. As will be noted, only a portion of the porch is covered.

The finish throughout the house is rich

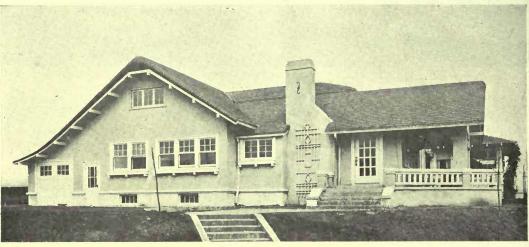


old ivory, the only contrasting material being the mahogany doors in the dining room, and the stairs and rail in the hall.

The hall, truly the index to the home, is purely Colonial, with the dignified simplicity that only a fine old Colonial hall can achieve. Old Turkish rugs add a touch of richness.

The interest around which the living room centers is the hearth. The wide fireplace is in the west end of this spacious of a field scene, a field in bloom, gives charm and character. A feature of this room is the two Colonial cabinets built cornerwise.

The second floor is also furnished throughout in old ivory. Each room has its spacious and comfortable window seats covered with wicker, with flowered cushions here and there. The walls are papered in Colonial style, the paper being of tapestry effect. The curtains are of



A thatch-roof bungalow.

Dwight Cheney, Designer

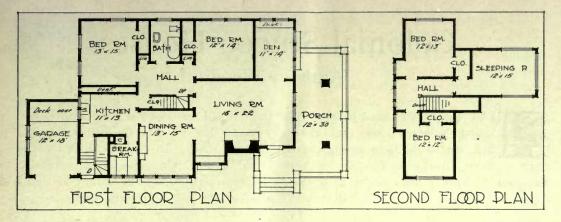
room. The mantel of old ivory is very imposing. Deep and spacious window seats are under the windows, covering the radiators. Note the delightful arrangement of the many windows overlooking the park. The walls of the living room are olive green, the hand tufted Austrian rug being of the same shade, and give the room an inviting and homelike air. Seclusion and comfort pervade the den, or what is really a library. The color scheme is carried out the same as in the living room, in olive green. The furniture is well chosen and admirably arranged, and signifies comfort and rest. The old fashioned bookcases of old ivory are built in.

The furnishing of the dining room reflects its cheer. A frieze painted on canvas, pink silk. The furniture in the large main bedroom is of the Adam period.

Little description is needed of the unique sleeping porch. It appears to be literally grooved in the roof. The third floor is devoted to the servants' quarters, with chambers and bath. A rear stairway leads to this floor.

A drive leads into the adequate service yard and garage. A high fence, over which vines will be twined, hide this view of the rear from the street.

Could anything be more pleasing to the eye than this thatch-roof bungalow, an echo of the low rambling homes in Ireland and Scotland? Following their lines, the designer of this home, Dwight Cheney, built a modern, up-to-date bunga-



low. After all, the essential of every house is that it be a "home," whether large or small, costly or lowly.

Where this house differs from the average low built bungalow is that it not only appears low and rambling, but it is low. This is really the keynote to its fascination. Observe the graceful tapering lines of the roof. Its length is acentuated by there being no second floor over either the front or the rear of the house, and the garage being housed under the same roof at the rear. It is to be noted that the top of the entrance door is very close under the eaves.

It seems that the chimneys on the old fashioned houses must have been of such a style as this, as the chimney suits this bungalow so admirably.

The material used in its construction is stucco, giving a rich cream tint. The shingle-thatch roof is harmoniously painted light green, and the trim is a rich cream, or old ivory. The lattice work, also in old ivory, is very effective.

The interior of this dainty bungalow is equally, if not more pleasing. Throughout, the finish is of old ivory, the only exception being the kitchen, which is in white enamel.

The entrance opens directly into the well proportioned and commdious living room. As in days of yore, interest is focused in the fireplace, which is of tile with wood mantel. A charming little alcove, with small paned windows overhead, and a spacious comfortable window seat, unite to creat an atmosphere of comfort and repose. A French door opens from the living room into the den, whose principal characteristic is restful harmony. A built-in desk and bookcases cover the entire wall space on one side.

A unique feature of this house is the hall, which is almost in the center of the house, and has access to the living room, two bedrooms, bath, kitchen and the upstairs, truly a clever arrangement.

The china closet, built in the paneling of the delightfully informal breakfast room, is particularly quaint and striking in design, as is also the buffet in the dining room. A door beside the grade entrance opens to the garage.

A pleasing finishing touch, which adds much to the old ivory finish used throughout the house, is the use of yacca wood trim. A two-inch strip of this wood, which is lighter in color than Circassion walnut, and is a beautiful combination with old ivory, is inlaid at the very edge of the mantel over the fireplace, the bookcases in the den, the plate rail and the buffet. It is much softer than mahogany, and blends rather than contrasts with the ivory finish.

Colonial Stucco Houses Anthony Woodruff



HAT stucco was used by the Colonial builders and that there are stucco houses dating back

even to the early part of the eighteenth century may come as a surprise to those who are not familiar with the fine old mansions of Germantown and vicinity that we find the interesting old stucco houses. In each locality, the Colonial builder used, generally of necessity, the materials which he found at hand. His choice of materials depended on



Vanderbeek house, Hackensack, N. J., built about 1717.

Courtesy Atlas Cement Co.

some of the older "down East" buildings. Notable among these are the old Wyck homestead in Germantown which was used as a hospital during the Revolutionary war, and the Vanderbeek house at Hackensack, N. J., which was built about 1717.

The Colonial houses of New England and of Virginia were as a rule built of wood. It is in the curious old Dutch homesteads of northern New Jersey and whether he was building among the pine forests of New England, in the stone ledges of Pennsylvania, or in some place where home burned brick was available. In New Orleans stucco was used over walls of home-made brick, and even some times over brick and half timber.

The quaint old Dutch homesteads in northern New Jersey were built by the Dutch settlers who left New York while it was still called "New Amsterdam" and



Corner of Vanderbeek house.

houses with a driveway between.

"The walls of the Germantown houses are built of the well known native ledge stone, which comes from the quarry in long, flat pieces, varying in color from bluish-gray to a warm mottled brown. The stone makes an unusually charming wall and has been used very extensively in modern work around Philadelphia. As it comes from the quarry it is quite soft and porous. easily split and broken, but hardens somewhat with age and exposure. It was undoubtedly the soft and porous nature of the stone which led the early builders to employ stucco as a protective coating. In a number of cases the stucco was applied only on the north walls, which evidently bore the brunt of the prevailing storms.

The stone was laid in mortar

went across the Hudson to the fertile valleys. They handled their material with rare skill and these houses which they built have, both in form and detail, a charm which they still retain.

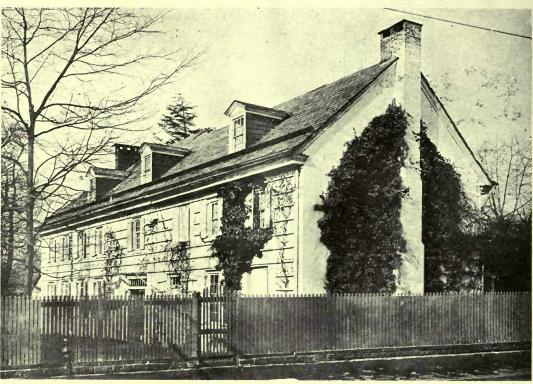
The houses at Germantown were built, we are told, by the descendants of the thirteen Germans who formed a community on the outskirts of the English Quaker settlement of Philadelphia. Most of these fine old buildings date well back of the Revolutionary war and not a few bear the scars of the battle of Germantown. Stucco was very commonly used for the houses in this vicinity.

The old Wyck house, one of the finest examples, has been used as a model for some of our very interesting modern work. Tradition says that this house was originally two



Doorway of the Wyck house.

composed of coarse sand and lime, the latter probably from the old lime kilns up the Schuylkill River, although it is not unlikely that the earliest work was laid with imported lime. Farther out in Pennsylvania, a common mud clay was used as the binding material. The chimneys of these houses were built of brick house in Hackensack, which shows the front wall and part of the west wall of stone stuccoed and the rest of frame clapboarded. In some rare instances, the wall consists of a hewn-timber frame work filled in with stone or brick and the whole plastered over. The chimneys are of Holland brick.



The old Wyck house, at Germantown.

Courtesy Atlas Cement Co.

imported from England. The brick was seldom stuccoed but we frequently find it whitewashed.

Out through New Jersey the walls, as a general thing, were built of native sandstone on the ground story and wood above," says J. A. F. Cardiff, A. I. A., in Early Stucco Houses, from which we quote. "In New York and Staten Island both stone and wood were used, while on Long Island wood was invariably employed. The combination of these materials is sometimes rather curious, as for instance, the charming old Vanderbeek Around New York and Staten Island the stone, which was hard, was laid up random-rubble fashion, sometimes stuccoed, more frequently whitewashed." "The mortar used for setting the stone, which was an ordinary clay mud mixture containing an admixture of straw as a binder, could not withstand the washing action of the rain, and it was evidently due to this fault that a protective coating of stucco was sometimes applied. There seems no other reason for its use, since the stone work itself, in color, texture and handling is charming. In the light of our knowledge of the perishable nature of old fashioned lime mortar where used out of doors, it may seem curious to contemplate its use as a protective covering for exterior masonry, but protection was necessary and no more-lasting material was then available."

Many varieties of stucco were used, but there were three distinctive types more generally used. One was a stucco of lime and gritty sand, troweled quite smooth and even. In tone it is a warm gray with an interesting mottled and sparkling effect due to the presence of mica in the sand. This type was used on the charming old Wyck house, the finest in all Germantown, but it lies far beneath whitewash so thick that the lattice is partly imbedded.

Another interesting variety is a warmer gray stucco made of the same or somewhat coarser constituents, but with a texture such as might be termed roughly-floated. The surface has a pleasing inequality, following the unevenness of the stone base and in some cases the high spots of the stone come through the stucco. This finish was used a great deal on the gable walls, with a different finish on the front walls.

The stucco of the old Dutch homesteads was made of a fine sand and lime mortar. Records of one, Adrian Sip, who in 1665 built an interesting old house still standing, describes the stucco as made of a lime produced by burning oyster shells.

In texture this stucco is finer than that on the Germantown houses and the subsequent coatings of whitewash, which seem to have been the rule, have made it quite smooth. The mellow tones of the old whitewash is very lovely. A more charming example of old stucco than the Vanderbeek house could hardly be found. The wide projection of the eaves across the whole front of the house, serving almost the purpose of a porch, in the protection it gives the entrance, was sometimes used in this early type of Dutch house, though this is perhaps its most interesting example. This shelf-like effect in the overhang of the eaves stuccoed underneath is also seen in some of the early Pennsylvania types, lending a charm quite its own, to the stucco surface which it protects.

Pre-Cast Walls for the Concrete House



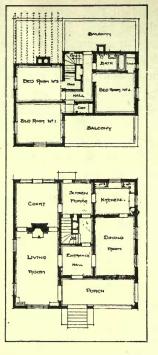
AYING concrete in a horizontal plane is a very simple matter. Reinforcement is easily put in place, openings only require the

placing of the frames, the thickness of the wall is easily established, the concrete is easily poured.

Early in the history of concrete construction in this country, Col. Aiken of the United States Army, devised a system of casting the walls of a building in a horizontal position and raising them with special equipment. Numerous buildings were erected, notably at army posts, but the system was not widely used. Concrete enthusiasts have taken up this system in various parts of the country, but the most satisfactory of the recent developments of this system have been carried on in Southern California under the personal direction of the architect Mr. Irving J. Gill, who has developed the use of concrete in residence construction and who uses it almost or quite exclusively in his work. In order to obtain the desired excellence of results the materials are prepared with the greatest care and the workmen have especial training. The training of a workman looks not so much toward a superficial perfection of technique as toward the development of personal thought and conscienciousness toward his work. With this basis for the materials and the labor. and the absolute sincerity in design, quite phenomenal results have been attained in the use of concrete by this artist-craftsman.

The sincerity of design, with this architect, goes back to first principles, both in its artistic and constructional phases. Nothing is done purely for effect. Neither

effort nor material may be wasted. The simplest adequate solution of a problem is essentially the best solution. Taking concrete as the ultimate logical building material for the conditions in which he

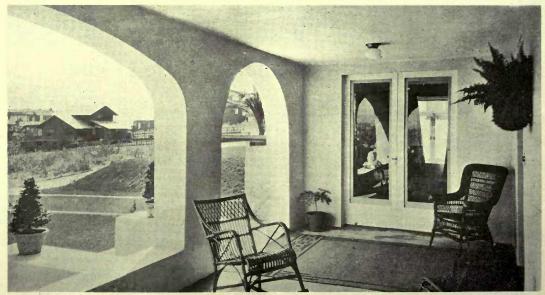


works, the pre-cast wall is a logical method for its construction.

The photographs show a concrete house built by Mr. Gill at Hollywood in the different stages of its erection, and somewhat the processes of construction. A view looking out from the loggia shows the simplicity and beauty of the arch treatment, which is characteristic of the design.

After the foundation for the house had been poured and had set the floor slab was laid, and on this jacks for the erection of the walls were placed. Twelve feet of floor space from the wall to be erected was required, in

which to place the jacks, on which tilting tables, built of 2-in. x 6-in. rough plank, were laid over steel walking beams. The number of jacks used and the spacing of them depended on the weight and size of



The beauty of a simple treatment of the arch.

Irving J. Gill, Architect.

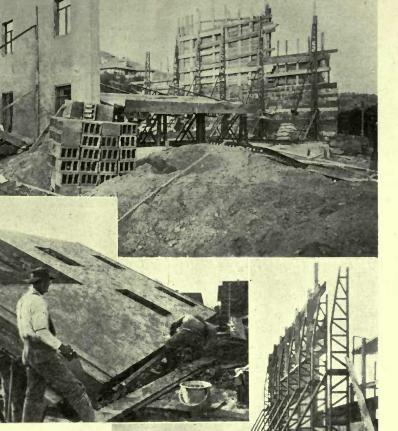
Upper cut shows 3 wall sections in different stages of construction;—with forms removed,wall in place showing jacks, and forms ready for concrete.

Second cut shows wall sections ready to be raised.

The jacks are shown below.

the wall which is to be supported. Door and window openings were laid out, the metal jambs set in place and the remaining surface of the wall form covered with hollow tile spaced for reinforced concrete beams to give proper stiffness; twisted steel rods were then placed vertically and horizontally and the wall was ready to be poured. Concrete was wheeled up an incline, dumped, leveled off and allowed to set. The upper surface (the outside of the wall) was finished in its tilted position before being raised.

The power for erection was obtained from a 5-horse power gasoline engine and transmitted to the jacks by a shaft through their pedestals. A worm gear mechanism extended all jacks at exactly the same rate.



From one-half hour to two and a half hours was required to raise each wall, the time depending on the weight, shape and position of the wall.



The interior has no unnecessary wood work to keep clean.

Irving J. Gill, Architect.

terior and interior wall surfaces. Each side of the frame is bent from one piece of metal so there is no danger from cracks.

The interior of the house has been worked out with quite as much thought and in quite as original a way as the exterior. Sanitation and the "Conservation of Mother" have been kept

Horizontal rods left projecting from the ends of the walls were bound together after two adjacent walls had been raised to an upright position. A form two feet wide was built up the entire height of the wall and into this, concrete was poured, producing a concrete and hollow tile shell reinforced with twisted steel bars.

Roof joists are held in place by anchors for which provision had been made in the concrete wall and 1-inch x 6-inch sheathing covered by a gravel composition was used for the roofing. Interior partitions are of metal lath on wood studding and the rough concrete floor slab has been covered by a finish coat reinforced with wire cloth. planning of the interior. The view from the loggia shows the restfulness of the simple treatment. There are no mouldings or panels anywhere, for these will catch dust and add to the cares of the housewife. Neither is there any unnecessary woodwork to wash and keep clean. Picture mouldings are also omitted, the individual pictures being hung invisibly. The doors are without panels or mouldings—simply plain slab surfaces easily cleaned and dusted, while the absence of baseboards, ceiling beams, plate rails, door and window casings make the house as near dust-proof as possible.

among the first considerations in the

Special metal door and window frames were used, manufactured from No. 22 gauge galvanized iron, bent to shape and provided with perforated flanges through which the concrete forms a key. The plastering finishes flush to the corners of the frames which act as a corner bead for both ex-

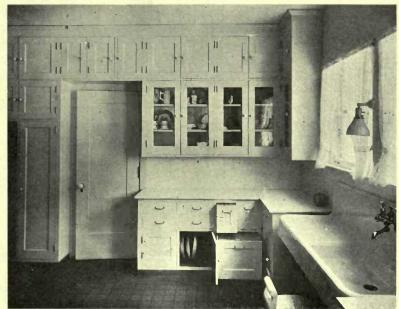


Exterior of the house at Hollywood where the Irving J. Gill, Architect. walls were pre-cast.

The Kitchen is the Laboratory about which the Home Centers The Home is the Carbureter of the Industrial World

Efficiency in the Home Edith M. Jones, Kitchen Specialist

PART III.



Platter cupboard is open-Bread, Cake and Cookie boxes are partially open.

and work tables are placed with reference to the light. The cupboards and drawers are placed convenient to their use,—salt and spice cupboard near the range; dish cupboards near the sink; bins and baking utensils near the work table, etcetera.

HE photographs with this series of articles show

a modern workshop of the efficient type. It is interesting because it is simple and without unusual

The plan of the kitchen is given in detail in order to show how the work of the house is laid out and the relation of one part to another. The range is placed on the long wall with the pot

closet near. The sink

expense.

The photograph shows the sink and the cupboards around and above the door above and below the vitrolite working shelf. The photos of the series show the cupboards and their uses quite definitely.

The overhead cupboards all around the

kitchen are useful for two reasons. They take care of the things which are not in constant use and which otherwise would have to be carried to the attic to be stored —such as Christmas decorations, bits of china, etc., etc. Then, too, these high cupboards fill the space from dish cupboard to ceiling and there is no ledge for dust and dirt to lodge which is always a source of much annoyance to the good housekeeper.

The open door shows the platter closet, deep enough for large dishes.

Inside the cupboard at the left of the door.

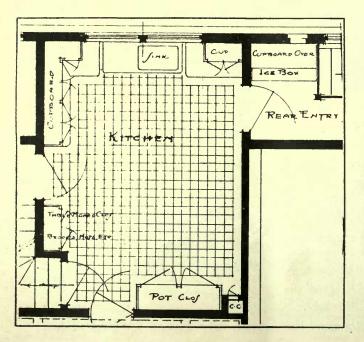
The partially open compartments are the bread, cake, and cookie boxes. These boxes are made of this same heavy "vat" tin and run in like drawers. This arrangement economizes the working table tops.

The platter closet has two rows of nickled uprights placed one row at the back and one row at front of cupboard and set two inches apart. These can be removed for cleaning.

The other drawers are for the various cooking utensils.

The tall narrow closet

at the left of the door is the broom closet, a drawing of which shows the uses to which it is put. This drawing shows the table boards run in between uprights at left of the closet. The hooks for brooms, etc., are on the underside of the shelf and



the shelf affords a place for dusters, polish bath, etc. This closet, as well as the pan closet, is lined with galvanized iron.

The knobs and pulls on the cupboards and drawers are good looking, very practical and easily cleaned, because they are made of porcelain and nickel.

The kitchen floor is always a problem. In this case one of the new elastic, cork composition tile has been used. The floor is made up of four inch tile of a beautiful Copenhagen blue with interlining strips

of black. There is a border of the plain blue which curves and forms the sanitary base on which rests the cupboards. This sanitary base is a great protection for the white enamel paint of the cupboards.

The size of this kitchen is 12' by 14'

with a good sized anteroom for the refrigerator; this box is iced from the outside. In this anteroom is also a receiving window with a broad shelf for incoming groceries, etc. This method of icing the refrigerator and this receiving window will not only keep much dirt out of the house, but confusion and interruption by untimely deliveries can be avoided. Above the refrigerator in this anteroom is a cupboard for the storage of extra supplies, baking pans, etc. Stairs at the left of the anteroom lead to the laundry and stairs at the right open into the garage, which is

heated by the house heating system.

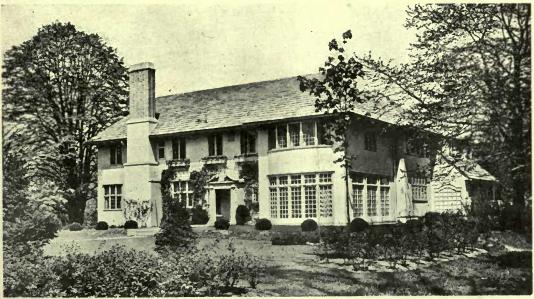
There is no butler's pantry in this house because of the decided opposition of the housewife. She keeps a nurse maid for the children and one general girl for the house. There is always a generous sense of hospitality for all, but formal entertaining is done at one of the town or country clubs. This effort of simplifying the housekeeping has a wonderful effect upon the servant problem in this home—it not alone lightens the work but eliminates much confusion and long working hours.

Some Charming Stucco Homes Katherine Keene



HERE is a group of architects in this country to whom all home lovers owe a debt of gratitude for the notable work they have done

in bringing the element of beauty into American homes. They have done this pass things without seeing them, which to other people are so attractive as to draw their especial attention. Only a comparatively short time ago a beautiful country home was so unusual that it immediately became a "show place" in the

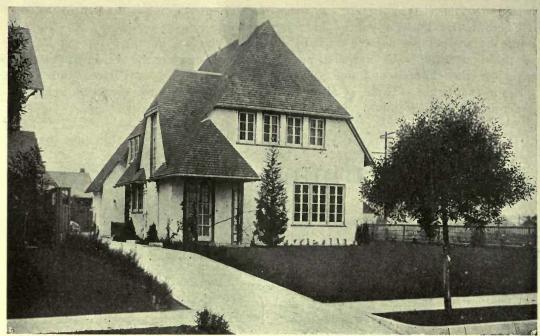


Courtesy Atlas Cement Co.

A charming country home.

Davis, McGrath & Kiessling, Architects.

in such a simple logical way that even those most closely concerned have scarcely appreciated just what was happening. The thought of beauty is infectious. Those who see it want it. To be sure there are people who are "beauty blind" just as there are people who are color blind. They community. But the infection spread. Those who could not have beautiful big places demanded at least a little spot of beauty, and the spots have accumulated and grown, until now there is scarcely a community which does not rejoice in them. At the same time the group of



Courtesy Sandusky Cement Co

Picturesque in its roof lines.

Robert D. Farquhar, Architect.

architects doing the beautiful big houses tion, for it is not only the "big house" on

has also enlarged amazingly, and the the estate, but the superintendent's cotsmall house is receiving its share of atten- tage and that of the tenant farmer must



Courtesy Atlas Cement Co.

The beauty of the simple stucco surface.

Noman McGlackan, Architect.

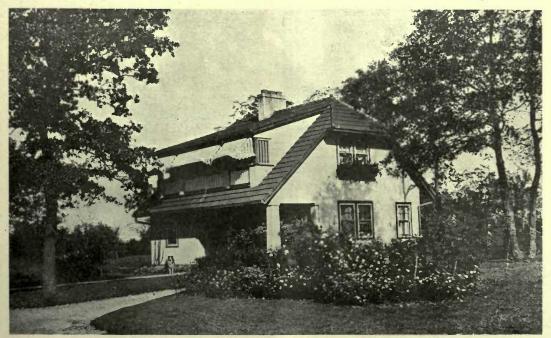


A Dutch Colonial Cottage.

Courtesy Atlas Cement Co.

all be given their element of beauty. Not suburbs of small cottages have been made only the big city house and the summer picturesque and attractive. For that matcottage of the bond holder, but whole

ter the "bond holding class" has spread



A Superintendent's Cottage.

Courtesy Atlas Cement Co.

to the family with a very moderate income.

The series of charming homes presented in this group run the gamut in size from the beautiful country home to the superintendent's cottage, yet each has a beauty of its own.

The soft texture of the stucco is restful

The Swing of the Pendulum Modern Building With an Ancient Material



R. Bernard Shaw somewhere says, in his brilliant fashion, that human progress is of the squirrelcage movement. We are travel-

ing pretty fast but we're getting nowhere. Mr. Shaw's idea is that we mistake speed



A substantial and pleasing stucco home.

for straight-away getting there. Thus history moves in spirals, and not fullspeed ahead. Traveling in a circle fetches the traveler up at the starting-point. Humanity "comes back"—comes back to taste old emotions made new because forgotten; to reapply to new days old ways and means and methods.

Taking counsel, therefore, of this wisdom of the ages, the men of our sophisticated Today are going back to Yesterday, and the Day before that, for inspiration in the building of homes. Have we ever really, for that matter, gotten away from the fundamental principles and methods of construction which made for endurance in the buildings of the past.

and pleasing to the eye. It takes tones which are almost iridescent in the sun-

light, and it catches the play of light and shadow in a fascinating way. Yet we

have been told that the possibilities of

stucco have scarcely been touched as yet, that it has been used in only the simplest

and in so many cases in the crudest way.

Modern research, in its excavations among the most ancient buildings, comes upon many things which we think of as being very modern. The Romans made a large use of concrete in the building of their day. Cement is found among the ruins which are very old. It was used by the ancient Babylonians, that most



A modern residence.

"modern" of ancient peoples, by the Egyptians, and Greeks. All through southern Europe stucco is in common use today, presumably dating back to the earliest time. Its qualities, both as to charm and endurance, have been well tested.

The clock has struck again and the swing of the pendulum has brought us back to the new use of an old material, which we are considering from the viewpoint of homes for folks to live in at this present time.

. When you are to build a home for yourself you will be interested, first, in the material out of which to build it. You will take into consideration such things as durability, cost of material, cost of



A charming home.

maintenance and resistance to fire. Back of that in your head will be detail considerations, such as repairs, fire insurance, cost of heating. But looming large, naturally, also, will be the matter of first cost.

Take the item of durability, or perma-



Rough cast stucco used in a building for a large seed company



Taking advantage of the plastic material.

nency, of construction. There is nothing better than good stucco. One doesn't have to "prove" that. It has been proven by the wisdom which has come down to us through the ages. But the stucco must be right, the composition must be right; and it must be applied upon



A charming use of stucco.

a proper base. If your stucco is properly mixed and properly applied, it will last so long as your building will last. Nay! It may even lengthen the life of your building. Your stucco-covered walls, with backing scientifically constructed and of dependable materials, will win out in the fight with time and the elements.

You will consider, moreover, the matter of adaptability to change in weather conditions in that house you contemplate building. The construction beneath the stucco is all-important. A suitable backing will eliminate all chance of cracking and disturbing the stucco. That will mean, of course, weather-proof construction.

Stucco is naturally cool in summer and warm in winter. So that, whether you live North or South or East or West (and, by the way, "hame's best"), you will have a house perfectly adapted to climatic conditions.

But you're not through when the house is built. Maintenance, or upkeep charges will bulk large in your home-making plans.

You must count on painting a house surfaced with wood every three or four years, at a cost of anywhere from seventy-five to two hundred dollars.

In your stucco house, however, you must remember that the longer good stucco ages, the more potentially lasting it becomes. There is nothing to wear out, nothing on the outside to be refurnished, and your stucco house is bound to be a home-beautiful if you give it a chance. It will lend itself easily, and naturally, to the surrounding landscape; and its soft-toned surface, with trellises and vines, will age and mellow most delightfully with the passing of the years.

Building, thus, upon the wisdom from the ages, you will be old-fashioned, yet up-to-date. For you will have gone back to construction principles and construction materials as practiced and used by those of the race who lived and loved in the Long Ago. Yet you will be doing what everybody else is doing—you will be in the swim—you will have a home *comme il* faut.

Meantime, Mr. Bernard Shaw is right. History moves in circles, moves in a spiral, and not in a straight line. Evolution, after all, is revolution. The swing of the pendulum—now back, then forward—is the measure of the story of humanity.

The illustrations in the foregoing article are used by courtesy of the Bishopric Manufacturing Company.

A Simple Substantial Home for the Smallest Possible Expenditure



HE most interesting result obtained in the Com-

plete Building Show competition in New York asking for the designs of small houses recently completed is shown in the accompanying photographs and in plan and was awarded the first prize. The competition fulfilled its object in bringing some very interesting homes

Detailed Statement of Costs.					
Excavating\$	85.00				
Masonry Work	2,000.00				
Carpentry work, inc.					
unfinished work 2	2,100.00				
Roofing	100.00				
Painting	30.00				
Plastering	155.00				
Plumbing	300.00				
Heating	200.00				
Tinning	75.00				
Wiring	75.00				
Electric fixtures	35.00				
Hardware	80.00				
Total\$	5,235.00				

built at a very reasonable price. It must not be overlooked that these homes all received, all probability, in the greatest thought and co-operation of the home owner, the architect, and the builder. Equal results cannot be expected from the ordinary contractorbuilt house. It is the individual effort which has made these homes pos-

sible; taking advantage of local materials or conditions, and making the most of them.

The first prize was awarded to the house designed by Robert Tappan, at that time associated with Cram and Ferguson, architects, and built at Bryn Athyn, Pennsylvania.

The house represents an earnest attempt on the part of the owner and the architect to construct a simple, substantial home for the smallest possible expenditure. In order to accom-

plish this several features that are often considered necessary in even the cheapest houses were omitted, such as a vestibule, coat closet, serving pantry and cov-



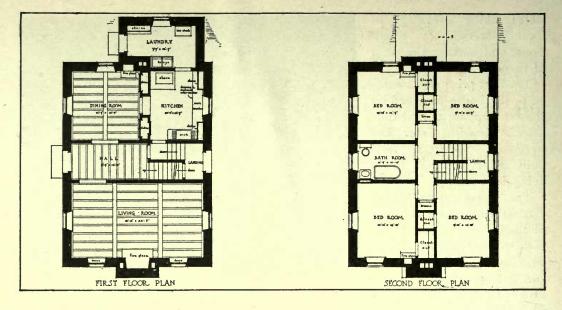
Exposed girders form the second floor construction.

ered piazza, or a screened sun room. Stone was chosen for the walls of the house because it happened to be cheap in the locality. The construction of the

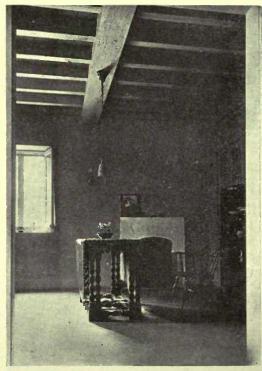


Stone was chosen for the walls because it happened to be cheap in the locality.

Robert Tappan, Architect.



second floor was of exposed girders and joists without a cent's extra expense over the usual way. There is very little wood trim inside the house. All of the windows are set in plaster jambs and a wood



Robert Tappan, Architect. The dining room is quaint.

plank serves as a window sill. The window frames are of the simplest construction; the same in design as those ordinarily used for cellar windows. They have proved to be amply weather-tight. The floors are of North Carolina pine throughout. The plaster walls are slightly rough and tinted in various colors for the different rooms. The kitchen arrangements were laid out with the idea that the owner's wife would do her own housekeeping. The house has been standing for over a year, and the owner is very well satisfied with his experiment in simple building. Unfortunately the Colonial front doorway, which was designed, was not in place at the time the pictures were taken. Carpentry work is the owner's hobby and he intends to make this doorway himself from the designs when he can get around to it.

The architect says: "It may be interesting to know, in connection with this small house, that it is directly opposite a magnificent Swedenborgian cathedral that we are building in the village. This cathedral has been under construction for four years and will not be completed for another year and a half. It is probably

the most expensive church of its size that has been built in this country. The money is not expended in superfluous elaboration, however; it has all gone toward creating an edifice by hand labor throughout, and one of the sincerest possible construction. The village of Bryn Athyn is a religious community founded by the late John Pitcairn. The church is his gift to the village. It has been a source of considerable satisfaction that the owner and I have been able to create a substantial cottage at the least possible cost directly opposite a church of very great cost, and still have it hold its own architecturally."

Stucco for the Home Beautiful



HE influence of the Spanish Padres is still widely felt along the Pacific coast and particularly in the Southwest which was the special

field of their labors, though that influence extends in a widely different direction

The Spanish and Mexican builders, who did the early mission building, knew the value of the plastic substance which they found in the fields in which they built. Building with adobe in the most primitive way for the early buildings which were



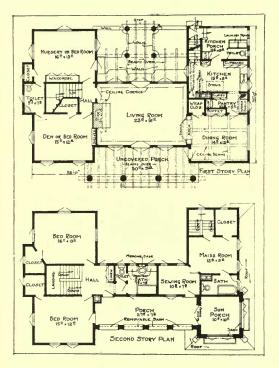
The white walls are accentuated by red spanish tile.

E. W. Stillwell, Architect

from that in which those kindly fathers anticipated lasting results. The thing of which they thought least and which they did as a matter of course,—the building of their simple structures,—has been a source of inspiration to the civilization which followed them. They worked sincerely and without conscious effort, and they achieved results which set their small world to copying them. charming in their simplicity, the use of stucco naturally followed.

California has much to teach the homebuilder in the older parts of the country, on account of the progressive spirit of the building public in that newly built region. While some of the features are of local interest, many could be widely applied, and in fact are being used all over the country. A home on one of the beautiful Los Angeles boulevards is here illustrated. It is built of cement applied over metal lath, the white walls being accentuated by the red Spanish tile of the roofs.

The plan follows in a way the simple lines of the Mission time, with its semienclosed patio, but with the added com-



forts and beauty of built-in equipment found in every California home of its type.

The living room, opening from the front porch and onto the patio, is light and airy, the fireplace at one end and the bookcases at the other, giving a "homey" touch. The "patio" at the rear carries out the true Spanish idea of seclusion for the assembled family. The pergola will soon be covered with flowering vines, and the sense of comfort and peace coming to one resting there, can hardly be found on the ordinary porch.

The dining room has a beautiful buffet, close to the pantry door, which saves many steps. The wrap closet is near enough to the entrance that it will be found to be a real convenience. The pantry opening directly from the dining room is quite large enough for a house of this size. The cold-air closet is indispensable to the Californian and might be used to advantage elsewhere. The work table, like the sink in the kitchen, is placed under the window for the best light. There is ample cupboard room, and the built-in ironing board is well located.

Laundry trays, toilet and broom closet on the kitchen porch all add to the stepsaving system, and this is further aided by the direct access to cellar and service yard through the grade entrance. The ascending rear stairs fit nicely into the cellar-stair recess.

The suite of rooms at the other end of the living room can easily be used as bedrooms or as a den and a nursery. Both are well supplied with closets and have direct connection with toilet, again saving steps. If a den is desired, a door to the living room and one to the porch would add to convenience and comfort.

The second floor is divided in an unusual way. The bedrooms for the family are of good size, closely connecting to stairs and bath. The servants' room is isolated so that they need not come in contact with the household in their comings and goings. This room is one that will help to solve the servant question, having a private bath and generous closet. A sewing room in the home is almost a necessity nowadays.

Special attention is called to the porch and sun room. Either can be used for sitting or sleeping room. Built on the East, the porch openings are fitted with removable sash, making it usable the whole year around, while the sun porch casements are adjusted by special hardware permitting them to be folded back against one side of the opening.

All windows are casements opening out, and are fitted with roller screens, thus eliminating trouble in opening or closing the windows and removing the unpleasant effect given by a screen in front of the glass when the window is closed.

Basement for the heating plant, etc.,

occupies the space under the right wing of the house.

The house is frame with stucco on metal lath although hollow tile or brick with stucco applied could be used, giving a thicker wall at a slightly higher cost.

A Stucco House Built in Minnesota



OT only in "Sunny California" is stucco popular: It is also being used very widely throughout the region of sterner climates and the

stucco house is equally popular throughout Minnesota and the Dakotas.

The home here shown has recently been completed in Minneapolis. It will be noticed that it is very compactly planned and has a vestibule which may be left open in summer but in winter puts two doors between the temperature of the outside and that of the house. The sun room, a charming interior view of which is shown, may be thrown open to catch every breeze on a summer day, and to get sunshine all day during the winter.

By a clever arrangement of the porch the entrance is carried back to the central hall, thus giving direct access to the stairs, the living room or the dining room. The toilet under the second run of the stairs gives a very convenient arrangement.

When so desired the living room, dining room and hall can be thrown well together, with the wide openings and folding doors between them. The living room has windows on three sides and one end of the room is dominated by the fireplace, with high casement windows above the mantel shelf at either side.



A home with a pleasure sense of dignity.

W. W. Purdy. Architect.



Beyond is a delightful sun room.

One side of the dining room is very attractive with its built-in buffet, and serving table under the wide window. The cupboard doors on either side are filled with glass, leaded or cut to match the windows. A group of windows fills the side of the room opposite the hall.

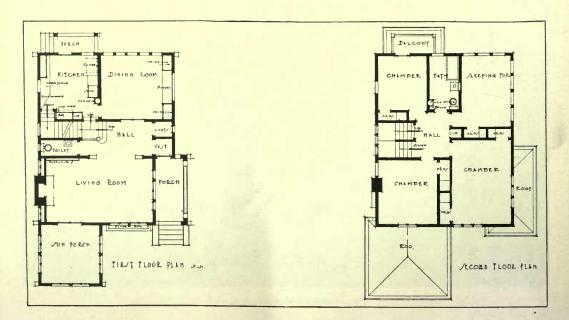
The kitchen is very complete. It has a built-in work table with bins under, a plate warmer over the radiator, a high cupboard over the refrigerator and a cupboard for table leaves beside it. Steps from the kitchen give access to the landing of the main stairs. The basement stairs also open from the kitchen and go down under the main stairs.

On the second floor are three airy chambers and a fourth with the outside walls filled with windows converting it into a sleeping porch when desired. There is a small balcony for airing bedding or rugs. Each chamber has at least one, and the largest room is provided with two closets. Over the main stairs is found the stairs to the

attic, with a door leading from the hall.

The second floor is finished in pine, painted in ivory enamel, with birch doors given a mahogany stain, or painted in dainty tones to correspond with the color scheme of the rooms.

The exterior walls are frame with white cement plaster over galvanized metal lath. On account of the simple lines of the house hollow tile might be substituted at a small additional cost. The roof shingles are stained a deep red. Porch floor and steps are of brick.



Stucco for the Elaborate Home or for the Bungalow

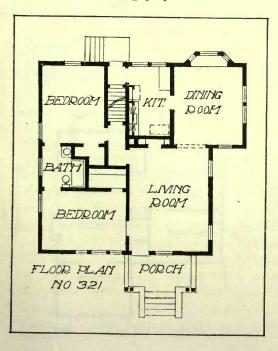


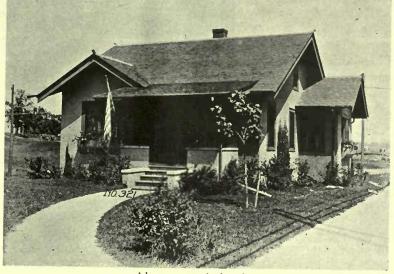
ERY unassuming a n d homey is the bungalow

shown in this illustration. Stucco outside with the trim stained a darker tone, with its planting and vines and flower boxes, it is certainly an attractive little home.

The compactness of the plan gives the complete living space, —a five-room house in 28 by 31 feet. Each bedroom has a good sized closet, and there

is a very convenient cupboard from the living room. The space under the roof may be finished for a big play room.





A homey, unassuming bungalow. J. W. Lindstrom, Architect.

The living room and dining room are well proportioned. The bay of windows in the dining room makes an interesting vista from the entrance. The kitchen, while small is, perhaps, more convenient because it is small, and fewer steps can accomplish the desired results. There are cupboards over the sink, and the range is beside them.

A passageway separates the rear bedroom from the living room and the stairs to the attic open from this passageway. The front bedroom opens from the living room and the bathroom may be reached from either room.

Quite a large house by comparison is the second home shown. The great living room has the full sweep of the house, with the entrance at one end and the sun porch at the other. Opposite the entrance the stairs lead up from the end of the living room. At the other end of the room is the fireplace, while the sun room

opens on one side and the dining room on the other. The screened porch and side entrance is beside the fireplace. Both living room and dining room are beamed and a great bay of windows projects on one side of the dining room.

The kitchen is fully equipped with cupboards and working space. Steps from the kitchen reach the landing of the main stairs.

Beyond the main part of the house is the billiard room in a separate

wing which is only one story in height. It connects with the side entrance.

The main story of the house is finished in birch with birch floors throughout. In the main rooms the woodwork is given a stain of dark brownish mahogany. The second floor is finished in white, with

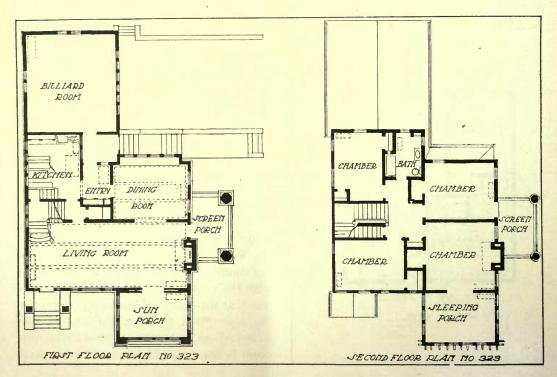


The Ionic order is used in the Colonial details.

enamel paint. The bathroom is tiled. On the second floor are four chambers and a bath beside the sleeping porch. The small rear bedroom has two closets.

The small rear bedroom has two closets. The tub is set in a niche in the bathroom and tiled all around.

The exterior is of stucco with Colonial

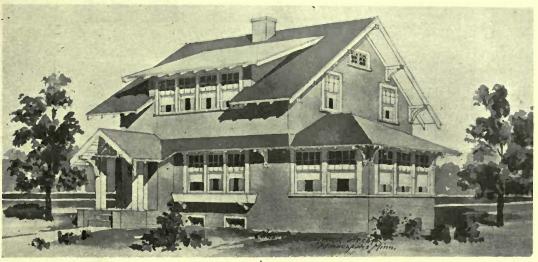


details and with rafter ends, painted white, across the sun porch, over which vines are to be trained. The basement is built of brick to the sills of the first story windows.

The Ionic order is used in the Colonial details. Small free standing columns sup-

port a pediment at the main entrance. Pilasters carry the trellis over the sun porch, while great pillars two stories in height carry the cornice of the screened porch in line with the regular cornice of the house. Brackets are used in the soffit of the main cornices.

A Complete Modern Cottage



The stucco is given a pebble-dash finish.

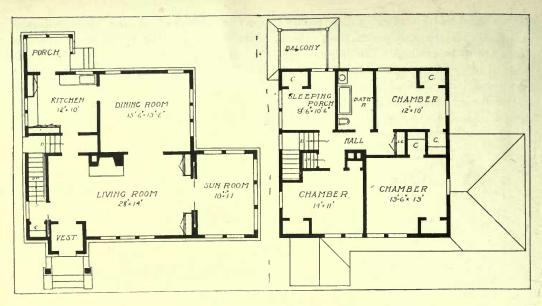
C. S. Sedgwick, Architect.



HE home here shown is one that has been planned and is to be erected every soon. The exterior is finished with cement stucco on

metal lath with a "pebble dash" finish. The size of the cottage is 30 feet x 30 feet with a sun room 11 feet wide, a front porch and one in the rear. The rooms are all of good size and they are conveniently arranged. Special attention has been given in the smaller details of the plan for the comfort of the housewife. The frontage is west and south. The inside finish is oak in the first story and white enamel for the second story with hardwood floors. The kitchen floor is covered with linoleum. There is a full basement with laundry fully equipped,

toilet room, heating and fuel rooms and vegetable cellar. The height of the first story is 9 feet and the second 8 feet 6 inches, with a good attic for storage purposes. The outside wood trimmings, cornices, casings, etc., are done in "Old Colonial White," and the roof is stained green. On the second floor are three good chambers, each with a good closet and in addition there are low closets under each roof angle. The ceilings are full height with square angles. The small chamber over the kitchen is used for a sleeping porch, with the space in the two sides filled with windows. There is one central chimney with wide fireplace in the living room and a large flue for furnace and kitchen. The main stairs are closed



off with a sliding door which closes the entry, and this is filled with glass. When required this can be kept closed and thus cut off the down flow of cold air. There is a grade entrance under the main stairs with basement stairs underneath and attic stairs over. The bathroom is large and a good linen closet is provided.

Combination in Building Materials



ICTURESQUE effects are often obtained by bringing together different materials in the structure. Nothing lends itself more

satisfactorily to the combination with other materials than cement or stucco. It is wonderfully effective in combination with brick, it is charming with shingles. A group of homes illustrated in this article shows several where stucco is used in combination with other materials and one in which stucco alone is interestingly treated.

The first is a cottage where the bed rooms on the second floor are finished under the broad sweep of the roof, with windows in the gables and a dormer, front and rear.

It is a small house, very compactly arranged, with a porch across the width of the front. The entrance is into the living room, with the dining room beside it, and with only a slight separation between the two rooms. The fireplace, at one end of the living room, gives warmth and cheer to both rooms.

A tiny hall, which at the same time is large enough connects, yet separates the different parts of the house. A portiere across the hall would make a private suite of the bedroom and the bath. The hall connects both the sleeping rooms and the kitchen with the main living rooms, and also the stairs to the second floor.

The kitchen is carefully planned and well equipped with cupboard space. The refrigerator is on the rear porch beside the kitchen door. The basement stairs has an entrance at the grade level.

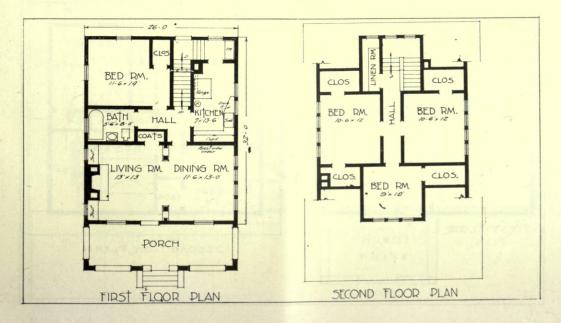
The house and the porch is built of stucco to the heads of the windows. Shingles are used in gables and dormers.



A cottage where rooms on the second floor come under the root.

Judging from the outside, the size of a house is often very deceiving. Which house is larger, the first or the second of the designs shown? The figures give the second house as 25 by 28 feet. The living room is 13 by 15 feet, with a fire place at one end, where the chimney gives a flue for the furnace and for the kitchen range. The entrance is into a good-sized reception hall, from which the stairs lead to the second floor.

A pass pantry connects the dining room with the kitchen, giving the cupboard space.



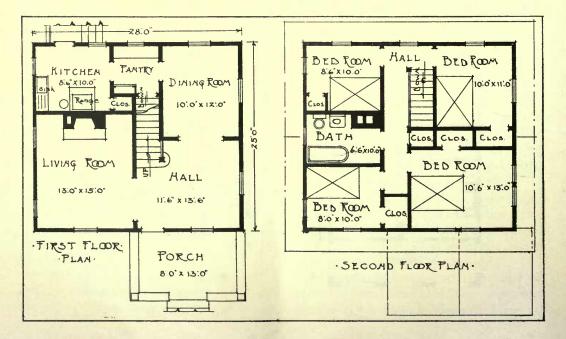


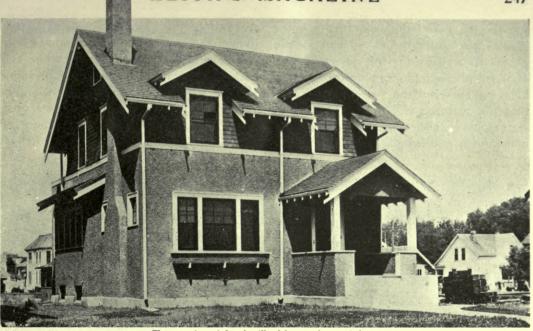
A compact house which is very attractive.

rooms, which while they are small, each one has windows on two sides. The bath

On the second floor are four sleeping room is centrally located, with a linen closet opposite.

The house is very good looking on the

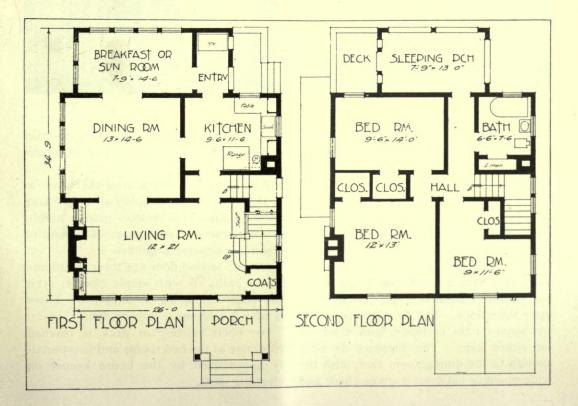




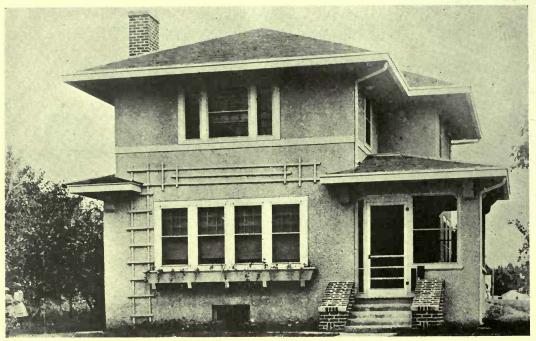
The stucco is carried to the sills of the second story windows,

outside with its combination of stucco quite light in tone and the dark stained shingles. The timber work and trim is

given the same dark stain as the shingles. In the third house of the group the stucco is carried up to the sill course of



the second story windows, with a shingled frieze under the eaves and in the gables as well as for the dormers. All of these photographs are unfortunate in being taken when the homes are so new that the planting is scarcely more than started, so that they do not quite feel at home in their surroundings. warmth to the dining as well as to the living room. A group of windows fills one side of the dining room, while the breakfast porch beyond makes a pleasing picture when the main dining room is used, or an informal meal may be served there. The breakfast porch connects directly with the kitchen through the en-



The house is very attractive in the simplicity of its lines.

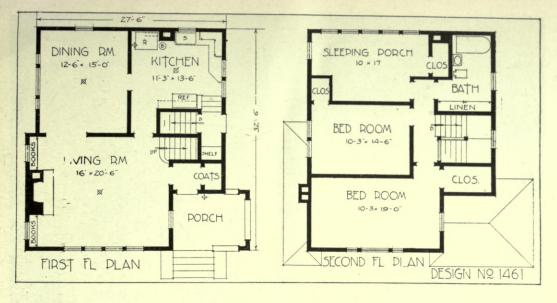
This home is especially well planned with reference to the placing of the entrance and the co-ordination of the living rooms. The entrance is at one end of the living room, and beside the stairs. It also is conveniently near the door to the kitchen, which is separated from the living room by a passage way leading to the basement and to a grade entrance.

By this arrangement the living room has windows admitting air and light in three directions. The fireplace is in the end opposite the entrance, with windows on either side. The fireplace is near enough to the dining room that, with the wide opening between it gives cheer and try. There is space in the entry for the refrigerator, which may be iced from the outside.

A cabinet is built around the window in the kitchen, with cupboards above and drawers and bins below, giving ample serving and working space. The sink is also placed under a window.

On the second floor are three bedrooms and a bath, all with ample closets, even the bathroom being so supplied. There is also a sleeping porch or den.

An open balcony or deck is reached from one of the bed rooms and is especially appreciated by the house keeper on cleaning days.



A basement under the house gives accommodation for the heating plant, laundry, fruit and storage rooms.

The last home in this group differs from the others in being built entirely of stucco and on very simple lines. The trellises are decorative in themselves, entirely aside from their usefulness as a framework for vines and growing things.

The general lines of the plan belong to the same type as that of the preceding home. The living room occupies the whole front of the house with the entrance through the porch at the side of the living room. There is easy access to the stairs at the entrance, and also to the kitchen,—a really important point, whether a maid answers the door or the mistress expects to answer it herself.

A fireplace with bookcases on either side fills one end of the living room. There are windows over the bookcases and a fine group of windows across the front.

Beyond the living room is the dining room, and beside it the kitchen. The stairs to the basement are under the main stairs. A door at the grade level gives a side entrance to the kitchen. The refrigerator is placed beside the steps, allowing it to be easily iced.

On the second floor are three bedrooms and a bath room. One room is virtually a sleeping porch as one wall is filled with windows.

The heating plant and laundry are placed in the basement, with storage and fuel rooms.

This home is very attractive in the simplicity of its lines, both of wall and of roof. The white of the woodwork and the touch of color in the stain of the roofs are in pleasing contrast with the tone of the stucco, which is in itself rather light in tone.



Dining room of the Whipple house.

Nelson & Van Wagenen, Architects.



Decoration and Finishing

VIRGINIA ROBIE, EDITOR

Proportion in Decoration

EVER has so much been said and written about house decoration as today. Magazines devote considerable space to the subject and

the daily papers are full of hints and suggestions. The theme is a favorite one with lecturers, and the principles advocated are one and the same. Societies are formed to perpetuate Morris and Ruskin theories and the good work goes on unceasingly. Two lines of William Morris have been quoted so often that many people are unaware that he wrote anything else. Possibly if the sentence about the useful and the beautiful were quoted less and lived more, it would have more force and point. Owen Jones, who is seldom read and rarely quoted, said "Ornament construction, do not construct ornamentation"; and later and lesser lights have told us to build from the foundation, and to look after the useful and let the beautiful take care of itself.

Most people believe these principles, but few are successful in carrying them out. The majority of houses have good furniture, many have good wall-papers, rugs, and pictures. Yet there are few good interiors. If the really well-dressed people of one's acquaintance may be counted on one hand, is it not also true that the well-furnished houses may be enumerated in like manner? These satisfactory houses stand apart from all the others. Why? They do not contain any better furniture, any better rugs, any better pictures, but they embody a few of the vital things. Proportion is one, simplicity of arrangement is another, harmony of color a third, the absence of the trivial a fourth. Possibly the fourth should be placed first, for its importance can hardly be over-emphasized. In the small things of the house the greatest faults are committed.

We all know that a few good things are better than a lot of poor things, but we have not yet learned that a few good things are better than a lot of good things. The crowding together of many articles, no matter how 'attractive each may be, is poor decoration. Unnecessary things are superfluous in the sense that they fail to contribute either to use or beauty. They are a hindrance to proportion, to order, and to harmony.

It is customary to think of proportion as belonging exclusively to the architecture of a house and having little relation with decoration. Proportion is the very foundation of good decoration. By proportion in decoration is meant the balance of light and shade, the contrast of plain and ornamental surfaces, and the correct adjustment of the large and important things in the room with the small



and unimportant. Proportion, simplicity, and harmony are the A B C of the decorative alphabet.

Under the head of vital things, order should be written in large capitals. No house is beautiful if its laws are disregarded. The order that faints at the placing of a chair upsets the order of a room, something is wrong, and the "something" is the crowded condition.

We sympathize with one architect who designs his fireplaces without a sign of a shelf. Nothing can mar their beauty, for there is neither nook nor cranny in which

Mother

cupboard.

to set a vase, nor any place where anything may be hung. They are as bare as

A room devoid of personal touches is not advocated. No matter how well the architect and the decorator have done their work, the real home feeling must be contributed by the occupants. Books and pictures and the various things which we know to be useful or

believe to be beauti-

ful have their place

Hubbard's



Simple Louis XVI treatment.

Albro & Lindeberg, Architects.

sight of a speck of dust, the order that locates every chair and table by a chalk mark, the order that cannot tolerate a misplaced book, is not to be thus written. This order is not vital. It was once called good housekeeping, but it is no longer considered good home-making. It has wrecked homes quite as successfully as the saloon.

The order that makes for restfulness and for comfort is vital. It cannot exist in crowded rooms. Furniture is made to be used, and books are made to be read. If the disarranging of a table or the misquite as much as the rug on the floor or the paper on the wall. The personal touch, the "human interest," is absolutely necessary. But it is contended that restraint is desirable in all things; in the arrangement of the parlor mantel as well as in the larger issues of life. Simplicity of arrangement is so bound up with order and the absence of the superfluous, that it cannot well be separated. A few pictures, chosen to accord with the room, books placed within reach of those who use them, lamps located where they are needed, flowers arranged with a Japanese



feeling for the value of the leaf and stem, are expressions of a love for a simple arrangement. Beauty no less than comfort is dependent upon this vital principle.

Color is an important factor, and many inexpensive houses have been made "successful" by the intelligent use of this

powerful factor. Harmonious coloring does not necessarily imply a room where everything matches. The blue rooms of twenty years ago, where walls, carpets, curtains, lambrequins, and upholstery were all of one shade, exist today only in fiction. They were never cheerful, imparting by some subtle power their own indigo coloring to the moods of the occupants. The blue room, pure and simple, is not now in

er key. The length and breadth of a room are important considerations, likewise the height thereof. No room can be treated independently of its surroundings; many houses fail on this one point. Each room has been considered separately without regard to what opens off from it. Each



Where the highly decorative wall has been skillfully treated.

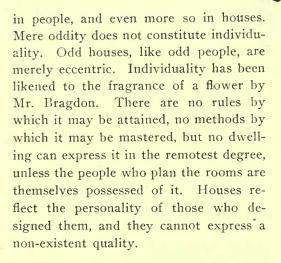
favor. But we are all familiar with the very green room. Green is nature's own color, and no other is so restful, so desirable; but it can be abused. Nature makes use of russets, of yellow-browns, of redbrowns, of bronze shades, of grays, of all neutral tints, of soft purples, of pomegranate tones. These may be transferred to the walls of our houses, and if rightly placed be very effective.

Rooms brightly lighted are more satisfactory when the color schemes are comparatively low in tone, and dark rooms are made more livable by colors in a highis charming in itself, but the effect as a whole is poor, and inability to cope with the problem of decoration has been shown.

A room is most satisfactory when it does not proclaim its color, when walls, rugs, furniture, pictures, and small articles make a satisfactory whole, and no one feature is unduly prominent. This principle does not preclude the use of brilliant tones. An Oriental rug on examination shows colors that gleam like jewels, yet the general effect is subdued.

Individuality has its place among the vital things, a quality difficult to define

in and a second s



Individual homes are not common. Many delightful, talented, even original people have little power to communicate a spark of the unusual to their surroundings. They do not possess the gift of endowing inanimate things with interest, of so grouping and combining very simple objects that they take on life and character. This is more than individuality. It comes very near genius.

מתמותה 🖬 מוונותאו 🗅 מתחותה 📲 מתחיותה 🗅 מתחותה 🖬 חווה

Simplicity, order, proportion, harmon of colors, and individuality do not sum up all the vital things, but a home embodying these five principles cannot be a failure.

Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.

\HE use of the tile as an ornamental feature in house decoration is comparatively new in America, though centuries old in many foreign countries. Mantel tiles we have known for a long time, good and bad, but we are just awakening to the larger significance of the subject. Several of our leading potteries have helped us in this matter, and individual potters and craftsmen have contributed to our general education. Charming detached tiles may be purchased in many places and form one phase of the decorative side. Sometimes a single tree, possibly a pine, is depicted within its squareness. Again a bird on wing is the motif, or a single flower treated with the

simplicity of a block print, or a bit of historic ornament, a fragment of Moorish or Byzantine design. The tile tells a short story but usually tells it well. The color is an important part of its charm, and here is where it becomes a useful unit in house decoration. Placed on a shelf, hung against a wall, resting face upwards on a table or used in various ways it has decided value in a simple house. Nor is it always square. There are delightful things in circles particularly the replicas of Byzantine subjects, queer birds or leaf and flower motifs well worth the consideration of those who wish unusual things. A really beautiful tile will confer distinction on a small room and add interest to



the particular corner where it happens to be placed in a large room.

A visit to any of the large potteries would be a revelation to those who have thought of tiles merely as a fireplace accessory. Many of the tiles shown in the sales rooms were made primarily for hearths and mantels, but their great appeal is that they are entirely suitable for other purposes.

When the "Desert" and the "Jungle" tiles were first exhibited their purely decorative quality was enjoyed by nearly every one who saw them. Four sections, in each case, were needed to complete the composition. The majestic loneliness of the "Desert" and the luxuriant sweep of the "Jungle" struck a new note in tile making. It is fully a decade or more since these ceramic landscapes made their appearance at Grueby exhibitions, and since that time tile making has been a big feature of this pottery. From gigantic architectural commissions to the output of small table tiles for tea and hot-water pots is a long step with many intermediate developments.

Such compositions as the "Jungle" and the "Desert" may be used in many ways. Framed in simple strong bands of wood to match the trim of the room they are tremendously effective. Sometimes they are used as inserts in the woodwork, and in one dining-room of my acquaintance the "Jungle" has been sunk in the rough plaster of the wall and is the most important decoration. The use of tiles in the latter manner opens up a delightful field and one which is receiving consideration from decorators and architects all over the country.

The architectural side is concerned with both interior and exterior work and

is a subject by itself. This phase should not be overlooked by owners of simple houses, for there are many practical ways thus to use tiles. Several simple dwellings are recalled where tiling schemes have been carried out with marked effect. One house of rough cast has inserts of glazed green tiles over the small entrance; another has ivory colored tiles in bas-relief, combined with brick; and a third house, after the Spanish manner. has a mosaic of softly toned rough tiles for the entire second story. The rounded so-called Spanish roof tile is well known over here, and the flat red tile used shingle-wise also-the latter a picturesque and practical accessory for country houses. The tiled vestibule we have in many guises-tiled walls and floors and sometimes ceilings. The clever use of lettered tiling to denote the ownership of a house is sometimes seen, as, for instance, the inscription on one tiled floor of a small vestibule: "John and Elizabeth Willoughby: Their House." Mottoes are occasionally used in vestibule and hall, but like fireplace inscriptions should be chosen with skill and discrimination. As with many other things, they are successful or very unsuccessful according to a happy or unhappy choice.

Electricity, in spite of its convenience, has not entirely superseded lamp and candle light. Science has not yet produced a flame that equals in charm the steady glow of the lamp or the soft gleam of the candle. Even when carefully shaded by stained and leaded glass, electricity still leaves something to be desired. It provides the useful and the practical, while candlelight supplies the poetical. Few houses are so constructed that candlelight alone is sufficient. Gas or elec-

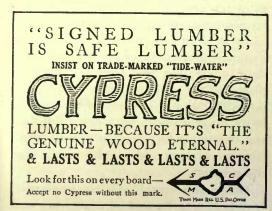


tricity must be depended upon as a rule to supply the general illumination, but wise is the home-maker and fortunate the family who knows the worth of candlelight and has the individuality to use it, not alone for entertainments, but every night. For reading and working, good lamps are a necessity. Candles do not encroach on their domain. They make no claim to special usefulness, but should they voice their virtues, they could put forth a special plea for a few attributes that the really useful things of life often lack. Lighted candles are beautiful in themselves, but this is not their greatest claim to consideration. It is the beauty they give to other objects that constitute their chief charm. They throw into



shadow the ugly portions of a room, they radiate certain beautiful points, they soften angles and lend a general witchery. No room is commonplace if lighted by candles. If firelight is the soul of a room, candlelight is the spirit. Both contribute a touch of ideality that atones for much that is commonplace and very prosaic in our twentieth-century homes.

Many people who use candles for the dinner-table ruin their beauty by elaborate shades. The simplicity of candlelight is one of its great attractions, and when the flame is hidden beneath ruffles of silk or tissue paper, the charm vanishes. Petticoat effects in candle-shades are not to be desired, and a word of protest might be raised against the omnipresent red shade. Red shades are sometimes effective, but they have been used to excess. Unshaded candles are most charming of all, but to many people there is something ecclesiastical about candles without shades. On the table shades are usually preferred, but there are many places where unshaded candles are more interesting. This matter is one of personal preference rather than of taste. A welldesigned shade cannot give offense.



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"Keep your hands off the piano-Take your feet out of that chair-Do sit down and read a book."

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Give them a room of their own.

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Isn't there room in the attlc or some other unused space where you can provide just the sort of a playroom the children need?

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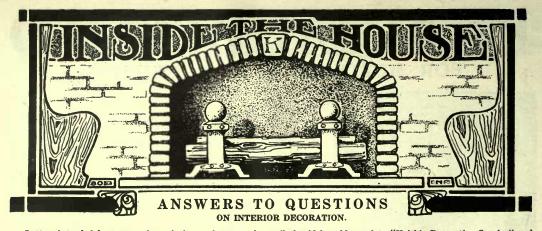
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Trade at home and prosperity takes no vacation.



Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

A Concrete House in Manilla.

F. W. D.—We wish a scheme for interior decoration of a two-story dwelling of concrete. This might include painting house outside, if thought desirable. Such plans as I thought might be of use to you are enclosed. This should include tinting of walls, ceilings, and floor treatment, as well as style and design of furniture and number of pieces of latter. A 3½ inch concrete picture mold runs 2 feet 1 inch in the clear below ceiling, below stairs; above stairs it is 4 feet 6 inches from ceiling and 20 inches below top of partition walls.

Both floors are of concrete slab. A block of cement slab with grey marble chips is laid at entrance to each front door. The only woodwork is for doors and windows, door and window trim and cap rail and newell posts for stairs, which is native hardwood, polished natural finish, mostly "narra" (something like mahogany). Other darker woods are used to some extent, as panels for the doors, the stiles being all yellow "narra," a wood which finishes a light golden color. In all outside doors and French windows above stairs, the middle panel is to be set in wood frame with squares of art glass, in the upper panel native shell and lower panel of wood. Both shell and glass are set in diamond shape, and held in place by wood strips. It will be noted that native shell is used in windows instead of glass; these shells are white and translucent, about 21/2 inches square, and are held in place by wood strips. They are set diamond shaped in frame, looking not unlike ground glass.

The finish of the walls is natural concrete rubbed down with a concrete brick and painted with Portland cement which has stood in water 24 hours. This makes quite a white finish. The stairs are concrete, tread and risers red concrete containing a sprinkling of white marble, with iron balusters and narra cap rail and narra newell posts. The ceilings of rooms below are 14 feet high and heavily beamed; those above are the same height, likewise Partition walls above stairs beamed. stop 2 feet 10 inches short of ceiling, with an occasional pillar in the partition walls going to ceiling to support roof. There is a pillar standing in the open at corner of stair well in upper hall. The balustrade around porches and terraces are also of concrete with plain vertical open spaces. The floors of the porches and terraces are venetian red cement. Both interior floors are finished in meter squares of colored troweled cement as follows.

Below stairs: Sala—bright red; dining room and living room ultramarine blue; den—brownish red; back hall—yellow; kitchen—Venetian red.

Above stairs: Study and all bed rooms —ultramarine green; hall—dark brownish red; porch—iron oxide; sleeping porch venetian red.

Battleship linoleum will ultimately, no doubt, be used for both floors throughout, except kitchen and baths, and held to concrete slab by means of the usual spe-

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1

For Isolated Homes

Give the protection their exposed location makes necessary.

Circular KK88 explains. Sent upon request.

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cial cement for the purpose. Cork carpet was thought of for bed rooms. We would like each bed room different in color. Should a border be used? If so, one of the fancy made borders or just a plain strip of another color?

We can secure this linoleum easily here in the usual colors or they will make it to special order as follows:

Scarlet for sala and in alcove at foot of stairway; Terra-cotta or blue for the den; Green for the dining and living room, and Brown for the back hall.

All corners and angles are rounded. I want a sanitary house in general, and therefore do not look with much favor on rugs and pictures and other hangings which collect dirt. Remember also that this is a hot country.

The furniture should, I think, combine the idea of simplicity with richness and durability; something that will look cool and give an idea of spaciousness. Very fine narra furniture can be made here after any design. I am rather inclined to some sort of colonial design. We do not want upholstery as it is unsanitary and hot. Cane bottoms look well in the native hardwoods.

All windows and outside transoms have iron grills, and the doors opening onto porches, above stairs, will eventually have folding iron grills. What color shall we paint these grills?

The winding stair to roof is of concrete; it is enclosed, with door at entrance to stairway.

I am inclined to a warm red treatment of the "sala" or reception hall.

Please make your scheme postive and explicit and not too expensive, as means available at present are quite limited for this purpose. Something that I can hand to my builder and have carried out.

The house is suburban, being situated a few miles from Manila. It faces slightly South of East and the flat roof is enclosed by a solid wall parapet with panel effect. The roof cornice is two feet wide.

The dining and living rooms, first floor, are separated by a middle column and two arches. Each of these spaces under the arches are closed to 6 feet by means of two dwarf walls, which in turn support two other small, many sided, columns which run to a cross piece, which latter extends from middle column to main wall on each side. There is a large projecting face of a pillar opposite big center columns in each main wall from which the arches spring. It is constructed entirely of cement.

It is intended to place jardinieres containing small palms in the spaces as indicated. There are some nice ones carried by the Indian stores here.

Ans.—In laying out the color scheme for your new home, the light, air and comfort are the most important points to consider in your hot climate.

The colors of your different rooms should blend into one another in such a way that the casual observer does not realize that there is a definite color scheme.

Consider the walls simply as a background and treat them in soft tones and as you do not care to use many rugs, pictures and hangings, we would suggest a generous use of palms, ferns, etc., in richly colored jardinieres of metal and concrete.

By reason of the climate, doors and windows will probably remain open the year round, so we would advise careful study of the possibilities of beautiful vistas through these openings, by the thoughtful arrangement of paths and groupings of shrubbery and flowers. This you should plan in conjunction with someone in your city who specializes in landscape work.

In suggesting a subdued treatment of the walls, we have in mind that these framed vistas would make the most charming pictures you could have for your home.

It is surprising how running water will reduce the temperature of a room on a hot day. Why not have a small fountain and pool with water rippling over the edge and falling among ferns and flowers banked within a marble curb and carried off through a small concealed drain? If carefully worked out it is surprising how



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Combination Storm and Screen Doors, and Morgan Storm Sash

Comfort-loving, thrifty home-owners know that Morgan Cold-weather Protection means warmth and comfort on coldest days; that it makes for LOWER FUEL COSTS, fresh air and family health.

Morgan Combination Storm and Screen Doors and Storm Sash are made of selected, well-seasoned materials with the same care characterizing all Morgan Products. While built primarily for *service*, they harmonize in *appearance* with standard designs.

> Send today for the "Cold Weather Protection" Booklet

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much joy and satisfaction can be derived from a tiny flow of water. The hotter the day, the more one appreciates its musical sound. Why not make the fountain a feature of the living room by placing it against the middle column between the two arches opening into the dining room? The narrow spaces between the three columns could be filled in with a trellis or lattice and a profusion of vines allowed to run riot over this trellis and through the grilles of both arches. Singing birds should be suspended in wicker cages, from the ceiling, and adjacent to the fountain.

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As for the wall treatment, we should much prefer a perfactly flat paint to a tint or a water color. An ordinary flat paint may be made from white lead and turpentine.

The living room and dining room will appear to better advantage if treated in the same color. We should suggest a cool gray green with the ceiling in a lighter tone. We would also carry this treatment into the stairway and through the entire upper hall.

If you decide to use any hangings at the windows, we would suggest fastening a $1\frac{1}{2}$ inch metal pole (in same finish as hardware of room) to the walls, 6 inches above the windows and extending 2 feet beyond the opening on each side. On each pole we would hang 2 lengths of 50 inch chintz or cretonne, attached to rings and arranged with traverse cords so that they may be closed when desired. When not drawn over the openings, these two

strips should occupy the two foot space at each end of the pole. This chintz should show gorgeously colored birds and tropical flowers on a neutral gray or tan ground with deep rose predominating in the flowers and cool green in the foliage.

A generous use of mirrors would add spaciousness to your rooms; not the conventional mirror in massive frames, but large sheets of plate glass filling the entire wall spaces and extending from floor to tops of doors and windows, and finished with a narrow simple moulding colored to match the wall.

We would suggest the following color schemes for the chambers; a cool French gray with the ceiling in ivory. A light cream with ivory ceiling. A delicate shade of pink or blue, and a cool green with ivory ceiling. The study may be in creamy tan with battleship brown for the floor covering.

The folding iron grilles we would certainly have a dead flat black.

We do not advise a border incorporated with the linoleum, but would rather see it perfectly plain. If you wish to break up the plain spaces, we would suggest using a few thin grass mats which we imagine would be easy to obtain in your country. If you prefer a border, we would suggest two plain bands or lines, two inches wide and four to six inches apart; the outside line about 9 inches from baseboard. Have the bands 3 shades darker than the body color.

HERE detailed plans for HOUSE DECORATION are de-Decorative w sired with samples and prices of wall paper, fabrics, window drapes, etc., the moderate fee of \$1.00 per room or \$5.00 for the entire house will be charged to defray the expense of our decorator's Service time in working up the plan, securing and mailing samples. Address Keith's Decorative Service, Minneapolis, Minn. **BOWDOIN** and Furnishing and Decorating MANLEY

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It is so fine for interior trim, furniture, veneered doors, and hardwood floors, that it seems almost a pity to hide its charms under a covering of white enamel. Yet since there is no wood better adapted to this purpose, what is one to do?

White enamel asks a good deal of hardwood-and birch answers every requirement-birch has a very hard, close grain, therefore it takes and holds the enamel perfectly. It's practically mar-proof, as a white enamel must need be.

This is only a synopsis of the big, interesting, profitable birch story in the latest birch book.

Don't huild until you read about "Beautiful birch" for varnished trim and furniture as well as enam-eled. We'll send the book FREE, with a set of little **birch** panels, in different finishes (including white enamel) for the asking ask today.

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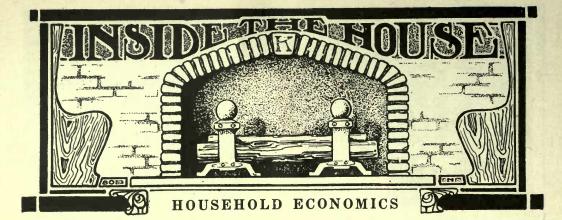








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A Portable Range



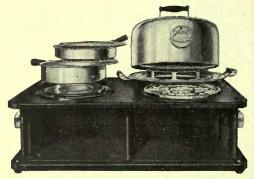
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HE time will soon come doubtless when the "Kitchenless Restaurant" will be the latest thing; when a neat maid with an electrical appliance on a little table will

serve a group of tables where the patrons can give their orders direct and watch her prepare their favorite breakfast or lunch "just to a turn" under their own direction, and receive them piping hot.

The tendency for some time past in things electrical, has been toward breakfast-table cooking. There are devices on the market by means of which practically any breakfast dish may be prepared at the table. The round or oblong grill with a tray under and one over the electric plate which broils and toasts and boils, is well established on many breakfast tables all over the country. It is now possible, by means of a portable oven which sets over this round grill to bake muffins or apples electrically, either at the table, or elsewhere. The tray under the hot plate may be used for broiling or toasting at the same time that the oven is being used.

There are several types of portable oven or ovenetts on the market, dome-shaped in effect, in one or more sections; a device which fits over the round grill and in which even beef may be roasted, we



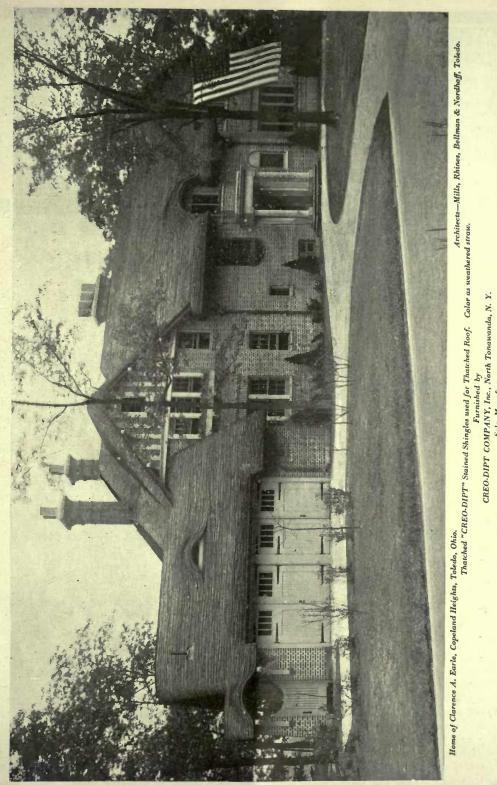
The portable oven sets over the grill.

are told. It has a thermometer attachment which registers the amount of heat. The grill itself may be regulated to four degrees of heat, the thermometer registering the amount of heat developed in the oven.

Saving the Garden Produce.

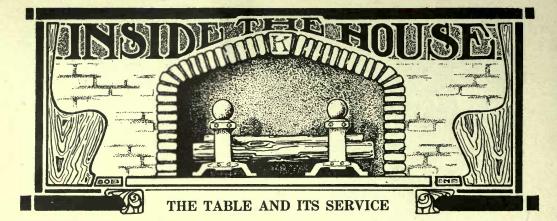
The products of the summer gardens may be stored very largely, under proper conditions. The ordinary unheated basement is all right for the storage of root crops. Vegetables may be packed in boxes with alternate layers of earth and sand, and remain crisp late in the spring. Onions must be kept cool and dry, hung in splint baskets, or spread on shelves. Squashes, pumpkins and sweet potatoes may be placed on shelves or in slatted crates in a warm, dry room as a temperature of 60 or 70 degrees F. is better than a lower one. They must be kept in a free circulation of air or they will rot.

REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc. is a serious business,—it may win or lose the war.



Working drawings of construction of Thatched Roof, standard specifications and instructions for design and construction of same, furnished on request by manufacturer.

Sole Manufacturers.



The Honor System of Eating



MAGINE eating breakfast with a pair of scales on the serving table to weigh out the bread allowance (and one hears nothing

of its being toasted) for each individual. That is what they are actually doing now in England.

Imagine there not being enough food to give each person a portion if the big fellows, and those who can, take more than they actually need. Do you remember how it was the day an unexpected guest came to dinner and the pie would not go around except as Mother cut all of the pieces a little smaller than her usual generous allowance? England is cutting her pie now so that every one shall have a piece, and America is looking over the pies on her pantry shelf, as the housekeeper used to do in the days when she baked only once a week, and counting the places at her table for tomorrow to see if she will have enough to go around.

The system of bread tickets as in use in Germany tends to work a hardship on those who can least bear it, so England has adopted a voluntary Honor System where the individual accepts the national scale of rations suggested by the government, we are told by Ruth Wright Kauffman, who was on the spot.

They are trying to see "eighty million slices of bread saved every day by fortymillion self appointed food-controllers." Every housewife can control her own kitchen,—it may not be easy but she can do it. Women are not called to the trenches; they are called to Captain their own households, and are told that the "Kitchen is the Key to Victory."

These are some of the things English women are studying:

Eat. less bread—Do not use bread, which will let others starve, when rice or mush or string beans can take its place?

Use corn flower (corn starch) and patent barley to thicken soups and sauces.

Cheese and beans are a substitute for meat.

Should starch be used in laundries?

And especially what we must do as well as they is to

Buy wisely, Cook wisely, Eat wisely, Waste nothing.

The Important Questions, "What to Eat" and "How Much to Eat."

The simplest diet is best, from the point of view of health and nutrition, provided it includes foods so ordered as to perform their real function of nutrition.

Tables have been published from time to time in this and other magazines showing the composition of the more usual foods and their nutritive and other values, and also their values as estimated in calories. We are told that three thousand calories per day are sufficient for

REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc. is a serious business,—it may win or lose the war.

Residence F. X. Conillard, Sevis P. O. (Sevis Station) covered with Ambler Asbestos Shingle.

AMBLER Asbestos Shingles - the most sensible roof covering

An architect who had specified Ambler Asbestos Shingles for the roof of a modest-priced bungalow was asked why he had done so. He replied:—''Because they are the most **sensible** roof that can be put on.''

They are fire-proof, weather-proof, do not fade and will last as long as the foundation. Then too, the first cost is the only cost.

Made of Portland cement re-inforced with long asbestos fibre. Three colors-Newport gray, India red and blue-black.

Equally appropriate for modest homes and magnificent mansions. Write for book of photographs, samples, and prices. We are always glad to send literature, samples and prices.

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a man weighing 150 pounds, doing work which gives him only light exercise. Typical menus worked out by Dr. Wiley give something under this amount as a sufficient and satisfactory nutrition. Dr. Wiley cautions us that nutrition does not consist alone in building the body, restoring waste, and furnishing heat and encereals it is found largely, if not almost entirely in the bran and germ, and not to any extent in the starchy parts. Thus it would seem that if fruit and vegetables cannot be obtained, it is desirable to use whole grain flour, on account of the mineral matter and the cellulose as well as for the vital principle.

Typical Menus By DR. WILEY Giving satisfaction Nutrition

Breakfast—1.CalorBread, 3 oz. (2 slices) \therefore Egg, 1 oz. \therefore Bacon, $\frac{1}{2}$ oz. (3 or 4 slices) \ldots Butter, $\frac{1}{2}$ oz. \ldots Apple, 5 oz. \ldots	25 Whole wheat bread, 3 oz. 225 00 Butter, ½ oz. 112 95 Milk, 1 pint 325 12 Potato, 5 oz. 120
Milk, 16 oz. (1 pint)	
Total $Breakfast$ —II.CalorBread, 6 oz. (4 slices) a Apple, 5 oz. a Milk, 16 oz. (1 pint) a Butter, $\frac{1}{2}$ oz. a Sugar, $\frac{1}{2}$ oz. a Total a	Chicken soup, $\frac{1}{2}$ pint,

ergy, but that a certain vital principle ' must also be included. The scientific study of nutrition in the last ten years has discovered something of this element, which has been called "vitamin" and is contained in practically all vegetables. The lack of foods containing this vital principle is what has caused scurvy in the days when vegetables could not be kept and transported as they are at present. It is found in all vegetables, in abundance, spinach, cabbage, peas, beans; both in tubers as in potatoes and in the leaves and in nearly all succulent vegetables and fruits, especially oranges and apples. In

"It is a strange notion and yet one of universal vogue, that the person who is doing extra hard work, such as a soldier on the march, needs great quantities of meat. This is wholly erroneous," says Dr. Wiley. "The person who is to undergo the severest bodily exercise and tolerate the greatest fatigue should be fed principally cereals, especially wheat, corn bread and rice. It is sugar and starch, and not lean meat that gives physical vigor and endurance. If a reasonable amount of fat, bacon, butter, oil, lard, is provided, the ideal ration for hard service is at hand."

REMEMBER-That the Food Pledge which you have made, to conserve wheat, meat, fats, etc. is a serious business,—it may win or lose the war.



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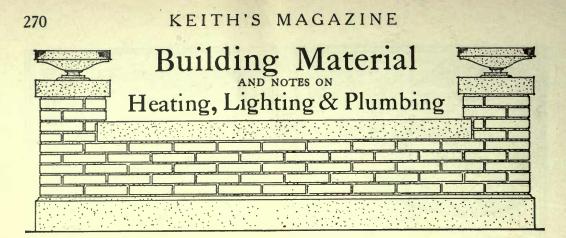
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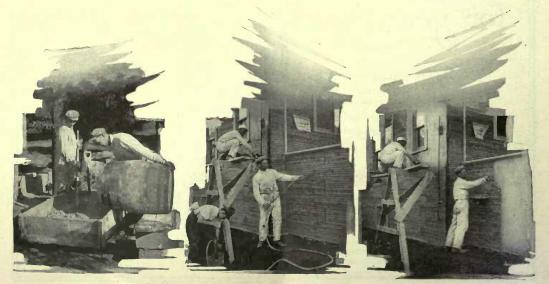


HE word stucco is in a general way used to refer to any kind or type of plaster utilized for the external coating of buildings.

Nearly every kind of Portland cement, lime and gypsum has been used for exterior stucco work as well as mixtures and various combinations of those materials.

Only in recent years has Magnesite Stucco been commercially exploited for exterior stucco work, although this composition has been employed as a building material for something over fifty years. It has even been stated, and it is not improbable that some of the remarkable plaster and cement work done centuries ago by the Romans and Spaniards, the process of which has not been discovered, was constructed with magnesite compositions, compounded by them. Certainly astonishing strength and durability exhibited in some present examples of this material might readily give strength to that theory.

However, be that as it may, our interest in this discussion will be centered on the adaptability of Magnesite Stucco, for different types of construction, certain unusual properties that are possessed only



A liquid chemical is used instead of water in mixing Magnesite stucco.



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by this product and brief reference to its application.

In either new or remodeled building the inevitable question concerning wall construction comes up for decision. Brick, stone, frame, and stucco all have their advantages and disadvantages, while one



Adapted to remodeling work.

type is better suited for certain definite purposes than the other.

Brick, stone and reinforced concrete are at once conceded to be ideal for heavy mill and factory construction as well as for the huge office buildings now predominant in our metropolitan centers.

For residential work, however, stucco undeniably takes its place as the most versatile material for exterior wall building. It adapts itself to practically every type of architecture, it combines economy in first cost with that of moderate expense in upkeep, it is substantial in appearance, is fire-resistant and is equally effective whether used on the modest cottage or the palatial mansion.

In order that the reader may understand the difference between Magnesite Stucco and other materials ordinarily used for that purpose, it will be advisable at this point to give a brief description of the nature of this material.

Magnesite is a dense white ore mined in rugged mountainous country and is burned in great furnaces under specified temperature to eliminate certain of its contents and to reduce it to a caustic state. It is then pulverized as fine as flour, after which it is ground and mixed in large agitating machines with other mineral ingredients, producing what is known as Magnesite Stucco powder. This stucco powder is put up in bags containing one hundred pounds each, which are delivered to the job much the same as cement and plaster. Magnesite Stucco, however, is not mixed with water; a liquid chemical solution supplied by the manufacturers being used instead. This solution is shipped in heavy steel drums holding about 30 gallons each. This liquid is mixed with the powdered product in a regular plasterer's mixing box at the job when the stucco is being applied.

In considering the particular characteristics possessed by Magnesite Stucco it must be remembered that this material



Magnesite may be used over any surface.

contains no Portland cement, lime, gypsum, plaster-of-paris or any similar ingredients. The hardening or setting up process is the result of a chemical reaction caused by the uniting of the caustic magnesite powder and the liquid chloride solution. The ingredients combine into a tough seamless mass as hard as granite yet not brittle. When thoroughly set and cured, Magnesite Stucco attains remarkable tension and tensile strength many times greater than that of other materials hitherto used for stucco purposes. Some idea of its powers of resistance may be gained when it is learned that a properly made article will stand crushing pressures in excess of 10,000 pounds per square inch.

Furthermore, the chemical action causing Magnesite Stucco to harden also causes it to contract or draw closely together all particles of which it is composed, thus producing a very dense, non-



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porous coating excluding the entrance of moisture.

It is the absorption of moisture which has been a source of considerable trouble with ordinary stucco, particularly in the winter season after an all-day rain, a sudden change in temperature to many degrees below freezing allows frost to enter the stucco which naturally cracks from expansion.

Magnesite Stucco may be bent or deflected several inches out of line in a span of eight feet. This property is of vital importance in preventing the stucco from cracking from strains and stress, always prevalent in buildings. In addition to this, it is dead to expansion and contraction induced by temperature changes. By being immune to this attack by powerful force, Magnesite Stucco conquers the most destructive element that causes stucco to crack. No doubt this is why it has become known as a crack-free stucco.

Magnesite is one of the most fire resistant materials known. It is used to line the great furnaces in steel mills, blast furnaces and smelters throughout this and other countries. On account of its fire resisting properties, it will protect wood surfaces, over which it may be applied, from exposure to a very hot flame for a sustained period. This fact shows its quality as a fireproof exterior coating.

Magnesite composition is also an efficient insulator, and is very valuable as a protection both against hot and cold weather, thereby adding comfort to the home and saving of coal bills.

From the viewpoint of the architect and contractor, one of its most valuable characteristics is its adhesive or bonding Magnesite Stucco, unlike properties. other forms of cement and plaster stucco, does not depend on clinching or keying to hold it in place. Instead, it will adhere or attach itself to surfaces over which it may be spread, taking hold so tenaciously that it is difficult to separate it therefrom. On this account it may be used over any kind of building surface including wood lath, metal lath, hollow tile, reinforced concrete walls, either new or old brick walls, various kinds of patent stucco boards and patent sheathing.

Because of the fact that this stucco is mixed with a chemical liquid rather than with water, it will not freeze or be injured in the least, even if applied in zero weather. This will permit stucco work to be carried on safely throughout the winter months, even in freezing weather.

Magnesite Stucco is particularly adapted for overcoating and remodeling old brick or frame houses. The work may be done without removing the siding or without disturbing the occupants of the property. Beautiful and distinctly unique granite dash finishes are produced with this material. Color effects harmonizing with the architectural scheme are created by mixing stone, granite and marble chips of various shades, and casting them into the finish coat at the time of application. Color effects thus created cannot fade.

No special tools, equipment or apparatus are needed to apply this chemically made stucco.

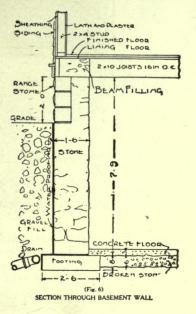
All surfaces over which it is to be plastered are first treated with a spray or brush coating of the liquid solution over which a brown or base coat is spread so that it will cover the surface not less than 1/4 inch in thickness in all parts. After this base coat has set or hardened it is then sprayed with the mixing liquid and immediately followed by the application of the second or finish coat which is darbied and floated true and even. While this finish coat is still very fresh and soft, dash aggregate of the desired size and colors is cast forcibly into the soft finish coat and lightly patted with a float to bring all particles in contact with the fresh stucco. Once firmly imbedded the dash remains permanently in place and cannot be removed without using a stout steel tool.

One particularly important point that should be remembered in using Magnesite Stucco is that under no circumstances should this material be applied less than full $\frac{1}{2}$ inch in thickness. In order to cheapen the work it is sometimes suggested that this kind of stucco be applied $\frac{3}{8}$ to $\frac{1}{4}$ inch thick, but to follow such advice would be to commit a serious error, which will result in disappointment. It is far better to apply a Magnesite Stucco $\frac{5}{8}$ to $\frac{3}{4}$ inch thick than to have less than a good generous $\frac{1}{2}$ -inch thickness.

Magnesite Stucco has found favor with the most prominent and progressive architects and contractors, as there is little or no difference between the cost of a job finished with this material and one with ordinary stucco.

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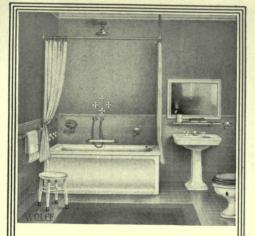


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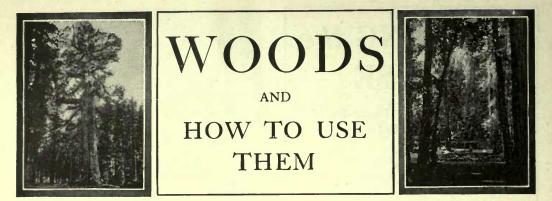
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The True Significance of Wood as a Building Material

Extracts from a Published Address by Wm. Gray Purcell-A. I. A.



E must not get into habits of mind. We must occasionally review even things that seem to be foregone conclusions. We must

test even things that we are quite sure we know.

One of our especial habits of mind in regard to architecture that I would like to review concerns the idea of durability. Architects and people generally, believe that to be enduring is one of the first principles of good architecture. It is not the enduring quality of the building that is so important. It is the enduring quality of the ideas and institutions behind it that really counts. The flower by the roadside springs up and lives but a day or so, but it keeps on springing up year after year. The little habitation which the spirit of the buttercup builds for itself soon passes, but the buttercup idea endures and repeats every season.

The difficulty has been that wood has been asked to do what it cannot do *best* and it is very seldom asked to do the very things it can do best. We must insist upon wood being asked to do all the things that it can do so well and so beautifully. It is not right to ask any material to do service that is contrary to its character and qualities. I had an interesting conversation the other day with a professor in one of our Eastern colleges about metal doors. He was remarking what a wonderful thing these doors have become—how they are now made to resemble wood so closely than an expert simply cannot detect the difference. I told him I thought it was a very unfortunate thing, if the imitation of the wood door was so successful.

The only really wicked thing about an imitation is, that it deceives someone, so it appeared to me if a metal door was a very excellent imitation, everyone would be deceived, and considered as works of art, they would be really abominable; but if the imitation of a wood door in metal was a poor imitation it would deceive no one, and as a consequence no great harm would result.

The quality of architecture, the quality of the work of art, that is most significant and is most human, is the quality of growing old gracefully.

The real trouble with the metal door, where it was made to look like wood instead of being made to look like what it actually was, lay in just this fact—that it could not grow old beautifully. The knocks and scratches of time instead of adding to its human interest, served no



House on Fresh Pond Parkway, Cambridge, Mass. Charles R. Greco, Architect, Boston, Mass.



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Representing The Northern Pine Manufacturers' Association of Minnesota, Wisconsin and Michigan, and The Associated White Pine Manufacturers of Idaho better purpose than to reveal its deceit, and The Fine Art of Building is particularly the one where this quality should be carefully conserved and it seems to me that what we want to search for is that quality in our building materials which will enable us to use them so they will grow old in a beautiful way.

The quality of the work of past times which we enjoy most, the one which makes these old buildings perennially the most interesting to us, is the fact that in the old work, as long as the one stone remains upon another, as long as the ancient beam rests upon its post, something of the spirit and vitality of the ancient building remains.

What we want to do first of all is to avoid imitations. Mother Nature soon reveals the shams and it is only the imitation wood, imitation stone, imitation marble, imitation metal work, which never can grow old beautifully.

I would like to make as the real point of my remarks, the great need we have to understand wood as a material. It is not the qualities of wood as a good physical material that we need to know more about, nor am I concerned with a technical understanding of woods and their uses, important as that knowledge may be, but what I do believe to be important is that we should have an intimate understanding of the essential, intrinsic, intimate nature of this material; to be sensitive to its inherent qualities, not only as a building material, but as a part of the world with which we have to live.

We must come to understand wood not merely with the intellect nor with the book of rules which tells how great a load it will sustain, but to know it through having grown up with it, worked with it, and enjoyed it in everyday affairs.

Our children get a certain fine knowledge of the qualities and characteristics of wood in the manual training courses of our high schools, but this opportunity for real knowledge and understanding stops almost as soon as it is well begun.

We must use our wood in such a way that it is not so very important whether we spend much time learning how best to fireproof it; but in such a way must our buildings be fundamentally conceived that we do not care whether a given building be fireproof or not. The idea is illustrated in a perfectly practical way by school buildings erected of late years on the Pacific Coast. Many one story high school buildings of large size have been built, the rooms opened on both sides, so that the children can pass quickly into the yard in case of an emergency, and let me say here, that far more important than the negative aspect of preventing disaster through fire, is the positive effect upon the children and upon the community of these wholesome open air, close to the ground, close to nature, home-like and human school buildings.

With such possibilities in view, with inexpensive construction in an honest material, honestly expressed; a material that the knocks and scars of time will only make the more beautiful, we can picture to our minds an environment vastly different from the standard fireproof building.

But to insure something more than factory like forms, vital and necessary as they are, we must not only permit the forms of modern American architecture to develop naturally from the construction, mechanics and practical needs of the building, but the problem must also be approached with a poetic insight and understanding of our own times that will permit these forms to become lovely, significant, and expressive of the best in this nation. In this way, and in no other, can a universal Architecture arise which will be worthy of this fascinating modern world of ours,-expressing itself naturally and freely in all materials and exposing to general appreciation the native dignity and fineness of woods in all uses.

We certainly cannot expect to accomplish this in a year or so. We must begin with the educational basis. We must concern ourselves with the schools and see that problems are presented which will encourage active thinking, not only in terms of wood, but careful thinking with regard to the use of all the various materials. Only in this way will the true significance of wood as a building material come to be generally recognized, not only with regard to its own intrinsic quality, but enriched and beautified through contrast and comparison with the special qualities of the other materials.

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ROSPERITY in all industries producing the necessaries of life —food, clothing, munitions, utensils and supplies, will be limited

during the next twelve months only by capacity to produce and transport. Industries producing the non-essentials may languish. From them both capital and labor may be diverted.

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Will American business men be ready? Will they have the factory and storage capacity, the transportation facilities, to take care of this flood tide of business? Will they prepare constructively on a scale which will give full play to output with minimum waste? Or, will they drift day by day from hand to mouth in a spirit of shortsighted fear and wait for the deluge to engulf them?

The time to build is now, before materials run short, transportation becomes still more congested and labor is drafted into military service.

Some may strain present facilities beyond normal capacity and risk a breakdown. Others may expand temporarily by means of makeshifts. This is waste. Such a mushroom plant must soon be rebuilt. It is never efficient. Facilities should be permanently enlarged and solidly built to stand the strain of huge output. Costs can be reduced through efficiency, and that is possible only in a modern, adequate, constructively planned plant.

After the war, efficiency and low costs

will be indispensable. Peace should find this country wonderfully equipped—its farms developed to yield maximum harvests—its industries geared to the most efficient production. Its railroads and highways capable of handling promptly and cheaply the greatest caravan of merchandise the world has ever seen. Only thus can American business hold its own in the coming trade struggle between nations.

Portland Cement.

The Portland Cement Association suggests that there is no good reason for writing "portland cement" with a capi-tal "P," since the product is not made in Portland, Me., Portland, Ore., nor at the present time in Portland, England. The word "Portland" is properly to be considered as a qualifying adjective used to distinguish a kind, not a brand, of cement nor a trade-mark. The case is quite similar to that of "macadam roads," where the word "macadam" has become a common adjective, though derived from MacAdam, the name of the man who invented this type of road. It is believed that departing from the custom of capitalizing the word "portland" will do much to correct the present troublesome misconception.

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Concrete as a representative industrial activity has been one of the recent additions to vocational and industrial arts courses in many schools. As a result of the unusual interest which this work has created, both Chicago and Columbia University, in co-operation with the Extension Division of the Portland Cement Association, offer a course in concrete during the summer session.

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From "The Livable House"

A house at Cynwyd.

Mellor and Meigs, Architects.

VOL. XXXVIII

NOVEMBER, 1917

No. 5

A Group of New Homes in Spokane, Washington Henry K. Pierson



POKANE is one of the most beautiful cities in America. Nature has provided a wonderfully

picturesque setting for this city of over 100,000, and its people have the wisdom and the taste to build in sympathy with their environment. The irregular, uneven contour of the ground, instead of being reduced to a dead level, was catered to both in landscaping and the design of the building. The great boulders of volcanic rock were so treated as to bring them right into the scheme of things, and instead of being dynamited and blasted away, were made charming features of the grounds. I have seen a boulder as large as a small house, of this black, forbidding basaltic rock, so planted with bright creepers, lichens, ferns and vines as to be an enchanting object.

The volcanic rock which underlies the whole city and crops to the surface everywhere is a delightful building material, right to their hand, and even though they



A handsome Colonial design in gray and white.



A home among the pines.

do have to blast out their basements, they get enough rock to build the house, or at least enough of it to make it a picturesque part of its setting and harmonize with the tall, stately pines that are its fitting companions. For the dark beauty of the pines is everywhere in Spokane, except where foolish man has cut them down and as an integral part of the house itself. The craze for plain surfaces and severe lines has reached here also, and the new houses are nearly all designed along such lines. With forests and stone right at their door they must needs build of brick and plaster-plaster, the omnipresent, the unescapable.

The group of Spokane residences here presented show this later tendency,

though not so marked as in the larger, more costly homes. They are, however, excellent examples of modern, moderate cost homes, and as such will prove interesting to our readers. The Colonial is receiving favor from the West as it has long been popular in the East. An interesting house of an English type is shown,

tried to grow foreign shrubs and transplanted trees, or replaced them with a bald smooth-shaven lawn.

But a las! how prone is man to try and improve upon Nature—that w is e builder and designer, who is seldom astray in her combinations. It is only among the older places in Spokane that one now sees the charming use of the black basalt, in landscaping the grounds and



A semi-English design.



One of the typical new homes.

with brick and half-timber work. Cottages and bungalows are always popular, as in the East. The group of lowroofed, rambling buildings, in the last illustration, shows a charming lake resort near Spokane, and its approach through a long, flower-bordered lane, with its background of dark pines and distant, snow-

capped mountains. The buildings themselves, of logs and unsmoothed boards, and low, white casements, are most picturesque and thoroughly in sympathy with their environment. The great stone fireplaces of the interior and staircase of rough hewn logs, as well as some of the furniture, add to the charm.



Summer resort at Hayden Lake.

The White Interior

By Gertrude Appleton Luckey



T is a well-known fact that the color and amount of light in the houses we inhabit produce in us physical effects, and affect to a

considerable extent our health and consequently our happiness. Why this

should be true is obvious when we consider the immense effect that light and color have on all forms of organic life. A rose, for instance, if grown in a dark and shady place loses its color and fragrance, and this is true of almost all plants. But as there are dark and shaded places in our world. Nature has provided plants whose habit of growth is suited to such environments. A fern will not flourish in the full glare of the sunshine, but must have a cool dark place, preferably with dieffects will be quite as unfortunate and disagreeable as those that give sombre depressing tones.

To have comfort we must have restfullness. To find the happy medium, to make a room such that it shall not be



A charming hall in mahogany and white.

rect or reflected green light, in which to grow to perfection. A cool dark room is a delightful place to pass a few hours on a sultry day, but who would care to spend all their days in such a room! We would better follow the roses and other flowers, for Nature is a reliable leader, and have sunshine and brightness in our homes so that we may have them in our lives.

On the other hand, if we have dazzling light and excessively bright colors the liant sunshine of a hot day, nor gloomy on a dark, dreary day, but always restful and inviting is indeed a problem. Conditions vary so much that it is difficult to formulate any definite rules. The amount of light which we have in our rooms and the colors which we wish about us are the controlling elements. Α room with many windows, and flooded with light must be given very different treatment from another which may be dark, with few windows through

garish in the bril-

which the sun seldom or never shines.

Popular favor is again turning toward painted woodwork, for the interior finish as well as for furniture, and many charming effects are obtained in the use of color. Nevertheless the white or old ivory interior gives a happy solution for many kinds of problems, and one may expect quite satisfactory results from its use. The white interior will harmonize with almost any form of wall decoration and



A nook which invites one to read or day-dream.

style of furniture, and the readiness with which it may be cleaned and renewed adds to its advantages. It may be counted upon to give the bright and cheerful effect which we wish to incorporate in our homes.

Many charming old Colonial rooms were done entirely in white, with high

wainscoting or paneled walls, all painted white, bringing out the subtle curves of the delicate mouldings. This treatment was used more often for the hall and dining room, and mahogany was often used to relieve the white, in the woodwork itself, or in the furniture. or both. This treatment has been adapted to modern conditions with particular success. A charming hall in a modern

home is shown in the illustrations where mahogany treads, newell posts and rail have been used in a white paneled hall and stairway, and the hall is furnished in mahogany. The hard usage which must be given to' the steps and to rail is better served by the hard wood, while the combination is charming in effect.

When the walls and woodwork of the dining room are

white it is advisable that the furniture and usually the doors be in mahogany or some other rich colored wood and that the rugs and draperies should be bright. The effect of an all white room may otherwise be cold. In the living room white walls and woodwork do not seem to be so desirable, unless in rooms spe-



China cupboards and serving table are well arranged.

cially designed in some period which calls for that particular form of decoration, although the cheerful effect of white enamel in the living and dining room can not be overestimated. Ιt can be made more dignified and imposing, if such an effect is desired, by having the doors finished in mahogany tones. A library or study may have more sombre tones than a dining room, while a break-



Square paned glass in French and cupboard doors.

fast room should be as bright and cheerful as possible.

For a bedroom nothing is more charming than ivory or white enameled woodwork combined with soft gray wall paper and old rose or dull blue draperies.

The accompanying illustrations of rooms in which the woodwork is finished in either white or ivory enamel show in a general way the pleasing results that can be obtained by its use.

The ingle-nook, all in white, is very attractive, continuing from the mantel. The hearth and face of the fireplace are tiled. The walls are soft gray in tone, so the effect is cool and refreshing in summer, and in winter a blazing log fire makes it bright and cheerful.

Two dining rooms are shown. One is finished in white enameled woodwork and

has dark stripped wall paper. The white buffet being extremely simple in design is very pleasing, and has not the effect of being a built-in fixture. The doors of this room are white.

The other dining room has French doors which take their character from the glass door to the china closet between the fireplace and the doors. There is a wood panel at the bottom of the French doors similar to the panel in the cupboard door. The china cupboard is built in and the door has a round head so typical of the period. An old fashioned Colonial mirror is set in place over the Colonial mantel. Through the open doors we see a glimpse of the wide hall with its low white paneled wainscotting, carrying out in detail the Colonial style in which this house is built.

Stenciling for Home Decoration

J. S. McMillan



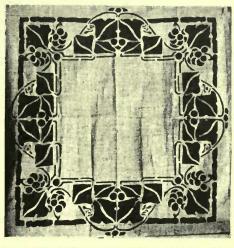
FENCIL-LING, as a means of decorating and

beautifying the home, has again come into favor, though it is an old process and has been in existence for centuries past. The Japanese are considered by experts to be foremost in this form of decoration. The Egyptians and Ro-

cils for decorating their homes, although their methods were different from ours, and, we are sorry to say, lost to us for all time.

Modern stencilling has become simpler than in the past. Formerly the artist had to make his own stencil materials, such as brushes, colors, papers, etc. Today, however, these things are all especially prepared and made easy for us.

One reason for the popularity of stencilling is because of its adaptability in decorating. Window curtains, cushions, table runners, friezes, dadoes, wall fillings, door panels, ceilings, and almost anything used in the house can be decorated beautifully by means of the stencil.



mans also used sten- Cushion design based on conventional rendering of the vine. sharp pointed blade,

stencilling vary according to the nature of the work required. For beginners, a well sharpened pen knife and a half used shaving brush are almost all that is required. For elaborate stencilling, a regular outfit, which can be readily obtained at any art store, is needed.

The materials for

A knife, with a

almost "V" shaped, is best for cutting the stencil. The brushes are mostly of hog hair, round in form, short in the bristles, with a short, round stump handle, set in tin. Japanese brushes are useful because the fineness of the hair is suitable for very fine work.

The paper used for cutting the design is made in many forms. Ordinary cartridge paper, coated with shellac or varnish,

> gives a good paper for ordinary work. In cases where much repetition of design is necessary, a specially prepared oil paper is now on the market, and can be bought at any art store for a small price. Tin foil, thin s h e et lead, zinc, b r a s s or copper, e. even celluloid, have



Cushion design based on conventional rendering of the rose.

299

all been used for this purpose. The Japanese have a specially prepared paper of their own, which is made of two or more layers of very thin, but tough paper, or wood; between these layers they place a hair net which combines the material together, and makes a very efficient stencil

plate. When the design is stencilled through this material, the hairs do not show on the finished work, as the brush somehow makes the color run underneath them.

In cutting stencil designs great care is necessary in order to produce good work. Sharp, cleancut and correct working patterns are indispensable. Various substances are used for cutting stencils upon. The best possess a hard surface which will not be affected by the knife blade. Some use hard wood, sheet tin or zinc, but these surfaces are too soft and invariably the stencil knife cuts through them in a s. ort time. The best surface of which I know is a sheet of plate glass about

twelve inches square; this has the advantage of a smooth, hard surface, allowing the knife to run in any direction.

While holding the paper to the glass with the left hand in cutting curves, it is a good plan to move the paper gently in the opposite direction to that in which the knife is cutting. In other words, push the paper against the blade. By this means it is easier to cut the curves correctly.

Circles of all kinds are best cut with steel punches, which can be procured at any hardware store, in fact, good ones have been made from pieces of piping, sharpened by the worker, enough to cut through the paper. In cutting straight lines a steel straight-edge is best to cut against. When wooden straight-edges are used, the knife is apt to cut into the wood and spoil the edge, causing it to appear ragged.

The beginner will find designing the

pattern for the stencil plate the most difficult part of the work. It is almost impossible to get persons who design and execute their patterns on the actual material. Nevertheless, the stenciller should be able to design his own patterns, as the simpler the design the more suitable it is for the work.

There is no "royal road" to design, except the oft trodden one of hard work and study. It is imperative that the student or worker should study nature, drawing its varied forms and taking note of the color s c h e m e s. After many studies have been made in this way, they should be the basis of conventional forms for decorative purposes. Experiments should

be made in the filling of various shapes, such as a square, oblong, triangle, etc. It is necessary for the beginner to remember that designing for stencils requires different treatment from designing for, say art glass; in fact, stencil designing is an art by itself.

There are several principles in designing for stencils which experience has taught along these lines:

1. Ornament construction, do not construct ornament.

2. The more frequently repeated, the more conventional should be the design.

3. Naturalistic treatment will not bear



worked in colors.

frequent repetition within the range of vision.

4. Plain spaces, alternating with decorated surfaces, give refinement.

5. Whenever possible, a design should be prepared specially to fit the space it has to occupy.

6. Allegorical, historical, poetical and Biblical subjects are most suitable for special panels in natural treatment.

To get a thorough mastery of the principles of design should be the aim of all good craftsmen. There are so many good handbooks on this subject that one wonders how few craftsmen seem to take an interest in them. Those I would recommend to be studied are written by Lewis F. Day, and especially one by E.

Batchelder on the "Theory and Practice of Design."

Assuming, then, a knowledge of designing, the next important part is the placing of the "ties" on the stencil plate. "Ties" being the name given to those parts of the stencil which bind it together. The real object of these ties is to prevent the various parts of the stencil from becoming detached, curling, twisting or tearing when in use. A good tie will appear quite as necessary to the design as the stencil plate. Bad ties are generally no-

ticeable by their haphazard positions. To make the meaning of "ties" more clear, suppose a design with a number of leaves to cut. The most natural way to place the ties is by having them follow the main vein of the leaf. Very often the tie is cut in an opposite direction, which leaves the work unsatisfactory in appearance. It is a good principle to design

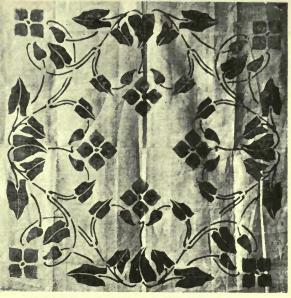


Table cover—Stencilled in tones of violet and blue green, based on clematis.

the ties as part of the design itself and to make them appear as necessary to the design as the stencil plate.

In applying the stencil to material the method varies. The ordinary mode used for wall decoration, either for a frieze, dado or filling, is to mark off, with pencil of chalk, the position of each repeat on the surface to be stencilled. These marks, or "keys," are also placed on the stencil and give the exact position where each repeat of the stencil must come. When one repeat is finished, lift the stencil plate

> to the corresponding repeat, and so on until the work is complete. Stencilling on cloth for curtains, cushions, table runners, and handbags requires a little different treatment.

For curtains the design invariably runs along the sides of the cloth a reasonable distance from the edge, and comes generally from three to four inches wide



in design space. Too wide a border on a narrow curtain cloth never looks well. In the case of a handbag, here we have an entirely different problem, as the design has to be prepared specially to fit the particular shape of the bag.

The color scheme for cushions, curtains, etc., will be determined by the general scheme of color in the home. The first and greatest consideration should be to get the general effect of the curtains, cushions, wall decorations, carpets and furniture to harmonize. Some of the best results in coloring are obtained by using a series of tints of the same color.

"There is a marked difference in pigments and in choosing those for stencilling two things should be remembered — permanency and transparency, the former for durability and the latter for effect.

"The best blues are indigo and ultramarine; greens, sap and cinnaber; reds, carmine and madder. The specially prepared coal tar colors

are dependable and the shades desirable. Some colors, like vermilion, emerald green and yellow, may be used for brilliancy of effect or accent."

It should never be forgotten that the color of the cloth being stencilled also determines in some degree what colors should be applied. For instance, if the color of the cloth be dark, dark colors will not show very well on a dark background. Most stencil colors are now obtainable in all paint stores. I find that the flat glaze stencil colors made by standard paint companies are suitable for fabric decoration. In many cases colors are too thick to work comfortably. Mixing them

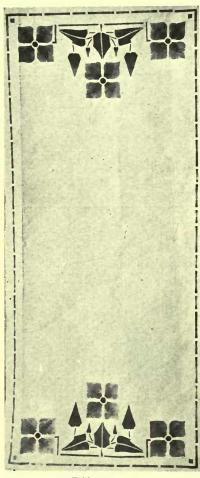


Table runner.

turpentine and varnish will bring them to their proper consistency. A "stencil medium" is now on the market which serves this purpose well, and has also a tendency to make the colors applied more permanent. The proper consistency for stencil colors will soon be determined by actual experience. It is a mistake, however, to have them too thick or too thin; in the one case they become clogged on the brush and stencil plate, and if they are too thin they will run underneath the stencil plate and spoil the work. If the colors are brought down to the consistency of cream, by any of the mediums above mentioned, they will generally work well.

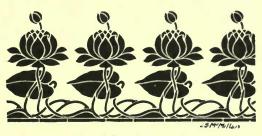
with a few drops of

There are two meth-

ods used in applying color by stencilling, the one by dabbing up and down with the brush, the other by rubbing in a circular motion with the brush. The first method of dabbing leaves the color rough on the surface when finished, the second leaves it smooth, or comparatively so. For wall decorations in alabastine or tempera the first method is suitable. It is objectionable in woodwork. On cloth, again, either method can be used, but the best results are obtained by the dabbing method.

For wall decorations, stencilling with distemper color or alabastine are the most practical. The soft tones of alabastine lend themselves admirably for this class of work. In stencilling distemper upon distemper, the ground color should be well bound, in order to prevent the stencilled pattern from working up the ground and thus making shady work. Milk is a good medium for mixing distemper colors for use on distemper. It works freely and well but soon goes bad. A little carbolic acid will prevent this. Some colors work well with common beer alone. Burnt and raw sienna, and all colors which are not of a spongy nature require little or no gluten or animal size to bind them. They have a binding power in themselves. Ultramarine and similar pigments require size used freely to obtain satisfactory results in most cases.

In stencilling two or more colors with one stencil, especially when two colors are close together, one color should be first stencilled, and, when stencilling the second color, that previously stencilled must be covered or protected by a piece of paper cut to the required shape of the first stencilled form. To avoid this it is generally necessary to cut a second stencil. If the wall space to be stencilled be too large, or the pattern too intricate, it will be necessary to cut a second stencil and apply each separately. Whenever this is done, gauge dots or key marks should be cut in each stencil as a certain means that each color shall register into its proper place. Unless this is done failure is often the result. In this way any number of colors may be stencilled with all the beauty and exactness of a printed pattern. The stencil should always be kept flat on the surface to be decorated or the color will run underneath the stencil and produce faulty work. It sometimes happens, when the stencil has been used many times, that the color accumulates on the surface and leaves a ragged impression. When this is so, the stencil requires to be cleaned. If alabastine or distemper color has been used, the color will wash off with a warm wet cloth. If oil colors have



Frieze design.

been employed, a cloth dampened with benzine or turpentine will remove the color.

When cleaning the stencil it should be kept flat, with a piece of blotting paper underneath, if possible. The blotting paper helps to absorb the color and saves extra rubbing. The rubbing should be done very gently to save the ties from breaking. If any of the ties should break, all that is required is to gum a new piece of paper over the broken part, forming a bridge as it were. This will prevent the breaks from spreading. When finished cleaning the stencil, it is best to give it a coat of shellac or varnish, and when perfectly dry place it in a flat position, until it is ready to be used again. The coating of shellac or varnish gives the stencil plate a hard surface, and also has the advantage of making it last twice as long as a plate uncoated with varnish.

The Kitchen is the Laboratory about which the Home Centers The Home is the Carbureter of the Industrial World

Efficiency in the Home Edith M. Jones, Kitchen Specialist

PART IV.



DDERN efficiency lays especial stress on concentration, and the assembling of the equipment for each part of the work. A little

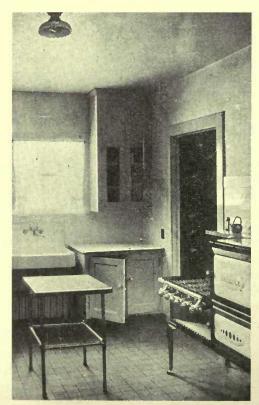
study of the plan, together with the photographs given in the different parts of this series shows the concentration of each feature of the work and the relation

of one part to the others,—the sink to the dish cupboards, the range to the pot closet on one side and also to the spice cupboard and baking equipment on the other side.

The accompanying photograph shows the concentration in one corner of the kitchen. The cabinet at the right of this photograph, just inside the door, is used for spices, coffee, cereals and other ingredients used in cooking. The sugar and flour bins are below the working top, and hold 100 pounds each. These bins are made of

heavy "vat" tin and can be easily removed and cleaned because they are made separate or loose from the wooden frame work.

This picture also shows the close relationship of the bins and spice cabinet to the stove, refrigerator and cupboard for baking tins above the refrigerator. They



Spice cupboard above, bins below the working shelf and baking tins, the other side of door.

are all within arm's length of each otl:er and the advantage of this arrangement is easily apparent.

Dish washing at this beautiful onepiece sink with its convenient drain board, having ample working space, on either side and set beneath windows that not alone afford a delightful view, but ample fresh air blowing directly in the face—is surely not such a disagreeable task after all.

Since these pictures were taken two drawers for the tea and roller towels have been added. These drawers fit into the space between the radiator and sink and have the advantage of centering the dish washing activities. In fact distributed cupboards and drawers are secrets of efficiency which architects do not always consider in their working relationship.

A patent stopper in the sink makes it possible to dispense with the dishpan, as which is used for the maid's sitting room, and it is also so arranged that it can be used for the children's nursery. There is a blackboard built into one side of the wall and a large closet with drawers and ample shelf room for the children's toys. Adjoining this room is a large lavatory with drawers for towels, toilet articles and fresh aprons for the maids. This



A trelles separates the kitchen door from the garage.

C. LeRoy Kinports, Architect.

the sink becomes water tight. A rubber mat in the sink will save much breakage of dishes. The height of the sink and all working table tops is 36 inches.

The little table in the middle of the kitchen is a convenience few people have learned the importance of. This particular table is made of a bolted, matched maple top, set on a nickled gas pipe frame, and has castors. These castors, however, are the important part of the table, because it can be easily moved to any part of the room when needed and pushed out of the way when the work is over.

Opening from the kitchen is a room

provision saves many trips upstairs and provides a place for a hurried toilet, if necessary. This room has a sunny exposure and the blossoming plants lend a most cheerful and livable appearance.

An unusually large buffet in the dining room gives ample drawer room for table linen, silver, etc. The dining room by the way, is a very, very attractive room, as it has much sunshine for the day time and a beautiful indirect lighting shower for the artificial lighting. The woodwork and furniture are early English, the hangings and rug are dull blue and the side walls are ivory.

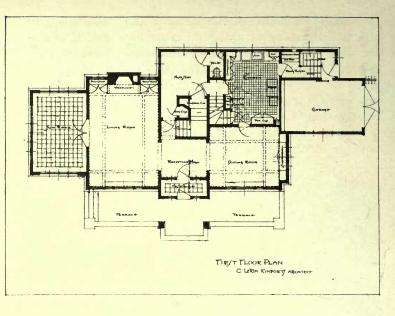
The back door and the garage door are

separated by a trellis which is very attractive and acts as a screen for the clothes line and the garbage pail.

This kitchen has given me especial pleasure to plan and install, but the greatest joy is in watching its every day efficiency. It is so simple, yet so very complete, and amply rewards the worker with its sense of beauty and order. Every member of

the family seems interested and proud of this part of the house and there has never been the slightest difficulty with getting or keeping servants.

Recently I took occasion to ask the young woman in charge of this kitchen how she liked her little workshop, and with the brightest, happiest smile, she said, "Sure an it's just fine, every bit of it. So handy like and so easy to keep sweet and clean."



As these satisfactory testimonies accumulate and I watch the effect of these improved industrial centers in the home, I am more and more convinced that kitchens planned along efficiency lines are indeed worth while, and more and more I am realizing that unquestionably our lives, spiritually as well as materially, are very seriously influenced by the kind of houses we live in.

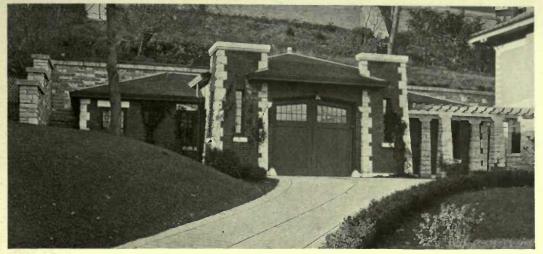
The Picturesque Garage Anthony Woodruff



HE possibilities of the garage as a picturesque feature of the landscape has not received the attention which it deserves, doubtless

owing to the fact that it is still in its formative stage. It is scarcely possible for any other structure to accommodate itself to the changing levels of the ground with such facility as the garage, nor to lend itself so easily to any form of material or construction. It may be built into a corner, or any convenient place on the basement level, or make a foundation to the terrace. It may be built in connection with the gardener's store rooms or the man's workshop or living rooms with long low lines continuing from the house.

A garage which has attracted admiration is shown in the illustration. It is built against a retaining wall, well back from the street. It continues the lines of the house and connects with it by a pergola whose stone piers mark the transition between the stone of the house and the stone trimmings of the brick garage. The different parts are so well handled that



An unusually attractive garage.

Reed & Stem, Architects.

the garage makes a charming composition, and, though it is placed among handsome houses, it is the one picture which catches the eye and is carried in remembrance.

While the level building plot has its advantages, the element of the picturesque is not among them. A change in level is generally an advantage to the garage for it does not place it under the same trying set of conditions, where the small mass must in a way compete with the larger building.

Perhaps the most economical and prac-

ments of the neighborhood. In the meantime nearly every city lot has its little separate bandbox of a building, which serves the individual owner very well, though at a maximum expense for the building and heating.

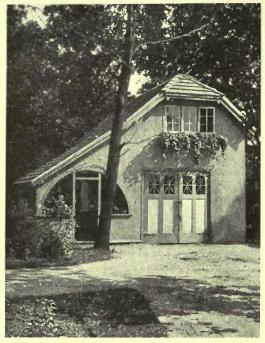
The garage with individual needs and special treatment comes as a welcome relief from the type of building so generally seen. An interesting garage is shown in the illustration with the picturesque porch at the side. This leads to the man's room over the automobile

tical garage treatment is that shown in the second photograph, where the garage is built in as an intrinsic part of the house, either in the basement or under a porch as in this case. Such a solution of the problem utilizes the house walls and also the heat from the house.

In the near future, probably every city block will have its "central garage," heated and convenient for the use of all the dwellers in the square, with perhaps a certain amount of service, depending on the require-



Garage under the porch.



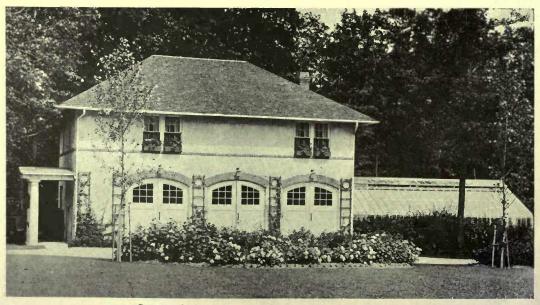
A garage with a picturesque porch.

space. It is a very clever treatment and a very logical one. The garage is of stucco with a tile roof and is very attractive.

A box seat built in across the end of the porch gives enclosed storage space for garden tools and accessories and is convenient in many ways. The porch is altogether useful as well as picturesque. Flower boxes are not the least attractive feature of this garage, as is often the case with all types of building. The "hanging gardens" make a brave showing and add materially to the attractiveness of the building. The garage which is placed in a garden always has its advantages.

The larger garage shown is an essential part of the greenhouse and garden. The brick and cement treatment is not only good-looking but structurally good. The brick arches carry the wall over the wide openings for the garage doors, and the succession of them makes a very interesting feature. The trellises make it a part of, as well as a good background for the garden.

The full second story makes the gardeners lodge and rooms for the chauffeur over the garage. This seems a particularly happy arrangement as it keeps these men and their work, and even the possibilities of accommodation for their families, all under one roof.



Garage and green house with lodge for chauffeur and gardener.



Well built and convenient.

E. W. Stillwell, Architect.

The Home of a Lumberman's Daughter

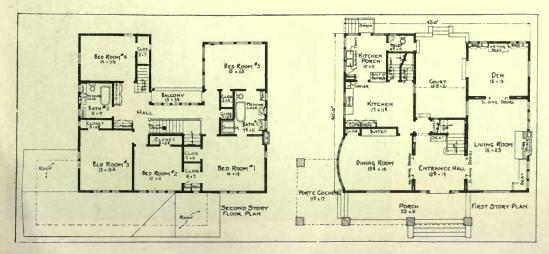


HE first requirement in starting the plans of this home was that they should provide every conceivable comfort and conven-

ience.

Another was that the quality of ma-

terials and of the construction—seen and concealed—was to be of the very best, for this home was built by a former Wolverine—an ex-lumberman—for his daughter in California. It was desirable that the exterior lines be simple, in accordance





Looking past the fireplace to the den.

with their tastes. For these reasons it is a house that could very well be reproduced in Michigan, or in other cold climates.

The court is the most notable feature of the plan. It permits a broad frontage for the principal front rooms and floods the interior with

light and air.

In the first story, the court is a porch with a cement floor. It is partly covered by the overhanging balcony. The expectation is that one day the remainder of the court will all be glassed in.

The kitchen equipment is ideal. Cupboards go to the ceiling. There is a plastered, vented hood hung from the ceiling over a gas range. The sink and drains are one-piece enameled iron, and the refrigerator is closed off from the kitchen with cupboard doors.

The kitchen porch is walled up and plastered like the kitchen itself and the floor is cement. The high screened openings are also permanently equipped with outward swinging hinged sash. The porch, then, is a comfortable laundry room in all seasons. The den has spe-

cial built-in equipment the entire width

of the room. The windows are high, above the book cases and writing cabinet.

The house is fully wired for modern electrical equipment. An intercommunicating telephone is one of the conveniences.

The first story hall, the living room and



A double vista.

den are finished in quarter sawed oak; the dining room in white enamel. The second story hall and bedrooms Nos. 1, 2 and 3 are done in white enamel but have mahogany doors. Baths are tiled and plastered walls stipple painted.

Bedroom No. 5 is a sleeping porch with high openings equipped with sash which drop in pockets under hinged stools.

The first interior shown is taken in the

living room looking toward the den, with its built-in writing desk and bookcases. The hearth of the fireplace is raised the height of the tile.

The view in the bedroom is unusual in showing a vista from each door. Through one is seen the windows and door to the balcony. From the other one looks through the bath room to the bedroom beyond.

Built in Virginia



A home in the South-land.

Chas. S. Sedgwick, Architect.



DISTINCTIVE home recently planned and now building in Virginia has generous space, with light and air from three direc-

tions for the main living rooms. The construction, as the house is built, is of frame with stucco exterior. The plan is adapted to either a south or west front.

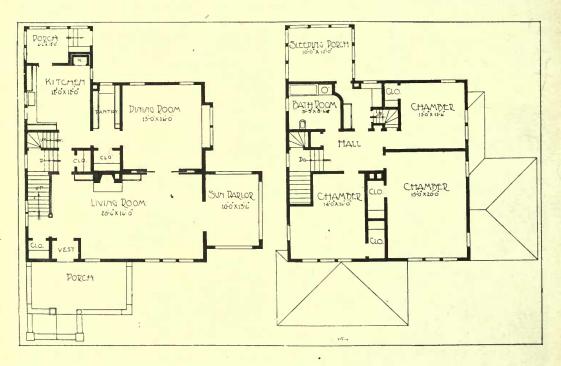
The entrance is at one side of the living room. The vestibule and coat closet have the effect of recessing the stair way which leads up from the same end of the living room. A short run of stairs from the kitchen reaches the landing of the main stairs giving convenient access to the second floor from either the front or the rear of the house. The basement stairs are under the main stairs, with a grade entrance. The sun parlor opens a pleasing vista from the end of the living room and adds length to the room, which is already of good size. There are bookcases on either side of the fireplace.

The dining room on the cross axis gives

a sense of variety to the group of rooms. Sliding doors shut off the dining room from the living room. There is a projecting bay on one side of the room with two large windows.

A well equipped pantry stands between the dining room and kitchen, with a work table under the window at one end. The kitchen is also well equipped with cupboard and working space. The refrigerhas a natural finish. The finished floors are of oak.

On the second floor are three large sleeping rooms and bath room, and in addition, a good sleeping porch which opens conveniently from the hall. There is an attractive alcove in this part of the hall with seats under the window, and also a big cupboard which may be used for linen. The stairs to the attic are here



ator is so enclosed as to protect it from heat in the kitchen, and may be iced from the outside. The rear porch is of good size and makes a very comfortable place to work out of doors. The first floor is particularly well supplied with closets, a convenence which every housekeeper appreciates.

The main floor is finished in oak for the living room and sun parlor and enamel in the dining room. The woodwork in the kitchen and service portion of the house also. The chambers are all supplied with roomy closets. The wood finish throughout the second floor is enameled. The floor is of birch.

There is a full basement under the house. The stucco surface of the outside of the house has good tone and exterior trimmings are painted white. The entrance porch is wide with concrete floor and brick steps. Brick is used around the entrance and at the grade line around the house. The roof is of Spanish tile.

A Livable Home



HE first requirement of a home is the livable quality; the feeling of satisfaction constantly present.

A compact, yet roomy house is here shown, where all of the space, even to that under the roof is closely utilized. The first sense of satisfaction is felt on entering. While the exterior is not unant living conditions during the warm season.

The fireplace is at one end of the living room with a seat at one side and the door from the vestibule on the other side. A coat closet opens conveniently from the vestibule. The sun porch opens from both the living and dining rooms. An at-



Pleasing and home-like.

J. W. Lindstrom, Architect

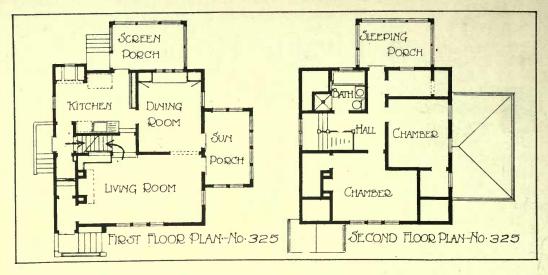
usual enough to attract especial attention yet it is pleasing and homey.

Screen and sun porches speak for comfort in summer and for sunny days, and these are specially generous, one opening from the living rooms and one from the kitchen on the first floor, as well as the sleeping porch on the second floor.

The entrance is at one side of the living room, leaving the front exposure unbroken for the living room. The wide opening between the living and dining rooms allows them to receive light and air from three directions, insuring pleastractive serving table is built in under the group of windows in the dining room with china cupboards on either side.

The stair landing is up two steps and is reached from both living room and kitchen. The basement stairs are under the main stairs with an outside entrance which is also accessible from the kitchen.

A breakfast nook in the kitchen adds to the livable qualities of the house for the housewife, not only in the convenience in setting a hasty breakfast for two or even three people, but also for her convenience during the course of the morn-



ing's work. Here she can prepare her vegetables and her fruits, and here she may have a little shelf for her books, which need not all of them refer to the culinary department. While the kitchen is small there is place for a small refrigerator beside the sink, which is well placed for icing, yet convenient for serving the dining room and for the cooking.

On the second floor are two chambers and a sleeping porch, which may be reached from the hall and makes another sleeping room. The space under the roof is utilized for closets. The front chamber has a fireplace over the fireplace in the living room. The bath room is fitted with a shower in addition to the usual fixtures.

There is a full basement under the house with laundry and furnace equipment for the house, storage room, etc.

The exterior is of stucco with wood trimmings, with exposed rafter ends under the eaves.

A Simple and Inexpensive Design

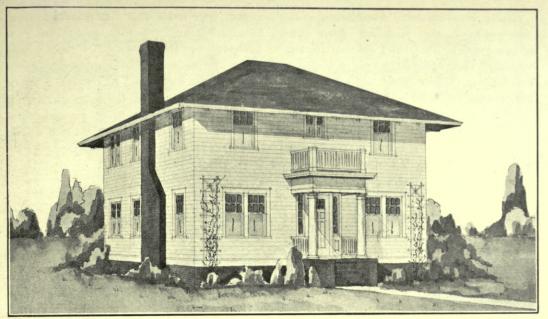


N these days of "H. C. L." the architects are doing their bit by finding ways in which it is possible to "cut the cost" in build-

ing, in order that clients may be able to go on with the construction of their homes as planned. This means, for one thing, a return to the square house plan, simplifying the details, and the use of local materials whenever and wherever possible.

This home, so simple in line as to give the colonial feeling, was planned under such conditions. The requirements were definite; the usual amount of living space in the day rooms; four sleeping rooms on the second floor, ample in size and with sufficient closet room. The exterior, while simple, must be attractive. The amount of money available was definitely fixed, and must cover the cost of the lot, grading, sidewalk, decorating, and lighting fixtures, as well as the cost of the house complete.

The plan is not unusual, with the entrance through a vestibule into a central hall, with the living room on one side and dining room on the other. One's first impression on entering is that of spaciousness, the rooms light and airy,



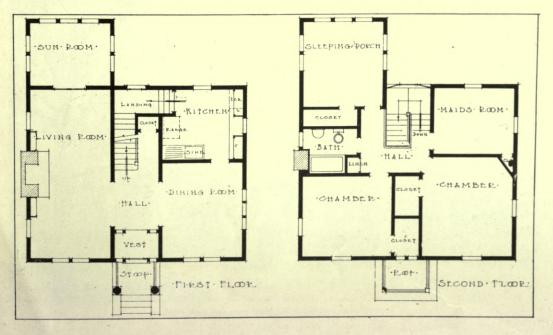
Simple in line-with Colonial feeling.

W. W. Purdy, Architect.

and the wall spaces sufficient for placing the larger pieces of furniture.

The fireplace in the living room is opposite the wide opening from the hall, and has book cases on either side. The sun room, opening with French doors, makes a pleasing vista. The coat closet under the stairs opens to the hall. The kitchen is well arranged. Its outside entrance is at the grade level and connects directly with the basement stairs.

On the second floor are four good sized chambers with generous closets for the rooms, a linen closet opening from the hall, and a centrally located bath room.



There is a concrete foundation under the entire house, veneered with brick above grade. The brick of the foundation and the chimney giving a touch of color to the white-sided walls while the green stained shingle roof, also adds a touch of color which helps to relieve the severity of the exterior lines

Brick work is carried up to the floor of the "Colonial" porch through which we enter. The front door has the traditional side lights and transom, and there is a balcony over the porch.

On the second floor, in the gables of the roof are two good chambers, a small sewing room and a bath room, and a sleeping porch which gives an additional chamber. A wide linen cupboard opens from the sewing room, and good closets from all of the rooms.

The White Trimmed Small House



HE tendency of modern efficiency ideas, as applied to house planning is to make the outside of the house smaller and the inside of

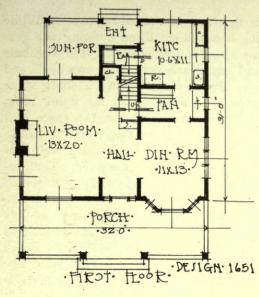
the house larger. This may sound like a paradox, but anyone who remembers the big rambling house built fifteen, twenty, or more years ago, knows that it is true. The careful planning of the modern home gives much more living space and much less useless space than our mothers had long hallways and rooms that were seldom used, but which must nevertheless be just as carefully kept.

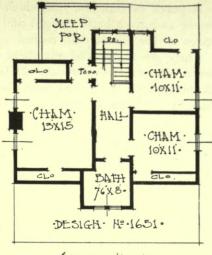
The favor given to white finish is not confined to the interior of the house. White trim and white exterior finish is generally pleasing, and is very effective in the dark stained house.

A nicely planned example of the small



A pleasing contrast in the white train and dark wood.





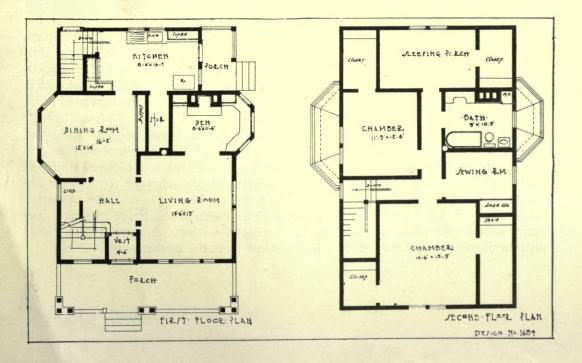
SECOND. HOOR.

house with a central hall is shown in the first home illustrated. The hall is scarcely separated from the living room, while the dining room has a wide opening to the hall. The fireplace is well placed in the living room. A pleasing sun porch opens with French doors. The dining room has interesting window groups.

A pantry is placed between the dining

room and kitchen, and is well fitted with cupboards, with a work table under the window. The kitchen is also well equipped. The refrigerator is placed so as to be iced from the entry.

The stairs may be entered either from the living room side or from the service side of the house. The basement stairs are under the main stairs.



A porch extends the full width of the house and gives better height and closet space for the second floor rooms.

There are three good chambers on the second floor, and a roomy hall. The sleeping porch is reached from the large chamber or from the hall, so that it may is flattened in the wide spaces. While the house is small, on entering one gets the sense of spaciousness. The vestibule and stairs are very well arranged, and give a good closet under the stairs. The wide openings to both the living room and dining room throws the space well



The white porch is a little unusual.

be used as an additional chamber if desired.

On the exterior wide resawed siding is used up to the height of the porch rail, and shingles above, all stained a soft brown. The outside chimney is built of boulders. The trim, porch finish, verge board, and exposed rafter ends are all painted white.

The second home shown has a very effective note in the white trimmed porch, with its simple pointed arch effect, which t o g e t h e r. Both rooms are well proportioned. The projecting bay which fills one end of the dining room assures the room as to light with a good chance for sunshine. The built - in buffet is roomy.

Opening from the living room is a small, very attractive den, with the fireplace as its center of interest. It closes the vista from the living room, serving its purpose quite as well as though it were in the living room itself, while it has the inti-

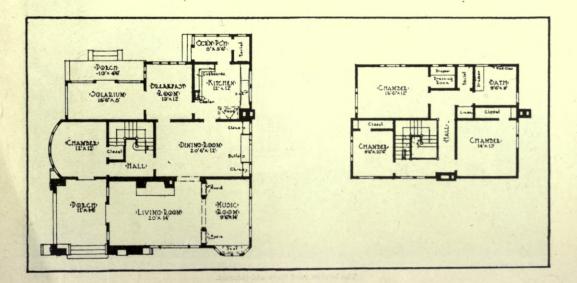
mate and cosy surroundings of the smaller room. With its bookcases and seat it will unquestionably be the best used room in the house.

The kitchen opens directly from the dining room. It is long and narrow giving ample wall space. It is well equipped with cupboards, with the refrigerator under the cupboards beside the basement stairs. These have a grade entrance, convenient for icing. A large storage closet opens from the kitchen.

Portfolio of Interesting Homes



An unusual treatment of brick and shingles.





Courtesy of the Creo-Dipt Co.

Picturesque in line and detail.

J. Frederick Beckbissinser, Architect,



Courtesy of the Creo-Dipt Co.

The broken roof lines add interest.

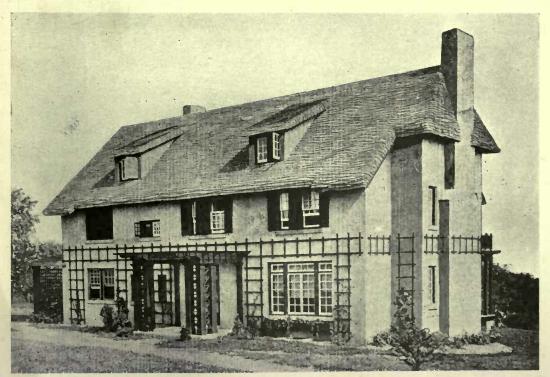
Tietig & Lee, Architects.



Courtesy of the Creo-Dipt Co.

A home formal in plan, yet picturesque.

W Duncan Lee, Architect.



Courtesy of the Creo-Dipt Co.



Overmantel in Louis XVI style—A picture worthy of its setting.

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MERATURAD (AND AND A CONTRACTOR) (

Decoration and Finishing

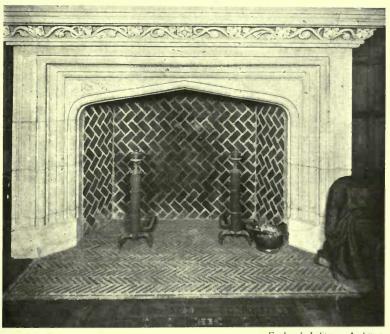
VIRGINIA ROBIE, EDITOR

Fireplaces and Mantels



O single feature can contribute more to the com-

fort and beauty of a room than a well-designed fireplace. Architects realize this fact and it is a dull designer who does not make the most of the opportunity. Aside from comfort. the decorative value of a well-constructed chimney-piece is too important to be neglected. Many modern houses have a fireplace in every room on the main floor, others have



Frederick J. Stener, Architect. Late Gothic mantel in a room paneled in English oak.

one large one, usually in the living-room, which in most homes is the focus of the household. From a luxury the fireplace has grown to be considered a necessity, ranking in importance with the placing of the staircase and the location of the front door.

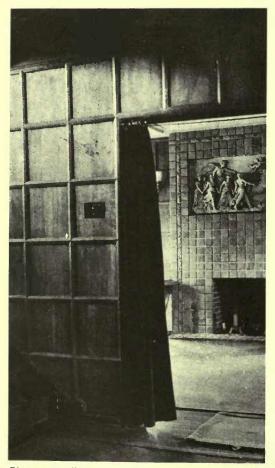
Whether the chimney-piece be large or small, rough brick or Carrara marble, it is constructed in harmony with the room. Gothic hoods are not combined with colonial columns, nor English hobs with Renaissance details. If the house be of the half-timbered style the chimney-piece is of kindred type; if of colonial treatment, an equal harmony is preserved.

The evolution of the fireplace, like that of the door and the window, has been of gradual growth. The fireplace of the Middle Ages was built in the center of the room, the smoke escaping through an opening in the roof. When the built-in



fireplace superseded the central hearth a stone hood was added as a protection from smoke and drafts.

During the fourteenth and fifteenth centuries, the chimney-piece was designed



Plaster cast of "Aurora" recessed in cream colored tile forms sole decoration of the mantel.

in accordance with the architecture of the dwelling. French fireplaces of this period are beautiful examples of Gothic handiwork, displaying the trefoil, quatrefoil, and foliated carvings. The hooded fireplace continued to be a feature of French house-building long after it had been abandoned in England. The mediaeval chimney-piece was constructed upon the principle that the larger the hearth, the greater the warmth. When found that a smaller opening prevented drafts, and made possible an equal amount of heat, the colossal fireplace was doomed.

The chimney-breast built flush with the wall originated in Italy, and for many years was termed the "Italian manner." The removal of the hood and the contraction of the opening necessitated a different scheme of construction. The change from old to new forms took place in the sixteenth century, when stone-cutters and wood-carvers were imbued with the spirit of classicism which had been dominant in Italy since the beginning of the Renaissance.

It has been customary to date the French Renaissance from the reign of Francis I. but the movement traveled north before the accession of that sovereign. Charles VIII., in his long, disastrous wars with the Italians, opened an intercourse between the two nations which craftsmen of the south were quick to seize. Louis XII., more peacefully inclined, paved the way for the achievements of Francis, who came to the throne at an auspicious moment. The fireplaces built during his reign are among the most beautiful monuments of the Renaissance.

Fireplaces in France continued to be built upon simple lines until the reign of Henri IV., when rococo ornament was first introduced. It was a mild rococo, hardly recognized as such until the succeeding period, when Simon Vouet, under Louis XIII., carried the shell and scroll scheme of decoration to great extremes. The Louis XIV. period was more formal and interior work, as a



whole, improved vastly. With the extreme rococo of the Louis XV. epoch, the chimney-piece again became a medium for highly ornate schemes of decoration. Under Louis XVI. a more severe treatment came into existence, and with the Empire style a revival of the classic took place. The history of the chimney-piece is the history of architectural ornament and must be studied in connection with it.

A beautiful fireplace is often marred by an unfortunate mantel treatment. A crowded, poorly arranged mantel can do more toward spoiling the harmony of a room than any other one feature. Many successful rooms have received their finishing stroke, not touch, by the miscellaneous array of vases and photographs which find a convenient resting place over the fireplace. New chimney-pieces are sometimes designed without a shelf, but many of the older type are still in existence and the decorator is confronted with the problem as to how it should be treated. Better a mantel devoid of even a candlestick than an overcrowded one. There is something confusing in a multiplicity of small things, a sense of restlessness which in time becomes very wearing. Possibly only the highly sensitive are conscious of the real reason, but even those less keenly alive to their surroundings, are in time affected by this unrest.

The ancient law regarding mantel pieces decreed a garniture which included a clock, two candlesticks, and sometimes a pair of vases. This is decidedly formal but far in advance of a too informal scheme. A timepiece out of order is the most useless article in existence, and unless rare enough or beautiful enough to be interesting has no particular place anywhere.

Where period furnishing is under consideration it is often difficult to complete the mantel garniture because of the scarcity of the correct center ornament. In



Where mantel decoration is severly simple.

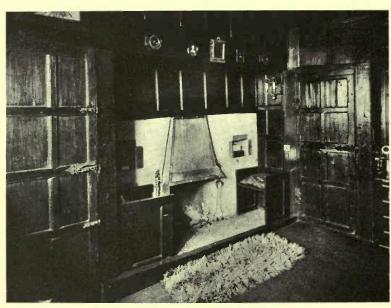
rooms of the Louis XV. and Louis XVI. styles it is possible to find good reproductions, but often difficult to find the right thing when other periods are under consideration.

With a Colonial mantel, if it be in the style of the late eighteenth and early nine-



teenth centuries, it is not easy to go astray for the limitations are clearly defined. With the half-timbered style of house with its plastered walls, dark woodwork, brick fireplace, and oak furniture there is greater latitude. A safe rule to follow is to choose a few things which carry well, If a picture is to be hung over the mantel it must be a good one, the most important in the room. Often an admirable effect is obtained by using a picture in a structural way, but it must be worthy of its setting; not necessarily painted by a great artist but of sufficient interest to

the



Hooded fireplace in an old English room.

large enough not to need a microscopic inspection, and then consider that the mantel question is settled. Sometimes a big bas-relief looks well over the mantel with one pottery jar holding pine branches, oak boughs, or something equally decorative. This is particularly effective against a brick chimney-breast or against rough plaster. If candlesticks are used with this scheme they should be large. The usual type would be lost with this treatment. As the fireplace is usually the focus of the room it is very important that it should not be marred by a fussy or uninteresting treatment. colors in rugs and hangings soft blues and greens, the curtains pure gold. Let into the center panel of the over-mantel was a landscape of the French Impressionist school. in which blue and green and luminous purples seemed to reflect and hold all the color tones of the room.

warrant the scheme. We recall a room paneled in mahogany, the wood finished in such a way as to show no polish;

predominating

Several other pictures of the same school were in the room, smaller but of great charm. They were framed in flat bands of unpolished gold and were hung in such a way as not to mar the paneling. The furniture was old mahogany.

Another room had against the yellowbrown brick of its chimney-breast a large plaster cast of the north section of the Parthenon frieze toned to a deep ivory. Two large Italian flower-jars of modeled plaster were filled with dark green foliage. Two tall brass candlesticks held high candles, the wicks of the latter forming a line with the top of the frieze.

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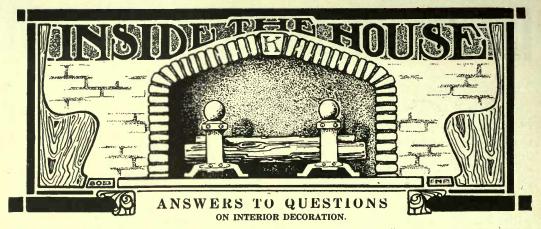
A narrow mantel in a house of an older and different style had a long gilt mirror running its length, a set of old mantel ornaments consisting of a center vase and two tall slender flower-holders, of "East India" china, and a pair of fire-gilt branch candlesticks with glass prisms. The trim, including the mantel, was white, and the paper one of those charming reproductions of an old-fashioned landscape in two shades of gray-a small landscape quite suitable for a modern drawing room. The curtains were straight hangings of old-rose linen and silk brocade held back with brass knobs. Oldfashioned gilt curtain bands were also used, which accentuated the gilt of the mirror and the polished brass of fine old andirons.

A less formal but attractive scheme was seen in a city living-room, where a Connecticut shelf clock of mahogany made in the early nineteenth century was the central feature of the mantel. At one side a large Van Briggle jar of soft yellow was kept filled the year around. Pine needles picked in October lasted well into November. A "winter bouquet" of bittersweet, roseberries, white asters gone to seed, and purple-red barberry leaves tided over the season until Christmas, when holly branches replaced the woodsey things. Spruce filled in the intervening period until Easter, when the yellow jar fairly glowed with jonguils. Ferns did duty during the summer. On the other side of the clock was a colored print of Rosetti's Beata Beatrix, framed in polished green wood. There was a good deal of green in the print, some orange, and a little fine old red. A pair of colonial brass candlesticks and an old copper lustre pitcher, standing fully ten

inches, repeating in a brighter way the mahogany of the clock, completed the scheme. There were no pictures over the mantel. It was a high old-fashioned room with yards of wall space between the shelf and ceiling, but this was unadorned. The mantel with its effective decoration held the eye, and the proportions of the room, which were frankly bad, went almost unnoticed. The mantel and facing were of yellow-brown marble, quite simple considering the period, which was about 1870. On the wall was a warm tan paper meeting a deep ivory ceiling. The curtains were deeply yellow, but of a material so transparent that they seemed scarcely more than a yellow film. The room faced north and west and had been considered hopelessly dark before the present treatment. Good color and an interesting arrangement of a few fine old things together with a few well-chosen new things gave decided individuality.

Andirons and other fireplace appointments may be purchased in many styles at prices within the range of all purses. In period rooms all accessories should be as carefully chosen as the important features. It is now possible to find faithful reproductions of all the famous styles, and in rare instances it is possible to find genuine old French and Italian andirons, though like all fine old articles they are expensive.

In colonial rooms fire accessories of brass will usually be found suitable, and in half-timbered rooms those of iron. It will sometimes be found that in timbered rooms the gleam of brass is needed to give high lights. Again, in the very early type of Colonial fireplace, heavy iron dogs are more in keeping than the more carefully executed ones of brass.



Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

Living and Dining Room.

F. M. G.—We are planning a small bungalow and the living and dining room extend across the front, being $28x14\frac{1}{2}$ feet. How should the dining and living room be separated in order to make them seem as "roomy" as possible? If much of a partition is placed between them, it will make the living room especially seem small. What is the best way to separate them slightly and still make as much air space as possible for the living room?

I have planned fumed oak finish and tan walls for these rooms, but I wish a russet brown in cretonne and rugs. Would it be better to have the fireplace of brick to match rugs and curtains, or of natural stone? The latter is much used in this locality.

Ans.—The separation between living and dining rooms must be chiefly a matter of personal preference. Perhaps you do not care to really divide the two rooms, merely fitting one end of the living room for dining and placing a four panel screen while the table is being prepared and cleared. This, of course, would not allow you to use regular dining room furniture. If you have a "gate leg" table, or one you could use for dining and do not wish to use a sideboard or buffet, you might follow such an arrangement. With your 28 feet for the two rooms, you will still get fair sized rooms if you make a slight division.

Fumed oak wood trim with tan walls with hangings of cretonne or chintz in tans, browns, a touch of green and some deep red over an ecru ground would make a very pleasing combination. I would suggest that in this combination living and dining room that you have considerable brownish red in the rugs relieved with cream or golden tan.

The fireplace would be more effective in our opinion if laid up in a "rug face" brick in warm reddish brown, showing touches of deep reds and greens. A pleasing touch of colors could be added by having loose cushions and back pads of wicker chairs covered in the same chintz as in the hangings.

A Dentist's Home.

G. P.—I would appreciate your advice in regard to finishings of woodwork and decoration or tinting of walls and ceilings in living room, dining room, sun parlor and reception room of the remodeled home of a dentist, of which I enclose a blueprint.

The oak finish is plain red oak and the plastering is smooth, hard finish. It is not intended to have any beamed ceilings, because it is only nine feet high, but a cornice moulding may be put on. Would you advise a brick fireplace or a wood mantel for the living room?

The wood trim for doors and windows is a plain pilaster casing and plain head with moulded cap.

The house is on a corner, facing south; the entrance to the dentist office facing west.

I am an old subscriber to Keith's Magazine and I like it very much.



Ans.—I would suggest that the wood trim of living room, reception room and vestibule be stained in the regulation fumed oak color and waxed. I would omit the wood mantel, using a simple "rug faced" brick in tobacco brown with touches of red and green finished with an oak slab for the mantel board.

I would suggest that you use paper on account of its decorative possibilities. For the living room and vestibule use a golden tan or soft brown with the ceilings in buff.

The wood trim of dining room and sun room may be in a soft gray, stained and waxed. The walls of dining room would be very attractive if hung in paper in gray with a little rose, while the sun room may be hung in a gray Tiffany blend with a decorative border at the ceiling.

For the reception room would suggest a two-toned sage green, doing the wood crim of surgery and laboratory in pure gloss white enamel and the walls and ceiling in flat paint in a pure straw color or a Colonial yellow; or these two rooms may be painted in flat color in a very light cream, almost a white.

Treatment for Fir.

E. S.—Will you please give me suggestions about the following things that we cannot quite decide upon?

The woodwork in our house is fir and we can't decide what to stain it. Have thought of doing the whole house-only five rooms-in light natural. Would that be monotonous? In the living room, 24x14, we will use tapestry furniture and mahogany-the brown English finish-and some willow too. Would you have the willow stained mahogany or leave it natural? We will have to leave the walls white until fall so will not consider overdrapes for the windows now, but would like your suggestions about how to curtain a group of four windows in living room and how shall I curtain the French doors leading from this room to little sun porch?

The house faces west and I think I'd like gray and rose tones in living room and blue and gold in dining room. Would a rose rug be pretty in living room with



Yes, it's <u>genuine</u> birch-of course!

"Isn't it beautiful?

"You know my weakness for 'genuine' things, especially in furniture, and when my furniture dealer informed me that this was a 'genuine' **birch** table mycuriosity was at once aroused and I examined it with great interest.

"I have never shown it to anyone who did not agree that this table was as handsome in design and that the grain and finish of the wood was as beautiful as any they ever had seen.

"Another of its attractions, is its extreme hardness, which means that it will resist wear and tear. I expect my great-grandchildren to enjoy it.

"And finally I was delighted with *the extremely reasonable figure* which I found on the price ticket.

"I couldn't resist having it sent home."

An ever increasing list of buyers of good furniture are saying, in substance, the same complimentary things about "Beautiful **birch**" furniture—"genuine" **birch**—*you* will be just as enthusiastic we feel sure, when you see it.

The new designs are being shown in all the good furniture shops of the country.

The new <u>birch</u> <u>Book</u>, together with a set of birch panels showing different finishes (including the lovely ivory enamel) will be sent free if you'll write. Do it today. Address



329



the tapestry furniture? Should it be either nearly plain or very small pattern?

Would you use mahogany stain on outside front door or oak or natural? The house is square, 24x24, entire front is living room and open stairs at north side with kitchen back of stairs and dining room back of living room, open double doorway between. How would you treat the opening? Are draperies used in doorways, and what materials would you suggest—nothing very expensive or elaborate?

Ans.—Our advice is to use the same stain throughout your house. Fir is an excellent wood. Do not have it too light. On the other hand avoid a dark stain. A grayish tone will be most effective with the color schemes you have planned.

With woodwork a very light gray, having at the same time some of the natural life and tone of the wood, the gray and old rose color scheme you wish, will be very effective. Use a two-tone gray paper on the wall and upholstery of tapestry in old rose gray and soft green. The draperies should be old rose and the rug gray with old rose and green in the border.

Paint the wicker gray with one or two pieces in lustrous black. Use as cushions for the willow, cretonnne with a black ground and gay flowers and birds in rose, green and gray. In the dining room use the blue and gold you specify but not as a wall tone. Repeat the color of the living room wall in a paint or plain paper. Use a plain rug of old blue and chintz curtains in which blue, old rose, green and gold are seen.

The best way to treat a group of windows is to use a plain valance, made over buckram, extending across the group with curtains at the ends either in straight panels or hanging in folds. With this scheme net is usually used next the glass, which in this case should not be pure white. For the French door use net confined by rods at top and base.

Portieres will not be needed at the opening between living room and dining room if the rooms are treated in harmony. The entrance door should be stained to harmonize with the exterior which you do not describe.

With North East Living Room.

I. E. W.—Will you kindly give me information about the following: My living room has woodwork in old ivory and piano and table in mahogany. Have a Turkish rocker I would like to use in this room. Thought of getting several wicker chairs to go with these. What upholstery would you suggest, and also what color for rug? What shade of wall paper would be best in this room, also for overdrapes?

In the dining room the woodwork is old ivory. Early English dining room suite. Tan rug. What color burlap would you suggest below plate rail, also wall paper and overdrapes?

In den the finish is green mission with shaded green rug. Would like this room tinted.

Bedroom No. 1 has brass bed and walnut dresser. What color tinting for wall and ceiling, also for overdrapes? No. 2 has white enamel bedroom suite, cane inset. Little daughter of six will occupy this room.

Bath, kitchen and breakfast room are all in white enamel finish; blue and white tiled floor.

Ans.—Your living room would be charming if the walls are hung in a plain "silk fibre" or an "Eltonberry fibre" paper in a soft yellow leaning to a straw color. This paper should be carried up to the picture moulding without any decoration whatever. Glass curtains of sheer fancy net in a soft ivory tone may be hung at the windows with simple straight overdraperies of a golden brown silk in a Shike weave. These overdraperies should be hung from very short rods at the extreme outside of windows. Do not use a valance at the top but keep everything as simple and unobtrusive as possible.

Would confine the furniture of this room strictly to mahogany on simple Colonial lines and old ivory enameled wicker. The Turkish rocker would spoil the entire room, so would dispose of it.

330



Visit some of the second-hand stores and see if you cannot unearth two or three of those old fashioned round picture frames and a pair of brass candlesticks.

A splendid floor covering for this room would be a seamless Chenille rug in two tones of golden brown in a small set design.

As the dining room adjoins the living room with a large opening and has a cold exposure, would suggest that this room be carried out in russet brown for the burlap dado with the upper in a tapestry paper in brown, olive green and gold. The hangings should be in a luminous golden sunfast.

The den walls may be tinted in a soft gray green with the overdraperies in a mahogany or copper tone.

Chamber No. I may be tinted a soft rose with the ceiling in ivory and overdraperies of Chintz with rose predominating on a cream ground.

Chamber No. 2 would be very appropriate in robin's egg blue with ivory ceiling and Chintz drapes of blue on a white ground.

A Square Brick House.

We are planning to build a square brick house, with four foot cornice and will use French windows all over house I believe. The house will face the south, there will be front porch 10x35. I am enclosing plan of floor in hopes that you will make suggestions that will help us. We are thinking of finishing all down stairs rooms excepting kitchen in light oak, as we are told that it will blend with all kinds of furniture though our furniture is mostly dark oak. What sort of curtains should we use on these windows and do you think us foolish for using French windows? We had thought we would make the front windows in dining room and sitting room into the French doors. We also had thought of finishing the walls in rough plaster and perhaps using tan color. What would you think. Should the den, living and dining rooms and hall What colors in be finished the same? rugs should be used? We have a rug with tan ground work that we might use in dining room and I have one in green and red that I would like to have used, in den, possibly.



From an original oil painting Made especially for The Lowe Brothers Company by C. H. Taffs, of New York

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> Ask our Architectural Service Department for suggestions about your house finishing problem. "The House, Outside and Inside," with color plates and a booklet on Var nish sent on request.

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PAINT J

Jersey City Chicago Kansas City Minnespolis Lowe Brothers, Limited. Toronto, Canada.



What kind of fireplace would you suggest, brick or tile and should mantel match wood work?

The upstairs wood work we expect to paint. What color would you suggest and what should be used on walls in front rooms? If you will please answer these questions we will be greatly obliged. Your magazine has been coming to us for about a year and we find it very helpful.

Ans.—By all means do not use a golden oak but keep the wood trim to a grayish tone or pure fumed oak color, using this treatment throughout the entire first floor with the exception of the kitchen. This may be in natural color and varnished or in enamel paint. The wood trim of second floor would be most satisfactory in ivory enamel, rubbed, and if of birch, would suggest that the doors be done in brown mahogany stain.

Would advise French doors to den and portieres on traverse rings in opening to dining room. Keep the portieres pushed back to casing, so as not to interfere with the vista from fireplace to west wall of dining room. It would be advisable to have all the walls in smooth putty coat and decorated with paper in preference to sand finish and tint. Hang the living room and hall in the same paper, preferably a golden tan on account of wide overhang of porch and north exposure with the hangings in a velvet or sunfast in russet brown. Your den rug calls for a burnt orange wall and olive green hangings. The dining room, having a warm exposure, would be charming in dull blues, which would blend with the rug you wish to use. The golden tan suggested for the hall should be carried through the entire upper hall with the wood trim of upper hall in ivory enamel.

The enamel should begin at the break in the skirt board at the top step.

For an inexpensive fire place, "rug faced" seems to be the most popular material.

By French windows we presume you mean casement windows. These are excellent, either swinging in or swinging out, but they must be very carefuly detailed to make them tight. We can advise you about detailing if desired. French windows at the front are very good and we think not too numerous.

A four foot projection on the cornice is extremely effective but the cornice must be thoroughly braced either with steel or heavy timbers to prevent its sagging. Be very sure that the corners do not sag, for a wide projection which is not true spoils the effect completely.

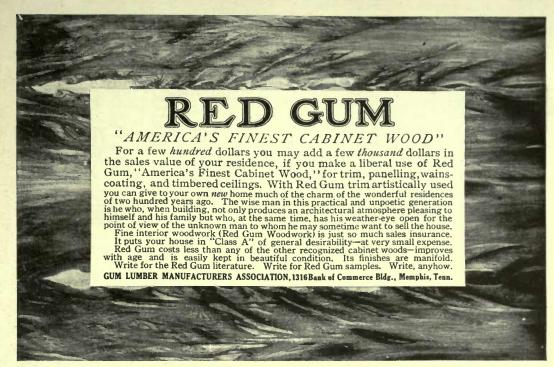
The Fireplace.

G. P. P. What style of fireplace shall I use in my new home? The house is Colonial in design. What treatment and colors do you advise for the walls?

Ans. The style of fireplace depends much on the character of the woodwork. The usual Colonial interior has white woodwork, either with mahogany or walnut doors, or all white. If the woodwork is white with mahogany doors, then the mantel can be either white or mahogany. We should prefer the former with mahogany shelf, with dark smooth red brick for facing and hearth.

With such treatment of woodwork and fireplace, we would advise a gray or dull neutral green paper with brocaded design in self tones. Or, if there is a hall, such a paper could be used there with a plainer paper in living room. In the dining room we would use one of the Colonial Landscape papers in gray and white.





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styles

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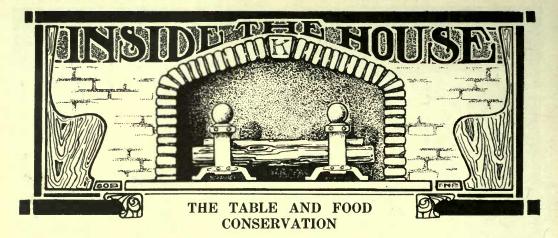
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The Home-Harvest Thanksgiving

DON'T feel I ought to spend so much money at this time on food, but we must have our Thanksgiving festivities," said mother, days it was a topic of discussion

and for days it was a topic of discussion at the dinner table. At length father solved the problem by suggesting that we buy nothing for the dinner except the turkey. Everything else was to come from the garden, the storage cellar, or the preserve cupboard. As the garden space had been doubled last spring, there was a most ample supply to draw from.

Daughter was appointed a committee of one for decorating the table and no money was allowed to the committee on decoration, so she had to use her ingenuity. She decided to scoop out the pumpkin for the pie, taking the shell for the foundation to her centerpiece; but at the last minute she found more possibilities in an old straw-colored farmer's hat which had originally been purchased at the "store" for ten cents, and had never been worn. She filled the basket with the brightest colored autumn leaves. Then she picked out the prettiest fruits which the storage cellar or trees still offered, and gathered all the kinds of nuts which were to be found in the woods at that time, doing them up in attractive mys-To each package of terious packages. nuts and each piece of fruit she tied a string, one of which led to each plate, and buried them deep in the leaves. With sprays of boxwood (laurel, myrtle or bayberry could be used in the same way) she completely covered the strings. After the family had finished their pumpkin pie each member pulled his string and found attached to it his favorite fruit or nuts.

Several large crocks filled with branches of autumn leaves were placed around the room. Strings of white popped corn may be used.

The menu, which came entirely from the household supply, was as follows:

Cream of Succotash Soup with

Corn Meal Sticks

Roast Turkey

Mashed Potatoes Peas (home canned) Carrots

Pumpkin Pie

Coffee

Nuts Fruit

Here are other menus carrying out the "Home Harvest" idea.

The recipes for the starred dishes are given below.

Menu No. 2.

Roast Turkey

Hominy Fritters* (1)

Glazed Sweet Potatoes

Canned Peas and Beans Mixed

Peach (home canned) Salad Cottage Cheese Crackers Pumpkin Pie

Coffee Nuts Fruit

Menu No. 3.

Vegetable Soup with Corn Sticks Browned Fricassee Chicken with Polenta

Our allies depend on us for food. They ask us for it with a right which never existed before, for today they are fighting, and suffering, and dying,—in our war. This can only be accomplished by the combined personal and voluntary services of all the people of the land. Hence the food pledge which you have taken.



Spinach (home canned) Beets (home canned) Asparagus (home canned) Salad Brown Bread Ice Cream^{*} (2)

> Menu No. 4. (Vegetables only.) Corn Chowder* (3) Mock Turkey* (4)

Olives

Scalloped Tomatoes Beet and String Bean Salad Corn Meal and Prune Fluff* (5) Coffee Nuts Fruit

*(1) Hominy Fritters.

One quart cooked hominy (one cupful cooked in one quart of water), one cup chopped cheese, season with salt and pepper. Pour the hominy to a thickness of about three-quarters of an inch into a pan for cooling. When thoroughly cold, cut in small squares, dip in egg and bread crumbs and saute in chicken fat or salad oil. Serve with tomato sauce.

*(2) Brown Bread Ice Cream.

- 1 quart thin cream
- 1 cup brown bread crumbs
- $\frac{1}{2}$ to $\frac{3}{4}$ cup of sugar

1/8 teaspoon salt

Soak the bread crumbs in the cream (or if you use custard for the foundation of your ice cream, soak them in the custard), add salt and sugar and freeze.

*(3) Corn Chowder.

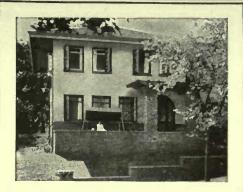
 $\frac{1}{2}$ can corn

- 1 pint sliced potatoes
- 2 tablespoons butterine
- 1 sliced onion.
- 1 pint of milk
- $\frac{1}{2}$ teaspoon salt
- 1 cup water

Cook the onion in the double boiler in one-half the butterine for twenty minutes. Add the sliced potatoes and one cup boiling water. Cook directly over the flame until the potatoes are tender. Add the corn, milk and the remainder of the butterine. Heat to the boiling point, and serve.

*(4) Mock Turkey.

- 2 cups legume pureé
- 2 eggs
- $\frac{1}{2}$ cup Granola or toasted bread crumbs
- $\frac{1}{2}$ cup browned flour
- 2 teaspoons celery salt



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Our service department will help you, without charge, to adapt Whitney Windows to any unusual requirements, fur-nishing you with drawings and specifications that will enable your contractor or carpenter to make successful installation,

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Whitney Window

-This shows the Whitney hinge that is bottom of sash. It has a shoe that slides in a water-proof metal track.



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- 1 teaspoon salt
- 2 teaspoons sage
- 1 cup strained tomato
- 2 cups nut meal or finely
- chopped nuts
- ¹/₄ cup cream
- 2 tablespoons grated onion

Cook the legumes, either lentils, peas or beans, until quite tender and dry. Make into a pureé by mashing through a colander. Beat the egg slightly, add the pureé and the other ingredients in the order given. Then bake in a loaf in a hot oven twenty to thirty minutes, or until nicely browned. Serve with a cream sauce or brown sauce.

The mixture may be shaped with a paring knife or spatula to represent a fowl.

*(5) Corn Meal and Prune Fluff.

- 2 cups prunes
- 2 cups cold water
- 2 tablespoons sugar
- 1 egg white
- $\frac{1}{2}$ cup white corn meal
- 1/4 teaspoon salt
- 1 cup milk
- $\frac{1}{2}$ cup cream

Wash prunes, cover with boiling water, let stand a few minutes, then soak in cold water 24 to 36 hours, or until soft. Drain, and to 2/3 cup of the liquid (making up the amount with water if necessary) add the corn meal and salt. Bring to boiling point and cook until water is absorbed, stirring constantly. Add milk and cook one hour in a double boiler. Meanwhile remove the stones from the prunes, rub the prunes through a colander, add the sugar and egg white beaten stiff. Place a spoonful of the cornmeal on the serving plate-add a generous spoonful of the prune fluff, and serve with cream, plain or beaten stiff.

The World on Rations.

"Seven years ago a famous European student of history prophesied that the next great war of the future would not be won by fighting but by famine. We are today fighting that war, and famine is indeed threatening to be its arbiter." If, indeed this great war is not to be won by fighting, but lost by famine, then the great responsibility is thrown on the people who stay at home in the countries which must supply the food. That brings the responsibility for victory very near to those who stay at home. Starvation will exterminate a weakened nation quite as effectually as bullets. Our armies may be equipped and may fight ever so well and they themselves may be well fed and clothed, yet if famine stalks through Belgium and France, no real victory can be achieved by the greatest valor and the greatest sacrifice of the armies.

Production has been increased to the greatest possible extent, yet with all this effort, conditions have been such that the harvests are scarcely up to the normal. We are now starting on the next lap of the race and yet we fear that the great mass of the people throughout the country have absolutely no appreciation of the dire need for conserving foodstuffs so that we may send them to Europe. How can a mother who has a son in khaki "Somewhere" allow a single morsel of food to be wasted when she realizes that plenty of food in Europe can stop bullets and send her boy back more quickly and in better condition.

Owing to the limitation of shipping we must confine our food exports to the most concentrated foodstuffs, grain, beef, pork, dairy products and sugar. Let the housekeeper find other foods which will take their places on her table, using perishable foods as far as possible. Eat apples, whole or fried, for breakfast instead of the customary bacon and eggs, or it may replace a last piece of toast. The "Eat less bread campaign" in England, in one month cut down the consumption of wheat flour 10 per cent, a saving beyond all expectations.

The thing which the housekeeper must understand is just what is meant by food conservation. It does not mean thrift, or saving of money, else the rich might pay. What use is money if there is no food to buy. Under-nutrition of the people would be an equal calamity.

REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc. is a serious business,—it may win or lose the war.



Five Food Elements.

There are five food elements which are necessary to the human machine, as given by the government bulletins. Each of these has its specific work to do in the human body and no one of the five can take the place of any of the others. A list of the foods commonly used and the classification into the five food elements was given in the September number. This is cleverly put into concrete form in Caroline L. Hunt's "Ideal Rations for a Day" where one food of each element stands for the class, and the quantities of each are made sufficient for a day's rations for a man of average weight at work with light exercise. By substituting different foods of the same class a wide variety can be found having practically the same food values. This is given merely as a basis in the combinations of foods.

Standard Rations for a Day.

6 eggs or equivalent.

- 1 lb. bread (a little more than a baker's loaf) or equivalent.
- 3 oz. butter or equivalent.
 - (Six one-inch cubes.)
- 4 apples or equivalent. ¹/₂ cupful sugar or equivalent.
- Near equivalents of:
 - 1 egg (2 oz.) =
 - $1\frac{1}{2}$ oz. lean meat, fish or poultry. 1 glass milk.
 - 2 cu. in. or 1 oz. cheese.
 - $\frac{1}{2}$ cupful baked beans.
 - Bread (1 oz.) =
 - $\frac{1}{2}$ cupful cooked cereal.
 - 1/2 cupful cooked macaroni.
 - 1 cupful flaked, shredded or puffed cereal.
 - 1 large potato.
 - Butter (1 cu. in or $\frac{1}{2}$ oz.) =
 - 3/4 oz. bacon.
 - 1 tablespoonful olive oil.
 - 1 cu. in. salt pork.
 - ¹/₃ cupful cream (6% fat).
 - Apple (6 oz.) =
 - Equal weight of any fresh fruit or any fresh vegetable.
 - Sugar (1 lump or ¼ oz.) = ½ tablespoonful rich jam or marmalade.
 - 1 tablespoonful maple syrup.
 - 1 cu. in. comb honey.
 - 1 level tblsp. granulated sugar.



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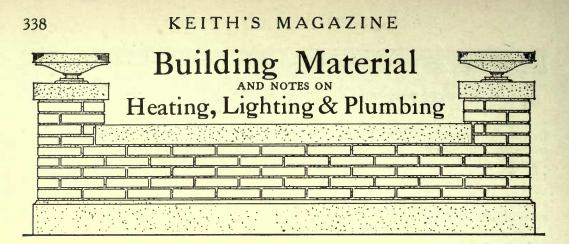
3-8 in. thickness Oak Flooring can be laid over old pine floors in old houses, or over cheap sub-floors in new houses at a very low cost. It is decidedly cheaper than a good grade of Brussels carpet or pine flooring.

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Conservation and the Coal Bin



HE contents of the coal bin and the rate at which it empties is always a matter of concern to the householder. This year its

value approximates that of his other jewels, if he is so fortunate as to possess them.

Every one knows that it is much easier to burn coal than to get the full amount of heat from it; that there is no definite relation between the coal that is burned and the heat which reaches the rooms to make them warm and comfortable; that much coal is simply burned,—wasted. With the threatened scarcity of coal the leaks must be stopped this year.

After the first cold spell and before the severe winter really begins is the "last chance" for finding and stopping the leaks economically.

In cheaply built houses where thoroughly good building paper or insulating quilt have not been plentifully used, draughty cracks will be found which are the cause of much wasted heat. Sometimes a projecting bay or sideboard seems almost like an open door when the wind is in certain directions. In one such instance an examination on the outside showed there was no reason why the wind should not come in. A layer of building quilt carefully placed under the projecting bay and sheathed underneath quickly made a different temperature in the room.

A single thickness of glass at the windows is always a source of heat loss. As it may be helpful to others, we give one home builder's experience, who says:

"We have estimated that every storm window on the north and west side of our house has saved us a quarter of a ton of coal a winter. In one season we paid the cost of the windows in the saving of fuel, for they average only from \$3 to \$5, according to the size.

"Then there are inside problems. Owing to settling and shrinkage of the wood, the baseboard and floor are often separated by a quarter of an inch of open That leak coming in near the space. floor chills the whole atmosphere. The remedy, as we found, is simple. Boil up a lot of old newspapers into a soft, pasty mass, add a little glue when nearly ready for use to give it consistency, and then a little coloring matter to imitate the wood trim. Your painter can tell you what you need to secure a certain shade to imitate oak, chestnut or pine.

"Stuff this pulpy mass in between the floor and baseboard, and between the wall and baseboard until every chink and crevice is filled. If it is the color of the wood trim, it will never be noticeable.

"The leaks will be stopped up so effectually that you will find your floors much warmer. Nearly all floors are double, and with a layer of building paper between, the leak of cold air rarely comes up through them. The air enters from the corners and sides around the baseboard and windows.

"The windows can be treated in the

Shovelfuls of Coal Saved Each Day

This amount of coal saved each day will total roundly a half a ton a month-surely economy worth while and when at the close of the heating season you find your coal bills have been lessened 3 tons or more it will certainly take the sting out of the high price of fuel.

This advantage in fuel saving is available in its fullest measure if you will wisely install



Automatically regulates the drafts and dampers at all hours of the day and night holding the consumption of fuel to just the amount required to obtain the temperature desired.

Eliminates heating plant attention and worry. Insures comfort, health and safety.

Works perfectly with any kind of heating plant-hot water, hot air, steam, vapor or vacuum, burning coal or gas.

Sold by the heating trade everywhere under a positive guarantee of satis-faction. Send for booklet giving details and prices.

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It is absolutely wind, weather, storm, fire and lightning proof.

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 being it will bring it.

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WHEN YOU USE A **Hess Welded Steel Furnace**

Your house is Chock-full of HEALTH. It draws the cold air Off the floors and Warms it properly. Then the heat Circulates into Every corner. Moisture is added till the Humidity is just right. Never any gas Nor dust, for the Welded seams, melted Where the plates join, Make the joints Everlastingly tight and Leakproof. Burns any fuel,-Anything you can get. The cheapest will do. The Price-Ask us-It's less than you'd Guess, for we sell Direct from factory to you.

HESS WARMING & VENTILATING CO. 1217 Tacoma Building, Chicago (Special rates to Contractors)

same way with this paper pulp. If necessary to get at it, take a sharp knife and loosen the wall paper where it meets the casing, and stuff the filler in between the wall and wood frame of the windows. Then, when it has dried, replace the wall paper and paste down neatly. The difference will be so marked that you will immediately find comfort in rooms that were before hardly livable."

Furnace Efficiency.

It is estimated that one-quarter of the coal used to heat our houses is wasted. Even the busy man can afford, this year, to study his heating problem for himself and know how his furnace should be fired and what is the kind of coal which is adapted to give the best results in his special conditions. The money which is dropped on the street is not wasted, somebody finds and uses it; but the coal which is burned without giving its return is an absolute waste.

Each individual heating plant and each chimney makes its own set of conditions, so there are no universal rules to be laid down. A little understanding of first principles, and a large application of common sense are the first requirements, in the management of a heating problem. It is not easy to find outside help. Call up the evening schools and the Y. M. C. A. and they are likely to tell you that they have no classes in the study of combustion as applied to house-heating, nor in the stoking or firing of furnaces; that they have found no demand for such classes. You will perhaps get most help from your local coal dealer, for he will give you the benefit of his large experience, and will apply it to your particular problems.

"Burn all the coal you buy,—and use all of the heat from the coal you burn." That is the whole proposition. To get at it systematically the coal, before it is burned, and the coke and ash that is left, may each be weighed separately, the efficiency determined and applied to your problem, if the scientific advice necessary is obtainable.

Much fuel waste is due to improper use of fire tools. The slice bar,—in common parlance, "the poker,"—is abused almost every time it is used, according to Jos. W. Hays, combustion engineer, who says: "The purpose of the slice bar is to cut or slice the fuel away from the grates and to cause the fine ash to fall through the grates. Under no circumstances dig up the fuel with it. Under no circumstances use it unless the condition of the fire calls for it. The good fireman can tell from the dark spots in the ash pit when and where the fire needs slicing."

Much of the heat generated is lost through radiation unless the furnace and pipes are jacketed so as to thoroughly insulate them. "One or two inches of asbestos plaster covered with canvas, and the canvas covered with paint, makes a serviceable overcoat for a boiler setting." Let the householder use the same degree of common sense with his heating proposition that he does in his business.

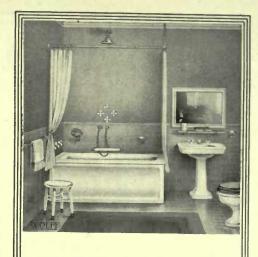
How the Japanese Draw Plans.

The Japanese draw their plans on one sheet of paper and then they fold it all down so that it is flat, says William A. Boring. When it is shown to the client, who has no imagination about mechanical drawing, the architect lifts up the side walls and puts the roof over the top. It is all drawn out and the client can look in the window and see the inside, or put it on the table and see what it looks like on the outside. It appeals to the imagination of people who are not educated to the building plan.

Concrete Brick.

The announcement has been made of a new concrete brick just being placed on the market which is expected to have its effect on building. With this pressed, machine made concrete brick, comes, we are told, the first radical change in the making of brick since the earliest times. While the product has been refined and the process improved, the basic material has always been clay. Reduction in weight is one of the first advantages claimed, weighing approximately $4\frac{1}{2}$ pounds as against the standard 6-pound clay or shale brick,—a saving of 1,500 When pounds per thousand of brick. completely cured, the bricks are several shades lighter than the usual "concrete gray."







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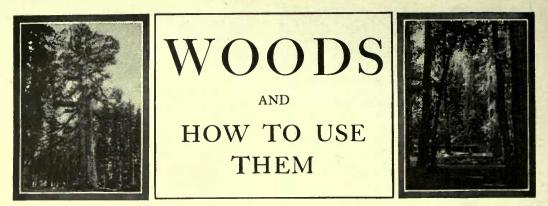
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EDITOR'S NOTE. - When the building idea takes possession of you-and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH's staff of wood experts. This department is created for the benefit of KEITH's readers and will be conducted in their interest. The information given will be the best that the country affords. The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring

The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

Russian Timber.



USSIA, it is stated, has almost one-half of the world's standing timber acreage.

A Russian information Bureau has been established in the Woolworth building, New York City, operating in connection with the American-Russian Chamber of Commerce. The bureau announces that it has been established by the Russian provisional government and that it is in constant cable communication and correspondence with Petrograd and will aim to disseminate in America authentic information in regard to the economic, financial, political and cultural conditions in Russia.

It is significant that the first bulletin issued by the bureau treats of the timber industry in Russia.

Director A. J. Sack, of the Russian Information Bureau, says that during the year 1915 the debit balance of Russia's foreign trade was large, but during 1916 it was almost trebled. The question of turning the balance in favor of Russia is one of the most important problems of Russia's economic life at the present time.

"This problem is solved in a very interesting manner by the possibilities in the development of Russia's timber industry. The timber export even nowadays holds second place, following grain, in Russia's export trade."

"The development of Russia's timber industry and the export of Russian timber to the European market means for Russia the practical solution of most of her financial difficulties that are bound to arise after the war. The development of the timber industry will create a favorable foreign trade balance and will assist in the payment of the national debt. American capital is familiar with the problems connected with the development of the timber industry, and American capital should therefore play a great part in the proper development of the timber industry in Russia. There is an opportunity in this connection for American timber interests and every effort should be made to assist Russia in the development of her timber industry in order that American capital can share in the rewards."

The Beauty of American Walnut.

It has taken a generation or so to forget the crimes of structure and finish perpetrated against black walnut in years past. Buried under a nondescript, opaque stain which effectually concealed the character of the wood, walnut became an offense to good taste.

But walnut is at last coming into its own. The wood is still plentiful and easily obtainable, and architects, decorators, wood-workers, are coming to realize that it is a wood of extraordinary natural beauty. With this awakening comes an attendant interest in the methods of finishing which develop its real beauty.

Fine-textured, strong, open-grained, beautiful in color and figure, black walnut shows at its best when given a natural treatment.

A paste filler does not, noticeably, color the wood, but it does accentuate the grain



IN planning the new home or in the remodeling or decorating of the old one, the interior treatment, both as to architectural detail and decoration and furnishing, is very important. Correct expression of decorative schemes is a difficult matter for the average person to handle. In view of this, we have published in "INTERIORS BEAUTIFUL" two hundred selected views of the interiors of successfully planned and decorated homes and give, in the captions under the illustrations, the scheme of decoration used.

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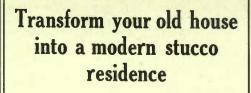
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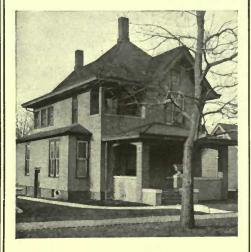
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Here is an old residence that has been given the appearance of a new stucco house.

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and the result is a mellow gray-brown which is rich and satisfying to the eye.

If one wishes a darker effect than may be obtained with the paste filler alone, an acid strain of the desired color may be applied before the paste filler, and pure white shellac applied over the paste filler and before the first coat of varnish. Acid stain does not cloud or obscure the figure and brilliancy of the wood.

Common Salt For Preserving Wood.

Many methods are in use for preserving wood and preventing the attacks of rot. Most of these, such as the chloride of zinc and the sulphate of copper treatment, are comparatively expensive, and are applicable therefore only to the better classes of wood; moreover, they can only be used by the large industrial works, and are not suitable for private use. It has now been discovered, according to the Scandinavian report reproduced by the Timber Trades Journal, that ordinary common salt is an excellent substance for impregnating wood and for preserving it against decay. The effects of the action of common salt on wood were first noticed at the Great Salt Lake in Utah. It was observed that the sleepers of a railway line which was continuously washed by the very salt waters of the lake needed no renewal, and after forty-three years were in a far better state of preservation than oak sleepers impregnated with expensive chloride of zinc after fourteen years, when these latter required renewal. In consequence of this discovery, comprehensive experiments have been made of the effect of salt impregnation of wood, and entire success is reported.

To Protect Shingles.

Shingles should be painted or stained before they are put on the roof as it is just as important that the under side, and especially the overlapping sections should be protected as that the exposed portions should be thus safeguarded, says the American Roofer. There are now on the market several types of paint which give quite an efficient protection against fire.

Either painting or staining can be done

by "dipping." If a stained shingle is required, there are numerous stains obtainable for the purpose, all of which are efficient. They usually contain a coal-tar product of which creosote is a constituent and effectively prevent decay.

Any color, from the lightest silvery gray, scarcely coloring the wood, to the darkest shades of red or green, is obtainable. A cold color, like gray or an undecided green, goes well with pure white, and the roof of a house painted with the mellow tint, known as "Colonial White," may be a dull shade of yellow.

The stain should be poured into a tall, narrow vessel capable of taking in an entire shingle. The shingles are dipped by grasping the thin end with a pair of pliers or pincers, immersing them, holding them down with a stick for a few seconds, the pliers being removed; then lifting them from the bath with the pliers and standing them upright in some convenient vessel to drain.

Painting by dipping is done in the same way, but is a little more difficult, as it is necessary to stir the paint once in about every ten minutes to prevent settling of the pigment (the solid portion of the paint).

For this use the paint may conveniently be more fluid than for brush painting. It is, therefore, recommended that to every gallon of prepared paint there be added one-half gallon of pure raw linseed oil. The rest of the procedure will depend upon the nature of the shingles. If they be of cypress or yellow pine, benzole should be added.

The shingles may be laid at any time after the stain or paint is dry, but it is good practice at the time of laying to give a coat of paint, as it comes from the can, to the overlapping undersurface of the shingle at the time of laying. This acts as a cement and is a most efficient preventive of leak and rot.

After the roof is completed it should receive a final coat of paint. Use the paint as it comes from the can, applying with a full brush and spreading out smoothly, but not too thin.



THE ARCHITECT'S CORNER

What Is YOUR Building Problem?

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Proportioning the Living Rooms



HE living room, in general, should be proportioned in the ratio of three to five, which would mean that a living room fifteen feet hould be twenty-five feet long or

wide should be twenty-five feet long, or a room thirteen feet wide would be twenty-one feet long. Of course this is by no means an absolute rule.

It may be noticed that in speaking of the width of the living room the odd numbers of feet have been used, and this is not because there is luck in odd numbers. but because lumber comes sawed in even lengths of feet. Twelve, fourteen, sixteen and eighteen are the usual lengths which are carried everywhere in stock and as one has to allow about six inches on each end of a floor beam to support it on the work below, if one desires to economize in a very sensible way the stock sizes of beams will naturally be selected. Now these stock sizes were originally determined by what widths could properly be spanned by beams of certain sizes, and it has been found by experiment that beams two inches in width and eight inches deep can be used over a span of thirteen feet, and a beam two inches wide by twelve inches deep over a span of seventeen feet, without the floor sagging or feeling shaky.

There is not much difference between the comfort of rooms thirteen and fourteen feet in width, respectively, but there is a considerable difference in the cost of the framing timbers.

To take a concrete example: a room thirteen feet wide can be spanned with a two-inch by eight-inch beam fourteen feet long; a room fourteen feet wide needs a two-inch by ten-inch beam, and since a fourteen-foot beam will not be long enough to give bearings at each end, thenearest stock size, sixteen feet in length must be used, with a consequent waste. Of course, even the strictest economy in the use of lumber will not make a very tremendous saving in the cost of a house, but thoughtfulness in these items will effect a saving of a small percentage.

This matter of the span applies equally to the distribution of bearing walls in all portions of the house, and where spans can be kept down to odd number of feet it should be done in order to make economical use of materials.

The shape of the living room should be such that several groups can assemble in it, concerned each with its own subject of conversation, and also so that every one in the room can form in one general group. As the center to which groups naturally gravitate is the fireplace, this should be so placed that no one facing the fireplace will have to sit immediately in front of a door, or block a natural passageway. A fireplace immediately between two large doors, while picturesque in appearance, is often uncomfortable in practice. A large square living room is not as a rule desirable.

As to the location of the dining room in regard to light and air, the southeast corner is the most desirable, since morning and noon sun enters the room and sunshine is a real essential at the breakfast table, because so many people need all the sunshine they can get in the morning to put them in good temper. All rooms should, if possible, be corner rooms.



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Dining Room.

Dining room tables run from four to five feet in diameter, and when extended to seat eight persons are from six to eight feet in length, or extended to seat twelve are from nine to twelve feet in length. The width required, with pieces of furniture projecting into the room, for a fivefoot table is eleven feet. This will give plenty of room for people to sit at the table, and for the maid to serve them properly. This means that fourteen or fifteen feet is wide enough for the actual needs of any dining room. In length a seventeen-foot room is sufficient to seat twelve people, and a fourteen-foot is sufficient to seat eight people, unless both ends of the room are blocked with large pieces of furniture projecting into it. Besides the dining table and the chairs necessary to seat the expected number of guests, the average dining room furniture consists of a sideboard, from five to six and a half feet in length, usually projecting a foot and a half; and possibly a china closet projecting about one foot and four inches, and from three to four feet in width. For these pieces of furniture there must be wall spaces, and as the sideboard is usually one of the most interesting pieces of furniture which goes into the house, there should be wall space in the center of one side of the room provided for it. There is a question about the advisability of placing a window above the sideboard, since the silver, glass and china show to much greater advantage when lighted from the front, and lose in beauty when lighted from above or behind, for they cannot be well seen against a strong light. The sideboard forms a most agreeable termination to a vista.

Stairs.

As stairs are probably the only portion of the house where accidents are likely to occur, the layout should be considered from a practical as well as from an artistic standpoint. Steps on landings are only permissible when they occur at places where one would naturally expect them, and which are thoroughly lighted both at night and by day.

In the second place stairs should not feel steep, and the word "feel" is used advisedly, since a staircase may, in fact, be steep without being hard to mount or descend. The natural distance a person of normal size steps in going up or down stairs is about the same, whether the stair is steep or of gentle slope, and this has been proven by experiment to be approximately seventeen and one-half inches, so that the combined distance of the step up and the step forward should equal this amount. In other words, if the step is eleven and a half inches wide, it should be about six inches high, and a stair of these dimensions is extremely comfortable. On the other hand, a stair in which the risers are eight and a half inches and the treads nine inches is not uncomfortable, although a stair with the treads twelve inches wide and the same height is distinctly uncomfortable.

The Hall.

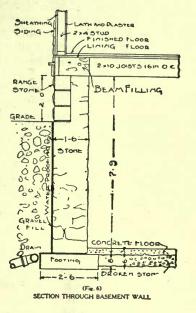
The hall is the least usable space in the house; it adds not one whit to its capacity, and its size is determined by two things only—the first, the desire of the owner to give the visitor a first impression of spaciousness and comfort, wasting what area is necessary to accomplish this result; the second, the size which is necessary to form a connecting link or intermediary between the various rooms of the house.

Doors should, wherever possible, be placed opposite to one another; they look better, and as in most cases where a thing looks well it will be found that there is a sound practical reason for it; which here is the fact that the shortest distance between two points is a straight line. In this connection it might be added that especially in the small house, wisely arranged vistas are desirable. No one wishes to feel cramped or enclosed, and if vistas can be opened, even small houses will not appear confined or crowded.

[Note.—The Livable House, Its Plan and Design, by Aymar Embury II, which was reviewed in an earlier issue, holds so much of interest that we reprint part of the chapter on proportioning of rooms. We wish to acknowledge the courtesy of Moffet, Yord and Company, also in the use of the frontispiece and others which shall be used later from the illustrations from The Livable House.]

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NE result of the European war which will have a far-reaching effect will be the determination on the part of many of the manufac-

turing countries to require that all goods offered for sale, either domestic or export, shall carry a mark denoting the country of origin.

It is not generally known that the term "Made in Germany" was not a matter of choice on the part of German manufacturers, but was first required by England as a means of identification on all goods imported from Germany on account of the inferior goods competing in the English market. Improvement was immediate and marked when identification was required, until the mark came to stand for high-grade goods.

England has long had respect for the product of English factories, says the Wall Paper News, and the term "Made in England," as a distinguishing mark, has been promoted by patriotic pride rather than as a requirement of law. The same considerations are true of things made in Canada, and there have been many "Made in Canada" fairs, for the purpose of emphasizing the brands and qualities of home products.

France has now through the Union Nationale Inter-Syndicale Des Marques Collectives adopted the initials, U. N. I. S. and the word France, as a guarantee of French origin.

Entertains Guests by Setting House on Fire.

To prove the building fireproof, Edward F. Croker, one time chief of the fire department of New York City, is said to have burned up the contents of one room in his home at the housewarming recently. He deliberately set it on fire and then asked his 150 guests to sit down to an elaborate dinner without doing more than closing the door to the room in which the fire was raging.

Ex-Chief Croker did not call a fire department—he did not want any; in fact, he wouldn't allow anyone to try to stop it, and, there is no insurance on his property.

One of Mr. Croker's hobbies is fire prevention. He has for some time insisted that fire in residences were things that could be controlled, if they could not be absolutely prevented, and built a house to prove it, and incidentally to live in. To demonstrate that the house is unburnable, he gave his housewarming.

Food Supply of the World.

We of America are accustomed to seeing food wasted on every hand, even by the very poor. Living in a land which has now the largest remaining stock of food in the world, seeing food in profusion all about us, we are slow to realize, and in fact can hardly comprehend the idea of complete food shortage, such as threatens the world. In order to help to such a realization, Mr. Hoover warned the country when he undertook the food conservation that if food consumption continued as heretofore, even with normal cropsand they have not reached the normalthat by May of 1918 there would not be an ounce of bread stuffs in the world. The large garden production of the summer has doubtless replaced much bread stuffs that would have been consumed under other conditions, but the great effort is yet before us during the winter months.

The food pledge which doubtless every loyal housewife has signed, becomes more important as the time passes, and each housekeeper will prove her loyalty, especially if her boy may be "somewhere in France" by finding her own ways of conserving foods, and these will be spread through communities like other favored recipes.

The Point of View of "the Maid."

Selma could not understand why it has suddenly become such a wasteful thing to cut an extra slice of bread. She "did not like" cornbread and bran muffins, and refused to eat them. "She could buy a loaf of bread herself"—in a very hurt way. "We not eat these things in my country,"



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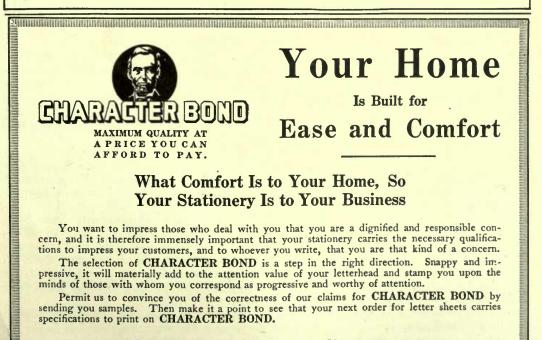
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she said. It had only been a little more than a year since she came from the old country. Here was the key to what would help her to understand! "No," I said, "you do not have these things in your country, that is the reason that we are eating them here, so that we can save and send to your people some of the food which they do eat, and to other countries which will be starving, unless we can send them wheat and these other things which we pledge ourselves to save."

"Home Making."

The story of the Colonel and his good wife and their new home which appeared in "Splinters and Shavings" for September is too good a story to appear without acknowledgements to the author. It is worth rereading if you do not remember it. It is the heart of a story, by Walter A. Dyer, published in The Hoggson Magazine. The original story, covering several pages, tells how the fine old Colonel and his wife succeeded in getting a new home in which the old gentleman only threw away his corncob pipe and bought a briar-root,-instead of going to the kitchen to feel at home,-in the new house.

Credit.

"Credit depends on character more than on capital." J. Pierpont Morgan said at one time (this is quoted by thousands of bankers): The size of the bank balance, nor the business, does not count so much after all as the man. The loan is made to the man, and not his bank account or his business. One may be wealthy, but if he is dishonest the banker does not care to risk the loan.

Franklin's Contribution.

Benjamin Franklin's contribution to science was of an intimate social value to his time, and to us.

"Franklin did not discover electricity; he discovered that lightning and electricity were one and the same; he also discovered the conductivity of electricity.

"He invented the heating stove, the double lense spectacle, and wrote a treatise on the prevention of smoky chimneys that is standard today.

"Franklin organized the postoffice system, the first police and fire department, and the first free circulating library."

Sweden Restricts Use of Gas and Electricity.

A recently issued royal decree prohibits the use in Sweden of electricity and gas for signs or for advertisements out of doors. The same decree also limits the use of gas and electricity in private houses and commercial buildings. In Stockholm there may be used only 60 per cent of the quantity used during the like period last year.—Commercial Reports.

Drive an Automobile Without Gasoline.

"Give me a suitable tank containing a set of plates submerged in water and a source of electric current and I will drive your automobile engine without any gasoline whatsoever at reduced cost," says Ernest E. Punches in the Electrical Experimenter.

The secret of this remarkable invention lies in the fact that if an electric current is passed between two plates submerged in water it discomposes the water, evolving two gases, oxygen and hydrogen; the oxygen accruing from this process is liberated, while the hydrogen is collected, and when suitably mixed with a proper amount of air it forms a highly explosive mixture when ignited in the automobile engine cylinder.

An Appeal to Sportsmen.

All sportsmen are interested in the protection of our forests. This could not be otherwise, since the forests constitute the natural home of all big game. With the disappearance of the woods the game will disappear also.

The sportsman, before all others, appreciates the forest for its own sake. The lure of the woods is one of the greatest incentives to the camper, hunter or fisherman.

The forests of this country have been steadily reduced in area and impoverished in character by fires, and this is an appeal to you to do all in your power to prevent forest fires by exercising care in camp and by putting out SMALL fires when you find them.

Under the new forest law any person leaving a fire unextinguished is liable for the damage it does and is subject to prosecution as well.

W. T. Cox, State Forester.

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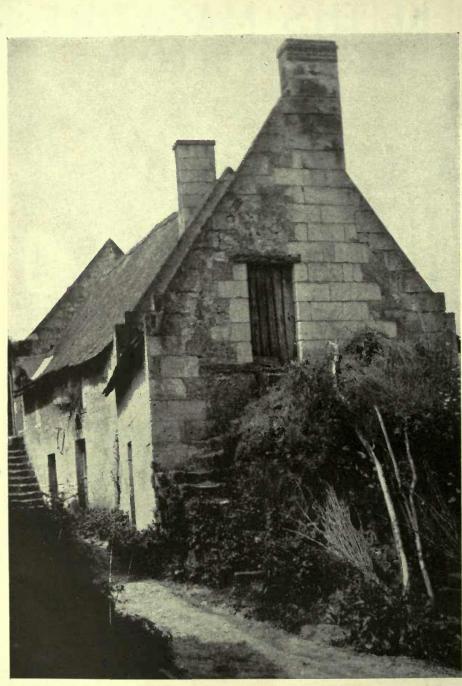
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From "The Livable House"

A Roadside Cottage in France.

VOL. XXXVIII

DECEMBER, 1917

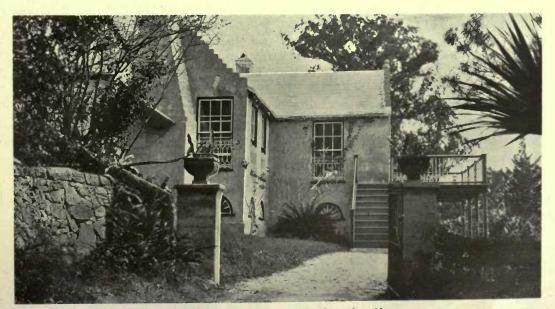
No. 6

Domestic Architecture in Bermuda

Burdette Crane Maercklein

HE domestic architecture of Bermuda is a constant source of delight to Americans who admire the simpler forms of architectural

expression. There is something indescribably quaint and beautiful about a Bermudian house, with its dazzling white roof and its shimmering white walls, however small or unpretentious it may be. This is apparent in the trim little bungalows of white coral construction that house so many of the Bermudian negroes; in the gleaming white cottages that nestle picturesquely among groves of cedar on undulating slopes, overlooking little turquoise-tinted coves; in the fine old farmhouses and haciendas of the interior, surrounded by their fertile freeholds and flourishing plantations; in the immaculately clean city residences of Hamilton with their white-walled grounds and shady gardens; in the venerable homesteads that flank the curious winding alleys of St. George's; and in the stately mansions of aristocratic Paget, across the bay from Hamilton. Invitingly cool in appearance and phenomenally white, a Bermudian house is always a



Type of Spanish architecture shown in a Bermuda residence.



A quaint street in St. George.

dazzling object when the sun shines, yet it seems as much a part of the surrounding landscape as the native cedars or the scrubby palmettoes that grow so profusely on every available hillside. To visualize the beauty and charm of the Bermudian scene one must think in various gradations of green and white.

Commanding sites and wonderfully picturesque settings for architectural adornment abound in all parts of Bermuda. These are seldom overlooked by the Bermudians, who seem to have a genius for selecting the most sightly locations when building their homes. As the general lay of the land is high and rolling many of the houses are, set well up on the hillsides overlooking the water. The amphitheatre of cedar-grown slopes that rise rather abruptly from Hamilton Harbor afford superb sites for the bungalows, cottages, villas, mansions, and hotels, which adorn it so effectively. As one

enters the lovely land-locked harbor or great lagoon by boat, what an exquisite panorama of luxuriantly green hills nature has unrolled, and how delightfully the Bermudians have decked it with their radiant dwellings! It is difficult to divorce a Bermudian house from the compelling beauty of its natural surroundings. Without the vivid lights and colorings of the sub-tropical sun and the flashing summer sea, Bermudian architecture would perhaps lose some of its characteristic charm, but that is only because it is adapted so admirably to the environment.

In Bermuda where the simplest bungalow and the most pretentious mansion are built of exactly the same materials, handled in precisely the same way, there is true architectural democracy. The Bermudian aristocrat and the Bermudian negro build their homes of coral, the only

material at hand in unlimited quantities. Building with coral entails little labor and is consequently surprisingly inexpensive. On one of his early trips to Bermuda, it is recorded that Mark Twain made special mention of some cottages constructed of coral blocks, all "as beautiful and as neat as a pin, at the cost of \$480 each." The building material costs next to nothing for coral is found everywhere a few feet below the thin covering of top soil. Bermuda is, in fact, a ledge or reef of coral and calcareous shell sandstone, resting on a great submarine plateau. When a Bermudian buys a plot of land, he buys at the same time the material of which to build his house. Likely as not the coral taken out in excavating for the cellar may be put back into the walls of his house. When first uncovered the coral is so soft and porous that it can be cut with a saw. This is the customary way of quarrying it. After being exposed to the air for a comparatively short time it becomes hard and firm enough to last, with proper care, for several generations in a climate where frosts are never known. When whitewashed it loses its porousness.

The blocks of coral used in building the walls of a Bermudian house are cut about two feet long, one foot wide, and six inches thick. The roofs of all houses are pitched so as to catch the rain water, for there are no springs or fresh streams

in the islands. Practically every house has a hipped roof. For roofing purposes the Bermudians use overlapping coral slabs about an inch in thickness. Successive coats of whitewash are applied annually to the exterior of all Bermudian houses to make them watertight. This covers the joints and leaves the surface perfectly

his house above two stories. Most of them are quite content to stop at one story. The bungalow is by far the most popular type of native dwelling, and the Bermudians have every reason to be proud of it. In America almost any fantastic affair will pass muster as a "bungalow." In Bermuda, however, you see the real tropical bungalows, which bear a strong resemblance to their East Indian prototypes. A little white Bermudian

A Bermudian seldom if ever extends



Bungalow on the shore of Crow Lane Harbor.

smooth, giving it an exquisite texture and an almost imperceptible gloss.

Could anything be more vividly, radiantly, penetratingly white than a Bermudian house? To quote Mark Twain again, "It is the whitest white you can conceive of and the blindingest. A Bermudian house does not look like marble: it is a much intenser white than that." When the sun strikes it, the radiant white roof and the splendid white walls sparkle and shimmer gloriously like the frosting of a cake. When the checkered shadows fall upon these splendid surfaces, one is again struck with admiration at the monolithic smoothness, the soft, satin-like polish, and the absolute simplicity which are characteristics of all Bermudian houses.

bungalow, situated on a green hillside overlooking a sparkling lagoon, and surrounded by a grove of feathery cedars, with occasional palms, Pride-of-Indias, palmettoes, and many bright-colored flowering bushes, makes about as pretty a picture as one could wish for.

On the lovely shores of Crow Lane Harbor, across the bay from Hamilton, there is a tiny white bungalow of the most primitive type. It is absolutely devoid of any architectural features, yet in its quaint and beautiful setting, no elaborate mansion could be half so charming. It nestles between two handsome cedar trees on the hillside, shining gloriously in the bright sunshine. It is literally built on the slope in the shape of a rectangle with a low, broad side to the front. The hipped roof rises at a graceful pitch. Wide projecting caves cast a deep shadow, which relieves the utter whiteness of the smooth walls. The radiant roof is without a shadow or a blemish. The bungalow has a front door of dark cedar, located somewhat to the left of the center and two green-shuttered windows, placed one on either side so as to break up the plain wall spaces most effectively. The



Old home where Tom Moore visited.

only other thing which this bungalow could boast was an admirable little chimney, so immaculately white that it could not have been used since the last coat of whitewash was applied. This chimney was both well proportioned and well placed at the opposite end from the door, so as to balance the whole architectural composition. Fine proportion, admirable balance, good lines, and simplicity of treatment such as characterize this charming little bungalow, are fundamental characteristics of Bermudian architecture,-quite as prevalent in the simplest bungalow as in the most pretentious mansion.

When Tom Moore was acting as "His Majesty's Registrar" at Bermuda in the year 1804, he used to visit at Washington House, where he was entertained by the Trott family. This fine old house, built sometime in the eighteenth century, is more suggestive of Spanish architecture than most Bermudian houses, owing to the picturesque arcades of Moorish design, which extend across the front of the two lateral wings. But for all that it is typically Bermudian. In other houses of this period, there is often a striking resemblance between the domestic archi-

tecture of Spain and Bermuda. This may be traced, no doubt, to the influence of the Spanish West Indies, which the Bermudian traders brought back with them. To be sure the Bermudas were discovered by a Spaniard, whose name they bear, but they were colonized and have always been controlled by the English. Hence, what Spanish influence there was must have come from without. While it is usually in the houses from a hundred to one hundred and fifty years old that this Spanish

suggestion is found, some of the newer houses have revived this tradition.

The balconied country houses are to many the most interesting specimens of Bermudian architecture as well as the most picturesque. They are not confined to any particular locality. You see them in all parts of the islands, for like the bungalows, they are apt to be anywhere, excepting in the heart of Hamilton or St. George's. At Flatt's Village, in the vicinity of Harrington Sound, there are several particularly charming country places of this type. A grand old mahogany tree, famous as the only one of its species in Bermuda, shades the approach to one of these,-an impressive looking house of considerable size. Set a good distance from the highway, it is surrounded by a level lawn and shaded by trees of

different varieties.

In marked contrast to the rather ponderous dignity of this old homestead, is the graceful white mansion that arrests one's attention a little further down the road, suggesting the lines of Tom Moore, written in Bermuda: "Along the margin, many a shining dome "White as the palace of a Lapland gnome,



A typical Bermudian bungalow, built of native coral blocks.

"Brightened the wave;—in every myrtle grove

"Secluded, bashful, like a shrine of love,

"Some elfin mansion sparkled through the shade."

The grounds and gardens of almost all Bermudian places of any pretension are



A bit of garden wall.

enclosed by low garden walls of white coral construction, which give a charming architectural touch to the landscape. The beauty of these white walls which border country lanes and city streets, lies in their absolute simplicity, which is in perfect keeping with the style of architecture that prevails in Bermuda. Here again the quiet charm of plain white surfaces is exemplified. The typical Bermudian wall is low enough to look over from the seat of a carriage. It is unadorned except perhaps for a simple coping, an occasional post of good design, and sometimes a little panelling to break up the plainness of the surface. When these shimmering walls of vivid white are backed by a dense mass of dark green foliage in which a Royal Palm or two rises majestically, the effect is indescribably lovely. In St. George's narrow and tortuous streets the garden walls, with their rich drapery of blossoming vines and great crimson hisbiscus flowers, are wonderfully attractive.

Some of the most attractive places in Bermuda now belong to Americans.

Bermuda now belong to Americans: Mrs. Frances Hodgson Burnett, who has a charming place on Bailey's Bay; Mrs. Russell Hastings, who started the Bermuda lily industry.

A Small Shingled Bungalow L. R. Costigan



R O M Seattle comes à very in-

teresting small house of what might be called the Colonial type in which many pleasing features are embodied. Much thought and consideration have been given in the arrangement of the rooms to utilize every available space to make the interior not only artistic but extremely livable and convenient as well. Attention may well be called to the



A dainty bungalow with a fine outlook.

manner in which the living rooms proper, those rooms shared in common by the entire family, are separated by a hall from the chambers, thus giving a privacy to the bed rooms so desirable in a small house where all the rooms are on one floor.

From the small entrance hall one has direct entry to the large living room. The woodwork of this room has a flat enamel finish in old ivory. The walls are papered with a heavy canvas oil blend showing a mottled effect in the putty shades and old blue. The same colors are emphasized in the inlaid border, as well as in the oriental rugs on the floor.

The fireplace is of Rookwood tile in old ivory and putty tones. The indirect lighting fixture is in old ivory and antique bronze, as are also the side brackets over the mantel. A couch with a tapestry cover, a tapestry upholstered rocker, a wicker table on which is a bowl of brilliant hued flowers. and a few wicker chairs give a cozy appearance to this pleasant room.

Opening through French doors beyond the

living room is the dining room—a room that would be rather severe were it not for the fact that the entire outside wall is practically one large window, its mullions alone barring it from the wealth of colorful bloom in the window boxes and in the old fashioned garden at the back of the house.

Like the living room, the woodwork of the dining room is finished in old ivory. The walls are covered with a soft gray paper. The dining table, chairs and china cabinet are in French gray. Relieving the rather sombre effect are a few good prints showing a dash of red, and red also predominates in the rug. Having a southern

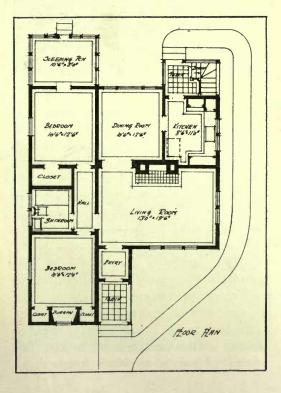
exposure and flooded with sunshine, as it usually is, this room is an exceedingly attractive gathering place for the family repast.

In providing a closet for the front bed room the architect h as employed rather an unique way of solving the problem. A closet is built at each side of t h e front window, and the recess resulting thereby is utilized for a built-in dressing table. The



The fireplace in tile and old ivory enamel.

mirrors at either side of the dressing table are pivoted and can be swung at any angle desired. This end of the room is shown in the accompanying illustration and is also shown, perhaps more plainly,



on the plan. The woodwork of this room is enameled in white, and the walls are covered with a paper having a white background with an all-over leaf pattern in a delicate tracery of gray with just an occasional suggestion of rose shown at intervals. The windows have overdrapes of plain rose colored Sunfast, which lends a particularly pleasing and dainty appearance to the dressing table. A craft rug in plain gray, a mahogany four poster and chair, and a chiffonier, the drawers of which are covered with cretonne of a pattern in harmony with the general color scheme, complete the simple furnishings of this room.

At the left of the central hall, and between the two bed rooms, is the bath room, which is finished in white enamel throughout, and at the end of the hall is the owner's dressing room, from which access is had through French doors to the sleeping porch at the rear of the house.

The problem of the sleeping porch, which is now coming to be generally realized, is the possibility of sleeping in the open air, where all of the windows



The dressing room-looking toward the porch.

may be opened, if the porch is glazed, yet being able to step immediately into a warm room. The room adjoining the porch, which on the plan is marked as a bed room, is furnished and used as a dressing or sitting room.

It is a charming spot with its wicker and chintz-covered furniture. The cretonne-covered dressing table with the triple mirror above is well shown in the photo. Glass candle sticks echo the note given by the glass knobs on the drawers.

The walls are hung with a paper the pattern on which is so indistinct as to give the effect of plain walls. This paper is quite light in tone and of a greenish cast. The woodwork is in white enamel. The hangings at the windows and doors are of gay colored cretonne, showing ap-

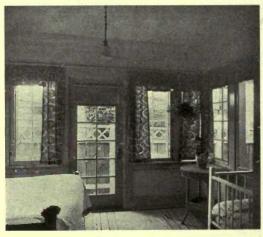


The built-in dressing table between two closets.

ple green, reds and browns on a background of white. The same material is used to cover the box couch and the chest of drawers in the dressing room. Rag rugs, showing greens, reds and browns in the borders, are on the floors.

The sleeping porch has ample accommodations for a double bed and a child's bed, a wicker chair and table, on which is a potted plant in bloom. A fern basket hangs in one south window. The same color scheme and treatment as the dressing room is carried out for the sleeping porch.

All in white is the kitchen of this little



The sleeping porch.

home and fitted with every modern convenience to lighten the labors of housework. The sink, with drip boards at each side, is placed directly under the windows, and at each end are ample cupboards with pot closets, bins and drawers beneath. A "cooler closet," so much in use throughout the west coast country, is also provided. While, on the inside, the cooler forms a part of the kitchen. cabinet, it is securely sealed from taking on any of the atmosphere of the kitchen, the rear wall being open through a lattice to the back porch, the lattice in turn being covered with wire screening to keep out insects. Food of all kinds keeps much

better in a well ventilated compartment, and the kitchen cooler closet takes care of any dishes which, for one reason or another, it is inadvisable to place in the refrigerator. Given a sheltered position which the sun's rays do not touch, it maintains a cool even temperature and in many homes takes the place of the refrigerator entirely. A wet cloth wrapped around the bottle of cream or the butter seems all that is necessary in usual weather.

At the rear of the kitchen is the back porch, from which the stairs descend to the basement. Dull red tiles form the floor of the porch, and

white lattice work screens it from the back yard.

As may be noted from the photo, the lattice is so constructed as to form really an enclosing wall, which is quite necessary, since it closes in the stairway to the basement.



The latticed entry showing sleeping porch beyond.



All in white is the kitchen.

Beyond may be seen the sleeping porch, with its casement windows opening out. These completely open the window space, making as nearly outdoor conditions as may be, while giving the protection of a porch.

The partially enclosed and protected court between the two porches gives an ideal place for blossoming flowers, making the picture for which the dining room windows give a frame and which is enjoyed by every one in the house.

The front porch is also latticed, and here too dull red tiles are used for flooring.

The hardware throughout the house is simple in design. Crystal door knobs are used throughout the interior.

The exterior of the house is designed with the greatest simplicity. It is covered with shingles, which are stained a soft brown. Shutters are provided only for the windows of regular size. These shutters are of solid wood in the old fashioned way, and are painted white, as is all of the outside trimming; which gives something of a Colonial effect to the bungalow. The front door is effective with its white painted muntins, which are also carried through the window treatment.

The Tribute of the Years Edith M. Jones



HIS December number brings to mind the close of another year and naturally one's thought turns back to check up the progress or

shortcomings of the year's work.

We have a greater realization of what

Compare the warfare and simple equipment of the army of the Revolution with the colossal preparations for the warfare that is being carried on by the vast armies in action today. Think of the machinery that is being used not alone on the land,

but on the sea and in the air!

War and warfare has so completely absorbed everyone's thought for so long that it sometimes seems as though nothing else is of great consequence, but nevertheless this very war has forced progress in many other lines of endeavor than actual war equipment.

At the beginning of the war how amazed we were to find how many things were marked

"Made in Germany." Today our own factories are supplying needs which before the war we depended entirely on foreign countries to supply. Of the many accomplishments of industry in the United States in the way of overcoming apparently insuperable difficulties none is entitled to greater appreciation than the way in which American manufacturers have substantially conquered the dyestuff situation. At a recent national convention in Springfield, Mass., most satisfactory reports were read, showing the remarkable progress which has been made along this line. This is

Cooking conveniences of the olden times-note the crane with kettles and

spit, the ovens, waffle irons, etc.

demands the war has made on all engineering and manufacturing activities than those of less urgent or more normal factors. While at times we have been hard pressed, Thought has leaped to supply the great need and the close of the year of 1917 finds stupendous things accomplished that had not been conceived by the mind of man even one short year ago.

Progress, supply and demand are agencies ever at work, and sometimes a glance backwards brings a realizing sense of the change that is steadily going on. Today everything is being done in a different way.



One end of the old-time kitchen served as a dining room.

only one of many discovered resources which mean not alone progress but much added wealth to the country.

In whatever direction we look we find progress manifest, proving that the treasure-house of Infinite Mind has a constant supply for the ever increasing demand.

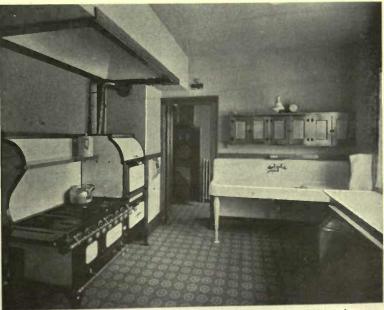
My thought today, however, turns towards the progress made in sanitary and fireproof housing, and my specific

which in olden times times centered in the kitchen have been separated. The laundry work, in the majority of cases, is done in a room by itself. The family eat in a room apart instead of one end of the kitchen, as was then the custom. Pantries afford storage for dishes. pots and pans, and refrigerators care for the foods. This beautiful kitchen with its white enamelled side walls. the linoleum covered floor. the beautiful white range

and built-in canopy, which carries off the steam and odors of cooking, the one-piece sink set high enough to avoid backaches, the vitrolite-covered pastry table with the up-to-date flour and sugar bins, the incinerator and ample artificial and natural light is surely an evidence of the progress made, and this is only one of the hundreds of improved workshops in the well planned modern house of today.

This beautiful interior plan showing

interest centers in the kitchens of modern times. Like all other industrial centers better equipment has made more efficient kitchens. The army kitchen, the hotel kitchen and the home kitchen are all interesting places these days. A glance at one of these old Colonial kitchens will prove to the homekeeper that much progress has indeed been made in this part of the house. In the first place the activities



Quite different is the modern kitchen, with enclosed cupboards and bins and built-in canopy over the range.

the dining room, breakfast room and hall is in strong contrast to this one end of the kitchen arrangement of olden times.

And yet after all, impressed as one may be by all this material activity and a c c om plishment, there is, I am sure, in the heart of every true man and woman a universal prayer that the close of another year may find democracy est a blished in every land, and the path of true



Showing both breakfast room and hall beyond the dining room.

progress turned spiritward. Then indeed will the song of the angels be sung, "On earth peace, good will toward men." No progress and no accomplishment is really worth while without the security of peaceful civilization and the assurance which comes to the nations only when the sanctity of treaty rights and national agreements are unquestioned by all civilized people.

The Fireplace in the Home Katherine Keene



N the old days the chieftain gathered his friends and his supporters around his own hearth stone. From that time to this the Hearth

has stood for hospitality and for good cheer. The Fireside stands today for home and friendliness. In the home of today, in addition to the sentiment which gathers around the fireplace, there is the present comfort of the warmth and brightness. It is not surprising that the home centers around the fireplace; that the interior is designed, and furnished, with the fireplace as the key to the entire scheme. The thought in the planning of the house is emphasized in the fireplace. The big informal country house, built of stucco and using field stones and boulders as far as practicable will have the wide hearth and big open fireplace, and the chimney breast as well, all built of boulders, selected from the finest in color and in form that are to be found. It gives the big hospitable center for gatherings of family or friends and a breezy interest to the neighborhood.

The great hall of one of the big California homes, shown in the illustration, is notable for the wall decoration as well as for the great fireplace. It is in the home of the daughter of one of the stalwart pioneers of California, a "lucky" ranch owner, and has been carried out in a big way. The mural decorations give the picture a real place on its walls, which is in keeping with the broad spirit in which the home is designed.

Where color is a particular feature in a room, nothing lends itself better to the fireplace treatment than tile. The scope and range of color is almost inexhaustThe tiled surface set into the oak paneled wall gives a distinct sense of satisfaction, like the feeling given by any thing which is just what it should be and in the place it should be. The room gives something the effect of an old English paneled room.

Nevertheless size and cost is not a controlling element, especially where the



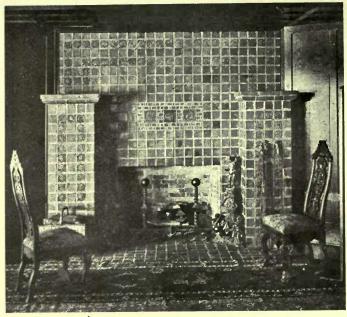
In a California country home.

ible, as well as its adaptability in design. The second illustration shows a most satisfactory fireplace in an oak paneled room. It is a tile faced fireplace, designed in the Bachelder studios, where it is the custom to design the fireplace as a whole, fitted to the special surroundings and requirements, with the tile especially prepared to carry out the design, and made especially for the particular fireplace in which it is used. This fireplace is quite simple in line and surface, depending on the wonderful color-texture and the slight modulation of the design to give the effect desired.

W. Carl

cozy fireplace in the home is considered. The simplest fireplace is often quite as satisfactory in its place as the most elaborate. In our steam-heated houses we have a tendency to forget that fireplaces are built for use, for real use, warmth that is really needed, and in early times at least for cooking as well.

The cream-tinted plastered fireplace shown, with its substantial fire irons and shoulder for the kettle was presumably built for use. At the same time it is a most interesting feature in the room, in its very simplicity. The andirons were cast at a country forge. It is also pre-



Brown tile fireplace in an oak paneled room. Bacheider tiled design.

pared for hanging a crane as may be seen.

The fireplace in use brings in other problems than those of the fireplace as the central decorative feature of the living interior.

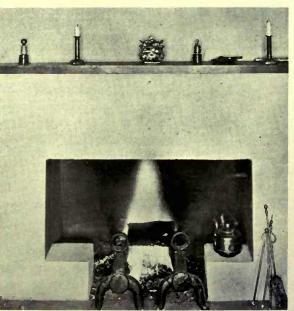
Any fire but that of a gas log must be constantly replenished and requires some convenient receptacle ior wood or coal or both. The "sweeping of the hearth" was the symbol of the house-in-order in the old days, and the tidy housewife finds great untidyness even with the modern small fireplace. A box seat beside the fireplace makes, perhaps, the readiest receptacle for fuel and kindling in the house which has those built-in conveniences. A copper bound wood box is made which, while good looking in the room, will yet stand a certain amount of knocks and such comparatively rough usage as fire utensils sometimes bring. These boxes are large enough to hold "logs" for later use in the fireplace, or it will hold small wood and kindling in one end, and coal or

briquettes in the other end.

While the long handled brush is not always included in the sets of fire irons it seems to be quite as necessary as the fire-tongs or shovel if the hearth is to be kept neat. Design in metal work of any kind has been given much attention since the revival of the craftman's art some years ago and pieces can be found fitted design or color to any scheme, good in design, making an attractive accessory of the fireplace, both as to color and design.

Good metal work has a fascination not to be found in many of the materials to

which design is applied, and on which it depends for its peculiar charm. For that reason, perhaps, metal work is carried into fields where it would not be used other than for its decorative value—hence the copper bound or metal covered wood



A most interesting feature in the room is this quaint fireplace.

box—hence the great copper and iron hinges on door which unquestionably do not need any such reinforcement, but which have their own reason for being in the charm of workmanship, color and design.

Hence a legitimate and logical use for metal work may be welcomed, and certainly there is no place where it is more in keeping than the fireplace and its accessories.

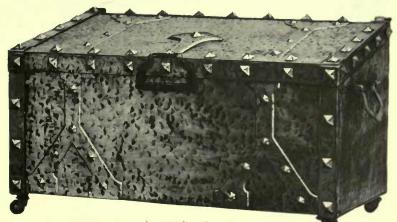
With the changing season the fireplace is used for burning coal or wood or possibly other fuels, according to the needs. When the fireplace

is intended chiefly as a decorative feature, andirons are very generally used, while logs as big as the fireplace will accommodate give a glowing, cheerful fire, which adds a sense of comfort when it may not be actually needed for the heat which it gives out. When the fireplace is depended on to actually heat the room or part of the house, it is quite a different matter.

A fireplace may be so built as to give heat to other rooms than the one in which it is placed, to serve as a small furnace, as it were, with hot air pipes connecting with the

room overhead. If the greatest amount of heat possible is to be obtained from the fire, special conditions must be met.

In place of the andirons, a fire basket of some sort may be set in the fire opening, which will hold the fire more compactly and in which any kind of fuel can be burned which can be used most economically. Here again is an opportunity for metal work, and good design should always be required when a selection is being made. The kind of metal which should be used depends on the character



A copper bound wood box.

of the room and the color scheme desired.

The time is fast approaching when poor design, even in the smallest accessories, will not be tolerated; where the fact that a thing is ugly will be sufficient to banish it from the market. There is more profit for the dealer in the cheaply made, shoddy articles than in the better grade, so they will be made just so long as people can be persuaded to buy them.

Every successful room has a character of its own, and these are as diverse as the personalities which they house.

Entirely different in character from those already shown is the stately fireplace built in a modern Colonial house and shown in the last illustration. "The Aurora" seems especially appropriate as the central feature of the overmantel in its embodiment of hope and the promise for the new day which the dawn brings. This is the message of the picture whether





A stately fireplace in a modern Colonial house.

painted, as in the original on the ceiling of a palace in Italy, or copied in some other medium, even plaster. While Colonial in detail, this is quite unlike the usual "Colonial mantel" in design and is very charming. The room is done in white enamel and mahogany. The ceiling beams, since they stand for structural timbers, are of mahogany.

The relief cast of "the Aurora" is set into the wall of the chimney breast, flanked by the graceful Ionic columns of the white woodwork—and the combination of materials is quite satisfying. A repliqua or copy of a favorite masterpiece, copied either as a picture or as a *bas relief*, seems particularly in place as the decoration of the chimney breast.

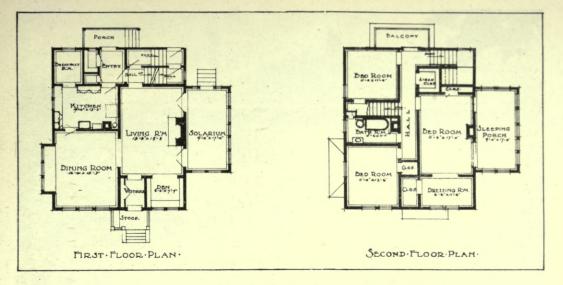
A Specially Planned Home



S the automobile is spreading its network of good roads all over the country it is bringing the city and the country more closely in

touch with each other, to the great advantage of both. The first and most tangible result is found in the general improvement in the homes which are seen along practically every road. With the automobile a country home is possible many miles from the centers of business activity, and a surprising number of people have availed themselves of the opportunities thus afforded to them. If the first effects were felt in the suburbs and outlying districts this immediately reacted on the cities and the nearer suburbs. In a comparatively few years the whole character of home building of the smaller class has been revolutionized and the smaller homes have been as especially planned and received as careful attention as many a larger house. In fact, the smaller house may require more study than one planned on more ample lines.

A home of rather unusual interest is here shown by photograph and plan. The basement is shown in addition to the plans usually shown, on account of some of its features. The exterior of the house is of stucco and very simple in line. The roof has a wide overhang of eaves and the



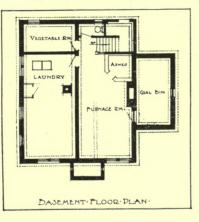
emphasis of the horizontal lines which relates it to the "Prairie Type" of building which has gained such favor through the Middle West.

In plan the individual treatment is also shown. The entrance is through a vestibule or small hall, from which a coat closet opens, into

the living room, which is the center and radiating point of the first floor.

Beside the vestibule is the den with bookcases on opposite walls and a seat under the windows between them; a most inviting arrangement. On either side of the wide brick fireplace French doors open to the solarium.

A wide opening



connects the living room with the formal dining room, which is well lighted and attractive. Beyond the dining room is the kitchen, well equipped with cupboard and working space. A small breakfast room is placed conveniently beyond the kitchen. In California the small breakfast room seems to



Looking toward the den and the vestibule.



The exterior is of stucco, with a wide overhang of the eaves.

G. L. Lockhart, Architect.

have entrenched itself as one of the essentials of a convenient home, and people in the Middle West, where this home is built, who have spent several winters in that sunny land, are adopting the breakfast room as their own and transplanting it all over the country, perhaps also because it so well fills the additional need as the maid's sitting room.

No space is given in the center of the house to hall or stairway. The stairs lead up and down from a tiny hall at the rear of the living room, equally accessible from the kitchen and from the front part of the house. As no space is given to passageways there is ample space for closets and storage reached from the rear entry.

As the basement plan shows, the coal bins are placed under the porches. With such an arrangement the foundation walls need not go the full depth of the basement proper and the grade of the floor can be so arranged to throw the coal automatically to the coal door beside the furnace. An ash receptacle is built into one corner of the furnace room. The laundry is well arranged and is built to serve as a drying room as well, with its ample window space and sufficient size to give room for several lines of clothes. It is completely shut off from the furnace room by a concrete or brick wall, so that it is free from the coal dust, inevitable in an open basement. The vegetable room is also entirely shut off from the heat of the furnace, so that it can be kept at any desired temperature. There is a small toilet beside the stairs.

On the second floor plan one again sees expression of the individual preferences of the people who live in the house. A suite of rooms are especially prepared for the owner in the large bed room with the sleeping porch opening from it and the dressing room opening from it on another side, with a closet opening from the dressing room as well as from the bed room. The linen closet is unusually roomy.

A Modern Colonial Home



HE dignified yet simple type of Colonial building makes a strong appeal to the home owner as a logical and sensible way to build.

The more elaborate details used in earlier times are not followed now. There is a vestibule is used in the modern way. At one side of the hall a large living room extends across the whole width of the house. In the early type of plan this space was often divided into front and back parlors. This living room is a little



A dignified home with Colonial details.

J. W. Lindstrom, Architect.

little attempt to "copy" any special house, but Colonial ideas are carried out just in so far as they adapt themselves to modern conditions.

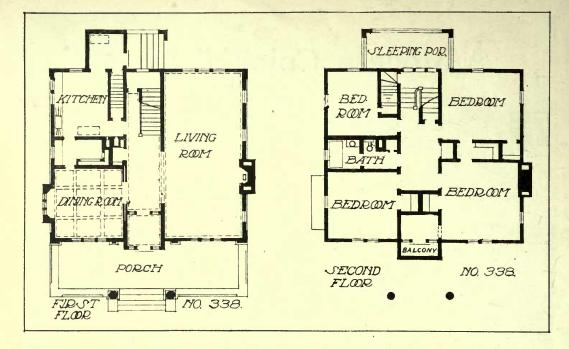
The home illustrated has accepted the main lines of the Colonial plan, or perhaps, having arranged the rooms in the best way to meet satisfactory living conditions, it is discovered that the Colonial plan has been re-devised, with modifications.

The entrance is into a central hall, but

unusual in that the fireplace is directly opposite the wide opening from the hall, dividing the wall space unevenly. The farther end of the living room may be given a specific use with the long wall surface for piano or davenport.

Across the hall from the living room is the dining room, which may be entirely closed off with sliding doors. The ceiling is beamed and the bay makes an interesting feature.

A butler's pantry, well equipped with



cupboards and working space is placed between the dining room and the kitchen.

In the kitchen a sink with double drain boards and a long work table fills one side of the room. Rear stairs opening from the kitchen reach the landing of the main stairs. The basement stairs opening from the rear entry are under this run of stairs. There is place for the refrigerator in the rear entry.

On the second floor are four bed rooms and a sleeping porch opening from one of the family bed rooms, which also connects with the other bed room through a closet, which is used from both rooms. There is an additional closet from each of the rooms, and a dressing room opening into the front balcony connects with the front room. The whole suite makes a very convenient arrangement where there are small children. Attention is called to the bath room arrangement. The tub and basin are in the bath room proper, while the seat is in a separate space. A similar space on the other side of the chimney is devoted to a broom closet, or other storage space. A linen closet opens from the hall. The attic floor is reached by stairs over the main stairs.

The exterior of the house is sided with clapboards and painted white in the Colonial way. The great porch columns are of the Doric order, fluted, with simple pilasters opposite them against the wall and at the corners of the house. The balcony makes an overhang over the entrance door. There are side lights on each side of the entrance.

There is a terrace across the front of the house, only the center portion of which is covered.

השורעה או המשורעה או המ או המשורעה או המשורעה או המשורעה או המשורעה המשור

A Two-Story Cottage



T is often difficult to find or to get a satisfactory plan which is adapted to a narrow or to a small lot. This two-story cottage, 24

feet by 27 feet, exclusive of front porch and pantry, can be placed on a small lot. The plan is "snug" and well arranged. It is economical to build and has the conveniences of a larger house. There are eight rooms if the hall is counted as a room separate from the living room. If made a part of the living room, it would give a room of 23 feet across the front of the house. None of the rooms are large, yet they give the necessary accommodation.

The arrangement is suited to a south and west exposure. In front of the living room is a pleasant sun parlor, opening from it with wide glazed French doors. The entrance is also through a glazed porch.

The living room and dining room open well together. The fireplace is in the end of the living room. The dining room is an attractive room with its bay on one side and window group opposite openings.

The stair ways are shut off from the hall and kitchen, preventing a down draft of air in the rooms. At the same time they are accessible from any part of the house. The basement stairs are under the main stairs.

On the second floor are four bed rooms, all with good closets. A linen closet opens from the hall. Stairs to the attic lead up over the main stairs. Windows fill two sides of one of the rear bed rooms so that it can be converted into a porch by simply opening the windows. The



With the interest of stucco and timber work.

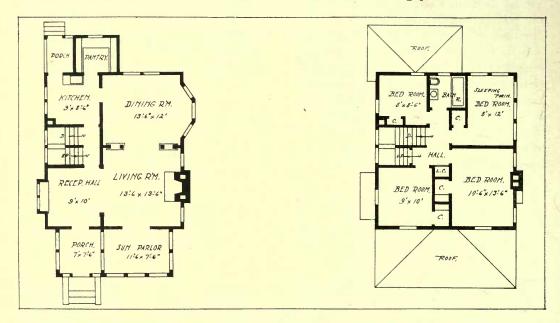
Chas. S. Sedgwick, Architect.

bath room is centrally located. The tub is set into one end of the room in such a way that it is easily converted into a shower, with a rubber curtain to confine the spray.

The first story is finished in oak, while the second story woodwork is intended to be enameled.

The house is well built, of frame construction, with cement stucco on metal lath for the exterior finish. The timber work and all the outside trimmings are stained a dark brown. The foundations are of concrete, as are the chimneys. There is a separate chimney for the kitchen.

The house is equipped for electric light. There is a full basement under the house with the usual accommodations and a hot water heating plant is installed.



A Simply Built Home



N the design illustrated is shown a home large enough for a good sized family. The room arrange-

ment is well laid out, with the entrance through a wide central hall. The large living room is at one side of the hall, with the sun room opening off the living room at the front, while across the hall and directly opposite the opening to the living room French doors open into the dining room. The coat closet opens from the front of the hall beside the vestibule.

On entering the eye at once falls on

the large brick fireplace at the end of the living room. The brick work is carried up to the ceiling where it meets a deep beam. The south wall of the living room is filled with windows. High casements give space for a piano underneath. French doors open into the sun porch, which has a wall cornice.

One side of the dining room is a deep bay, which gives additional room for the built-in buffet and china cupboards.

The kitchen is of the buffet type and very convenient. Cupboards and work shelf fill one side with ample, well lighted



A substantial home.

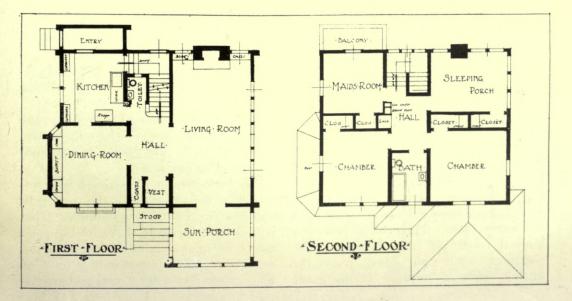
W. W. Purdy, Architect.

space. Opposite is the sink with drainboard on the side toward the range, and within easy reach from it. The range is so centrally located that few steps need be taken in the preparation of a simple meal.

The basement stairs open from the kitchen, with an outside entrance at the grade level. At the rear of the kitchen is an entry, in which is space for the re-frigerator.

The main stairs are set so far back in the hall that they are easily accessible from the rear of the house. The clothes chute is conveniently placed. A small toilet is placed under the return of the stairs.

On the second floor are four good sized chambers and a bath opening off a central hall. The larger rear chamber has six windows, giving the most ample ventilation when used as a sleeping porch. Each room has a good closet.



A linen closet opens from the hall. Beside it is a broom closet, a convenience which the housekeeper appreciates, for a broom is such an inconvenient thing in any of the usual second floor closets, and a trip downstairs for a broom to brush up a few threads certainly seems unnecessary. The clothes chute opens beside the broom closet.

The basement is partitioned off for a laundry, fruit and vegetable room, and fuel bin, the remaining part to be used for furnace space.

The plans and specifications provide for maple floors throughout, with quarter sawed white oak finish on the first floor, except kitchen, which is furnished in pine, natural. The second floor is finished in pine for enameling, with birch doors to be stained to match mahogany furniture.

The exterior is white cement plaster over galvanized expanded metal lath, with shingle roof stained. The front entrance stoop is of brick. A smooth cement base course extends around the entire building.

The photograph was taken shortly after the house was occupied, and before the grounds were put in shape. The shrubbery had not yet had a chance to "show itself." This house as planned would make an ideal home for a good sized family, where the building funds are limited.

The Home that is Economical to Build



large house," as the term is generally used, is quite a different thing from a house with large rooms or many rooms, or both.

One would hardly call the first of the homes shown in this article a large house, yet the rooms are not only larger than those usually found in the average home, but they are really large. The living room, which is 27 feet 6 inches by 16 feet 6 inches, is a large room, and the dining room is 21 feet long and wide enough to serve around a good sized table. The family sleeping room is on the same floor, with a private bath room and a good, light closet. It opens to the living room and to the outside porch. The whole arrangement is very livable.

No unnecessary space is given to the stairs. Four steps only are in view from the living room. Three steps from the kitchen reach the same landing. The basement stairs go down from the kitchen with an entrance at the grade level. A lavatory, at the level of the entrance, is placed under the second run of stairs, and a coat closet, opening from the hving room, is also under the stairs.

The living room is not only very generous in its space but also in its window openings. The great bay across the front opens the room to the outside. The front entrance is very cleverly placed at one end of the living room. At the opposite end is the fireplace. The door beside the fireplace leads to the dining room.

Between the dining room and the kitchen is a well equipped butler's pantry. The kitchen is well located and convenient in its equipment.

The bedrooms on the second floor are built into the space under the roof, with the windows grouped in dormers. That is one reason, perhaps, that with five good sized bed rooms yet the house does not seem large. The fact that it is built on what might be called "cottage lines" is



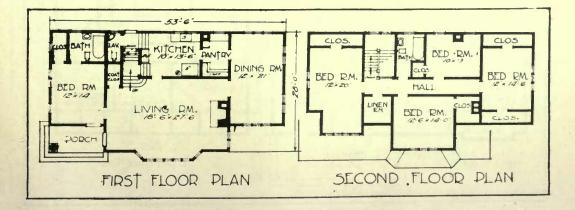
With shingle-thatch roof and white shingled sldes.

another reason that it does not give the appearance of a large house.

It is built of wood and painted white in a very simple fashion. The roof, of shingles laid as a shingle-thatch, is very attractive.

The second home is of quite a different type and considerable smaller in actual size. At the same time the living room is of good size, and the dining room is very serviceable. The living room has a central fireplace, the flue from which is available for the kitchen. A sun parlor opens from one end of the living room, by French doors, and the dining room from the other end. A projecting bay of windows fills one side of the dining room.

The kitchen is well equipped and connects directly with the dining room, or rather through a small passage way. The





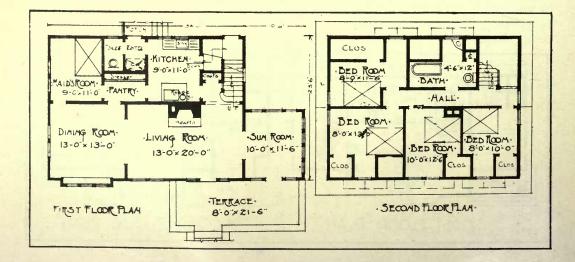
Stucco with timber trimmings.

kitchen is well lighted and convenient. The refrigerator is in the entry way. From the entry opens a toilet.

This smaller house has the same number of sleeping rooms as the larger house, with the maid's room on the first floor, opening from the small passage way.

On the second floor while the rooms are small yet there is accommodation for the furniture of the bed room and a sufficient living space. There are windows in dormers in the roof as well as in the gables, giving cross ventilation in most of the rooms. There are four bed rooms and a bath room on the second floor.

The exterior of the house is of stucco, with timber work and brown stained trimmings.

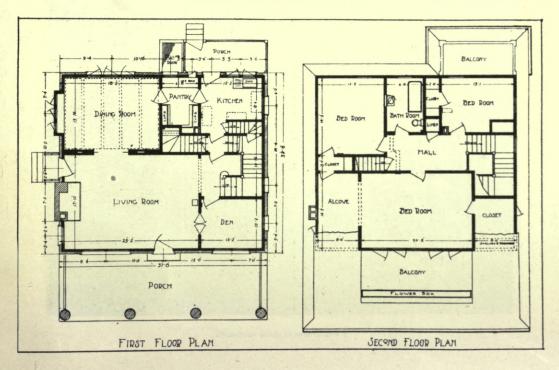


REITH'S MAGAZINE Portfolio of Interesting Homes



With an attractive porch, trellis enclosed.

Hugenin & Swearingen, Architects.





Bungalow exterior.

Robert L. Wright Architect.



A well arranged china cupboard.



Boat House.

Robert L. Wright, Architect.



The glass is leaded in doors of book cases and china cupboard.



A Spirit of light. Sconce to be executed in bronze. Designed by Harry Linder.



Decoration and Furnishing

VIRGINIA ROBIE, EDITOR

The House in December



HRISTMAS in this country is with many people growing more simple in character, more genuine, and far less taxing. Instead

of celebrating one day with much feasting and gift-making, the tendency is to cele-

brate in a quieter way all of Yule-tide, and to spend less on presents, and more in making the house expressive of the season.

The last few years have witnessed a reaction in the minds of thoughtful persons against excessive gift-making. Christmas in many localities had become a burden to the rich and a serious problem to people of moderate means. To many people it represents a financial outlay which they can ill-

afford, while to others it means a perfunctory giving without a ray of Christmas spirit. It strikes a deeper evil in the fostering of that serious American fault, the aping of the rich by those of moderate means. And it means many regrets and heart-burnings to those who cannot give in the proportion that they receive. The system is all wrong that places so high a value on the price paid for an article, or that makes the giver of simple things envy the person who can give costly things and chiefly because they are costly.

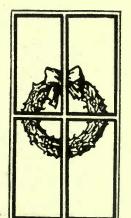
There is a gradual awakening to the fact that Christmas means more than the giving of presents; that if it means anything at all it means a fitness between the gift and the giver's mode of living. Nay

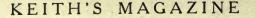
> even more, that the rich may give simply, and in giving simply give out of the fullness of their hearts.

> The ideal Christmas would embody the cheer and good will of the English Yule-tide with the charm and naivete of the Scandinavian celebration, and yet be quite American in its application.

Holly and mistletoe are inseparably connected with Yuletide, and to many people Christmas is not Christmas

without them. Mistletoe was used by the Druids in their festive rites, and like many of our holiday traditions is pagan in origin. The use of the fir trees is believed to have originated with the sun-worshipers who chose the shortest day of the year for special feasting and rejoicing. The gilded balls and silver ornaments are remotely symbolic of the sun and the moon. The twinkling candles represented the stars which, if pagan in theory, is beautifully symbolic of the first Christmas Eve.

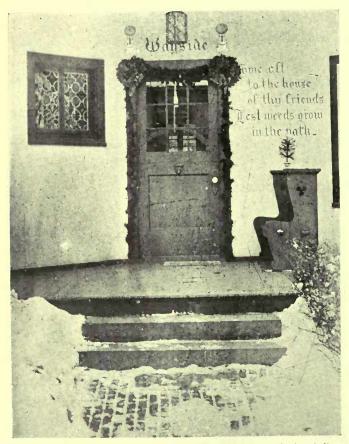






Pagan and Christian myths survive in our present celebration, but so blended that separation is difficult.

During the Protectorate, Puritanism almost exterminated Christmas in England. The tree was declared Popish and place in the calendar. The Stuarts were ever lovers of gaity of all kinds and especially the festivities of Yule, and Charles I. had tried his best to stem the opposition of the Round-head Parliament. When in the late seventeenth century the Royalists



Christmas Eve—On the old Dutch bench, a little tree, and over the door holly wreaths, ground pine and mistletoe.

banished from most households. Christmas greens were decried as "heathenish" and many Yule-tide customs were forbidden under penalty of fines and imprisonment. It was not until after the Restoration, when a Stuart king was again on the throne that Christmas with all of its merry-making was restored to its were again in power, we may well believe that Christmas was celebrated in Merrie England as it never had been before. Back came the wassail bowl filled to the brim. Back came the mummers in cap and domino. Once more the Boar's head, holly-decked, graced the Christmas board. Once more the pointed fir bore its strange fruit. The King of Misrule, due to appear on Twelfth Night, made up for his long years of absence by filling twelve days with his mad pranks. Plum puddings wreathed in green, and blazing with ignited brandy, assumed such proportions that in many households four servants were needed to convey them in safety to the table.

Christmas in early New England was a more somber day than in England under Cromwell. The Pilgrim

Fathers believed that all the forms and customs of the day were "worse than Popish," and the stocks and pillory were considered none too severe for "offenders celebrating Christmas by song, reveling or feasting." One poor soul in Boston was bro't before a magistrate for baking a pie the morning of December 25th.



In the South where the customs of England had been steadily observed without the interruption of the Protectorate, Christmas was celebrated in royal style and is, today, the one part of our country where the old traditions have survived in their most picturesque form. Great importance has always been placed on the use of Christmas greens in decoration.

A country home presents few difficulties in decoration at the holiday season, for the country background is in itself a great aid in producing a Christmas atmosphere. If woods are near at hand, there are many vines and shrubs which lend themselves to all forms of decoration. Laurel makes attractive garlands and festoons, and is effective when used in tall jars of copper or brass. The dark lustrous leaves form a beautiful background for the brighter green of holly, and for the grayish-green of mistletoe.

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Not only should the country house put on holiday attire, but the city home and even the city room. Nor is a quantity of green or great expenditure necessary. A few wreaths, a little holly, and one big spray of mistletoe will work wonders in a room, if they are well placed, provided —and this is very important—that many articles used during the rest of the year be put away.

Taking first the house and its arrangement, it may be said the largest fireplace should be made the keynote of the decorative scheme, whether it be in the hall, the living-room, or the dining-room.

Bring all the candlesticks of the house out for inspection. Place the largest ones on the mantel—a long row will be highly



Madonna and child, with angels by Luca Della Robla.



effective. If there is a candle for every member of the household so much the better. What else the shelf should contain depends on the character of the fireplace. If it be of brick with an exposed chimney breast, something large and impressive is needed. A big plaster cast would be an ideal thing for this place, and nothing could be better than one of the della Robbia subjects of the Madonna and Child. With this as a central ornament and the candlesticks filled with candles. the scheme is almost complete. Tall brass flower receptacles -- church vases are best for the purpose, - filled with holly, would make an interesting note in The red or brown of the composition. the brickwork, the ivory tones of the della Robbia, the green of the holly, the brass of the candlesticks and vases, and the clear white of the candles form a charming color effect.

The choice in della Robbia subjects is large, including the work of Luca and Andrea, also single figures and groups. Many of the groups are circular, several in the Madonna and Child series are arched, and a few are panel-shaped. In single figures, there are the four charming bambini of the Children's Hospital in Florence. Many della Robbias are made in enameled terra-cotta, the composition of the original subjects, others are in plaster in white or ivory tones.

If the fireplace is in Colonial style, quite a different treatment is suggested. Instead of a cast, a large photograph or print of the Mother and Child, or of the shepherds and their flocks could be used. In many families the Sistine Madonna is a favorite, and is associated with Christmas and its observance. Madonnas less familiar, but in perfect accord with the occasion, are those of Luini, Bellini and Botticelli. But for real joy and gladness, Fra Angelico's "Angels of the Tabernacle" can hardly be surpassed. Then there are many color prints of St. Nicholas, of quaint children singing carols, and hosts of subjects suited to the day.

The black and white prints made for school-rooms are excellent, and quite in-Such reproductions are of expensive. good size and serve well the Christmas purpose. Many magazines and illustrated papers have covers and frontispieces suggestive of the season and as most December numbers appear at Thanksgiving there is ample time to make selections. Children adore cutting up magazines. It is just destructive enough to appeal to them. Children also adore making things, doing something for a purpose. If the pictures are taken to make beautiful their Christmas room, they may be kept to use again or, better still, passed on to children less fortunate than themselves.

No child should be shut out from the fun of helping with the decorations. The preparation, the getting ready, the anticipation, are usually far more thrilling than the surprise, no matter how keen of seeing everything after it is in place. Awe is not always pleasure, and the little child who is dazzled by a tree, a multitude of toys, and a number of adoring relatives wondering what his sensations are, may perhaps be anything but joyful. It is on this one point, if for no other, that the custom of extending the gift-making through the holidays instead of cramming everything into one day, seems wiser.

Where stockings are hung, the Christmas mantel can be planned on a different scheme, and the chimney-piece banked



with green, and decorated in the manner of some of the old illustrations. All decorations should be kept in place until New Year's, or better still until Twelfth Night.

A pretty Twelfth Night custom is to light a candle for every member of the household and burn it until midnight. The candle burning the slowest will bring long life to the owner, and if a candle goes out, the owner must give a silver coin to the first beggar he meets next day. Every one must wish when he lights his candle, wish again when the clock strikes twelve. and a third time when he goes to bed, and by all the Christmas fairies, the wish will come true before the next Yule-tide.



Buying by Proxy

Keith's Guide on Home Decoration and Furnishing Brings Some Notes from the Shops

Through this department we offer our readers, under "Buying by Proxy" and "Answers to Questions on Interior Decoration," a most practical and valuable service. Letters of inquiry will be answered and expert advice on House Decoration and Furnishing will be given *free of charge*. Enclose stamp for reply. Write on one side of the paper only.



HE shops in their gala attire offer countless attractions to the

shopper. Gifts this year unite the useful with the beautiful. As wedding presents are growing more and more practical, so it is with our holiday presents. The large shops with their broad,

beautiful windows have much to tempt us, so also have the studio corners and the quaint little places with no plate window to draw the crowd.



Chinese tassel, which may be used for a bag.

In one shop we find a fireplace of most ample proportions, with new tiles of exquisite old shades of brown and green and orange mingled and having a rough surface. Here are basreliefs which many decorators now consider a successful way of treating an over-mantel.

Here also are a great variety of andirons and other fittings; also chests for wood and coal, some in brass and copper, others in wood with heavy trimmings of metal.

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Here are fire screens of brass and also of wire bound in brass, and an old English idea in the form of a narrow movable seat, built on a semicircular frame and covered with leather. It can be drawn near the fire or set away, and extended to hold a number of people. It is called a "Kerb."

Lamps, candlesticks, lanterns, both old style and new, and shades of every variety of material to fit the electric and glass burners, the kerosene lamp, and the candle. More attention

seems to be paid to the designs and the decoration than heretofore. No difficulty is encountered in bringing these useful articles into harmony with decorative schemes. In one shop we find the owner busy filling orders for shades made of grass cloth, beautifully colored, the designing natural or conventionalized as desired. Wire-cloth is the medium used for candle shades and guards in one place, both shade and guard painted in Louis XVI designs.

A charming idea is an adjustable lamp made of copper, the stand a lily-pad and the shade a shell from the



Old metal coffee ern fitted with modern equipment.



Candy Jar of decorated glass.

Pacific coast, covering the electric bulb in the form of a lily bud. It can be made to twist and turn, sending the light wherever wanted. Here also is a stationary lamp of copper with a beautiful abalone shell as shade, and chandeliers with all the bulbs shaded with shells.

Another shop shows a shade of copper with prisms of iridescent glass in tones of Tiffany glass. The prisms hang from a disk of copper concealing the bulb, giving a beautiful effect by day as well as night. The lamp hangs from a cop-

The Chinese and Japanese unhampered by the war are opening new importations of Cloisonne, Canton, Satsuma, prints, baskets, etc. Satsuma buttons for gowns with cuff buttons and belt clasps to match are attractive and not high priced. Silver sleeve buttons which open and reveal a compass, we noticed, and many other ingenious Japanese articles.

per chain.

In a craft shop famous for beautiful silver trays and pitchers, beaten out by hand, are found on exhibition and sale beautiful illuminated books and cards by a California artist. They are well

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worth seeing—and owning, too. In another shop famed for its leather work are many leather articles of all kinds.

In a large establishment are seen the new American leathers, developed, it is interesting to learn, by an English firm long famous for its leather articles. Here are cases of all kinds in black, green and scarlet, for medicine, with three, four, or five bottles with ground glass stoppers; for traveling stationery, envelope and paper in one, ink well, stamps, etc., all complete; for favorite recipes; drinking glasses in cases, one, two or three as desired. Work baskets of wicker, fully equipped, with covers of leather. Here we find also beautiful silver, both old and new-old brasses and new-old coppers and newall manner of articles, shapes, sizes, and prices. Here are many of the attractive panel mirrors, in Louis XV and Louis XVI designs, framed in gilt. Others framed in mahogany with English prints are attractive in colonial bedrooms.

At a Russian shop we find odd and beautiful embroideries, queer quaint shawls and table covers, beautiful brass and copper work, and odd toys made by peasants. Here also are old jewels in quaint settings, which are doubly attractive because of the many displays of imitation stones. At this shop also may be found Russian tea and charming caddies.

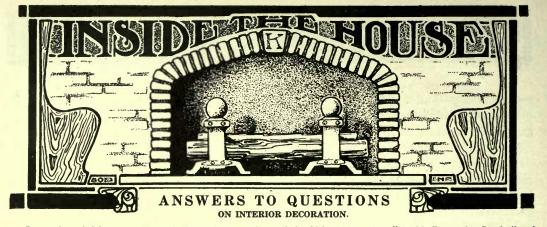
At another place we find a charming tea and coffee set of gray earthenware. It is thin in body with a border of red clover painted broadly and with decorative effect. There is also a new ware, excellent for chocolate sets, colors brown and gray. The brass and copper pots for filtering coffee, both single and larger, are useful. The cups holding the coffee are glass, set in copper. There is a great variety in coffee machines and their accessories this year. Everything connected with the chafing dish is here, and it is astonishing how many useful articles there are to accompany it. Pepper and salt shakers of metal made in shape of cannon shells, tall, heavy, are in the military mode of the hour. Very attractive is the American glass in compotes, and sweetmeat dishes.

At a Persian shop we are attracted to the mosque rugs for covering divans, also by squares for stiff wall pillows, beautiful in color, durable, and low in price.

Candlesticks of mahogany and oak are very suitable for library or pier table. One notices new Windsor chairs—the comfort of which has never been surpassed. They are useful when additional chairs are needed and they never look out of harmony with mahogany, oak, or painted furniture.



Clever china decorators are now copying some of the old continental patterns.



Letters intended for answer through these columns or by mail should be addressed to "Keith's Decorative Service" and should give all information possible as to exposure of rooms, finish of woodwork, colors preferred, etc. Send diagram of floor plan. Enclose return postage.

Making Over the Old House.

I. L. M.—I would like to get your advice concerning "making over" an old farm house which is ideally adapted for the "Colonial" treatment, but, inasmuch as I intend doing my own work, I dislike very much the idea of white enamel as it takes so much care.

Ans.—Your old house presents interesting possibilities and your ideas are excellent. With your sketch before me I would say: use the sun parlor as you have planned and balance it on the other side of the house with a pergola. As the house is high and narrow, you will gain a broader effect by this arrangement.

In regard to the windows: if small panes are used in the upper sash, continue the small panes in lower sash. This will be better architecturally than to use small lights above with large below.

Have the Colonial entrance by all means and the French door inside, also the new door at end of hall, which should be Colonial in design with side lights. You will thus secure an excellent vista when the front door is open and follow the old custom in our early building of a door at the end of the hall through which a garden or lawn could be seen.

With the interior, many things suggest themselves. First, in regard to the trim. Ivory paint throughout would fit the old time atmosphere and so would Colonial green or a gray green. Either would make a good background for mahogany.

Inasmuch as you are planning to take care of the house yourself, the pearl gray in the main rooms and the slate green in the dining room would be well worth considering with either cream or ivory in the bed rooms. These paints make excellent wall tones and easy to take care of.

In the hall I would suggest that you use wall paper now made in a reproduction of an old hand blocked paper. This will stamp an old fashioned idea on the threshold.

With the two parlors made into one room and a big fireplace you will have a delightful room.

There are many inexpensive things which will suit your old house. Chintz and cretonne and cotton prints.

I think you are to be congratulated on the possession of your old house, also on your own good taste as expressed in your letters.

Slip Covers for Brass Beds.

I. L. M.—(Continued.) I need advice now on how to furnish the completed house, also suggestions on remodeling of the dining room. It is very low ceilinged (being the old part of the house).

Having been in active business for twenty-three years, I have had little time but have always longed for a pretty but not necessarily expensive home. Would you use light gray or white window shades? The exterior of the house, of course, is white with green blinds.

I have two beautiful old prism chandeliers for gas which can be fitted for electricity. The larger one will be put in the living room, but I do not know where I can use the one with three arms, as the

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ceiling in dining room is too low for it, otherwise I should have it fitted with candles for the dining room. Where and how can I make use of it? It is so beautiful (I think).

My beds are all brass. Will they be impossible? Don't you think a brick walk, instead of the usual cement, would be good looking from the front door? also a few small evergreens at each side of walk and two small ones each side of door? If I only knew what is the right treatment for walks, walls, cellar to garret!

I do not wish to bore you with my ignorance, but if I were not, it would not be necessary to write you.

Ans.--As your house is white with green blinds, I should use white shades, unless you would like the shades made of chintz. The prism chandelier would be beautiful and I wish you could use it, but I don't see how you can with the low ceiling.

When we use the brass beds or iron ones, we make slip covers that just fit over the ends, head and foot, so that the bed looks prettier than a wooden one. This reaches clear to the floor and the valances come in between at the bed sides. The slips are perfectly plain while the valances are gathered or pleated. If the curtains are chintz or any gay colored plain material, the bed ends are of the same material with bed spreads of the same or of a white batiste over a plain color.

We should like the hall to have an old reproduction of a Colonial wall paper in gray tones, with woodwork white and handrail mahogany?

The brick walk from the door, with its evergreen trees, is such a picture that it shows that you do know what is right.

Moss Green Finished.

I. C. B.—I plan to use fir in a moss green finish for most of the woodwork, with furniture of either the fumed oak or early English finish. The dining room is to be paneled. Would you advise using furniture with the moss green finish? How would you treat the walls and floors? The floors are to have a two-foot maple margin.

What treatment would you suggest for the hall which leads by an open doorway to the living room? It is 6 feet 6 inches by 5 feet.

What wood finish would be advisable for two upstairs bed rooms?

Please advise me as to rugs and drapes for the living room and dining room.

Ans.—Your choice of moss green woodwork is interesting and will make an attractive background for your furniture. With it fumed oak is advised for furniture rather than the early English finish. For a wall hanging we suggest a paper of warm gray with a lighter ceiling and a darker floor.

The hall would better be finished in the same tone of woodwork, floor and walls with different curtains and upholstery.

In the dining room a paper showing a fabric weave is recommended, which on the wall looks like dull gold, yet has a light golden brown tone in the shadows. The general effect is sufficiently yellow to be harmonious with the gray suggested for the living room.

In the living room with the moss green woodwork use at the windows next the glass a very transparent net and over curtains of "sunfast" or similar material in a green like the woodwork. Cretonne or printed linen in which warm gray and moss green and other colors were blended would be interesting. One tone in the printed fabric should dominate either old blue, rose or yellow.

As for rugs—in the hall and living room—use plain rugs with or without a darker border, several shades deeper than the wall.

In the dining room a Japanese bungalow rug in tan, blue and ivory would be attractive.

For bedrooms the small rugs woven in cottage style would be suitable.



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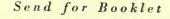
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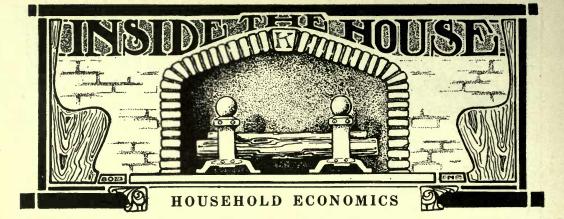
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Up



A Tremendous Responsibility

HE Food Administrator says that in our obligation to feed the allied armies and war workers this winter we have a tremendous responsibility.

Canada and ourselves alone have the surplus food to meet this epoch-making responsibility.

But the necessary supplies can be sent "over there" only by personal food economies of every man, woman, and child in Canada and the United States.

Dollars are not a substitute for food we can get the food only by intelligent substitution, and sacrifice if need be. The total quantity of food needed to hold the line on the western front must be made up from the individual savings of a population aggregating 120,000,000 people. Out of that population Canada has less than 10,000,000 people. So the burden falls almost wholly upon us.

When the issues and the outcome of this great war are finally analyzed, the American family table during the winter of 1917-18 will loom as large as the heavy artillery.

The United States Food Administrator says: "Autocracy finds its strength in its ability to impose organization by force from the top. The essence of democracy consists in the application of the initiative in its own people. If individualism can not be so organized as to defend itself, then, democracy is a faith which can not stand. We are seeking to impose no organization from the top. We are asking the American people to organize from the bottom up, and this is the essence of democracy itself."

"The revolution in Russia was a food riot wherein the violences of starving thousands were seized upon" to their own undoing, and we see at least the temporary paralysis of an ally. Upon us rests the responsibility for supplying food to our western allies. Half hearted measures play into the hands of the foe. Our boys in the trenches are the hostages we have given as a pledge of our faith in democracy. Those of us who fight at home must back them by every effort in the power of this great country and at any sacrifice to ourselves.

Eat for Health.

We might indulge in a species of selfpity, bad as that is for any one, if the food restrictions which are urged upon us were detrimental to our health, or reduced the nerve energy or the sense of vitality of the people adopting these restrictions. As a matter of fact these very food restrictions are directly in line with the systems of diet which physicians have been prescribing to those out of health as requisite to bring them back to a normal condition again.

All people, Americans not less than others, have been nations of over-eaters. Medical authorities state that the ill chosen foods which we literally hurl at our stomachs day after day and three times a day are the direct cause of 90

INSIDE HOUSE

per cent of all sickness. This percentage is amazing. It really seems that we shall be expected to know something about the actual food values of what we eat and to use a normal amount of common sense in its selection. With the vigorous outdoor life of our pioneer forefathers all food was fuel for the body. Luxuries of the palate were not so plentiful nor so easily accessible as to be a menace. The instinctive sense of taste was depended upon entirely. Many people died and no one ever knew "what was the matter."

The normal sense of taste is still the great criterion, if trained intelligently and not allowed to fall into bad habits. A little knowledge of food values will help to direct the sense of taste, and one can guage whether or not he is eating enough food by whether he maintains his weight, we are told.

The object of the Food Administration is to enlarge rather than restrict the healthful food efficiency. If the furnace were stuffed with quantities of sawdust and some wet leaves as well as the proper amount of coal, or even a larger amount than necessary, it would not give very satisfactory results. If the sawdust and wet leaves were as expensive as some of the treacherous food combinations, the cases might be considered parallel. We are asked to eat of the foods which have real nutritive value, and in a certain proportion or as far as possible to use perishable foods and those not required by our allies.

The Peanut to the Rescue.

"The American peanut, which till recent years was held by those who consumed it at "five a bag" as a confection and a joke, has risen to the dignity of a food, and a first-class food at that, taking a place in the pantry alongside of corn and wheat."

"The peanut produces not only food for man but grain and forage for stock. Peanut hay is equal to clover and alfalfa as a forage, while hogs are fattened on the nuts which they harvest themselves, making as high as four hundred pounds of meat to the acre."

"As human food the roasted peanut is said to be an almost complete ration, while peanut oil is now one of the dependable sources for the vegetable oils

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that are compensating for the growing shortage of animal fats, and much of the so-called olive oil we use is squeezed from the peanut."

"The peanut in this year of war is bringing up to the fat reserves, and in no poor way either, for it furnishes a perfect substitute for lard. As butter the ground peanut is rapidly coming into popular favor, and is driving a considerable amount of dairy butter off the American sandwich."

"Thus the little peanut, humble though it be, has already braced up the lean pork barrel, has supported the waning butter jar and has laid the lard firkin under a tribute of thanks, while not one jot abating its visible and welcome presence on the corner popcorn stand."

Peanut-Butter Facts.

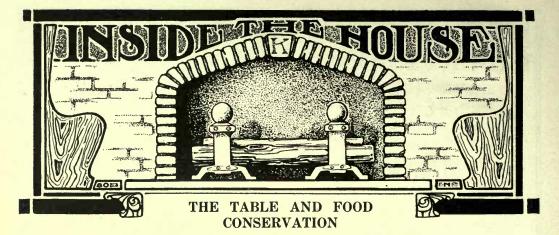
Trade interest in peanut butter as a typically American substitute food leads Simmons Spice Mill to publish some interesting facts about this product. Twenty-five years ago peanut butter was unknown. It is claimed that the first effort to place it on the market was made in 1896, and then only as a health food. The real growth of the industry dates from 1904, when there were only a half dozen small-sized factories making it in the United States. Today hardly a northern city of any size but has one or more peanut-butter factories, while the largest factory located in New York state has a capacity of 15 tons daily. There are many grades of peanut butter, classed according to the grade of nuts used, the amount of oil they contain, and the method of manufacture. There is no secret about processes, and the product, contrary to popular notions, is made only from good peanuts without the addition of other ingredients than salt. Highgrade peanut butter will retain its sweetness and flavor for many months in airtight packages.

The Self-Service Grocery.

Rising costs and scarcity of help are turning attention to the self-service idea in merchandising. Restaurant men long ago adopted the plan of letting patrons furnish their own service in the cafeteria as a means of reducing expenses and relieving the labor situation, and it is believed that self-service may be developed more widely in restaurants, and even hotels, if the war is prolonged. The grocery trade is interested in the self-service idea as exemplified in a store now being conducted on this plan with such success that others may adopt it.

"A customer enters the store through a turnstile, the purpose of which is merely to register the number of persons who enter each day. Here the customer helps herself to a tray which looks very much like a long pan with two handles on it, or, if she prefers, a regulation market basket. There is no charge for this pan-like container, which is simply a convenience for gathering up the items the housewife selects. If on the other hand she wishes to use a basket, in which to carry her goods home she is charged 4 cents for it, which amount she receives on returning Shelves are indexed alphabetically it. beginning with 'A' as one enters the store, and on these shelves one finds the commodities beginning with the particular initial letter, for instance, under 'A' there are ammonia, asparagus, apricots, etc. A low partition divides the store. The customer walks down one side and up the other, selecting the goods she desires. When she has finished with the letters "X Y Z" she finds herself at the cashier's desk, where she takes her purchases out of the pan or basket and the cashier checks the items and collects the amount. . If the customer has been using a pan on which to collect the groceries she proceeds to the front of the store, where a large shelf is placed for the accommodation of those desiring to wrap their packages, paper and string being provided for this purpose. When this has been done the customer returns the pan to the cashier's desk; if a basket is used she does not bother with the wrapping, but merely takes her purchases home. Every article in the store is plainly marked with the price at which it is sold. It is remarkable to observe how quickly a customer can wait on herself. -Food Bulletin.





Christmas Sweets Without Sugar



HAT would Christmas be without candies? What a wail of disappointment would go up from the children all over the land,—not

to mention the sighs of the grown-ups if a sweetless Christmas were asked. But fortunately a Christmas shorn of all its sweets is not necessary at all. "Goodies" which are just as acceptable may be prepared for the holiday season, which will not deplete the world supply of sugar. These delectable bits may easily be prepared at home, and perhaps with less expense than home-made candy.

People are not expected to give up all Christmas candy. It is a decrease in the usual amount consumed that is asked. A reduction of one-tenth of the amount usually consumed is not asking very much of a sacrifice for the "home fighter." Yet this small amount multiplied throughout the country will give comfort and help to our army boys. This is the Christmas present you are asked to give them, and it is not asking much. Suppose you are accustomed to eating ten pounds of candy a year yourself,-something less than a pound a month. You are now asked to get along with nine pounds. Perhaps you are accustomed to getting five pounds of Christmas candy for the family. You are asked to reduce it one tenth,---to use only four and a half pounds.

Dates, figs, raisins, even prunes, make a good foundation for Christmas sweets. Fruit pastes, candied orange peel, nuts, salted, glaced, or chocolate covered, candied ginger or fruits are delicious and are none of them difficult to prepare. A wider use of maple sugar is suggested this year, and to most people, no sweet is more delicious.

Stuffed Dates, Prunes or Raisins.

Dates with the seed removed and replaced by any kind of a nut kernel and the whole lightly rolled in sugar to keep it from being sticky to handle, is an oldtime favorite, and is a food as well as a sweet. Dried fruits like dates, figs, prunes and raisins containing sugar themselves are also highly nutritious. Prunes may be stuffed like dates, after having been thoroughly washed and soaked. Raisins are a sweet bit of themselves. which may safely be allowed to children. People do not realize, perhaps, how fully raisins are a desirable home-grown product which need more popular encouragement. Raisins are the logical way in which the great grape-growing regions of the Pacific coast may be utilized by the country as a whole. Their use should be especially encouraged now that the manufacture of wine is being reduced so greatly.

Fruit Paste.

Make any combination that is convenient of dates, figs and English walnuts. Run these through a grinder and soften with lemon juice. Cut into cakes like caramels, or roll into balls and these

REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc. is a serious business,—it may win or lose the war.



will make a wholesome and toothsome sweetmeat. They may be rolled in sugar or may indeed be chocolate coated.

Candied Grapes.

A small bunch of candied grapes makes a dainty gift. Clip a bunch of grapes into several parts, if it is too large to handle easily. After it has been perfectly prepared dip the bunch into rather a heavy syrup, retaining hold of the stem, and redip until each grape is coated completely. Put your bunch of candied grapes into a dainty little basket, tie it with Christmas ribbons, and the dear old lady for which you want to do some little thing will be surprised as well as pleased with the gift.

Salted nuts are not difficult. Peanuts, pecans or almonds, prepared in olive or salid oil, add to the Christmas dainties. Candied orange peel is an old friend. Cut into sticks before it is candied it is convenient to handle and makes a nice bit of color.

Nuts.

Nuts, in general, are rich in both protein and fat, and consequently may be used interchangeably with meat in the diet. One and one-fourth $(1\frac{1}{4})$ cups chopped walnuts, one and one-third $(1\frac{1}{3})$ cups chopped peanuts, or about one-third $(\frac{1}{3})$ cup peanut butter will yield as much energy as a pound of beef round. Made into a loaf according to proportions given below, two cups of the loaf yield as much energy as one pound beef. As a source of protein, nuts are much cheaper than meat.

Several rules are given in which nuts may be used in a practical way. They seem especially appropriate for the menu for Christmas week.

Nut and Bread Crumb Loaf.

- 1 cup chopped walnuts.
- 2 cups bread crumbs.
- 3/4 cup tomato juice and pulp.
- 2 tablespoons melted fat or oil. 1 egg.
- $\frac{1}{2}$ teaspoon onion juice.
- 1/2 teaspoon salt.
- 1/4 teaspoon pepper.

Make into a loaf. Place in pan lined with waxed paper. Bake about one hour.



tions, the scheme of decoration used. Fourth revised edition, just off the press, is beautifully printed on enameled paper and has embossed paper cover. 112 pages.

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Nut and Rice Loaf.

- 1 cup peanuts.
- 1 egg.
- 2 tablespoons butter.
- 1/2 cup rice, uncooked.
- 1 teaspoon salt.
- ¹/₈ teaspoon pepper.
- ¹/₄ teaspoon onion juice.

Cook rice in boiling salted water. Drain and add other ingredients. Place in a pan, oiled or lined with waxed paper, and bake in a hot oven about 30 minutes.

Nut and Cheese Loaf.

- 1 cup grated cheese.
- 1 cup chopped walnuts.
- 1 cup dry bread crumbs.
- 2 tablespoons chopped onion.
- 1 tablespoon butter.
- 2 tablespoons lemon juice.
- $1\frac{1}{2}$ teaspoons salt.
 - 1/8 teaspoon pepper.

Mix ingredients, using enough water to hold mixture together. Place in an oiled bread pan or in a pan lined with waxed paper. Bake in a moderate oven about 45 minutes.

All measurements in the above recipes are level.

"Beefless Tuesday" at the Hotels.

It is hard to imagine an overfed nation like the United States where not a pound of beef in any form is served at any of the big hotels or restaurants throughout the land, nor in few of the private homes, for one day in the week. "Beefless Tues-



day" is being inaugurated in the New York hotels, and the prominent hotels in all of the large cities. This brings no vision of hunger, for any kind of fish or fowl may be substituted. It is with the express object of being able to ship beef to the Allies. The use of fish is being doubled, perhaps.

Meat Dainties.

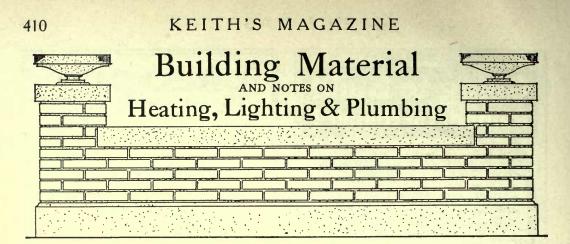
The butchers are saving and preparing for use odd parts which used to be wasted and which make good food at a reasonable price. This includes such parts as brains, hearts, sweetbreads, livers, kidneys, tongues, pork snouts, pork ears, tripe, plucks, etc. These products were often thrown away a generation ago, but the packers began stimulating trade in them. As they were cheap and good their use has grown. Housekeepers might well make a larger use of the meat products. The name "economy products" is used in offering them to the pub-lic. They are now packed in sanitary containers in attractive shape, and when once introduced create a steady demand by reason of their daintiness.

Sparrow Pie.

Four and twenty sparrows were baked into a pie recently in Washington, D. C., where the sparrow pie was cooked by a Quaker housewife, and was pronounced delicious by the domestic economy experts. A movement has been started to encourage the catching and eating of English sparrows in this country. Sparrow pie is a staple English dainty. In this country English sparrows are considered a pest because they destroy grain. For that reason their bodies make clean wholesome food. Special traps have been devised by which several dozen sparrows may be caught at once, either by day or night. The sparrows are prepared by a simple cleaning process of cutting away the necks and legs and peeling the skin off, feathers and all.

REMEMBER—That the Food Pledge which you have made, to conserve wheat, meat, fats, etc. is a serious business,—it may win or lose the war.





Winter Comfort and Humidity



HE installation of furnace heat in the house revolutionized the ideas of winter comfort in the home. It meant that the whole house was

heated, with no cold halls or passageways. With the installation of furnace heat came the tales of cracked furniture and woodwork. Valuable pieces of antique furniture suffered. Manufacturers set themselves to the task of making furniture which would stand the drying conditions in the modern home.

Another phase of the situation, which is more disquieting, is the fact that the excessively dry air so usually found in the heated building attacks everything in the house in its effort to extract moisture. We see the signs of it in the furniture, but we do not recognize the fact that this same condition is applied to the baby playing on the floor and to each individual in the home.

It is being recognized that, with a proper humidity in the air, 65 to 68 degrees F. gives a greater sense of comfort than 70 or 72 degrees in the usual superheated house.

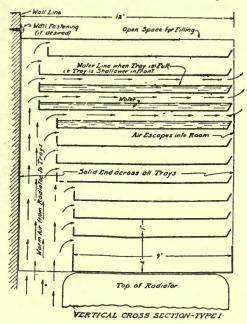
To remedy these conditions the thoughtful housewife has been putting a little pan of water on or under the radiator in the living room and is satisfied that she is accomplishing results because the water is so quickly evaporated, though the pan may not hold more than a quart, or at most a gallon.

Conservative authorities state that "ten to thirty gallons a day must be evaporated in an ordinary sized home to maintain reasonable humidity under the conditions of our northern winters." Tests made on the best radiator humidifiers which could be found on the market show that one of usual size has about the efficiency, as an air moistener, as one human being. The average evaporation from lungs and skin, in sub-zero weather, was found to be nearly two ounces per hour per person. This shows the necessity for larger and much more efficient types.

Dr. E. P. Lyon, of the University of Minnesota, has made and is still studying some very interesting experiments on this subject. In his own home he has built what he considers a fairly adequate humidifier. He took 40 per cent or 45 per cent as a standard for the humidity for dwellings, which can be maintained without special mechanical devices. The house is heated by hot water. In the basement he set and enclosed a radiator with air flues connected with the living room. The air moved by this radiator passes through a chamber in which sheets to the extent of 100 square feet are kept constantly wet. This surface for evaporation, Dr. Lyon says, ought to be doubled or trebled. Fifteen or eighteen gallons per day should be evaporated. Otherwise the scheme works well and is automatic.

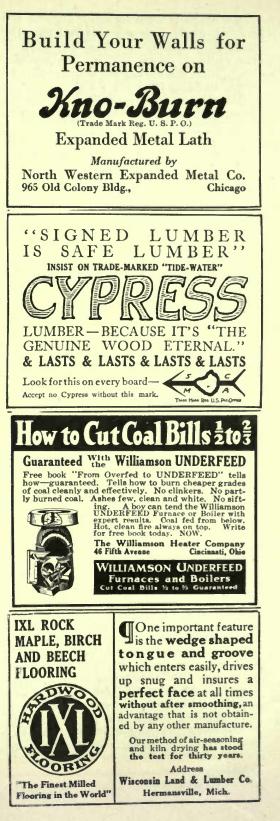
Comparatively few people, however, are able to make a complete installation. A radiator humidifier which shall give a sufficient extent of water surface and the maintenance of air currents over these surfaces is the great need. A discussion of humidifiers adapted to use over individual radiators is given by Dr. Lyon in the Heating and Ventilating Magazine, to which we are indebted for the following descriptions of them.

The first type consists of a number of trays of galvanized-iron placed one above the other, being supported by vertical ends of the same material. The trays are



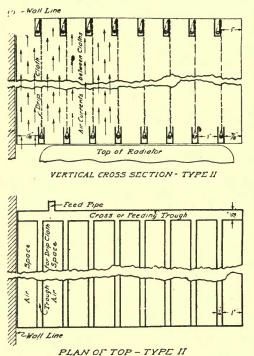
so arranged that the current of air rising from the back of the radiator is forced This apover the water in the trays. paratus is 12 inches wide (from the wall) and 13 inches high. It should be as long as the radiator will accommodate. The trays are 1/8 inch higher at the back than at the front to prevent water from running over the back to the floor. The ends project in front 1/8 inch beyond the trays (except the bottom one) and the front of all the trays except the bottom one slant back and down so that the excess in filling will run into the bottom tray. This design gives 10 square feet of evaporating surface for each foot of radiator occupied.

Experiments show that about $\frac{1}{2}$ inch between trays gives good results and at the same time avoids excessive height of the apparatus. A model of this type, 30 inches long, with twelve trays, has evaporated 3.6 gallons a day on a hot-water radiator, or about 1.4 gallon per foot.



This type is filled by hand and the top tray is made narrower to diminish the liability of spilling water on the floor. If the radiator in use will not support the apparatus the humidifier can easily be made to hang from the wall.

In the second type two series of troughs running lengthwise to the radia-



tor are arranged so that each upper trough is vertically above a corresponding lower trough. The illustration shows a design of Type 2 with eight drip cloths. This device is 11 inches wide (from the wall) and may be any length and height. The top troughs are ¼ inch wide and ¾ inch deep in front (where drip cloths come over) and ½ inch deep behind.

The center of each lower trough is vertically beneath the front edge of the corresponding upper trough. Otherwise the lower trough system is like the upper system shown in the diagram, the run-off pipe from the lower cross trough corresponding to the feed pipe in the upper system. The evaporating surface will vary with the height and number of drip cloths used. But as both surfaces are exposed to the air the surface of evaporation per foot of radiator might easily be made 60-80 square feet.

The cloth sheet from each upper

trough is suspended and kept wet by capillarity, the excess of water running off into the correspondingly lower trough. The heated air rises between these suspended drip cloths passing to the room.

Each series of troughs is connected to a corresponding trough running crosswise to the radiator. The upper cross trough may be fed with water from an inverted bottle so arranged as to maintain a constant level in the upper troughs. The excess running off from the lower troughs may be received through a rubber tube into a bottle or pail on the floor. But the frequent attention required by such a system constitutes a serious drawback. It is much better to supply a constant small stream of water from the city system and carry off the waste to the sewer.

With any wick system, by which cloth surface for evaporation is kept saturated by capillary attraction, it is important that distilled water be used in order to avoid the early clogging of the wicks by the solids left on evaporation. As capillarity is depended on only to carry the water over the edge of the upper troughs, in the second type, the cloth does not become clogged by evaporation.

A later type, for which the details have not yet been completed but which promises to give even larger efficiency, doubles the evaporating surface and allows the cloth to be easily removed for cleaning or renewal. Old sheets have been used in the models. Cheese cloth did not work well.

Tests with the second type show somethink like 2.9 gallons per foot of radiator per day. The amount of radiator surface covered may be more or less as the case requires, assuring a large amount.

While we have little actual data as to the effects of low humidity we have the ordinary observation of chapped hands, dry skin, chilly feeling and the supposed greater prevalence of colds and respiratory disorders. In addition to these the sharp changes in humidity even more than that in temperature, every time we step out of doors in sub-zero weather, is trying to the delicate mucous membranes of the head and throat. One thing seems to be certain, and this is that an increase in the humidity in the home will give greater comfort to the individual, and at the same time will improve the physical well being.

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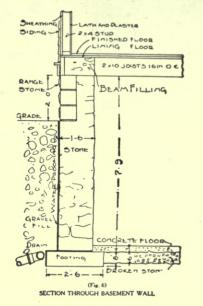
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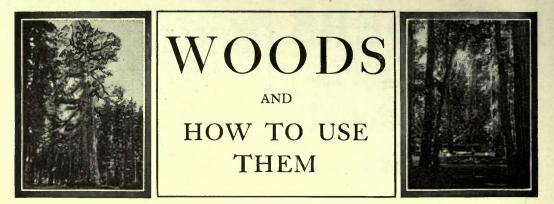


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EDITOR'S NOTE. - When the building idea takes possession of you-and the building idea is dormant or active in every person; when you feel the need of unbiased information, place your problems before KEITH's staff of wood experts. This department is created for the benefit of KEITH'S readers and will be conducted in their interest. The information given will be the best that the country affords.

given will be the best that the country affords. The purpose of this department is to give information, either specific or general, on the subject of wood, hoping to bring about the exercise of greater intelligence in the use of forest products and greater profit and satisfaction to the users.

The Enduring Quality of Wood

HE stanch condition of some old New England homestead, built in pre-revolutionary time and still serving its purpose, is com-

mented upon from time to time, as such an old house is being torn down, or perhaps is being remodeled. Surprise is expressed at the fine preservation in which the wood is found after the lapse of so many years, perhaps centuries.

Such comment mentions the old Fairbanks Home, in Deadham, Massachusetts, as the oldest frame house in America, having been built in 1636. It is a little startling to us in this "new" country to think of a house which has withstood the vicissitudes,-not only of so long a period of years, but of such a range of events as must have circled a house built so soon after the landing of the Pilgrims in New England. It is not unusual to see old world buildings,-in many of which wood is the chief factor, as in oak paneled English halls,-which have stood for longer periods and and whose beauty has grown with the passing years.

Tradition says that Jonathan Fairbanks and his good wife, with their six children, came to Boston from Yorkshire, England, in 1633, and three years later moved to Dedham, where they erected what is now the central portion of the Fairbanks house, two wings having been added, one in 1648 and the other in 1651.

Timbers used in the old house were brought by Mr. Fairbanks from England, and the bricks in the chimney are said to have come to this country as ballast in ships. No two windows in the house are of the same dimensions and contrary to colonial custom, neither the huge chimney nor the front door are exactly in the center of the house.

The front door, which is entered from the east, is unusually low and leads to a tiny entry eight feet in width and three and one-half feet in depth. Out of this diminutive hall lead no less than five doors.

The parlor to the right, as you enter, was plastered by later generations and in other ways is more modern. But the kitchen, to the left of the entry, is truly antique. The visitor's attention is here attracted by a fireplace, originally 7 feet 2 inches in length and five feet in height. An oven was installed in later years, making it considerably smaller. From the fireplace hang a bellows, tongs and various cooking utensils peculiar to colonial times. The imported timber shows prominently in the ceiling of this room.

A winding staircase leads from the entry to the second floor, where there are

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two rooms, one a bedchamber and the other a spinning room, where an old hand loom may be seen.

Many yards of plaster clay, used by the colonists as further protection from the wintry blasts, may be seen worked into the ends of the attic.

The wing on the northerly side of the original house, which was built in 1648, was the home of John Fairbanks, the eldest son, who was married in 1641. From the fireplace in the larger room still hangs a wooden crane five feet long and on this crane were suspended grease lamps called "widders" or "old Betsy" to light up the room during the long winter evenings. A small living room adjoins.

In 1901, the Fairbanks family in America was organized to preserve the house as a museum of colonial date.

Old Wood Work in New Orleans.

From the South comes another story of early wood work and early building methods, as revealed by repairs made in the historic New Orleans custom house.

"Workmen delving into the recesses of the foundation and roof of the ancient custom house at New Orleans have just uncovered some very interesting and surprising facts concerning the queer, but thorough, methods of early building operations in the South.

How a massive structure erected on planks and logs in the marshy soil of New Orleans could stand for almost three-quarters of a century without a crack or break of any character, and remain today as substantial as when it was built, is proving a marvel to modern engineering experts.

This enormous gray building occupies an entire block. On the site where it rests there stood during the early history of the city some kind of a custom house. It is worthy of note, too, that this block was then situated almost on the bank of the Mississippi river. Ever since then the river has been busily engaged in building up the "batture" with silt taken from other points, and the "batture" has grown in width from year to year until the building today stands a full 200 yards away from the river."

"The first custom house was burned in the great fire of 1788. Then Governor Miro erected a better structure. Carondelet, coming on the scene later, swept away everything that was on the site, and built Fort St. Louis there, covering the entire block.

When, in their turn, the Americans took charge, they had no use for forts, so they demolished Fort St. Louis, and built a brick court house in the middle of the block.

In 1848 the site, which had been ceded to the United States, was chosen for the custom house, and the work of building began.

The civil war came on, and it was years before the interior of the building was even approximately finished. General Beauregard had technical supervision of the building—he was then major of engineers. It is said that the corner-stone was laid by Henry Clay."

Curious Features of Foundation and Roof

"The foundation prepared for this huge structure will be of interest to people of today, who are accustomed to seeing deep-driven piles made ready for any large building, and steel reinforced concrete used to strengthen every part. The foundations of the customhouse rest on a plank floor seven feet below the sidewalk, on which is a grillage of 12-inch logs, covered by a layer of concrete one foot deep. Yet the building is there. It has sunken to be sure, and one end a little further than the other, but it has not gone down into the earth as one would have expected of a massive building erected on such a foundation, in the marshy soil of old New Orleans.

Yellow Pine in Perfect Condition.

A view of the roof while in course of repair offered as many curious sights to the student of building as the under-structure or the enormous stones used in the walls. Here the carpenter had torn off the copper covering and revealed a great layer of Southern Yellow Pine sheathing in almost perfect condition. This sheathing was put down under the original roof of the building, and has performed continuous service since. Here and there a defect in the roofing has permitted water to seep through and cause a small spot partially rotted. With this exception the sheathing is as good today as it was when cut from the Southern pine forests of Louisiana before the civil war."



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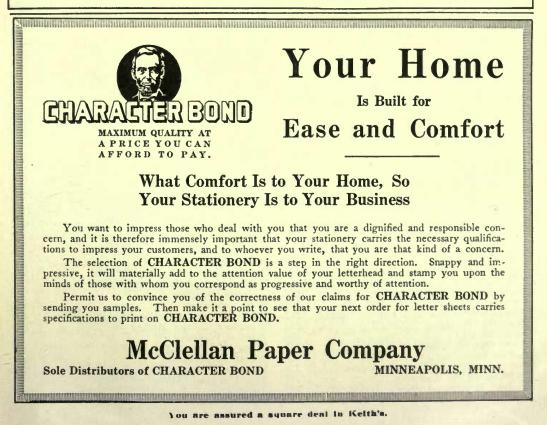
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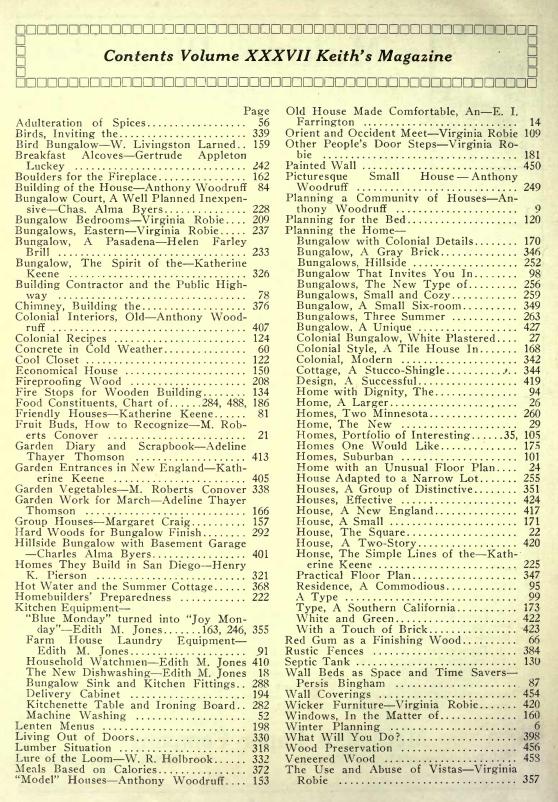
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SPLINTERS AND SHAVINGS

"Conservation" in Christmas Greetings.



little personal note, which has been neither engraved nor embossed, will at the same time carry more of the personal ele-

ment, and release by that much the skilled labor which is needed in other fields. Each holiday finds the waste baskets overflowing with expensive greeting cards which have only received a passing glance and been thrown aside.

A number of companies and individuals who have been accustomed to make a wide distribution of such cards are sending out advance notices to their friends and customers that this year they have decided to send to the Red Cross, or other

Statement of the Ownership, Management, Circulation, Etc., Required by the Act of Congress of August 24, 1912,

Of Keith's Magazine on Home Building, published monthly at Minneapolis, Minn., for October 1, 1917.

State of Minnesota, County of Hennepin-ss.

Before me, a Notary Public in and for the state and county aforesaid, personally appeared M. L. Keith, who, having been duly sworn according to law, deposes and says that he is the owner of the Keith's Magazine, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, to-wit:

1. That the names and address of the publisher, editor, managing editor, and business managers are:

Publisher-M. L. Keith, Minneapolis, Minn. Editor-M. L. Keith, Minneapolis, Minn.

Managing Editor-E. Bartholomew. Business Manager-Guy E. Nelson, Minneapolis, Minn. 2. That the owner is:

M. L. Keith, Minneapolis, Minn.

That the known bondholders, mort-3. gagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

M. L. KEITH.

Sworn to and subscribed before me this 26th day of September, 1917.

MARCUS P. STARK. (Seal)

My commission expires Jan. 25, 1922.

war relief organizations the money usually expended for these greetings.

The movement started with big manufacturing concerns, largely steel and concrete, and they ask that publicity be given to the movement, suggesting that every organization and individual attach a copy of this request to the money in explanation, if so desired, and forward to the American Red Cross, Y. M. C. A., American fund for French wounded, or any of the funds carrying war relief.

They call attention to the fact that if you are accustomed to order specially engraved cards, this labor will be diverted into productive lines. This applies quite as much to friendly individuals who have been accustomed to order expensive cards by which to send greetings to their hosts of friends. The need for these funds can scarcely be sufficiently urged upon those people who are not closely in touch with actual war conditions.

The Era of Trained Men-Keep the Colleges Filled.

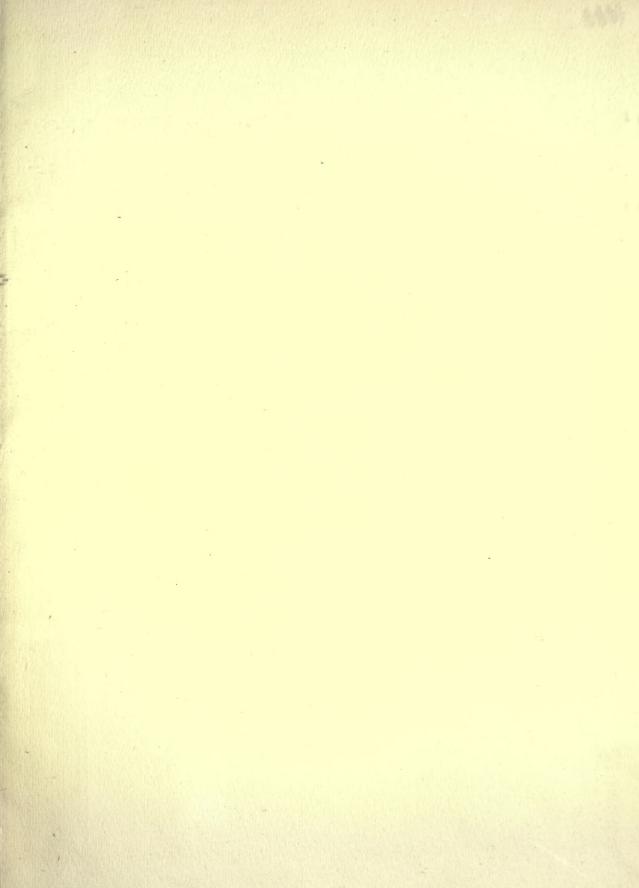
"This is a war of science, and the country needs educated brains," says Maj. Finney, American surgeon, now serving on French battlefields with the Johns-Hopkins medical unit.

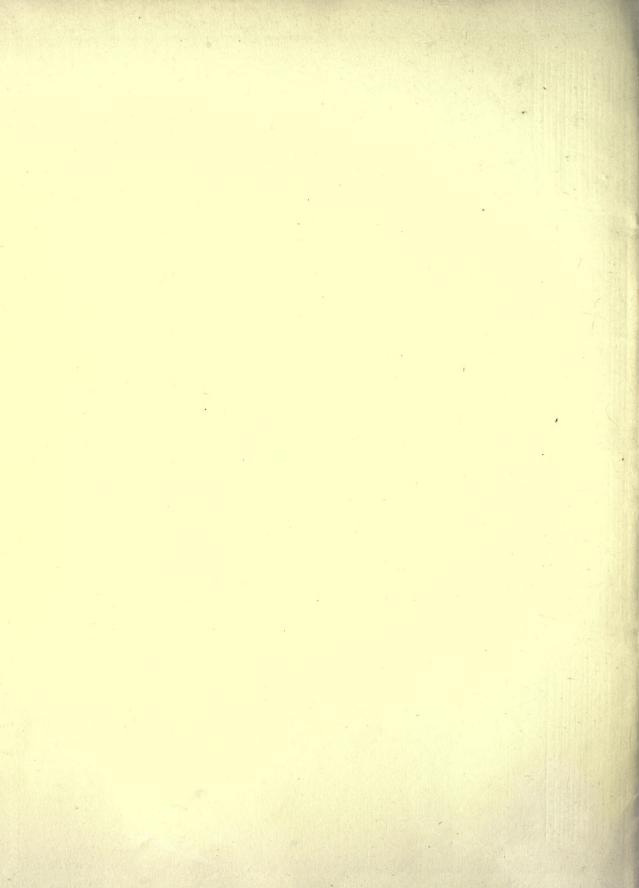
You will be nowhere without an education after the war ends.

The salvation of the world after this war will rest with men of education and scientific training.

The American Institute of Architects has issued a call to those young men who are under military age, and to those who are unable for other reasons to serve their country in the Army or Navy, to consider the equally patriotic services in the field of applied science. Every architectural school in the country should be filled to its capacity with young men fitting themselves for this service to their country.

This call is repeated in different forms by all of the great institutions whose business it is to train the youth of the land for the business of life.





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